

Project Administration Manual

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October 2016

Pakistan: National Disaster Risk Management Fund
(Project Loans and Grant)

ABBREVIATIONS

ADB	–	Asian Development Bank
CBDRM	–	community-based disaster risk management,
DDMA	–	District Disaster Management Authority
DNA	–	damage need assessment
DRF	–	disaster risk financing
DRM	–	disaster risk management
DRR	–	disaster risk reduction
EAD	–	Economic Affairs Division
ERP	–	enterprise resource planning
ESMS	--	environmental and social management system
FIP	–	fund implementation partner
ERRA	–	Earthquake Reconstruction and Rehabilitation Authority
GDP	–	Gross domestic product
GOP	–	Government of Pakistan
MHVRA	–	multi-hazard vulnerability risk assessment
NDMA	–	National Disaster Management Authority
NDMP	–	national disaster risk management plan
NDRMF	–	National Disaster Risk Management Fund
NFPP	–	national flood protection plan
PDMA	–	Provincial Disaster Risk Management Authority
SECP	–	Securities and Exchange Commission of Pakistan

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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 the policies and procedures of the government and Asian Development Bank (ADB). The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Economic Affairs Division of the Ministry of Finance, Revenue, Economic Affairs, Statistics and Privatization (EAD) and the National Disaster Risk Management Fund (NDRMF) are wholly responsible for the implementation of ADB-financed projects, as agreed jointly between the borrower and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation including compliance by EAD and NDRMF 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 Grant Agreements. Such agreements shall be reflected in the minutes of the loan negotiations. In the event of any discrepancy or contradiction between the PAM and the loan agreement, the provisions of the loan agreement shall prevail.

After ADB Board approval of the project's report and recommendation 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.

I. PROJECT DESCRIPTION

1. The Project will provide financial and technical support to the newly established NDRMF. The Project was designed in response to expected increased severity and frequency of disasters in Pakistan resulting from natural hazards and partly driven by climate change. The NDRMF is a government-owned not-for-profit company that will provide grants for subprojects that will contribute to enhancing Pakistan's resilience to climatic and other natural hazards and to strengthen the government's ability to quickly respond to disasters triggered by natural hazards. The NDRMF is an apex financing institution that will maintain highest level of integrity and transparency in managing, and guiding investments that reduce risk and vulnerabilities associated with climatic change and natural hazards. The NDRMF will strive to strengthen the technical knowledge base in disaster and climate change risks and impacts to develop market for transfer of residual risks of natural hazards that cannot be mitigated. This will reduce socio-economic and fiscal vulnerability of the country and its population to natural hazards.

A. Impact and Outcome

2. The project impact will be a more disaster resilient Pakistan with reduced socio-economic and fiscal vulnerability to natural hazards and climate variability and change. The project outcome will be increased and sustainable institutional and physical capacity to reduce the socio-economic and fiscal impacts of natural hazards and climate change. The design and monitoring framework of the Project is placed at **Appendix 1**.

B. Outputs

3. The project outputs are (i) NDRMF established and made operational, (ii) increased investment to reduce vulnerability to natural disasters, and (iii) analytical work and products to improve fiscal management of natural disaster risks. Each output is summarized below.

4. **Output 1: NDRMF established and made operational.** This output comprises (i) a fully staffed NDRMF, including its management team and technical staff; (ii) the required governance, due diligence, quality control, and fiduciary arrangements put in place for NDRMF to function as effective and efficient financial intermediary; and (iii) adequate capitalization of NDRMF through an endowment fund, to ensure the long-term financial sustainability of the NDRMF through the investment income earned from the endowment. This is to cover the full amount of NDRMF's operating costs during the project period and beyond. Capacity building support will be provided under the project to assist NDRMF in its early phase to ensure that its operations meet its objectives.

5. **Output 2: Investments to reduce vulnerabilities to natural disasters.** This component will provide funding through matching grants of up to 70% for a range of structural and non-structural interventions carried out by public sector entities or non-government organizations at the federal, provincial, district or community level. Eligible interventions are listed in the NDMP and NFPP-IV (para 7). Specific outputs under the project include: (i) around 300 kilometers of flood protection infrastructure retrofitted or newly built; (ii) around 500 public sector buildings, including schools and health facilities retrofitted against multi-hazards; (iii) delivery of non-physical preventive measures, including preparation and implementation of national and sub-national emergency response plans, establishment of early warning systems and design and implementation of disaster awareness campaigns; (iv) analytical work, such as multi-hazard vulnerability risk assessments for vulnerable districts and urban centers, including gender related vulnerabilities, as well as climate change research and studies; (v) DRR

mainstreaming and monitoring, including developing procedures for analysis and integration of disaster risk during project preparation, and DRR and disaster response expenditure tracking; and (vi) capacity building to strengthen functioning of national and local DRM organizations. Interventions will be assessed, prioritized, sequenced and monitored by NDRMF.

6. **Output 3: Improved fiscal management of natural disaster risks.** This output includes quantitative risk modelling analysis for the primary natural hazards faced by Pakistan and, based on the results, development of a comprehensive national DR) strategy. The risk modelling work will be used to derive disaster risk maps and quantitative national and sub-national information on the expected levels of loss for hazard events of varying types, intensities, and return periods. Appropriate disaster risk financing tools, including insurance mechanisms, to strengthen the country's DRM capabilities will then be identified for each layer of loss, based on combined multi-hazard loss curves. This will also take into account the scale of funding required for each layer of loss required for relief, early recovery and reconstruction purposes, the relative cost-effectiveness of alternative instruments for specific layers of loss, the particular disaster-related needs of vulnerable groups, and contribution to long-term disaster resilience. This output will also support the development of two priority financing instruments identified in the national DRF strategy and pilot one of them.¹

7. The project is the first phase of a longer-term partnership between the Government and ADB to comprehensively address key issues in DRM and DRF. It is envisaged that ADB will provide about \$1 billion through additional financing between 2018 and 2023, to contribute to the \$3 billion financing requirement for implementation of the NDMP and NFPP-IV. Such additional financing will be based on implementation progress and subject to further Board approval.

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

Table 1: Project Readiness Activities and Responsibility

Indicative Activities	2016					Responsible Individual/Unit/Agency/ Government
	Aug	Sep	Oct	Nov	Dec	
Incorporation of NDRMF as Section 42 Company with SECP			x			MOF
ADB Board approval				x		ADB
Loan and grant signing				x		MOF, NDRMF, ADB
Government legal opinion provided				x		MOF
Loan effectiveness					x	ADB

ADB = Asian Development Bank, MOF = Ministry of Finance, NDRMF = national disaster risk management fund
Source: Asian Development Bank

¹ The instruments could include support for capitalizing an insurance pool by combining features of a reserve fund and risk pooling mechanism targeting middle-class homeowner and SME insurance, sharing start-up risk capital together with national and international reinsurers, sovereign disaster risk insurance and catastrophe risk insurance for agriculture, micro-enterprise and financial institutions.

Table 2: Project Implementation Plan

[illegible]

Activities		Years/Quarters																
		2016				2017				2018				2019				2020
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
2.6	Install/replace two additional weather radars																	
2.7	Staff of forecasting organizations trained in modeling and analysis.																	
2.8	Develop criteria to assess projects from DRR perspective																	
3	Improved fiscal management of natural disaster risks.																	
3.1	Design awareness campaigns for public ²																	
3.2	Consultants for DRF strategy recruited																	
3.3	Risk data, maps and modeling for preparing DRF strategy																	
3.4	A national DRF strategy developed																	
3.5	Two DRF instruments developed for pilot testing																	
3.6	Pilot Test one DRF instrument																	
3.7	Loan Account Closing.																	

CBDRM = community-based disaster risk management, DRF = disaster risk financing, ERP = enterprise resource planning, ESSGU = Environmental. Social Safeguards and Gender Unit, GOP = Government of Pakistan, MHVRA = multi-hazard vulnerability risk assessment, NDRMF = National Disaster Risk Management Fund
Source: Asian Development Bank

² Including vulnerable communities and, women

Table 3: Project Reviews, Reporting and Monitoring Schedule

Reporting and Reviews	2017				2018				2019				2020			
Inception																
QPR																
Audit Report																
AR																
MTR																
PCR																

AR = annual review, MTR = mid-term review, PCR = project completion report, QPR = quarterly progress reports

Source: Asian Development Bank

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations: Roles and Responsibilities

9. The roles and responsibilities of various entities involved in Project administration and implementation are summarized in Table 3 below.

Table 4: Roles and Responsibilities of Executing and Implementing Agencies

Project Implementation Organizations	Management Roles and Responsibilities
Economic Affairs Division, Executing Agency	<p>The role of the executing agency will be to:</p> <ul style="list-style-type: none"> (i) ensure that the NDRMF performs in line with its mandate; (ii) timely transfers of contribution from contributors and government counterpart funding to the NDRMF accounts; (iii) ensuring the implementation of the agreement signed between the executing agency and the contributors for fund operations, and; (iv) regular review and reporting on the performance of the NDRMF; and v) facilitate the overall coordination of the DRMP and NFFP IV implementation at the federal level.
National Disaster Risk Management Fund, Implementing Agency	<p>General Body</p> <p>The core functions of the General Body will be:</p> <ul style="list-style-type: none"> (i) overall policy guidance, (ii) consider the annual financial statements of the NDRMF , (iii) pursue the annual budget approved by the Board of Directors, (iv) consider the annual report prepared by the Board of Directors, (v) Select Directors, appoint Auditors(s) and fix their remuneration, and; (vi) Transact any other business which may be agreed at an Annual General Meeting and deemed to be special or appropriate. <p>Board of Directors</p> <p>The overall functions of the Board of Directors will be to:</p> <ul style="list-style-type: none"> (i) determine direction and scope of activities of the NDRMF (ii) ensure that the operations of the NDRMF are governed by sound management principles: (iii) ensure that resources of NDRMF are used only for the intended purposes; (iv) to ensure that fiduciary care is exercised in use of the NDRMF's resources; (v) ensure that resources of the NDRMF are provided to well managed institutions; and financial assistance to partner institutions is based on principles of cost sharing and project/proposal viability.

Project Implementation Organizations	Management Roles and Responsibilities
	The roles and responsibilities of different committees of the Board of Directors are described in para 9 to 18.
Asian Development Bank (ADB)	<p>ADB will be responsible for overall administration of the Project The specific responsibilities of the ADB role include:</p> <ul style="list-style-type: none"> (i) provide technical and financial support and oversight in accordance with loan agreement. (ii) provide guidance and assistance to EAD and Fund throughout loan implementation to ensure smooth and timely implementation of the activities of the Fund in accordance with the Loan and Project Agreements. (iii) review all documents that require ADB approval. (iv) conduct requisite loan review missions, including mid-term review and project completion review missions. (v) monitor compliance with loan covenants, social and environmental safeguards and technical and financial requirements. (vi) ensure timely processing of withdrawal applications and release eligible funds. (vii) review audit reports and ensure compliance with financial audit recommendations. (viii) review project performance reports and provide advice and guidance to the NDRMF and the executing agency, as required.

Source: Asian Development Bank

B. Key Persons Involved in Implementation

Executing Agency

Agency Name
Economic Affairs Division
Ministry of Finance

Officer's Name
Position
Telephone
Email address
Office Address

Mr. Tariq Bajwa
Secretary EAD
9210629 Fax: 9104016
secretary@ead.gov.pk
Pak Secretariat, Islamabad

Asian Development Bank
Pakistan Resident Mission

Werner E. Liepach
Country Director
+92 51 2087300
wliepach@adb.org

Mission Leader

Donneth A. Walton
PAU Head
+92 51 2087335
dwalton@adb.org

Co-Mission Leader

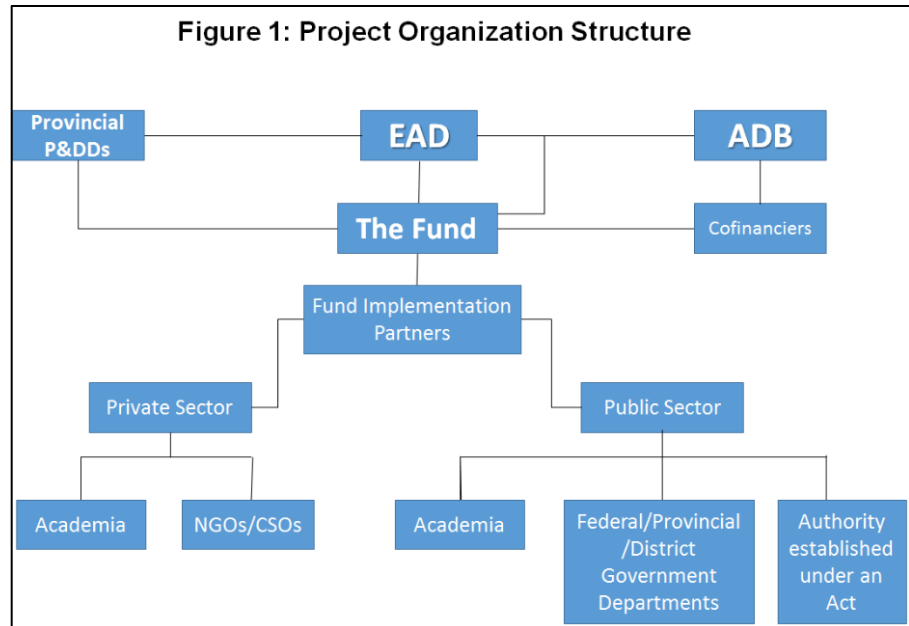
Mian Shaukat Shafi
Senior Project Officer
+92 51 2087316
mshafi@adb.org

C. Project Organization Structure

10. The Figure 1 shows relationship between the major stakeholders and implementers of the Project as well as the reporting lines.

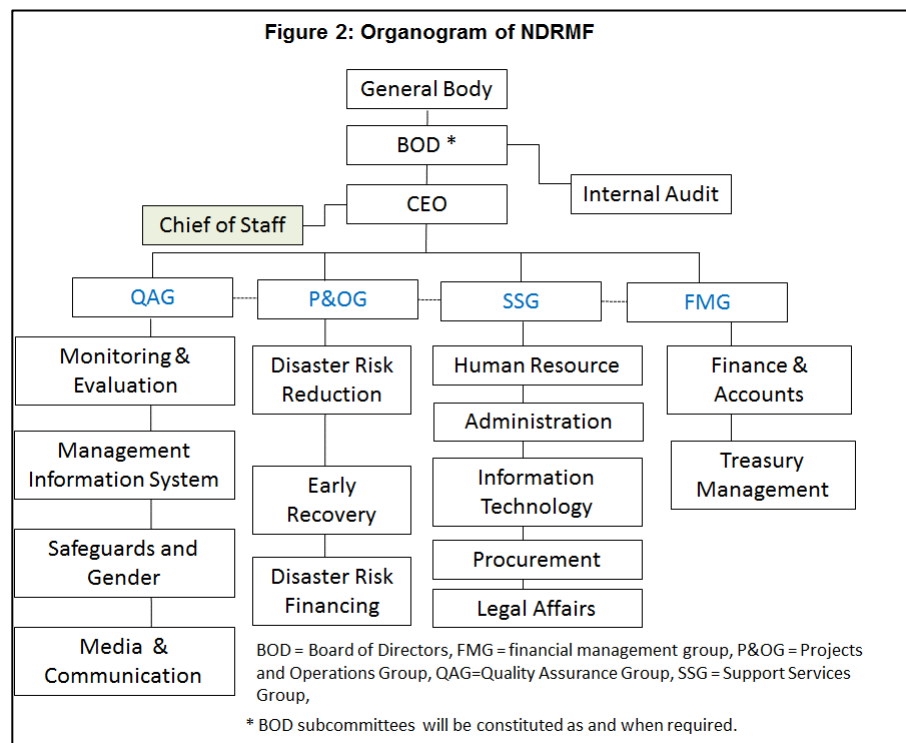
11. The organogram and essential internal structures of the Fund which is the implementing agency of the Project, presented in the following paragraphs.

12. Figure 2 below shows the NDRMF's three tier governance and management structure, comprising of General Body, Board of Directors (BOD – the Board) and a management team headed by a Chief Executive Officer (CEO).



13. General Body.

The Fund shall consist of up to 40 members to be nominated by Government of Pakistan. Out of which 16 members shall represent the Government of Pakistan and the remaining 18 members will represent private, civil society and the academia/research sector and/or business, community leaders of experience, integrity and repute. The members representing the government will include representative of federal ministries/authorities (5), provinces (8 members) and regions (3). The provincial and regional representation may be from the respective planning, flood management agencies (irrigation departments) and disaster management agencies.



14. The General Body is vested with powers to give overall policy guidance consider the annual financial statements of the NDRMF, pursue the annual budget approved by the Board of Directors, consider the annual report prepared by the Board of directors, elect Directors, appoint Auditors(s) and fix their remuneration, and to transact any other business which may be agreed at an Annual General Meeting and deemed to be special or appropriate.

15. **Board of Directors.** The second tier of NDRMF management will be the BOD for the overall management of the NDRMF affairs, which will be elected from amongst the members of the General Body. One term of the Board of directors would be for three years. The BOD would consist of 12 members out of which, a maximum of five will be Government representatives, (from among Government-nominated members of the General Body), seven will be elected by remaining members of the General Body. The CEO will be member in his/her ex officio capacity.

16. Overall responsibilities of the BOD are provided Table 3 of the PAM. Specifically, the BOD will:

- i. Appoint and enter into legal and administrative arrangements with the contributors of the NDRMF;
- ii. Approve the business plan highlighted the overall scope of activities to be financing by the Fund in medium term;
- iii. Approve the basic accreditation mechanism of Fund Implementation Partners;
- iv. Approve the operational structure and organogram of the NDRMF and terms of reference and remuneration, of management positions, and appointments of the Chief Financial Officer and recommending the appointment of the Chief executive Officer of the NDRMF to the executing agency;
- v. Identify the basic principles, by-laws, operational policies and guidelines to be followed by NDRMF for programming, administration, financial management, environmental and social safeguards and other due diligence;
- vi. Establish subcommittees and panels and define their terms of reference and delegation, as appropriate to facilitate the establishment and operations/working of the NDRMF and to meet its objectives;
- vii. Review and approve the administrative and operational budget of the NDRMF and arrange for performance reviews and internal audits;
- viii. Establish a framework for the monitoring and evaluation of performance and the financial accountability of activities supported by the NDRMF and any necessary external audits;
- ix. Guide the management in ensuring that the strategic orientation of the NDRMF is consistent with the National Disaster Management Plan (NDMP), DRR Policy and NFPP IV (once approved);
- x. Conducting discussions on a regular basis on the strategic orientation of the NDRMF; and
- xi. Regularly reviewing progress of activities financed by NDRMF and submit the required documentation to the general body for the consideration and approval.
- xii. To delegate, from time to time, to any appointee all or any of the powers and authority of the Board and to reconstitute, restrict or vary such delegations, and to ex post facto authorize any actions of such appointee.
- xiii. To agree upon and pay any expenses in connection with the NDRMF objects and undertakings and pay all the expenses incidental to the formation and regulation of the NDRMF.

17. Following good management practice, the BOD will constitute sub-committees responsible for specialized areas such as audit, human resources or any other relevant purpose. The formation and structure of these committees will be determined by the BOD in line with regulation prescribed by the regular and any limits defined in the memorandum of understanding of the NDRMF. The Board committees shall be chaired by non-executive directors and the majority of their members shall be independent. However, the independent directors in the committees shall not be less than their proportionate strength during the first four years of this notification. The existence of such committees shall not absolve the Board from its collective responsibility for all matters. Such committees shall have written terms of reference that define their duties, authority and composition, and shall report to the full Board. Some of key sub committees to be formed by the Board include:

18. **Audit Committee.** The Audit Committee will comprise of at least 3 members and the head of Internal Audit Unit acts as Secretary. The terms of reference of the Audit Committee will be approved by the Board. In particular the Audit Committee will: (i) suggest the appointment of the external auditor to the Board, the audit fee, and any questions of resignation or dismissal; (ii) considering the objectives and scope of any non-financial audit or consultancy work proposed to be undertaken by the external auditors, and reviewing the remuneration for this work; (iii) discussing with the external auditors before the audit commences the scope of the audit and the extent of reliance on internal audit and other review agencies; (iv) discussing with the external auditors any significant issues from the review of the financial statements by the management, and any other work undertaken or overseen by the audit committee; (v) reviewing and considering the external auditors' communication with management and any written response there to; and (vi) reviewing progress on accepted recommendations from the external auditors.

19. **Human Resource Committee.** The Human Resource Committee will comprise of at least members. The head of Human Resource Unit acts as Secretary. The Committee will assist the Board in overseeing the NDRMF's human resource policies and framework, with particular emphasis on ensuring fair and transparent compensation policy; ensure continuous development and skill enhancement of employees.

20. **Risk Management Committee.** This committee will be responsible for effective review the risk function related to assets of the company and any major investments that are made by the Fund, including the endowment funds

21. **Nomination Committee.** The key functions of this committee would be to identify and recommend the candidates for the Board for the consideration of shareholders after examining their skills and characteristics that are needed in such candidates.

22. **Fund Executive Management Structure.** The Chief Executive Officer (CEO) recommended by the BOD and appointed by the Sponsoring Government will head the management team of the Fund. The period for which the CEO is appointed is 3 years that can be extended by the BOD. The management team lead by the CEO and supported by senior executive team would report to the BOD and be responsible for managing day to day affairs and operations of the Fund. More specifically the management team will:

- (i) Ensure adherence to the governing principles of the fund.
- (ii) Establish the values, operational policies and procedures of the fund, and proper administration of its affairs, funds and resources for smooth running of operations.

- (iii) Prepare all documentation required for review by the Board, including developing the agenda for the Board meetings;
- (iv) Monitor and prepare report on effectiveness and efficiency of Fund's operations, investment activities, contribution mechanism, administration and on the overall performance of the Fund in achieving outputs, outcomes and impacts highlighted in the design and monitoring framework, business plans and annual operational plans of the Fund;
- (v) Review and update funding requirements for operations for consideration of the Board;
- (vi) Recruit and manage staff within the financial and other parameters approved by the Board of Directors for effective operations of the Fund;
- (vii) Conduct background research and analyses as required by Board;
- (viii) Accredite Fund Implementation Partners (FIP) based on criteria approved by the Board and partner periodically review accreditation criteria for consideration of the BOD.
- (ix) Solicit request for proposal in line with Fund mandate and review/approve subproject/funding proposal submitted by FIP in line with Fund Objectives and Business plan.
- (x) Ensure that overall investments made/subproject approved are in line with its strategic orientation of the Fund, consistent with the existing policies and strategies of the Government including National Disaster Management Plan (NDMP), DRR Policy, Climate Change Policy and NFPP IV;
- (xi) Monitor and report on financial and physical progress of activities related to establishment and operations of the Fund to the prospective contributors and the Board;
- (xii) Develop and implement a communication strategy for marketing the Funds for public, donor and private sector contributions and undertake outreach events to solicit contributions for the Fund;
- (xiii) Organize Board, advisory committee, and technical review committee (for subproject proposal review) meetings as required;
- (xiv) Organize provincial, regional and federal coordination committee meetings to coordinate with contributors, stakeholders and the government agencies on Funds implementation and business plans, operational issues and progress and coordinate/guide partner response and proposal submission process; and
- (xv) Provide administrative support to the Board, as required.

23. The overall coordination function related to the Fund business with all key stakeholders will be housed in the CEO office. CEO and this team will be assisted by four unit heads to undertake the above functions who will be senior sector specialists leading the following functional units.

- a. **Quality Assurance:** This unit will look after monitoring and evaluation, management information systems, safeguards and gender, media and communication functions.

- b. **Projects and Operations:** The unit will focus on the core business areas of the Fund including Disaster Risk Reduction (DRR), preparedness (early warning, contingency planning), early recovery and Disaster Risk Financing (DRF). It will carry the core **responsibility** of establishing and financing partnerships, technical review of investments to be made by the Fund and relationship management with recipient organizations. The selection of FIPs would be undertaken by a transparent Eligibility Criteria.
- c. **Support Services:** The unit will support human resources management, administration, procurement, and legal activities of the Fund, apart from housing the information technology backbone of the Fund.
- d. **Financial Management:** This team will manage finance, accounts and treasury function of the Fund.

24. Some of the activities that will be undertaken by the Fund under the Disaster Risk Financing component will be outsourced to third parties, mainly focusing on data collection, modelling, piloting and developing DRF strategy. The Fund will develop and approve business plan that will outline the key priority areas that will be financed by the Fund, the targets and results to be achieved (in line with DRMP and NFFP IV), along with resources and times lines required to meet these targets.

25. In order to fast track implementation, the associated TA will support the initial process of establishing the Fund and its core functions, including quality control, review parameters in each subsector that will be supported by the Fund. The associated TA will also support development of policies, bylaws and systems for financial management and control, procurement, safeguards and gender that are cross-cutting functions of the Fund to speed up the start-up process.

26. A coordination unit under the CEO with staff from all core units will function as the client relationship and outreach arm of the Fund. For public sector partners the federal and the respective provincial/regional governments will notify DRM coordination committees in the respective federal provincial or regional domain headed by Ministry of Finance at the federal level and the P&D departments at provincial/regional level, with representation from all key public departments dealing with DRM. The secretarial support for the coordination committees will be provided by provincial/regional disaster management agencies with staff support from the Fund. The coordination committee will include at a minimum, representation from irrigation, communication, works, environment, agriculture/forestry, education and health departments, apart from public sector universities. The key function of the coordination committees will be: (i) share opportunities available through the fund, including its business plan and priority investment areas; ii) share the accreditation and risk assessment procedures for public and non-government entities; iii) share and educate the partners on proposal submission guidelines in different subsectors; iv) coordinate and learn from the DRM activities being undertaken in the region; and v) update the status of the NDMP implementation and prioritize/reprioritize the activities in the DRMP roadmap.

27. The departments dealing with DRM will submit proposals to the federal, provincial or regional coordination committees that will be supported by the Fund staff. The proposals will be screened by the coordination committee and consolidated proposal will be sent to the Fund for review by each region. Based on the risk assessment and proposals review criteria established for its core areas of support and core institutional functions (procurement, safeguards, financial management), the proposals will be evaluated by the Fund review committee. The Fund as part of

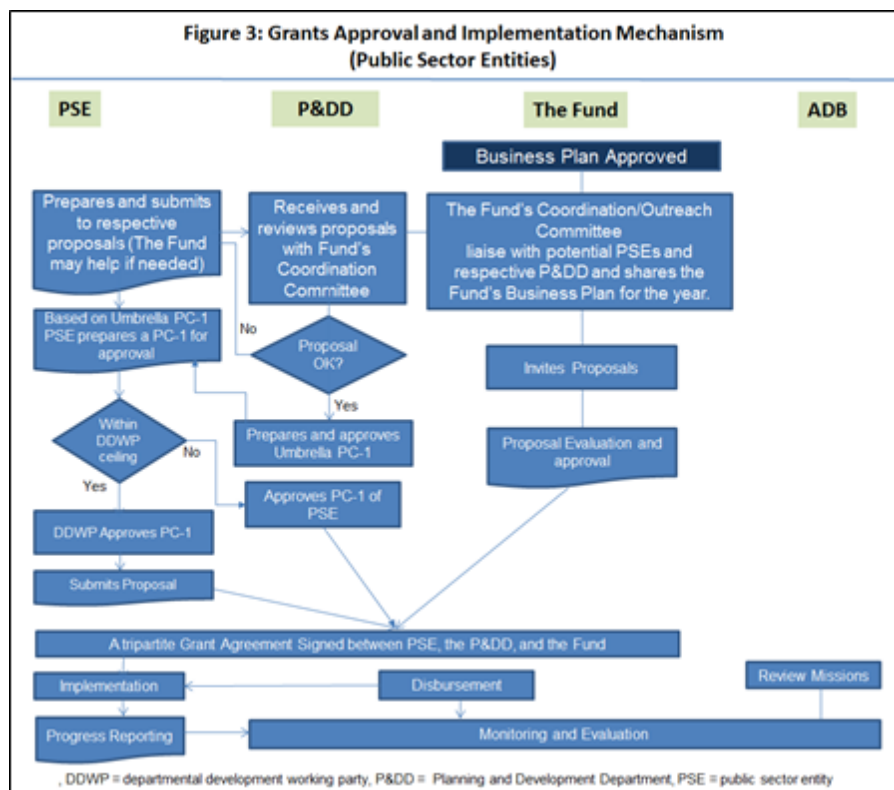
the proposal review of public sector entities will undertake a rapid risk assessment exercise before approval proposals for funding. The Fund staff will engage with respective departments directly to improve the quality of submission where required, risk mitigation measures and send the approved list of sub-project concepts for each region to the P&D of respective regions, who would process an Umbrella PC-I to solicit the required counterpart funding from their respective governments.

28. Each entity can hire additional resources to design and manage project implementation or collectively hire resources at the P&D level to provide these services to multiple departments simultaneously. Once the counterpart funding is approved a tripartite implementation agreements will be signed between the Fund, the respective P&D and the Public sector entity that initiated the proposal for subproject funding.

29. For non-government agencies the same approach will be followed but through a separate coordination committee lead by the Fund, facilitated by disaster management authorities, with representation from regional non-government entities. For non-government entities there will be independent accreditation criteria for screening before proposal submission and all proposals will be treated independently. A dedicated team of staff from the Fund will maintain an ongoing engagement with non-government entities coordination committee and their interested members to improve their access to opportunities provided by the Fund.

30. All safeguards, procurement, accounting and reporting (monitoring) requirement of the Fund will be detailed in the Agreements with the FIP and regularly reported on by the FIP and monitored and evaluated by the Fund. The associated TA consultants will periodically review implementation of activities by the FIP on sample bases to provide a third party view on quality control and progress and report the lessons learnt back into the project management cycle of the Fund.

31. The NDRMF management will collate reports of FIP and report against performance and progress targets outlined in the business plans to the Board and all contributing partners of the Fund. The Fund will also produce special reports in some cases targeting specific contributions in line with instruments of contributions signed with respective contributor



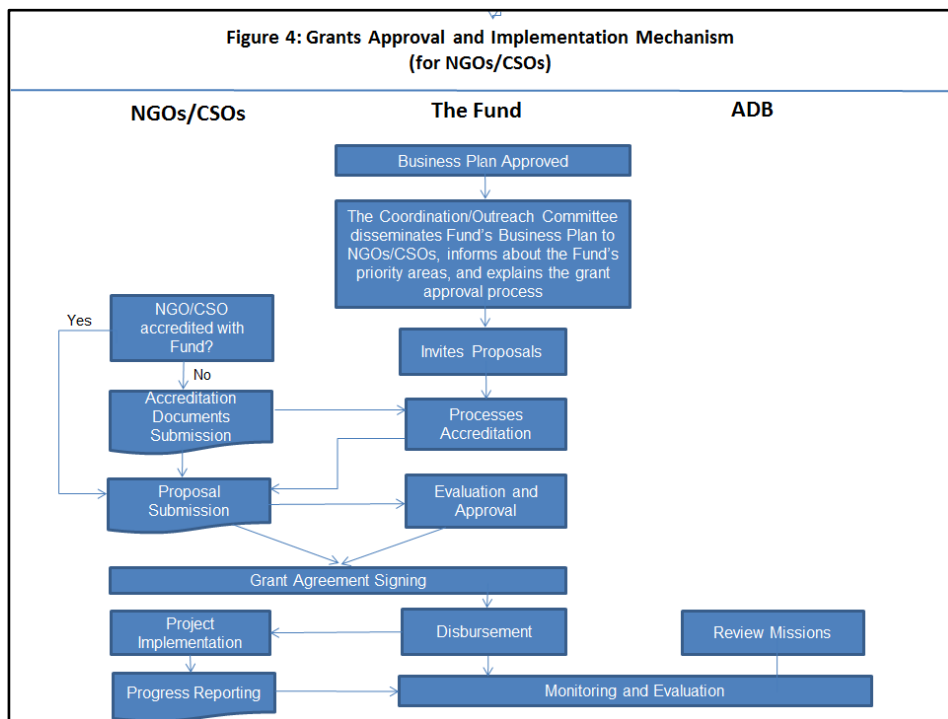
32. The NDRMF will regularly report back to its constituency (general public, government, existing and potential contributors) on its progress, efficiency and quality parameters, along with lessons and achievements through multiple means using a proactive communication strategy.

33. ADB will undertake periodic reviews of the selected or all

subprojects if required during review missions or through third party consultants under the associated technical assistance (TA) to help with project implementation. The design and monitoring framework (DMF) outlines the outcomes, outputs and key targets to be achieved by the Fund under each with timelines. The reporting from the Fund and the FIP will be based on this monitoring framework. The Fund will establish baselines for the targets for which this information is not available before the start of the implementation.

34. ADB will maintain multi-sector team to administer the activities of the Fund and apart from day to day oversight and guidance through core staff and staff hired through associated TA, will undertake detailed quarterly review mission to evaluate performance and progress of the Fund. All contributing partners will be invited to participate in such reviews and terms of reference for each review will be discussed and shared with all stakeholders in advance.

35. **Accreditation Criteria.** The NDRMF shall devise an accreditation mechanism for assessment of a recipient's capacity to implement grants before signing the grant agreement and releasing NDRMF money. The main objective of the recipient's (other than a government departments) capacity assessment is to only engage with entities that meet the minimum capacity requirements at least and to establish the need for development of a risk mitigation plan before releasing the fund money to address the gaps. The accreditation criteria will be applied to all non-government grantees' or Fund implementation partners (FIP) before receiving their proposals. For public sector entities and statutory authorities that follow standard government rules a tailored risk evaluation will be undertaken in tandem with their proposal evaluation. The accreditation criteria and risk assessment may broadly include reviewing the adequacy of the applicant's: (i) organizational structure; (ii) regulatory and legal regime under which the organization is established and functions (for non-government entities); (iii) the management structure and its capacity; (iv) internal control, books/record keeping, accounting and auditing systems, and review three year financial record/audit of the entity; (v) technical expertise in the area of interest and



related annual financial turnover; (vi) quality control mechanism and practices (safeguards, monitoring etc.); and (vii) procurement system and processes, including transparency of the procurement process including segregation of procurement responsibilities. Under quality control, social and environmental safeguard and gender policy and practices will be carefully assessed so that the relevant gaps can be included in the scope of the activities to be undertaken by the FIP and to ensure that these actions are included in the funding agreement to be signed between the NDRMF and FIP if required.

36. Project Selection Criteria. The Technical Advisory Committee (TAC) will be selected and constituted with members from a roster of experts in a specific sector, along with members from core team of the NDRMF, coordinated by experts from Project and Operations Department of the NDRMF. The proposals will be grouped in number of categories, based on types of interventions, funding levels, geographic areas and types of FIPs. The membership of the TAC will be adjusted based on the categorization to ensure quality, autonomy and efficiency of proposal processing. The roster of experts apart from independent consultants and subject specialist on retainer contracts will have experts coopted from sector departments, think tanks and research and academic bodies. The membership of the TAC will be endorsed by the NDRMF Management, to conduct rigorous technical assessments of requests for financing from the NDRMF. It will review subproject concepts/proposals related to the respective sectors. If the TAC adversely assesses the quality of a proposal, the related application will be either put on hold pending a reassessment of the proposal after all concerns are properly addressed or rejected at the discretion of the TAC. The NDRMF management will review and recommend only those proposals that have been cleared by TAC and submitted the recommended list after their due diligence for endorsement of its Board. The TAC may through the management also propose to the Board for consideration, strategic guidelines for prioritizing investments to be supported by the NDRMF.

37. The criteria given below, provides the overall framework for subproject proposal selection and review process to be followed by the TAC. More sector specific and tailored criteria will be developed by the NDRMF Management, endorsed by ADB, and approved by its Board for subproject proposal review in core areas of funding:

- (i) The subproject is in line with priorities highlighted in the NDMP and NFFP IV.
- (ii) The subproject scope is within activities outlined in the business plan of the Fund as approved by its Board.
- (iii) The subproject results are fully aligned to the output and outcome targets of the design and monitoring framework of the Fund.
- (iv) The subproject is located within Pakistan and prioritized according to available disaster risk modelling analysis and disaster risk maps.
- (v) Technical data related to natural hazards and disaster risk is included in the subproject proposal, relating it to the DRM targets and outcomes that the project is expected to achieve. This could include seismic data/maps, meteorological data, inundation maps, MHVRAs and other information recorded by recognized agencies dealing with the subject.
- (vi) The subproject has clearly defined inputs and costs that conform to the standard norms and reference quality control checklist developed (and updated) by the Fund for different DRM activities.
- (vii) The subproject is technically feasible/viable and the proposed intervention provides the most cost effective solution (comparing different option), and where applicable the subproject's economically viability (an EIRR of 12% and above) is established based on economic analysis procedures acceptable to ADB (for all infrastructure and equipment in the investment component - DRR).

- (viii) The subproject is in compliance with applicable laws and ADB's Safeguard Policy Statement (SPS) (2009); and prepared in accordance with the requirements of the agreed environmental and social management system (ESMS) for the NDRMF. 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 ESMS. Government environment clearance, if required, will be obtained prior to commencing civil works for such subprojects. Subprojects that do not satisfy the ESMS will not be financed by the NDRMF. Category "A" subprojects for environment and social safeguards according to ADB's Safeguard Policy Statement (SPS) (2009) will not be financed by the NDRMF.
- (ix) The subproject should be in compliance with the National Policy Guidelines of *National Policy Guidelines on Vulnerable Groups in Disasters*³. The Project is gender informed and should comply with the gender criteria developed for the subproject proposal screening and selection.
- (x) The intervention financed by NDRMF should not adversely impact local population, property and avoid land acquisition and involuntary impacts (IR) as much as possible. Subprojects that involve land acquisition or IR impacts will prepare a land acquisition and resettlement plan in compliance with the Land Acquisition Act and ADB SPS as outlined in the Fund's ESMS.
- (xi) No category "A" (IR, environment, indigenous peoples) subprojects will be financed by NDRMF.
- (xii) Only those subprojects that can be completed within the business plan implementation period (up to 3 years) will be selected.
- (xiii) The subproject proposal should be submitted on the standard templates developed by the NDRMF for areas of DRM activities.

38. **Establishment and Operation of Endowment Fund.** An endowment fund will be established under the Project with \$100.0 million contribution from ADB, and \$23.0 million counterpart contribution by the Government of Pakistan. The endowment investment strategy will be endorsed by the Board and approved by ADB. The interest earned thereon from endowment will be used to finance the Fund's recurrent costs after year three of the project implementation. This is to provide the Fund a reasonable time to grow and to ensure financial viability of the Fund and sustainability of its operations in the long term. Apart from meeting the Fund's recurrent costs, the interest earned on the endowment proceeds can also be used for; further investments in interest bearing securities, and/or financing of disaster risk reduction activities as deemed appropriate by the Board of Directors of the Fund. The endowment fund will be kept in a separate bank account for transparency and traceability purposes. A fund-flow diagram for the endowment fund is presented at Figure 10 in the following section of the PAM.

39. A tripartite fund agreement acceptable to ADB will be signed between the EA, ADB, and the Fund clearly outlining; (i) the composition of endowment fund, (ii) purpose of establishment, (ii) conditions for disbursement of endowment fund by ADB and the Government, (iii) sanctity and use of endowment resources, (iv) treatment or use of interest earned on the investment of the endowment fund, and (v) procedure for closure of the endowment fund in case the Fund is closed.

³ National Disaster Management Act 2010, in its section 11 mandates NDMA to lay down Guidelines for Minimum Standards for Relief for persons affected by disaster, specifically directs NDMA to make provisions for the vulnerable groups in the guidelines. It further emphasizes on ensuring equal access relief opportunities for the victims, without any discrimination.

IV. COSTS AND FINANCING

A. Cost Estimates Preparation and Revisions

40. The Project is estimated to cost at \$256.6 million. This includes ADB financing of \$200.0 million, government contribution of \$25.0 million, and another \$28.2 million contribution by the Funds Implementation Partners (FIP). In addition, the Government of Australia will also co-finance the Project through a Grant of \$3.4 million. Table 5 presents the detailed Project cost by financier whereas the Table 6 below presents the component-wise Project cost.

Table 5: Financing Plan (\$ million)		
Source	Amount	% of total
Asian Development Bank	200.0	78.0%
Ordinary capital resources (loan)	75.0	29.2
Special Funds resources (loan)	125.0	48.7
Co-financing	3.4	1.3
Government	25.0	9.7
Fund Implementation Partners	28.2	11.0
Total	256.6	100.0
Source: Asian Development Bank estimates.		

Table 6: Project Cost by Component
(\$ million)

	Amount^a	% of total
A. Base Cost^b		
1. NDRMF established and made operational.	133.1	51.9%
2. Investments to reduce vulnerabilities to natural disasters	90.2	35.2%
3. Improved fiscal management of natural disaster risks	10.8	4.2%
Subtotal (A)	234.1	91.3%
B. Contingencies^c	15.5	6.0%
C. Financing Charges During Implementation^d	6.9	2.7%
Total (A+B+C)	256.6	100.0%

^a Includes taxes and duties of \$17.5 million to be financed from government resources as well as from the Fund Implementing Partners' contribution.

^b In mid-2016 prices.

^c Physical and price contingencies computed at 9.5% and 4.48% respectively of the base cost (net of endowment fund contribution of \$123.3 million by ADB and the Government)

^d Includes interest and commitment charges. Interest during construction for the ADB loan has been computed at the 3-year fixed swap rate against the 6-month London interbank offered rate (LIBOR) plus a spread of 0.5% and 0.2% of maturity premium. Commitment charges for the ADB loan are 0.15% per year to be charged on the undisbursed loan amount ADB's special fund resources loan has been computed at 2.0% per annum.

Source: Asian Development Bank estimates.

41. The government has requested financial assistance amounting to \$200.0 million to help finance a portion of the estimated \$3.0 billion NDMP and NFPP-IV. The Project will be executed over a period of three years starting in last quarter of 2016. The government has requested the following loans:

- (i) A loan in various currencies equivalent to SDR 89.3 million (equivalent of \$125.0 million) from ADB's Special Fund Resources. The loan will have a 25-year term, including a grace period of 5 years, an interest rate of 2.0% per annum during the grace period and thereafter, and such other terms and conditions set forth in the *draft loan and project agreements*.
- (ii) A loan of \$75.0 million from ADB's ordinary capital resources. The loan will have a 25-year term, including a grace period of 5 years, custom-tailored repayment

schedule, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, a commitment charge of 0.15% per year and 0.2% of maturity premium (the interest and other charges during construction to be capitalized in the loan), and such other terms and conditions set forth in the draft loan and project agreements.

42. The proceeds of the Special Funds resources loan will be used for: (i) the Fund establishment costs that includes endowment contribution of \$100 million as well as operational expenses of the Fund, (ii) and carrying out multi-hazard vulnerability risk assessment (MHVRA) studies, and (iii) financing the Project management consultants for the Fund for developing various systems, procedures, manuals, and also developing an enterprise resource planning tool for the fund. The proceeds of OCR loan will be used for: (i) financing disaster risk reduction activities, (ii) development of a disaster risk financing strategy, and (iii) development and pilot testing of disaster risk financing instruments. ADB financing constitutes 78% of the overall Project cost.

43. The cost estimates were prepared by the ADB Project processing team in consultation with different stakeholders. The cost estimates are indicative and subject to change during implementation. The Project Implementation Specialist of the Project Administering Division will be responsible for revising and updating the cost estimates during implementation. The estimates can be revised any time during implementation upon the request of the Borrower, the EA/IA, or at ADB's own. Mid-term review will be another time where cost estimates may need to be revised.

B. Key Assumptions

44. The following key assumptions underpin the cost estimates and financing plan:

- (i) Exchange rate: PRs.104.51 = \$1.00 (as of 20 September 2016).
- (ii) Physical contingencies are estimated at 9.5% of the base cost (net of endowment fund contribution)
- (iii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

Table 7: Escalation Rates for Price Contingency Calculation
(percent)

Item	2016	2017	2018	2019	Average
Foreign rate of price inflation ^a	-	-	-	-	-
Domestic Rate of price inflation	3.200	4.500	5.000	5.200	4.475

^a The Investment cost is not broken into Foreign and Local components.

Source: Domestic Cost Escalation Factors 2016-2020; Central and West Asia Department

C. Detailed Cost Estimates by Expenditure Category

Table 8: Project Cost Estimate by Expenditure Category
(\$ million)

Item	Total Cost	% of Total Base Cost
A. Investment Costs		
1. Endowment Fund Contribution	123.275	52.65%
2. Equipment and Vehicles	0.715	0.31%
3. Awareness and Outreach Program	0.177	0.08%
4. Disaster Risk Reduction	83.923	35.84%
5. MHVRA and Research Studies	6.302	2.69%
8. Consultants		
a. Project management	2.046	0.87%
b. DRF Instruments Development	10.800	4.61%
Subtotal (A)	227.238	97.06%
B. Recurrent Costs		
1. Salaries	5.768	2.46%
2. Office Building Rental	0.241	0.10%
3. Office operation and maintenance	0.683	0.29%
4. Monitoring and Evaluation	0.200	0.09%
Subtotal (B)	6.892	2.94%
Total Base Cost	234.129	100.00%
C. Contingencies		
1. Physical	10.531	9.50%
2. Price	4.961	4.48%
Subtotal (C)	15.492	13.98%
D. Financial Charges During Implementation		
1. Interest during construction	6.171	2.64%
2. Commitment charges	0.607	0.26%
3. Grant Administration Fee on Cofinance Grant	0.168	0.07%
Subtotal (D)	6.947	2.97%
Total Project Cost (A+B+C+D)	256.568	

ADB = Asian Development Bank, DRF = disaster risk financing, MHVRA = multihazard vulnerability risk assessment

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates

D. Allocation and Withdrawal of Loan and Grant Proceeds

Table 9-A: Category Allocation for ADF Loan

Number	Item	Total Amount Allocated for ADB Financing (\$)		Percentage and Basis for Withdrawal from the Loan Accounts
		Category	Subcategory	
1	Endowment Fund	100,000,000		100% of total claimed
2	Consultants	6,701,140		
	2A Project Management Consultants		1,841,140	90% of the claimed expenditure
	2N DRF Strategy and Instrument Dev		4,860,000	45% of the claimed expenditure
3	MHVRA Studies	3,500,000		56% of the claimed expenditure*
4	Fund Operations	1,814,271		90% of the claimed expenditure
5	Incremental Staff Cost	5,767,849		100% of the claimed expenditure*
6	Interest Charges	4,731,367		100% of amount due
7	Unallocated	2,485,373		
	Total	125,000,000		

MHVRA = multihazard vulnerability risk assessment

*exclusive of taxes and duties imposed within the territory of the borrower

Source: Asian Development Bank estimates

Table 9-B: Category Allocation for OCR Loan

Number	Item	Total Amount Allocated for ADB Financing (\$)		Percentage and Basis for Withdrawal from the Loan Accounts
		Category	Subcategory	
1	Consulting Services - DRF	4,860,000		45 % of total expenditure claimed
2	Disaster Risk Reduction	59,148,000		70% of total expenditure claimed
3	Interest and Commitment Charges	2,047,227		100% of amount due
4	Unallocated	8,944,773		
	Total	75,000,000		

DRF = disaster risk financing

Source: Asian Development Bank estimates

Table 9C: Category Allocation Table for Cofinancier Grant

Number	Item	Total Amount Allocated for ADB Financing (\$)		Percentage and Basis for Withdrawal from the Loan Accounts
		Category	Subcategory	
1	MHVRA Studies	2,801,865		44% of total expenditure claimed*
2	Unallocated*	559,635		
	Total	3,361,500		

* This amount also serves as a reserve for (i) currency fluctuations and (ii) payment of ADB's administration fees and bank charges or other charges pursuant to the Cofinancing Agreement.

Source: Asian Development Bank estimates

E. Detailed Cost Estimates by Financier

Table 10: Project Cost – by Financier
(\$ million)

Item	ADB		Government		Cofinancing		FIPs		Total Cost	
	ADF	OCR	ADB Total	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Costs										
1. Endowment Fund Contribution	100.000		100.000	81.12%	23.275	18.88%				
2. Equipment and Vehicles	0.644		0.644	90.00%	0.072	10.00%				
3. Awareness and Outreach Program	0.159		0.159	90.00%	0.018	10.00%				
4. Disaster Risk Reduction		59.148	59.148	70.48%		0.00%			24.775	29.52%
5. MHVRA and Research Studies	3.500		3.500	55.54%		0.00%	2.802	44.46%		
8. Consultants										
a. Project management	1.841		1.841	90.00%	0.205	10.00%				
b. DRF Instruments Development	4.860	4.860	9.720	90.00%	1.080	10.00%				
Subtotal (A)	111.004	64.008	175.012	77.02%	24.649	10.85%	2.802	1.23%	24.775	10.90%
B. Recurrent Costs										
1. Salaries	5.768		5.768	100.00%	-	0.00%				
2. Office Building Rental	0.217		0.217	90.00%	0.024	10.00%				
3. Office operation and maintenance	0.615		0.615	90.00%	0.068	10.00%				
4. Monitoring and Evaluation	0.180		0.180	90.00%	0.020	10.00%				
Subtotal (B)	6.779	-	6.779	98.37%	0.112	1.63%				
Total Base Cost	117.783	64.008	181.791	77.65%	24.761	10.58%	2.802	1.20%	24.775	10.58%
C. Contingencies										
1. Physical	1.689	6.081	7.770	73.78%	0.141	1.34%	0.266	2.53%	2.354	22.35%
2. Price	0.796	2.864	3.660	73.78%	0.067	1.34%	0.125	2.53%	1.109	22.35%
Subtotal (C)	2.485	8.945	11.430	73.78%	0.208	1.34%	0.392	2.53%	3.462	22.35%
D. Financial Charges During Implementation										
1. Interest during construction	4.731	1.440	6.171	100.00%						
2. Commitment charges		0.607	0.607	100.00%						
3. Grant Administration Fee on Cofinance Grant							0.168			
Subtotal (D)	4.731	2.047	6.779	97.58%	-		0.168			
Total Project Cost (A+B+C+D)	125.000	75.000	200.000	77.95%	24.969	9.73%	3.362	1.31%	28.237	11.01%

ADB = Asian Development Bank, DRF = disaster risk financing, MHVRA = multihazard vulnerability risk assessment

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates

F. Detailed Cost Estimates by Outputs and/or Components

Table 11: Project Cost by Component/Outputs
(\$ million)

Item	Total Cost	Output 1: NDRMF established and made operational		Output 2: Investments to reduce vulnerabilities to natural disasters		Output 3: Improved fiscal management of natural disaster risks	
		Amount	% of Cost Category	Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Costs							
1. Endowment Fund Contribution	123.275	123.275	100.00%				
2. Equipment and Vehicles	0.715	0.715	100.00%				
3. Awareness and Outreach Program	0.177	0.177	100.00%				
4. Disaster Risk Reduction	83.923			83.923	100.00%		
5. MHVRA and Research Studies	6.302			6.302	100.00%		
8. Consultants	-						
a. Project management	2.046	2.046	100.00%				
b. DRF Instruments Development	10.800					10.800	100.00%
Subtotal (A)	227.238	126.213	55.54%	90.225	39.71%	10.800	8.56%
B. Recurrent Costs							
1. Salaries	5.768	5.768	100.00%				
2. Office Building Rental	0.241	0.241	100.00%				
3. Office operation and maintenance	0.683	0.683	100.00%				
4. Monitoring and Evaluation	0.200			0.200	100.00%		
Subtotal (B)	6.892	6.692	97.10%	0.200		-	
Total Base Cost	234.129	132.904	56.77%	90.425	38.62%	10.800	4.61%
C. Contingencies							
1. Physical	10.531	0.915	8.69%	8.590	81.57%	1.026	9.74%
2. Price	4.961	0.431	8.69%	4.047	81.57%	0.483	9.74%
Subtotal (C)	15.492	1.346	8.69%	12.637	81.57%	1.509	9.74%
D. Financial Charges During Implementation							
1. Interest during construction	6.171	3.319	53.78%	2.548	41.29%	0.304	4.93%
2. Commitment charges	0.607	0.327	53.78%	0.251	41.29%	0.030	4.93%
3. Grant Administration Fee on Cofinance Grant	0.168		0.00%	0.168	100.00%		
Subtotal (D)	6.947	3.646	52.48%	2.967	42.71%	0.334	4.81%
Total Project Cost (A+B+C+D)	256.568	137.896	53.75%	106.029	41.33%	12.644	4.93%

ADB = Asian Development Bank, DRF = disaster risk financing, MHVRA = multihazard vulnerability risk assessment

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates

G. Detailed Cost Estimates by Year

Table 12: Contract Award and Disbursements by Year (ADB Loan and Cofinanced Grant)
(\$ million)

Item	Total Project Cost	ADB Loan and Cofinancing Grant									
		Contract Awards					Disbursements				
		2017	2018	2019	2020	Total	2017	2018	2019	2020	Total
A. Investment Costs											
1. Endowment Fund Contribution	123.275	100.000	-	-	-	100.000	100.000	-	-	-	100.000
2. Equipment and Vehicles	0.715	0.644	-	-	-	0.644	0.644	-	-	-	0.644
3. Awareness and Outreach Program	0.177	0.053	0.053	0.053	-	0.159	0.011	0.053	0.096	-	0.159
4. Disaster Risk Reduction	83.923	5.915	29.574	23.659	-	59.148	-	9.168	35.489	14.491	59.148
5. MHVRA and Research Studies	6.302	0.630	5.672	-	-	6.302	-	0.822	4.268	1.212	6.302
8. Consultants	-	-	-	-	-	-	-	-	-	-	-
a. Project management	2.046	1.473	0.368	-	-	1.841	0.055	0.739	0.838	0.209	1.841
b. DRF Instruments Development	10.800	4.860	4.860	-	-	9.720	-	2.284	6.197	1.239	9.720
Subtotal (A)	227.238	113.575	40.527	23.712	-	177.814	100.709	13.066	46.887	17.152	177.814
B. Recurrent Costs											
1. Salaries	5.768	1.923	1.923	1.923	-	5.768	1.202	1.923	1.923	0.721	5.768
2. Office Building Rental	0.241	0.072	0.072	0.072	-	0.217	0.072	0.072	0.072	-	0.217
3. Office operation and maintenance	0.683	0.205	0.205	0.205	-	0.615	0.205	0.205	0.205	-	0.615
4. Monitoring and Evaluation	0.200	-	0.180	-	-	0.180	-	-	0.126	0.054	0.180
Subtotal (B)	6.892	2.200	2.380	2.200	-	6.779	1.479	2.200	2.326	0.775	6.779
Total Base Cost	234.129	115.774	42.907	25.912	-	184.593	102.188	15.266	49.212	17.927	184.593
C. Contingencies											
1. Physical	10.531	-	-	-	8.036	8.036	-	-	-	8.036	8.036
2. Price	4.961	-	-	-	3.786	3.786	-	-	-	3.786	3.786
Subtotal (C)	15.492	-	-	-	11.822	11.822	-	-	-	11.822	11.822
D. Financial Charges During Implementation											
1. Interest during construction	6.171	-	-	-	-	-	2.057	2.057	2.057	-	6.171
2. Commitment charges	0.607	-	-	-	-	-	0.202	0.202	0.202	-	0.607
3. Grant Administration Fee on Cofinancing Grant	0.168	-	-	-	-	-	0.056	0.056	0.056	-	0.168
Subtotal (D)	6.947	-	-	-	-	-	2.316	2.316	2.316	-	6.947
Total Project Cost (A+B+C+D)	256.568	115.774	42.907	25.912	11.822	196.415	104.504	17.582	51.528	29.748	203.362
% of Total Project Cost		58.94%	21.84%	13.19%	6.02%	100.00%	51.39%	8.65%	25.34%	14.63%	100.00%

ADB = Asian Development Bank, CAD = contract award and disbursement, DRF = disaster risk financing, MHVRA = multihazard vulnerability risk assessment
 Notes: Numbers may not sum precisely because of rounding.
 Source: Asian Development Bank estimates

H. Contract and Disbursement S-Curve

Figure 5: CAD Projections Graph for ADB Loans and Cofinancing Grant

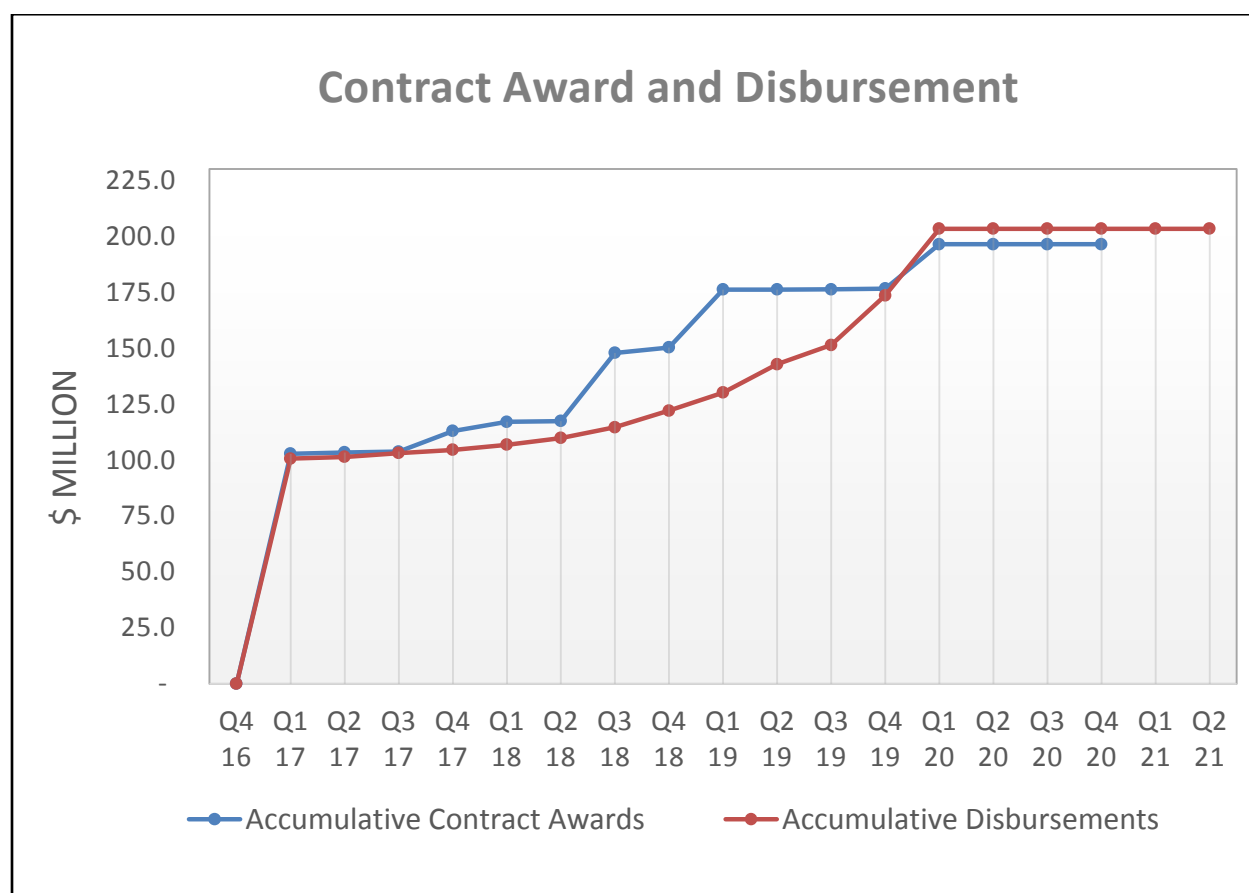
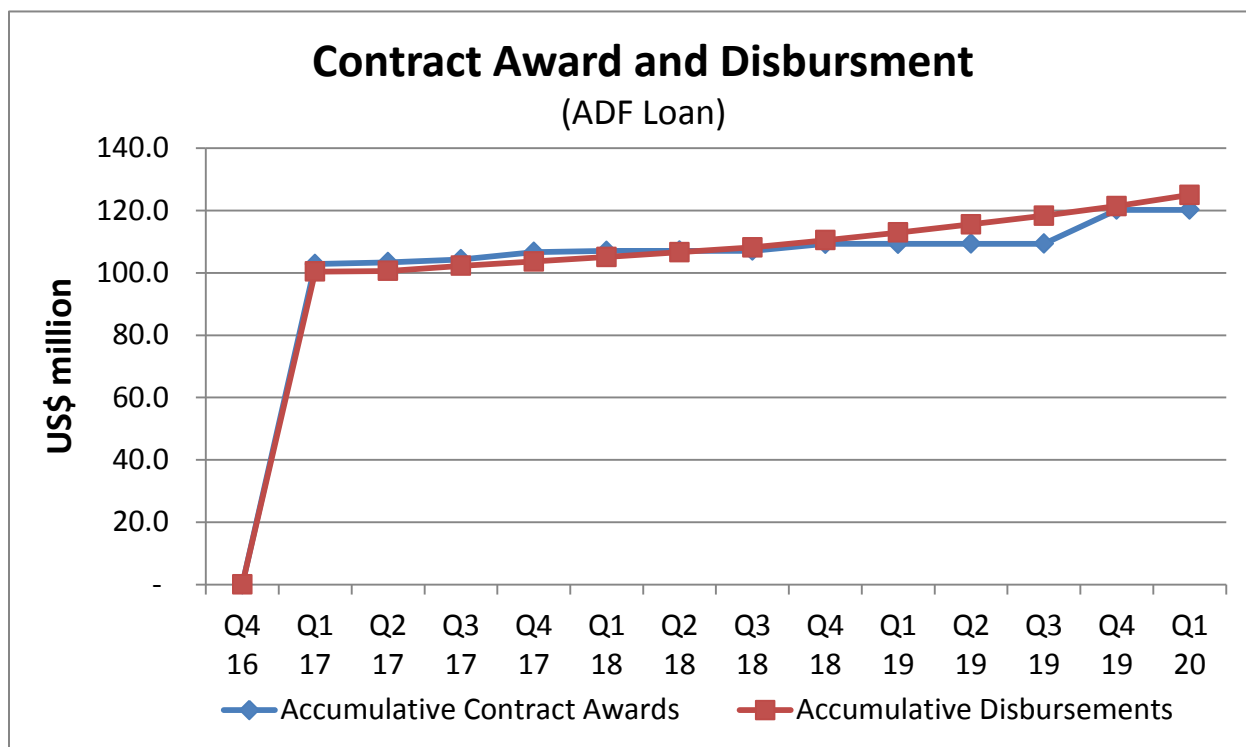


Table 13: CAD Projections for the ADB Loan and Cofinancing Grant
(\$ million)

CONSOLIDATED PROJECTIONS										
CONTRACT AWARDS						DISBURSEMENTS				
Year	Q1	Q2	Q3	Q4	TOTAL	Year	Q1	Q2	Q3	TOTAL
2016						2016				
2017	102.843	0.552	0.053	9.547	112.996	2017	100.579	0.819	1.703	104.504
2018	2.380	2.057	29.627	3.666	37.730	2018	2.290	3.001	4.838	17.582
2019	25.859	-	0.053	-	25.912	2019	8.051	12.628	8.616	51.474
2020	19.790	-	-	-	19.790	2020	29.802	-	-	29.802
TOTAL					196.428	TOTAL				203.362

Figure 6: CAD Projections Graph for the ADF Loan

Table 14: CAD Projections for ADF Loan
(\$ million)

PROJECTIONS (ADF LOAN)												
CONTRACT AWARDS							DISBURSEMENTS					
Year	Q1	Q2	Q3	Q4	TOTAL		Year	Q1	Q2	Q3	Q4	TOTAL
2016				-	-		2016				-	-
2017	102.843	0.552	0.053	0.921	104.369		2017	100.394	0.240	1.608	1.389	103.631
2018	2.380	0.368	0.053	-	2.801		2018	1.441	1.533	1.554	2.308	6.836
2019	2.200	-	0.053	-	2.253		2019	2.493	2.584	2.801	3.054	10.932
2020	10.845				10.845		2020	3.602	-	-	-	3.602
TOTAL					120.268		TOTAL					125.000

Figure 7: Contract Award and Disbursement Graph for the OCR Loan

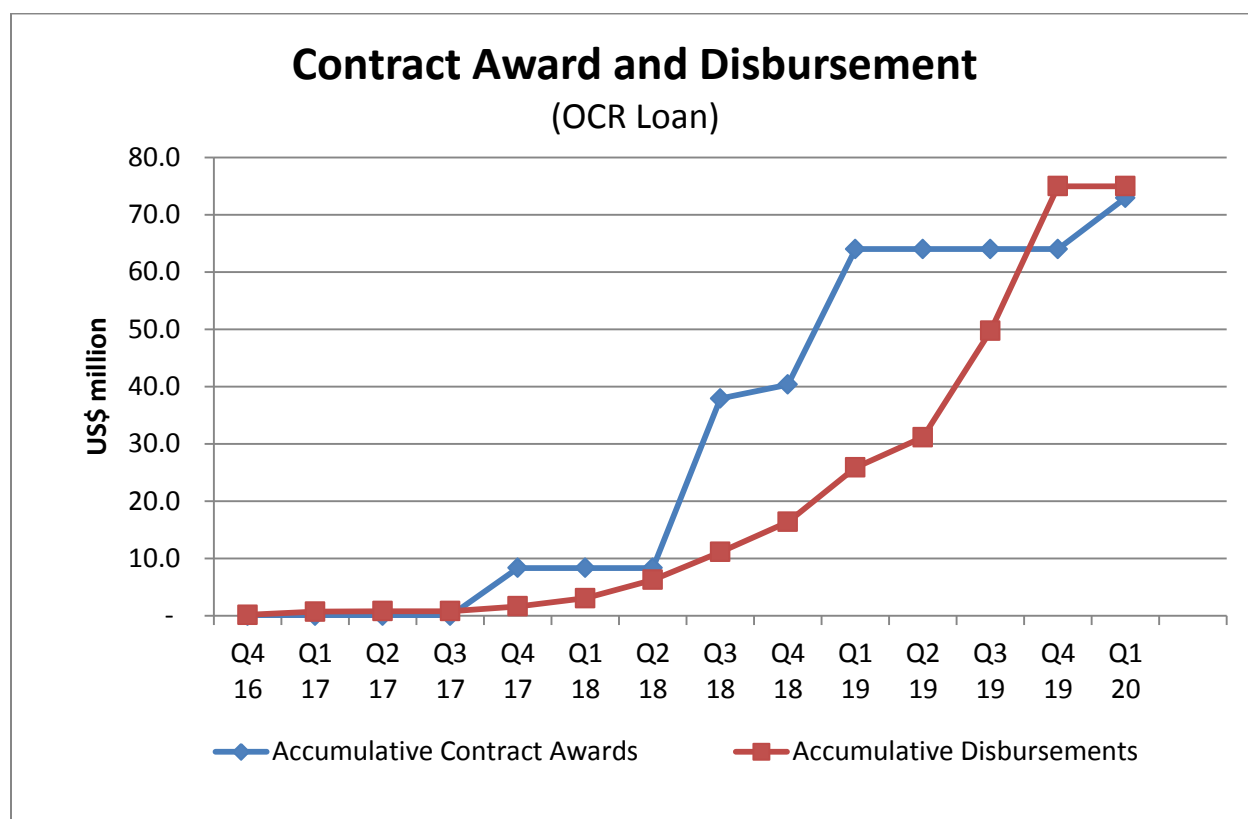
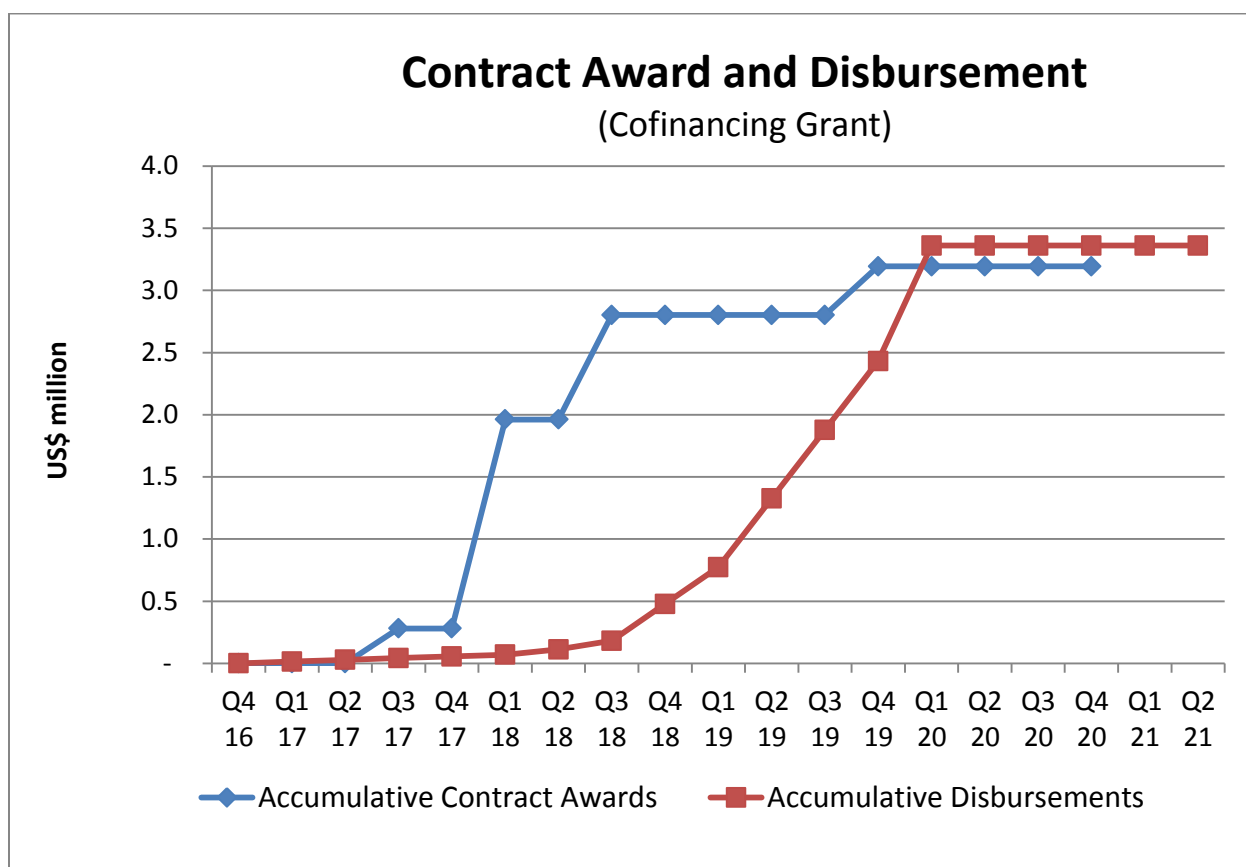


Table 15: CAD Projections for OCR Loan
(\$ million)

PROJECTIONS (OCR LOAN)										
CONTRACT AWARDS						DISBURSEMENTS				
Year	Q1	Q2	Q3	Q4	TOTAL	Year	Q1	Q2	Q3	TOTAL
2016						2016				-
2017	-	-	-	8.345	8.345	2017	0.171	0.565	0.081	0.817
2018	-	-	29.574	2.430	32.004	2018	0.834	1.426	3.214	10.324
2019	23.659	-	-	-	23.659	2019	5.262	9.492	5.262	38.588
2020	8.945				8.945	2020	25.271	-	-	25.271
TOTAL					72.953	TOTAL				75.000

Figure 8: CAD Projection Graph for Cofinancing Grant

Table 16: CAD Projections for the Cofinancing Grant
(\$ million)

PROJECTIONS (COFINANCED GRANT)											
CONTRACT AWARDS						DISBURSEMENTS					
Year	Q1	Q2	Q3	Q4	TOTAL	Year	Q1	Q2	Q3	Q4	TOTAL
2016				-	-	2016				-	-
2017	-	-	-	0.281	0.281	2017	0.014	0.014	0.014	0.014	0.056
2018	-	1.689	-	1.236	2.925	2018	0.014	0.042	0.070	0.296	0.422
2019	-	-	-	-	-	2019	0.296	0.553	0.553	0.553	1.954
2020	-				-	2020	0.930				0.930
TOTAL					3.207	TOTAL					3.362

I. Fund Flow Diagram

45. Fund Flow of the Project is summarized in the following diagrams.

Figure 9: Fund Flow Diagram (ADB Loan)

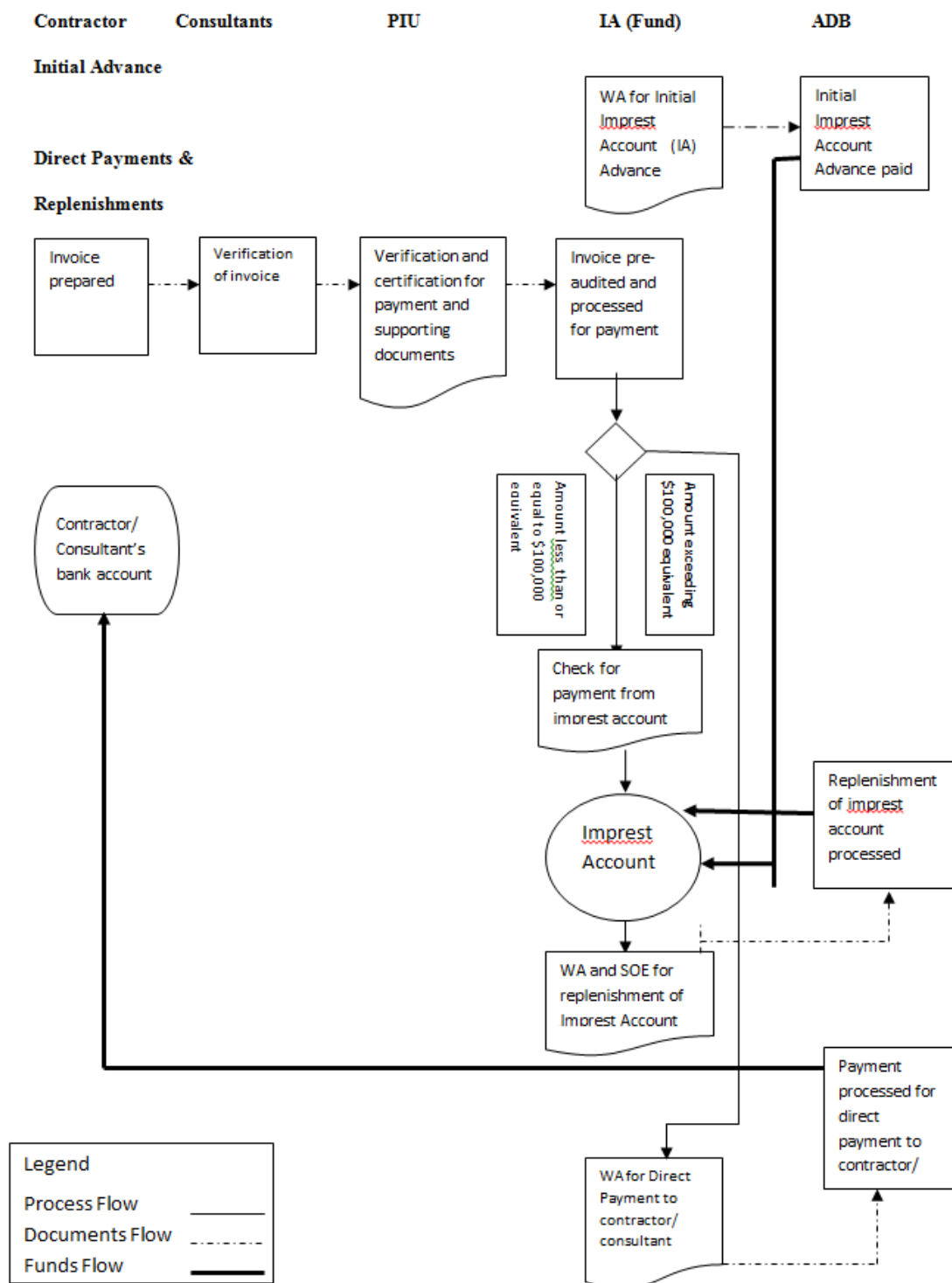


Figure 10: Fund Flow Diagram (Endowment Fund)

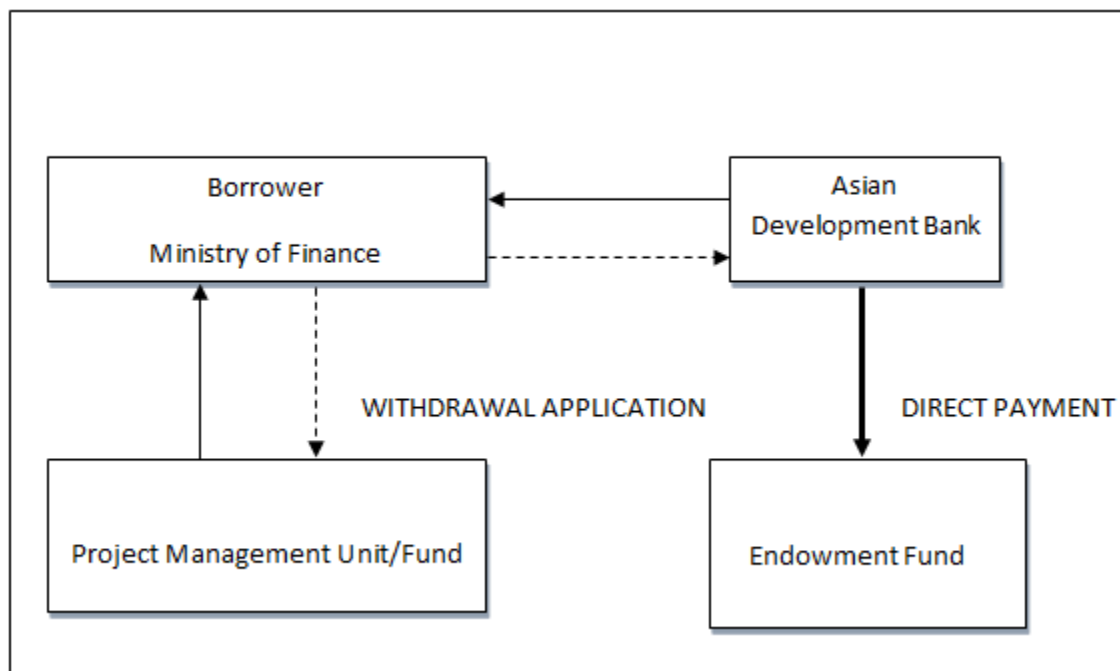


Figure 11: Fund Flow Diagram (Direct Financing to Fund)

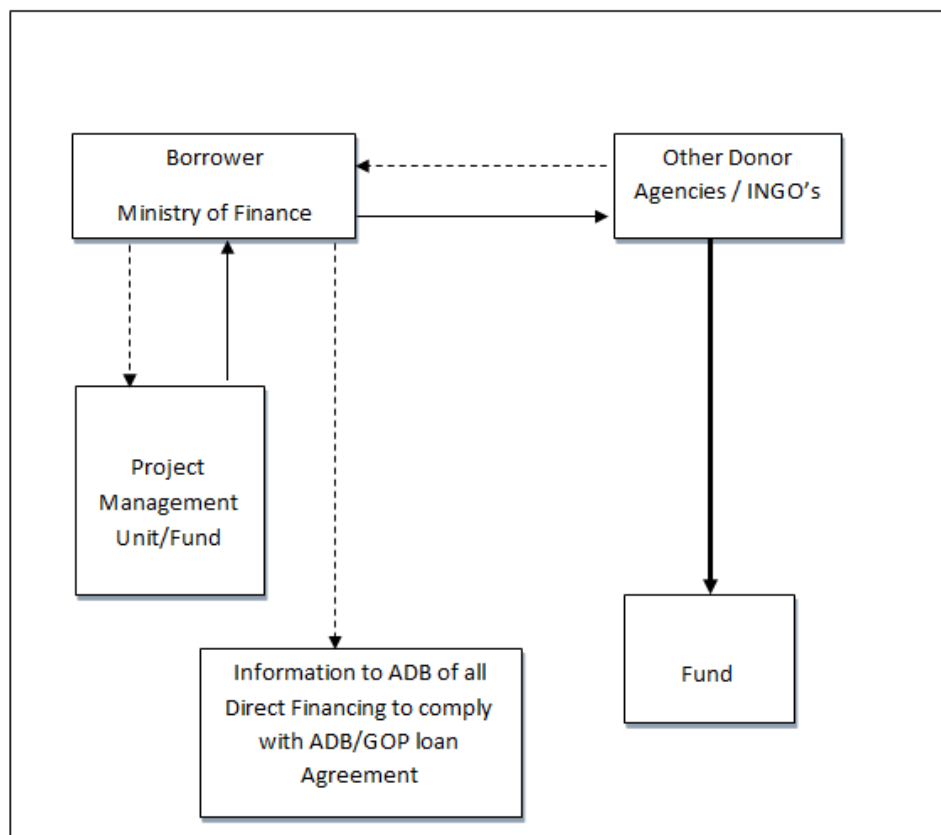
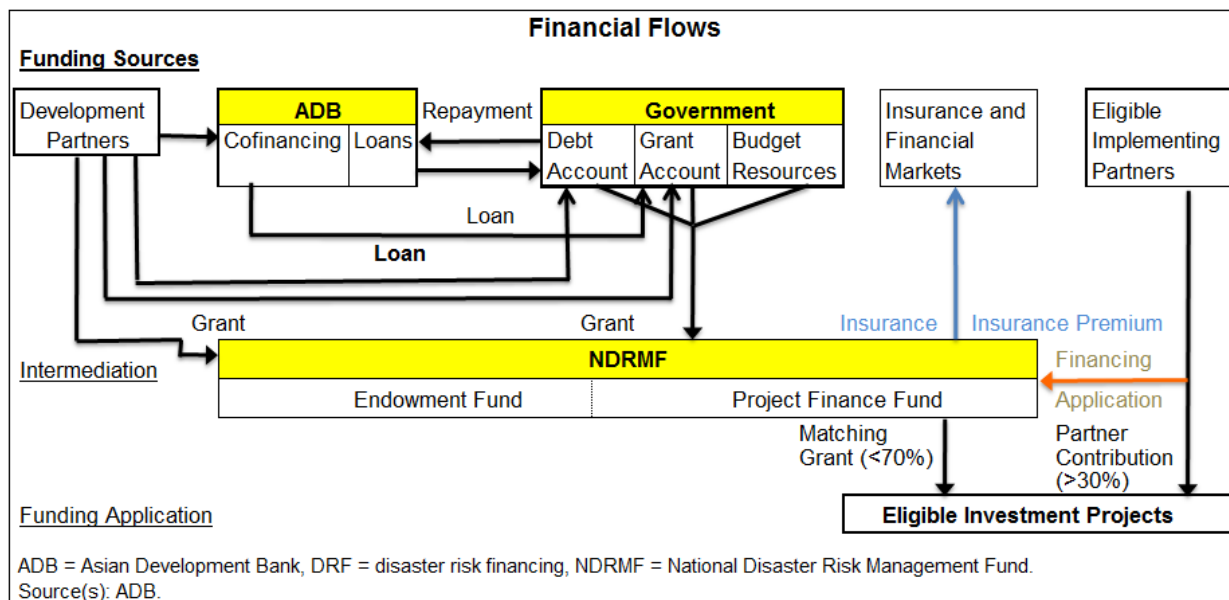


Figure 12: Consolidated Fund Flow Diagram



V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

46. Financial management assessment was conducted for the NDRMF in August 2016, in accordance with ADB's Guidelines for the Financial Management and Analysis of Projects and A Methodology Note on Financial Due Diligence. The overall inherent risk was assessed as substantial primarily due to the Fund staff-related factors. The overall control risk is assessed as moderate. Establishment of the NDRMF with qualified professionals will help in smooth implementation of the Project.

47. The assessment confirmed that the NDRMF will need to provide adequate number of accounting professionals as pre-condition for disbursement to the NDRMF and computerized financial accounting and reporting systems and procedures will need to be developed for robust internal controls, book/record keeping, and accounting related to the Project. The NDRMF should meet the overall financial management, accounting and auditing requirements, while the Borrower should express commitment to address issues relating to staffing and strengthening of the internal control process.

48. **Risk Analysis.** During the implementation phase, the NDRMF might face some risks that can generally be divided in two main categories: (i) country level; and (ii) organization/project level. Unavailability or delay in the release of counterpart funds can be attributed as major country specific risk for the Project. There are no major financial management risks once the NDRMF is adequately staffed and trained. The borrower, the executing agency, and the NDRMF have agreed to implement an action plan as key measures to address the deficiencies identified in the FMA. The financial management action plan is provided in **Table 17**. All such measures will be reviewed and updated throughout the project implementation.

Table 17: Risk Assessment and Risk Management Plan

Risk	Risk Assessment*	Mitigation Measures or Risk Management Plan
<i>Inherent Risk</i>		
1. Country-specific Risks	S	EAD will mobilize grant funding for government's portion of the project financing.
2. Entity-specific Risks	M	Extensive training of the NDRMF staff on ADB procedures will be carried out.
3. Project-specific Risks	M	Security in project areas. Security insurance measures and costs should be embedded in consultants' contracts.
Overall Inherent Risk	S	
<i>Control Risk</i>		
1. Implementing Entity	M	Organizational capacity augmentation with the induction of experienced staff of the NDRMF will support the organizational structure.
2. Funds Flow	L	Almost all disbursement will be made through Imprest Fund and Direct Payment to contractors and consultant.
3. Staffing	M	Dedicated and qualified accounting and financial management staff at the Fund level will be recruited.
4. Accounting Policies and Procedures	L	Accounting Policies should be in line with the national and international accounting standards and meets the

Risk	Risk Assessment*	Mitigation Measures or Risk Management Plan
		requirements of ADB.
5. Internal Audit	M	The NDRMF's internal auditor will audit The Fund's project financial statements.
6. External Audit	M	Audit of the project financial statements will be done in accordance with the International Standards on Auditing, by an independent auditor acceptable to ADB.
		The NDRMF will also be audited by the Accountant General of Pakistan.
7. Reporting and Monitoring	M	The NDRMF will regularly report in accordance with ADB requirements on inherent adequate control mechanisms. Timeliness of such reports will be ensured through regular monitoring and follow-up actions by ADB.
Overall Control Risk	M	

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

B. Disbursement

1. Disbursement Arrangements for ADB and ADB-administered Cofinancier Funds

49. **Imprest fund procedure.** Immediately after loan effectiveness, the NDRMF will establish separate imprest accounts for the OCR loan, ADF loan and cofinancier grant at a commercial bank acceptable to ADB. The currency of the imprest accounts will be the US dollar. The outstanding advance of the imprest advances will be equivalent to the estimated eligible project expenditure for the next six months. 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.

50. **Statement of expenditure procedure.** The statement of expenditure (SOE) procedure will be used to reimburse eligible expenditure and to liquidate and replenish the imprest account for individual payments of \$100,000 equivalent and below. Supporting documents and records for the expenditures claimed under the SOE should be maintained and made readily available for review by ADB's disbursement and review missions, upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit. Reimbursement and liquidation of individual payments in excess of the SOE ceiling should be supported by full documentation when submitting the withdrawal application to ADB

51. The NDRMF will be responsible for: (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting and retaining supporting documents, and (iv) preparing and sending withdrawal applications to ADB. Before the submission of the first withdrawal application, the government shall submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is set in accordance with the Loan Disbursement Handbook. Individual payments below this amount should be paid (i) by the NDRMF and subsequently claimed from ADB through reimbursement; or (ii) from the imprest accounts,

unless otherwise accepted by ADB.

52. Direct payment procedures will be used for large contracts and consulting services.

2. Disbursement Arrangements for Counterpart Fund

53. The NDRMF will open an Assignment Account at the National Bank of Pakistan's designated branch in accordance with Finance Division Procedures. The Assignment Account is to be used exclusively for GOP's share of expenditures. Assignment account will be established, managed, in accordance with Finance Division's procedures. For liquidation and replenishment of GOP's Assignment Account, requests will be submitted by the Chief Finance Officer (CFO) of the NDRMF. CFO will also be responsible for (i) preparing disbursement projections, and (ii) requesting budgetary allocations for counterpart funds on quarterly basis. The Government will be responsible for financing of local taxes and duties under the Project in shape of GOP's financing percentage agreed for the Project.

3. Fund Flow Mechanism

54. The loan proceeds including ADB-administered cofinancier funds will be disbursed in accordance with ADB's *Loan Disbursement Handbook*⁴ (2015, as amended from time to time), and detailed arrangements agreed upon between the government and ADB. Online training for project staff on disbursement policies and procedures is available.⁵ Project staff will be encouraged to avail of this training to help ensure efficient disbursement and fiduciary control. Direct donors to the NDRMF other than ADB and ADB administered co-financier, NDRMF will keep ADB informed of any such direct financing.

2. Preconditions to Disbursement

55. The following are set as disbursement pre-conditions:

- i. The Fund shall have appointed qualified and suitable accounting professionals in the finance and account sections.
- ii. A tripartite subsidiary grant agreement acceptable to ADB shall have been signed between the EA, ADB, and the Fund for establishment and use of endowment fund

C. Accounting

56. NDRMF will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the Project by adopting the accrual-based accounting following the International Financial Reporting Standards. NDRMF will prepare project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices.

D. Auditing and Public Disclosure

57. NDRMF would be required to put in place an internal audit function headed by a qualified accountant well versed with the internal audit function and requirements. This function should functionally report to the Audit and Finance Committee of the Board of Directors. Internal

⁴ Available at: http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf

⁵ Disbursement eLearning. http://wpqr4.adb.org/disbursement_elearning

audit reports should be directly submitted to Audit and Finance Committee of the Board of Directors for consideration. This arrangement ensures the independence and autonomy of internal audit.

58. Under the Companies Ordinance the company's management is responsible to establish and maintain a system of internal control, and prepare and present financial statements in conformity with the approved accounting standards and the requirements of the Companies Ordinance, 1984. These financial statements are annually audited by an independent firm of Chartered accountants in accordance with international auditing standards. Under the Companies Ordinance 1984 the audited financial statements for NDRMF would require to be submitted within 4 months at the Annual General Meeting (AGM) of the fund from end of fiscal year (FY) (30 June).

59. The NDMRF will cause the annual project financial statements for the Project to be audited in accordance with the International Standards of Auditing and since NDRMF would be treated as a government entity, in addition to the Auditor General of Pakistan (AGP), its financial statements would also be audited annually by an independent auditor acceptable to ADB. AGP is appointed under the Constitution and is primarily responsible for the audit of accounts of public organizations. The Auditor General of Pakistan provides the management letter highlighting any weaknesses in the financial reporting system and the overall systems of internal control. The audited project financial statements together with the auditors' opinion will be submitted in the English language to ADB within six months of the end of the fiscal year by NDMRF

60. The annual audit report for the project accounts will include 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 loan proceeds were used only for the purposes of the project or not; and (iii) the level of compliance for each financial covenant contained in the legal agreements for the project.

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

62. NDMRF will be made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.⁶ ADB reserves the right to require a change in the auditor, 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

⁶ ADB approach and procedures regarding delayed submission of audited project financial statements:

- 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 have not been received within 6 months after the due date, 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.
- When audited project financial statements have not been received within 12 months after the due date, ADB may suspend the loan.

accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

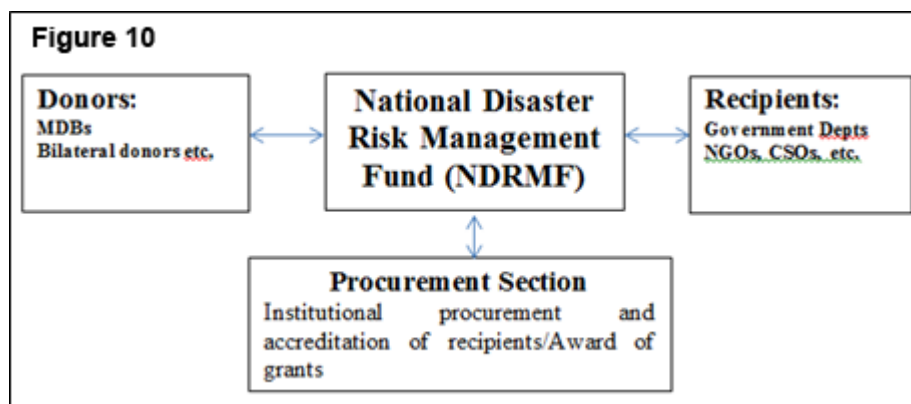
63. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011)⁷. After review, ADB will disclose the project financial statements for the project and the opinion of the auditors on the financial statements within 14 calendar days of the date of their acceptance by posting them on ADB's website. The Audit Management Letter will not be disclosed.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Procurement of Goods, Works, and Consulting Services

64. The National Disaster Risk Management Fund (NDRMF) is being established as a government-owned sustainable mechanism to enhance Pakistan's resilience to climatic and other natural hazards. The NDRMF will use ADB Procurement Guidelines (April 2015, as amended from time to time) for all institutional procurement and ADB's Guidelines on the Use of Consultants (March 2015, as amended from time to time) for engagement of consulting services (4 packages) as well as individual consultants under the loan. A procurement consultant hired through the associated TA will support the EA on these procurements. The procurement risk is therefore low as the remaining procurements will be done by the sub-borrowers (grantees) with oversight provided by the Fund procurement team and periodic review by the consultant hired through the associated TA. During the first six months, the EA will have prepared a procurement procedural manual and also put in place a procurement framework.

65. The Fund will follow the processes as shown in Figure 10 for awarding grants to the recipients and the procurement of goods, works and services. First, a procurement section with two procurement specialists and supporting analysts will be established within the NDRMF. The procurement section will carry out the institutional procurement to run the daily business of the NDRMF. The ADB Procurement Guidelines (April 2015,



as amended from time to time) will be applied for institutional procurement. In order to ensure efficiency, transparency, competition, and accountability, a procurement framework will be put in place describing (i) clarity on functional responsibilities and accountabilities for procurement activities; (ii) procurement systems and processes including guidance on anti-corruption and conflict of interest; and (iii) procurement skills and capacities. The NDRMF's Board will advise for completion of all such activities within 18 months after its establishment. In addition, in the concept paper, it is already indicated and approved that the country procurement systems will not be used. The detailed procedures will be developed and included in the procurement

⁷ Available from <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>

procedures manual by the TA Consultants.

66. Second, the Fund shall devise an accreditation mechanism for assessment of a recipient's capacity to implement grants before signing the grant agreement and releasing Fund money. The main objective of the recipient's capacity assessment is to establish the need for development of a risk mitigation plan before releasing the NDRMF money. The accreditation criteria will be applied to all non-government grantees' or Fund implementation partners (FIPs) before reviewing their investment proposals. For public sector entities and statutory authorities that follow standard government rules a tailored risk evaluation will be undertaken in tandem with their proposal evaluation. The accreditation criteria and risk assessment may broadly include reviewing the adequacy of the: (i) organizational structure; (ii) regulatory and legal regime under which the organizations is established and functions (for non-government entities); (iii) the management structure and its capacity; (iv) internal control, book/record keeping, auditing system and three year financial record of the entity; (v) technical expertise in the area of interest and related annual financial turnover ; (vi) quality control mechanism and practices (safeguards, monitoring etc.); and (vii) transparency of the procurement process including segregation of procurement responsibilities. Under quality control social and environmental safeguard and gender policy and practices will also be reviewed so that the relevant gaps can be included in the scope of the activities to be undertaken by the FIP and in their funding agreement to be signed with the Fund if required.

67. The proposed procurement framework is expected to provide information on (i) procurement strategy effectiveness; (ii) performance efficiency; (iii) strengths and weaknesses of the procurement function; and (iv) areas for further development.

68. The assessment should produce a detailed description of the recipient's eligibility and ability to undertake target activities under grant money from the NDRMF, in part based on prior relevant technical experience and experience in the project area. In the event of funding from multiple sources (donors) individually or as co-financing to the NDRMF, a mechanism ensuring equal treatment and transparency in utilization of such fund money will be put in place.

69. The NDRMF will maintain a roster of experts on retainer bases (individual consultants) to provide support in the preparation and review of the legal, procurement, institutional, finance, safeguard, gender and governance frameworks as well as sector proposals/sub-projects respectively for the NDRMF.

70. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is provided in Section B.

C. Procurement Plan

71. All procurements and hiring of consulting services (firms, or individuals) shall be in accordance with the provisions of the following procurement plan.

PROCUREMENT PLAN

Basic Data

Project Name: National Disaster Risk Management Fund	
Project Number: 50316	Approval Number:
Country: PAKISTAN (Federal)	Executing Agency: Economic Affairs Division (EAD), Ministry of Finance
Project Procurement Classification: B	Implementing Agency: National Disaster Risk Management Fund
Procurement Risk: Low	
Project Financing Amount: \$256.6 Million ADB Financing: \$200 Million Cofinancing (ADB Administered): \$3.4 million (equivalent) Non-ADB Financing: \$28.2 Million	Project Closing Date:
Date of First Procurement Plan 13 October 2016:	Date of this Procurement Plan: 13 October 2016

A. Methods, Thresholds, Review and 18-Month Procurement Plan

1. Procurement and Consulting Methods and Thresholds

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	Beneath \$15,000,000	
National Competitive Bidding for Goods	Beneath that stated for ICB, Goods	
Shopping for Works	Below \$100,000	
Shopping for Goods ⁸	Below \$100,000	

Consulting Services	
Method	Comments
Quality and Cost Based Selection (QCBS)	90:10
Least Cost Selection (LCS)	
Fixed Budget Selection	
Individual Consultants	The Fund will establish a roster of Individual experts to have 'On Call' specialized services to provide advice on a particular activity.

⁸ For purchase of Vehicles the Shopping limit will be \$200,000.

2. Consulting Services Contracts Estimated to Cost \$100,000 or More

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 \$ (M)	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
NDMF/S-1	Geo-referenced exposure database	3.00	QCBS (90:10)	Prior	Q1/2017	FTP	International
NDMF/S-2	Catastrophe (Earthquake, flood, tropical cyclone) Risk Modeling	3.20	QCBS (90:10)	Prior	Q1/2017	FTP	International
NDMF/S-3	Developing National DRF Strategy	1.00	QCBS (90:10)	Prior	Q3/2016	FTP	International
NDMF/S-4	Piloting one Disaster Risk Financing Instruments	2.00	QCBS (90:10)	Prior	Q2/2017	FTP	International
NDMF/S-5	Legal Services (On Call)	0.250	LCS	Prior	Q1/2017	BTP	National
NDMF/S-6	Audit Services	0.250	LCS	Prior	Q1/2017	BTP	National

3. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

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.

Goods and Works								
Package Number	General Description	Estimated Value \$ (M)	Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments
NDMF/G-1	Equipment	0.535	Multiple	Shopping	Post	1S1E	Q4/2016	
NDMF/G-2	Vehicles	0.200	Multiple	Shopping	Post	1S1E	Q1/2017	

Consulting Services								
Package Number	General Description	Estimated Value \$ (M)	Number of Contracts	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
NDMF/ES	Various Individual experts as indicated in Appendix 2 (pp 65-71)	2.300	Multiple	ICS	Prior	Q2/2017	Bio-data	National

D. Consultant's Terms of Reference

72. The consulting services inputs and TOR the consulting firms as well as individual experts are provided in **Appendix 2**.

VII. SAFEGUARDS

73. A draft Environmental and Social Management Systems (ESMS) has been developed for NDRMF (**Appendix 3** of the PAM). The ESMS clarifies NDRMF's environmental and social policies; and safeguard screening, categorization, and review procedures. The ESMS document also sets out a plan to strengthen the environment and social organization structure and staffing; and sets out performance monitoring and reporting procedures. The ESMS includes further development of institutional capacity within NDRMF to manage environmental and social issues. The Director of the Quality Assurance Group (QAG) will be the ESMS Focal Point for the Fund.

74. A Safeguards and Gender Unit (SGU) under QAG will be established in NDRMF to perform the following functions:

- i. Maintain and update the ESMS;
- ii. Ensure all subprojects financed by NDRMF are screened, categorized, and reviewed in accordance with the ESMS;
- iii. Ensure that the Fund does not finance any ADB category A sub-projects;
- iv. During screening provide advice to the fund implementing partner (FIP) to ensure that safeguard (environment, involuntary resettlement, and indigenous peoples) impacts are avoided or minimized;
- v. In accordance with the ESMS ensure that safeguard documents (environmental management plan, LARPs, and IPPs) as required are prepared;
- vi. Set grant conditions for subprojects and ensure all safeguards requirements are fulfilled including but not limited to award of civil works contracts only after compensation where involuntary resettlement occurs;
- vii. Monitor subprojects to ensure safeguards compliance in accordance with safeguards documents prepared for subprojects;
- viii. Conduct outreach on the safeguards requirements and processes under the ESMS and provide training and capacity-building to NDRMF FIPs;
- ix. Manage the grievance redress mechanism within NDRMF, ensure the establishment and operations of similar mechanisms in the FIPs and facilitate/follow-up on the resolution of complaints related to the NDRMF operations and supported projects;
- x. Provide information to ADB and other donors in accordance with the ESMS;
- xi. Provide assistance and required information to external ESMS auditors for the conduct of annual audits; and
- xii. Ensure monitoring and reporting requirements are undertaken in accordance with the ESMS.
- xiii. Ensure the implementation, monitoring and reporting of Gender Action Plan prepared for the fund.

75. NDRMF will follow the ESMS in the implementation of activities it finances. Any additional financing request from the project will include a review of ongoing subprojects and their compliance with the ESMS. If there is noncompliance, a corrective action plan will be prepared and submitted to ADB for review.

76. **Prohibited investment activities.** Pursuant to ADB's Safeguard Policy Statement (2009), ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the Safeguard Policy Statement (2009). The Fund and the FIPs will ensure that their investments comply with applicable national laws and regulations and will apply the prohibited investment activities list (Appendix 3) to subprojects financed by ADB.

VIII. GENDER AND SOCIAL DIMENSIONS

77. As detailed in the Summary of Poverty Reduction and Social Strategy, the Project has been categorized as "General Intervention" (TI), benefits the poor and vulnerable people living in high risk areas indirectly. Under the subject Project, Multi-Hazard Vulnerability Risk Assessment (MHVRA) will be carried out nationally and in the 20 most vulnerable districts and urban centers which will assist in developing informed social protection policies and plans targeting the vulnerable populations. The fund will assist the retrofitting of social infrastructure (public schools and health facilities) which are mostly accessed by poor and low-income groups. The fund will assist in developing national and sub-national emergency response plans and early warning systems in the most vulnerable districts in the country.

78. **Gender Mainstreaming.** The Project has been categorized as "Effective Gender Mainstreaming" with the key measures indicated in the Gender Action Plan (GAP) attached as **Appendix 4.**

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

A. Project Design and Monitoring Framework

79. The Design and Monitoring Framework of the Project is the overall guiding document for establishing a Project Performance Monitoring system.

B. Monitoring

80. **Project performance monitoring.** The NDRMF will employ a vigorous framework and systems to monitor, evaluate and report its activities and their results. The design and monitoring framework of the Project will be overarching framework that will guide the development of the Fund monitoring and evaluation system. At the same time in order to capture the role of the NDRMF in the implementation of the NDMP and the NFPP IV, the activities, outputs and outcomes supported by the NDRMF will be closely coordinated and shared with the federal and regional coordination committees that will collate the data on the NDMP and NFPP IV regionally and nationally.

81. Data for the monitoring system will be generated mainly by the Fund implementation partners (external) and on its own progress and performance internally by the NDRMF. The data and reporting requirement (quality, quantity and frequency) for external partners will be defined in the grant agreements signed with the FIP which will be in line with DMF of the Fund and any specific requirements of the contribution agreements signed with donors, including the ADB and the federal government.

82. At the initial stage the NDRMF will be supported by experts hired through the associated TA to update the baseline for key outputs to be produced under the DMF and to undertake a need assessment to gauge the data needs at different level within and outside the NDRMF to guide the development of the M&E system. This data will be used to populate and design monitoring system of the NDRMF that will capture both internal (enterprise resource and performance data) and external (activities, outputs and outcome data). The monitoring system will be integrated and fed by information from all operational and support units of the NDRMF according to their role in operations (financial, operational, safeguard, gender, audit, procurement etc.) related to FIP and internal responsibilities (efficiency of disbursements, efficiency of processing proposals, quality control, etc.). This will allow the NDRMF to monitor and improve its own performance through regular data and review of the efficiency/quality of its own delivery processes and at the same time guide the improvement in the performance of the NDRMF operation through the FIPs.

83. Individual consultants from the associated TA will be used to develop this M&E system and to periodically review and recommend improvements in the system. The associated TA will provide 24 person months of inputs of 3 to 4 M&E and MIS specialists dealing with accessing information/data needs for input, outputs, performance, process and impact monitoring of the NDMP's internal and external activities. Based on this the experts will guide the design of M&E and MIS system including defining the terms of reference to outsource the development of Enterprise Resource Planning (ERP) system for the Fund. The same consultants will periodically review the performance of the designed M&E and MIS system of the NDRMF to improve its quality and results and reduce redundancies.

84. The team of four M&E and MIS specialist within the Quality Assurance unit of the NDRMF will be responsible for the implementation of the design and day to day management of the M&E and MIS systems. Information generated at multiple locations from within and outside the NDRMF will be inputted in the MIS system by the four core units of the NDRMF based on their mandated role in operation of the NDRMF. Quality Assurance department will ensure regular data inputs from all sources and quality control of the data. This unit will produce monthly reports both for internal and external consumption based on data needs identified in the assessment at the design stage. Initially the FIPs are expected to be provided read only access, however depending upon FIP capacities and efficiency gains that can be achieved, the system access could be progressively expanded (starting with pilot tests).

85. **Compliance monitoring.** A standard monitoring report template has been design for the NDRMF. This template will be populated by available data during project inception mission will all compliance related data to ensure compliance issues related to policy, legal, financial, economic, environmental, gender and social safeguards are captured in the regular reporting system of the NDRMF. An effort will be made to integrate the compliance monitoring in the MIS of the NDRMF to improve quality and efficiency of compliance monitoring. Bi-annual ADB review missions will also report on compliance with loan and project agreements.

86. **Safeguards monitoring:** The overall framework for safeguards for the Project is the ESMS developed for the Project. Safeguard assessments will be undertaken by the NDRMF management (Financial Intermediary) and environmental management plans, social safeguard plans and resettlement plans will be developed in line with SPRSS for all projects that are financed by the NDRMF and requires such plans. The related activities to be performed for safeguard compliance and their targets and indicators will be defined in each of these plans.

The NDRMF, based on inputs provided by the FIP will provide quarterly update on the status of implementation of these plans and progress against agreed targets. These plans will be independently monitored by the NDRMF and also by the safeguards specialist hired under the associated TA periodically to ensure compliance and also guide the FIP in improving the quality of compliance.

87. **Gender and social dimensions monitoring.** The broader targets for gender and social dimensions are included in the project DMF and detail targets and activities are identified in the Gender Action Plan (GAP) of the Project (Appendix 5). In order to mainstream gender and social dimension reporting these targets and related indicators will be integrated into NDRMF's M&E and MIS system and made part of the quarterly progress reports to be submitted by the NDRMF. FIP's will report on the gender and social dimension of the project they are implementing in line with targets agreed in respective grant agreements. The four units will be reporting the gender and social targets to be delivered internally. The Gender Expert hired under the TA will develop the monitoring formats and mechanisms based on the gender targets/indicators of GAP. The Social and Gender Officer (hired as a core staff) financed by the fund will regularly monitor and review achievements against these targets both internally within the NDRMF and in project financed by the NDRMF and implemented by the FIPs. Periodic review of the progress and quality in achieving the gender and social targets will be undertaken independently by the individual gender consultants hired through the associated TA.

C. Evaluation

88. ADB will periodically review the NDRMF performance and that of its implementation partners. Review mission are expected to take place at least twice a year. The individual consultants hired through associated TA will provide independent monitoring and evaluation reports on the NDRMF performance in core areas like procurement, financial management, accounting, safeguards and gender. In addition the sector experts hired through TA will review operational performance being delivered through FIP both in terms of quality, outputs and impacts, and advice ADB and the NDRMF management on improvement measures. These independent reports will guide the scope of the review to be undertaken by the ADB missions every six months. In addition to periodic reviews ADB using resources from the associated TA will initiate special studies and reviews targeting specific areas of performance highlighted in the quarterly progress reports of the NDRMF or highlighted during ADB review missions.

D. Reporting

89. The NDRMF will provide ADB and EAD with quarterly progress reports in a format consistent with ADB's project performance reporting system and template of reporting agreed during the inception phase of the NDRMF. The quarterly reports include consolidated progress and performance data on all aspects of Fund operation, compliances, outputs and results agreed in the loan and project agreement with ADB and other donors, In addition the quarterly progress report will also report all targets and related indicators agreed in the Gender actions, environmental and social safeguard management plans, resettlement plans, apart from reporting on status of implementation and achievements against targets agreed with FIP.

90. In addition to the quarterly reports the NDRMF will provide consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets and the approved business plan and annual operational plan of the NDRMF, (b) key implementation issues and solutions and measures to improve efficiency and quality of operations, (c) updated procurement plan, and (d) updated annual operational/implementation

plan for the next 12 months; and (iii) a project completion report within 6 months of physical completion of the Project. To ensure that the Projects will continue to be both viable and sustainable, Project accounts and the implementation agency audited financial statement together with the associated auditor's report, will be shared and adequately reviewed and commented upon by ADB.

E. Stakeholder Communication Strategy

91. Strategic communications and branding are extremely important for transparency, managing the expectations of all stakeholders, securing their engagement on critical issues and their contributions, and for growth of the NDRMF. The NDRMF will have proactive communication and media/public relation unit that will publish progress reports and information about the activities of the NDRMF. The section under the M&E Unit of the NDRMF will market the NDRMF for public and private sector contributions and other outreach events to solicit contributions. Soon after its establishment the NDRMF will establish and maintain a website that enables easily and continuously accessible the following information to the public:

- The NDRMF's Memorandum and Articles of Association, together with its by-laws, as appropriate.
- The names of its Board members and senior officers.
- Its annual reports, which will include its audited financial statements.
- Guidelines and procedures for subproject identification, design, selection, approval, implementation and completion.
- A list and general description of all subprojects financed by the Fund.
- Relevant guidelines and procedures on financial management, procurement and safeguards for subprojects.
- All monitoring reports prepared by the NDRMF.

92. The following table shows how ADB documents on the investment program will be communicated, how and when the information will be disseminated and by whom, and the target audience.

Project Documents	Means of Communication	Responsible Party	Frequency	Audience
ADB Project Information Document (PID)	ADB website	ADB	Initial PID no later than 30 calendar days after approval of the Loan/Grant; quarterly afterwards	General public
Report and Recommendation of the President	ADB's website	ADB	Within 2 weeks of Board approval of the project	General public
Facility 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

Project Documents	Means of Communication	Responsible Party	Frequency	Audience
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 Implementation				
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	EAD, NDRMF	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	EA	One time, within first 2 months of project effectiveness	Beneficiaries

X. ANTICORRUPTION POLICY

93. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.⁹ 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 and/or 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.¹⁰ To support these efforts, relevant provisions are included in the Loan Agreement and the bidding documents for the Project.

XI. ACCOUNTABILITY MECHANISM

94. 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 an effort in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are

⁹ Anticorruption Policy: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

¹⁰ ADB's Integrity Office web site: <http://www.adb.org/integrity/unit.asp>

still dissatisfied, should they approach the Accountability Mechanism.¹¹

XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

95. All revisions and/or updates during the course of implementation should be retained in this section to provide a chronological history of changes to implemented arrangements recorded in the PAM, including revision to contract awards and disbursement s-curves.

¹¹ Accountability Mechanism. <http://www.adb.org/Accountability-Mechanism/default.asp>.

DESIGN AND MONITORING FRAMEWORK

Impact the Project is Aligned With			
A more disaster-resilient Pakistan with reduced socioeconomic and fiscal vulnerability to natural hazards and climate variability and change (National Disaster Management Plan, 2012–2022 and draft National Flood Protection Plan IV, 2016–2026) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Increased and sustainable institutional and physical capacity to reduce the socioeconomic and fiscal impacts of natural hazards and climate change	At least 3 million people who are highly vulnerable to the negative impacts of multiple natural hazards as of 2016 are safe and have become more resilient against the direct and indirect impacts of multiple natural hazards by 2019. (2016 Baseline: to be established during the national MHVRA).	Independent evaluation reports financed by the NDRMF and/or the government; damage and loss reports provided by the National Disaster Management Authority; and reports by development partners and third-party entities	Government commitment to the NDRMF changes over time due to political considerations and competing priorities.
Outputs 1. The NDRMF established and made operational	1a. Requisite governance, operational, fiduciary, and safeguard (including gender) procedures, policies, and systems are in place by December 2016 (2016 Baseline: 0). 1b. The NDRMF is fully staffed (at least 20% of these staff members are women) and has a fully established office by March 2017 (2016 Baseline: 0). 1c. The endowment fund is invested in appropriate vehicles by March 2017 (2016 Baseline: 0). 1d. Communication, disclosure, and public relations strategies of the NDRMF are developed by June 2017 (2016 Baseline: 0). 1e. A comprehensive ERP for the fund is developed and deployed by 2018 (2016 Baseline: 0). 1f. The first request for proposals to FIPs is issued by June 2017, with periodic requests for proposals issued every year up to 2019 (2016 Baseline: 0). 1g. The annual operational plan is prepared and the rolling 3-year business plans are updated by Q2 of each year during 2017–2019 (2016	1a. Donor review and NDRMF progress reports 1b. Minutes of the NDRMF board meeting and NDRMF periodic progress reports 1c–i. NDRMF quarterly progress reports	Risks The NDRMF is unable to retain quality human resources to maintain high quality due diligence. The government's commitment to the NDRMF reduces or fluctuates over time due to political considerations and competing priorities.

<p>2. Investment to reduce vulnerability to natural hazards increased</p>	<p>Baseline: 0).</p> <p>1h. Income from the endowment fund finances 100% of NDRMF operating expenses by 2019 (2016 Baseline: 0).</p> <p>1i. FIP accreditation and subproject selection criteria are finalized and approved by the NDRMF by 2017 (2016 Baseline: 0).</p> <p>2a. National and subnational emergency response plans are developed by Q4 2017 (2016 Baseline: 0).</p> <p>2b. A MHVRA (including climate change and gender-related vulnerabilities) is completed in 20 vulnerable cities and/or districts by Q3 2019. (2016 Baseline = 14 districts, and 4 urban centers).</p> <p>2c. CBDRM plans are completed in 50 vulnerable union councils or urban centers by Q2 2019 (2016 Baseline: 0).</p> <p>2d. At least 300 km of new or retrofitted flood protection infrastructure financed by the NDRMF are constructed by Q3 2019 (2016 baseline: 0 km).</p> <p>2e. An additional 500 public buildings financed by the NDRMF (in the social sector) are made safe and resistant to multiple hazards by 2019. (2016 baseline: 0).</p> <p>2f. The geographic coverage area of early warning systems increases by 10% by 2019 (2016 baseline: 80%).</p>	<p>2a. National emergency response plan</p> <p>2b–c. Independent monitoring and NDRMF quarterly operations progress reports</p> <p>2d–f. Independent monitoring by ADB-financed TA consultants and NDRMF quarterly operations progress reports</p>	<p>Government funds for operation and maintenance financing of the investments are lacking.</p> <p>National and subnational capacity to implement the plans is lacking.</p>
<p>3. Analytical work and products to improve fiscal management of disaster risk completed</p>	<p>3a. A gender-sensitive national DRF strategy is developed by Q4 2018.</p> <p>3b. At least two gender-inclusive DRF instruments are developed (with targeted interventions for the poor and vulnerable) and one is pilot tested by Q4 2019 (2016 Baseline: 0).</p>	<p>3a–b. Approved DRF strategy; independent monitoring by ADB-financed TA consultants; and NDRMF quarterly progress reports</p>	

Key Activities with Milestones	
1 The NDRMF established and made operational	
1.1	Recruit individual consultants by Q4 2016
1.2	Disburse endowment proceeds of ADB's and the government's contributions to the fund by Q4 2016
1.3	Complete office establishment, key staff recruitment, and development of the operations manual (including safeguard, procurement, and gender policies) by Q1 2017
1.4	Procure office equipment, furniture, and vehicles by Q1 2017
1.5	Finalize and have the NDRMF approve the accreditation and subproject selection criteria by Q1 2017
1.6	Issue the first batch of requests for proposals by Q2 2017
1.7	Operationalize the requisite institutional governance, monitoring, fiduciary, procurement, safeguard, and gender policies and procedures by Q2 2017
1.8	Establish and staff environmental, social, safeguard, and gender unit by Q2 2017
1.9	Establish list of accredited implementation partners by Q3 2017
1.10	Approve first batch of subprojects by Q4 2017
1.11	Develop, test, and deploy a comprehensive ERP for the fund by Q4 2018
2 Investment to reduce vulnerability to natural hazards increased	
2.1	Design awareness campaigns for the general public, vulnerable communities, and women by Q3 2017
2.2	Finalize criteria to assess all new development projects financed by the government's regular budget from a DRM perspective with cost-benefit analysis by Q1 2019
2.3	Conduct 50 CBDRM plans and/or activities in vulnerable union councils and/or cities by Q2 2019
2.4	Support modeling and analysis capability and advance training of forecasting organization by Q2 2019
2.5	Install and/or replace two weather radars to expand the geographic coverage of an early warning system by Q3 2019
2.6	Retrofit 500 critical public (social) infrastructure by Q3 2019
2.7	Conduct 20 subnational MHVRAs (including climate change and gender-related vulnerabilities) in the most vulnerable districts and/or cities by Q3 2019
2.8	Retrofit and/or reconstruct 300 km of critical flood disaster risk reduction structures by Q3 2019
3 Analytical work and products to improve the fiscal management of disaster risk completed	
3.1	Recruit consultants for the DRF strategy by Q3 2017
3.2	Complete risk data, maps, and modeling to develop a national DRF strategy by Q3 2018
3.3	Develop a national DRF strategy by Q4 2018
3.4	Develop two DRF instruments for pilot testing by Q2 2019
3.5	Commence pilot testing of one DRF instrument by Q4 2019
Inputs:	
ADB: \$125 million (Asian Development Fund loan)	
\$75 million (ordinary capital resources loan)	
Government of Pakistan: \$25.0 million	
Government of Australia: \$3.4 million	
NDRF implementing partners: \$28.2 million	

ADB = Asian Development Bank, CBDRM = community-based disaster risk management, DRF = disaster risk financing, DRM = disaster risk management, ERP = enterprise resource planning, FIP = fund implementation partner, GDP = gross domestic product, km = kilometer, MHVRA = multi-hazard vulnerability risk assessment, NDRMF = National Disaster Risk Management Fund, Q = quarter, TA = technical assistance.

^a Government of Pakistan, Ministry of Climate Change, National Disaster Management Authority. 2012. *National Disaster Management Plan: Main Volume*. Islamabad. The National Flood Protection Plan IV is awaiting formal approval and adoption by Pakistan's Council of Common Interests, which is expected in Q4 2016.

Source: ADB.

Werner E. Liepach
Country Director, PRM

Sean O'Sullivan
Director General, CWRD

Consulting Firms Packages, with Person-months and TOR
(Disaster Risk Financing Strategy and Product Development)

No.	Activities																				
I	<p>Catastrophe Risk Assessment and Modeling and National MHVRA (Project duration: 18 months) – Consultant will be a firm For each one of the four components, the Fund will invite eligible firms to submit expressions of interest. Interested consultants must provide information indicating that they are qualified to perform the services (brochures, description of similar assignments, experience in similar conditions, availability of appropriate skills among staff, etc.).</p> <p><u>Qualification Criteria for Firms for each component:</u></p> <ul style="list-style-type: none">- At least 10 years' professional experience in the field of the assignment as a core business.- Past work experience with similar projects with similar geological conditions is desirable- Technical and managerial capabilities in developing databases and triggers for risk transfer instruments- Acceptability of models by major insurers and reinsurers- Information on the qualifications of key staff and specialists- Agreement to develop open source models																				
	<table><tr><th>Component</th><th colspan="4">Key Members of Team</th><th>Cost (\$ million)</th></tr><tr><td rowspan="3">1. Development of comprehensive geo-referenced dynamic data base TOR - Develop database of all public and private buildings, infrastructure and crops, incorporating information on construction materials, occupancy, height, and structure as relevant, and their replacement value assets that covers all the major hazards prevailing in Pakistan i.e. floods, droughts earthquakes, and landslides. -Systemically identify all major hazard prone areas describe the physical characteristics of the hazards and various descriptors including sources of threats, magnitude duration, frequency, probability, spatial distribution of intensity within each hazard prone area, build plausible hazard scenarios for the major hazards and develop hazard intensity map, distribution of hazards and level of hazard vulnerability/risk from multiple disaster. s. -Develop GIS-based application for</td><th>Position</th><th>Number of consultants</th><th>Person Months</th><th>Total</th><td rowspan="3">3.0</td></tr><tr><td>Chief Technical Advisor/Team Leader</td><td>International Consultant – 1 Qualifications: -Master's degree in Sciences Management or related fields -At least 10 years of DRF expertise and project management experience -Previous professional experience in risk profiling -Experience of working with international organizations in Asia is desirable TOR -will serve as Risk profiling specialist (described below) and have specific DRF expertise and project management experience. -collaborate with all technical consultants on the design and planning of activities -take responsibility for timely completion of the GIS database</td><td>18</td><td></td></tr><tr><td>Risk Profiling Specialists</td><td>International Consultants – 6 Qualifications: -Master's degree in Sciences Management or</td><td>18</td><td></td></tr></table>	Component	Key Members of Team				Cost (\$ million)	1. Development of comprehensive geo-referenced dynamic data base TOR - Develop database of all public and private buildings, infrastructure and crops, incorporating information on construction materials, occupancy, height, and structure as relevant, and their replacement value assets that covers all the major hazards prevailing in Pakistan i.e. floods, droughts earthquakes, and landslides. -Systemically identify all major hazard prone areas describe the physical characteristics of the hazards and various descriptors including sources of threats, magnitude duration, frequency, probability, spatial distribution of intensity within each hazard prone area, build plausible hazard scenarios for the major hazards and develop hazard intensity map, distribution of hazards and level of hazard vulnerability/risk from multiple disaster. s. -Develop GIS-based application for	Position	Number of consultants	Person Months	Total	3.0	Chief Technical Advisor/Team Leader	International Consultant – 1 Qualifications: -Master's degree in Sciences Management or related fields -At least 10 years of DRF expertise and project management experience -Previous professional experience in risk profiling -Experience of working with international organizations in Asia is desirable TOR -will serve as Risk profiling specialist (described below) and have specific DRF expertise and project management experience. -collaborate with all technical consultants on the design and planning of activities -take responsibility for timely completion of the GIS database	18		Risk Profiling Specialists	International Consultants – 6 Qualifications: -Master's degree in Sciences Management or	18	
Component	Key Members of Team				Cost (\$ million)																
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	Risk Profiling Specialists	International Consultants – 6 Qualifications: -Master's degree in Sciences Management or	18																		

	dynamic hazard risk assessment and mapping.		<p>related fields</p> <ul style="list-style-type: none"> -At least 10 years of DRF expertise -Previous professional experience in risk profiling -Experience of working with international organizations in Asia is desirable <p>TOR</p> <ul style="list-style-type: none"> -develop indicative profile of risk addressing key indicators of hazard exposure -develop hazard exposure and vulnerability criteria for different locations 			
			<p>National Consultants – 6</p> <p>Qualifications:</p> <ul style="list-style-type: none"> -Master's degree in Sciences Management or related fields -At least 10 years of DRF expertise -Previous professional experience in risk profiling <p>TOR</p> <ul style="list-style-type: none"> -Support the develop of risk and vulnerability profiles -gathering key indicators of physical, social and economic vulnerability and estimates and potential disaster losses 			
		GIS-Specialist	<p>International Consultant – 1</p> <p>Qualifications</p> <ul style="list-style-type: none"> - Master's degree in Geography Geology, IT or related fields - At least 7 years' of mapping, GIS and Remote Sensing Experience - Knowledge of GIS for DRM and its applications - Experience and knowledge of using products and tools of GIS for DRM, including open source GIS software and spatial decision support systems - Strong visual communication skills, infographics and design - Previous professional experience in hazard and risk assessment - Experience of working with international organizations in Asia is desirable <p>TOR</p> <ul style="list-style-type: none"> -Provide geospatial support the identification all major hazard prone areas and describe the physical characteristics of the hazards and various descriptors 	18		

			<ul style="list-style-type: none"> -Develop different GIS applications -High quality advice on GIS data files, and mapping requirements (thematic maps, spatial and temporal analysis) available 			
			National Consultants – 2 Qualifications <ul style="list-style-type: none"> - Master's degree in Geography Geology, IT or related fields - At least 7 years' of mapping, GIS and Remote Sensing Experience -Regional and national knowledge of GIS for DRM and its applications -Experience and knowledge of using products and tools of GIS for DRM, including open source GIS software and spatial decision support systems -Strong visual communication skills, infographics and design -Previous professional experience in hazard and risk assessment TOR <ul style="list-style-type: none"> -Provide geospatial support and develop different GIS applications -Develop GIS database (layers, base maps, thematic maps, satellite images) available for watershed management and hydrological mapping; -All critical areas mapped and defined 	18		
		Database/ Information System Specialist	International Consultant – 1 Qualifications: <ul style="list-style-type: none"> - Master's degree in Information Systems, GIS, IT or related fields - At least 7 years' of experience of design and management of spatial database management systems applying additional knowledge of spatial feature representations -Strong RDBMS skills including development skills. - Regional and national knowledge of GIS for DRM and its applications - Experience and knowledge of using products and tools of GIS for DRM, including open source GIS software and spatial decision support systems 	18		

			<ul style="list-style-type: none"> - Strong visual communication skills, infographics and design - Previous professional experience in hazard and risk assessment - Experience of working with international organizations in Asia is desirable <p>TOR</p> <ul style="list-style-type: none"> -Develop GIS database (layers, base maps, thematic maps, satellite images) available for watershed management and hydrological mapping; -Support Operation of GIS System and maintain database 			
			<p>National Consultants – 2</p> <p>Qualifications:</p> <ul style="list-style-type: none"> - Master's degree in Information Systems, GIS, IT or related fields - At least 7 years' of experience of design and management of spatial database management systems applying additional knowledge of spatial feature representations -Strong RDBMS skills including development skills. - Knowledge of GIS for DRM and its applications - Experience and knowledge of using products and tools of GIS for DRM, including open source GIS software and spatial decision support systems - Strong visual communication skills, infographics and design - Previous professional experience in hazard and risk assessment <p>TOR</p> <ul style="list-style-type: none"> -Operate GIS System and maintain database -Update GIS database (layers, base maps, thematic maps, satellite images) available for watershed management and hydrological mapping; 	18		

	<p>2. Probabilistic natural catastrophe risk modeling and assessment for the quantification of the risk posed by earthquakes</p> <p>TOR</p> <ul style="list-style-type: none"> - Analyze records of historical events to develop a simulated hazard catalogue of potential events, providing a picture of the frequency and intensity of potential hazard events over thousands of years - Suggest triggers for financial transactions to provide a rigorous and robust basis for the design of a national disaster risk financing strategy. <p>(This information together with the exposure data will be developed using standards commensurate with the Insurance Development Forum on risk modeling and will be made available through an open-source web-based platform.</p> <p>The risk model will also be compatible with existing open platforms for risk assessment.)</p>	Risk Modeling Specialists	<p>International Consultants – 2 (of which 1 will be a Team Leader)</p> <p>Qualifications:</p> <ul style="list-style-type: none"> -Master's degree in Sciences, Engineering or related fields -At least 10 years of experience including seismological studies, structural engineering. -Previous professional experience in earthquake risk modeling -Experience of working with international organizations in Asia is desirable. <p>TOR</p> <ul style="list-style-type: none"> -Survey existing hazard, exposure, and historical loss data to identify gaps -Develop stochastic data that define hazards and potential events and address potential severity -Develop exposure and vulnerability data based on city requirements and specific hazards as needed -Develop a financial loss model that predicts the impact of likely natural disasters as required by project designs -Analyze projected performance of DRF options against loss model and suggest triggers <p>In addition,</p> <ul style="list-style-type: none"> - Team Leader will serve as earthquake risk modeling specialist (described above) and have specific DRF expertise and project management experience. -collaborate with all technical consultants on the design and planning of activities -take responsibility for timely completion of risk modeling for earthquakes. 	18		0.6

			<p>National Consultants – 2</p> <p>Qualifications:</p> <ul style="list-style-type: none"> -Master's degree in Sciences, Engineering or related fields -At least 8 years of experience including seismological studies, structural engineering. -Previous professional experience in earthquake risk modeling <p>TOR</p> <ul style="list-style-type: none"> -Survey existing hazard, exposure, and historical loss data to identify gaps -Develop stochastic data that define hazards and potential events and address potential severity -Develop exposure and vulnerability data based on city requirements and specific hazards as needed -Develop a financial loss model that predicts the impact of likely natural disasters as required by project designs 	18		
	<p>3. Probabilistic natural catastrophe risk modeling and assessment for the quantification of the risk posed by floods</p> <ul style="list-style-type: none"> -Analyze records of historical events to develop a simulated hazard catalogue of potential events, providing a picture of the frequency and intensity of potential hazard events over thousands of years -Suggest triggers for financial transactions to provide a rigorous and robust basis for the design of a national disaster risk financing strategy. <p>(This information together with the exposure data will be developed using standards commensurate with the Insurance Development Forum on risk modeling and will be made available through an open-source web-based platform.</p> <p>The risk model will also be compatible with existing open platforms for risk</p>	Risk Modeling Specialists	<p>International Consultants – 2 (of which 1 will be a Team Leader)</p> <p>Qualifications:</p> <ul style="list-style-type: none"> -Master's degree in hydro-meteorology or related fields -At least 10 years of experience including hydro-meteorology, structural engineering. -Previous professional experience in flood risk modeling -Experience of working with international organizations in Asia is desirable. <p>TOR</p> <ul style="list-style-type: none"> -Survey existing hazard, exposure, and historical loss data to identify gaps -Develop stochastic data that define hazards and potential events and address potential severity -Develop exposure and vulnerability data based on city requirements and specific hazards as needed -Develop a financial loss model that predicts the impact of likely natural disasters as required by project designs -Analyze projected performance of DRF options against loss model and suggest triggers <p>In addition,</p>	18		0.2

	assessment.)		<ul style="list-style-type: none"> - Team Leader will serve as flood risk modeling specialist (described above) and have specific DRF expertise and project management experience. -collaborate with all technical consultants on the design and planning of activities -take responsibility for timely completion of risk modeling for floods. 			
			National Consultants – 2 Qualifications: <ul style="list-style-type: none"> -Master's degree in hydro-meteorology or related fields -At least 8 years of experience including coastal disaster risk management. -Previous professional experience in flood risk modeling -Experience of working with international organizations in Asia is desirable. TOR <ul style="list-style-type: none"> -Survey existing hazard, exposure, and historical loss data to identify gaps -Develop stochastic data that define hazards and potential events and address potential severity -Develop exposure and vulnerability data based on city requirements and specific hazards as needed -Develop a financial loss model that predicts the impact of likely natural disasters as required by project designs 	18		
	4. Probabilistic natural catastrophe risk modeling and assessment for the quantification of the risk posed by tropical cyclones -Analyzing records of historical events to develop a simulated hazard catalogue of potential events, providing a picture of the frequency and intensity of potential hazard events over thousands of years -Suggest triggers for financial transactions to provide a rigorous and robust basis for the design of a national disaster risk financing strategy. (This information together with the exposure data will be developed using	Risk Modeling Specialists	International Consultants – 2 (of which 1 will be a Team Leader) Qualifications: <ul style="list-style-type: none"> -Master's degree in meteorology, oceanography or related fields -At least 10 years of experience including coastal disaster risk management. -Previous professional experience in cyclone risk modeling -Experience of working with international organizations in Asia is desirable. TOR <ul style="list-style-type: none"> --Survey existing hazard, exposure, and historical loss data to identify gaps -Develop stochastic data that define hazards and 	18		0.6

	standards commensurate with the Insurance Development Forum on risk modeling and will be made available through an open-source web-based platform. The risk model will also be compatible with existing open platforms for risk assessment.)		potential events and address potential severity -Develop exposure and vulnerability data based on city requirements and specific hazards as needed -Develop a financial loss model that predicts the impact of likely natural disasters as required by project designs -Analyze projected performance of DRF options against loss model and suggest triggers In addition,			
			- Team Leader will serve as cyclone risk modeling specialist (described above) and have specific DRF expertise and project management experience. -collaborate with all technical consultants on the design and planning of activities -take responsibility for timely completion of risk modeling for cyclones.			
			National Consultants – 2 Qualifications: -Master's degree in meteorology, oceanography or related fields -At least 8 years of experience including coastal disaster risk management. -Previous professional experience in cyclone risk modeling TOR -Survey existing hazard, exposure, and historical loss data to identify gaps -Develop stochastic data that define hazards and potential events and address potential severity -Develop exposure and vulnerability data based on city requirements and specific hazards as needed -Develop a financial loss model that predicts the impact of likely natural disasters as required by project designs	18		
II	Development of a national disaster risk financing strategy – (Project duration: 18 months) – Consultant will be individual/s					
		The results of the catastrophe risk assessment effort will help inform in the development of a national disaster risk financing strategy, including the development of the domestic catastrophe risk insurance market. It will be used to assist the following agencies: - Governments (national to provincial) in estimating the impact of disasters on their public accounts and operations, helping them evaluate the costs and benefits of implementing risk mitigation strategies, and quantify potential resource and liquidity gaps in their				

	<p>budgets that may be expected post-disaster; -Securities and Exchange Commission of Pakistan (SECP) in the supervision and regulation of private catastrophic risk insurance -Domestic private insurance industry in the development of catastrophic risk insurance products.</p> <p>Qualification Criteria:</p> <ul style="list-style-type: none"> - At least 10 years' professional experience in the field of the assignment as a core business. - Past work experience with similar projects with similar geological conditions is desirable - Review and update fiscal role and demand analysis - Develop a set of potential DRF options based on combined multi-hazard loss curves and taking into account the scale of funding required for each layer of loss, the speed with which disbursement of funding is required, and the relative cost-effectiveness of alternative instruments for specific layers of loss -Analyze the relative feasibility of DRF options - Design of triggers for financial transactions - Capacity building and training - Support for the placement of the financial transaction (contingent on the clients and the Fund's decision to move ahead with the recommended component) 				
	Component	Key Members of Team			Cost (\$ million)
		Position	Number of consultants	Person Months	Total
		Disaster Risk Finance Product Design And Development Specialist	International Consultants – 2 (of which 1 will be a Team Leader) Qualifications: <ul style="list-style-type: none"> • Master's degree in engineering, geosciences, mathematics, finance or closely related field with at least eight years of relevant work experience, or a comparable combination of education and work experience; • Extensive knowledge of DRF/DRM analytical work and/or project implementation experience with large and operationally oriented international public organizations, financial organizations and/or academic organizations; with a demonstrated track record of results on the ground; -Demonstrated ability to work effectively with Government officials and technical staff and with other DRF/DRM stakeholders; -Proven strong leadership and communication skills and ability to work cross-sectorally and lead inter-disciplinary teams; -Strong task and project management skills, with a proven record of problem-solving capability and a proven ability to conceptualize, design and implement major projects 	18	

			<p>TOR</p> <ul style="list-style-type: none"> -Assist in developing national disaster risk financing strategy -Support review of (a) analysis of division of fiscal roles and responsibilities for disaster response and risk management among national , provincial and local governments - Assist in preparation of reports and briefs - Assist and participate in country workshops and training sessions <p>In addition,</p> <ul style="list-style-type: none"> - Team Leader will serve as Risk modeling specialist (described above) and have specific DRF expertise and project management experience. -collaborate with all technical consultants and stakeholders on the design and planning of activities 			
			<p>National Consultants – 2</p> <p>Qualifications:</p> <ul style="list-style-type: none"> • Master's degree in engineering, geosciences, mathematics, finance or closely related field with at least five years of relevant work experience, or a comparable combination of education and work experience; • Extensive knowledge of DRF/DRM analytical work and/or project implementation experience with large and operationally oriented international public organizations, financial organizations and/ or academic organizations; with a demonstrated track record of results on the ground; -Demonstrated ability to work effectively with Government officials and technical staff and with other DRF/DRM stakeholders; -Strong task and project management skills, with a proven record of problem-solving capability and a proven ability to conceptualize, design and implement major projects <p>TOR</p> <ul style="list-style-type: none"> - Support review of (a) analysis of division of fiscal roles and responsibilities for disaster response and risk management among national , provincial and local governments - Assist in preparation of reports and briefs 	18		

			-Research current market conditions and acceptance of DRF options - Assist and participate in country workshops and training sessions			
III	Piloting Two Disaster Risk Financing Instruments (minus cost of subsidy) (Project duration: 36 months) – Consultant will be individual/s					
	The Fund will invite eligible insurance companies to submit expressions of interest to team with a team of consultants to pilot disaster insurance products. Qualification Criteria for Insurance companies: -At least 10 years' experience in general insurance. -Past work experience with similar projects -Technical and managerial capabilities in distribution, underwriting, claims, and reinsurance, -Information on the qualifications of key staff and specialists -Agreement to develop and pilot disaster insurance products for scaling up.					
	Pilot 1: TOR -Carry out studies and in consultation with insurance company, insurance experts, national and local stakeholders to validate the geographic scope of the pilot -Explore the feasibility of piloting DRF instruments (products). This will include collection of additional quantitative and qualitative data (direct and indirect causes of losses, the effectiveness of existing risk management mechanisms etc.) needed to develop risk based pricing model/s for identified districts/ provinces -Explore the current conditions of accessing finance post disaster - Identify target beneficiaries / clients and incentives of their participation in the scheme - Identify key organization's such as MFIs, insurance companies, humanitarian organizations and their potential role in the pilot -Identify the key limitations, both institutional and data related, that can preclude the feasibility of the insurance and the potential ways of addressing them -Explore the current measures of compensation to farmers, aid and subsidies that may distort incentives and encourage	Position *Intermittent Disaster insurance specialist*	Number of consultants International Consultant -2 (of which 1 will be a Team Leader) Qualifications: -Master's degree in finance, economics, statistics, actuarial sciences, or equivalent - At least, 8 years of international experience in insurance and reinsurance. - Experience in scoping, designing and/piloting disaster risk instruments in developing countries TOR -Conduct a desk-based review of background materials and available data and identify key historical climatic hazards and projected climate trends -Analyze how the climate hazards and trends affecting the vulnerable communities are similar or different from the those affecting the provinces in which there are located -map out major climate-sensitive livelihoods within these communities and assess the potential impacts of increased climate variability and extreme weather events on these livelihood strategies; - Conduct field visits to the community sites to collect additional quantitative and qualitative data (direct and indirect causes of losses, the effectiveness of existing risk management mechanisms etc.) needed to conduct a more	Person Months 24	Total	Cost (\$ million) 1.0

	<p>promotion of ineffective or inappropriate products</p> <p>-Identify the ways to design the product that can ensure more effective use of aid or subsidies;</p> <p>-Identify the ways how this DRF product can contribute to adaptation and play a role in managing uncertainties associate with climate change;</p> <p>- Design and deliver the consultation and awareness raising workshop/s to the key stakeholders and seek for the feedback in developing a well customized product;</p> <p>- Based on the assessments above suggest the key elements of design for DRF product for adaptation and disaster preparedness and relief in identified areas, including deployment options, payout rules and other legal, procedural and regulatory arrangements</p> <p>-Put forward a set of recommendations on how to scale up the scheme in a wider country context</p>		<p>detailed probabilistic risk assessment.</p> <p>-Identify the ways to design the product that can ensure more effective use of aid or subsidies;</p> <p>-Identify the ways how this DRF product can contribute to adaptation and play a role in managing uncertainties associate with climate change;</p> <p>- Design and deliver the consultation and awareness raising workshop/s to the key stakeholders and seek for the feedback in developing a well customized product;</p> <p>- Based on the assessments above suggest the key elements of design for DRF product</p> <p>- Team Leader will serve as Disaster Insurance Specialist (described above) and have specific DRF expertise and project management experience.</p> <p>-collaborate with all technical consultants and stakeholders on the design and planning of activities</p> <p>-take responsibility the implementation of the pilot</p>			
		Actuary*	<p>International Consultant -1</p> <p>Qualifications:</p> <p>-Master's degree actuarial sciences, or equivalent</p> <p>- At least, 8 years of international experience in insurance and reinsurance.</p> <p>- Experience in modeling, pricing, designing and/piloting disaster risk instruments in developing countries</p> <p>TOR</p> <p>-Build data sets for a quantitative risk analysis</p> <p>-Carry out a quantitative risk analysis of selected key climatic hazards in the areas selected for pilot;</p> <p>-Analyze the impact of catastrophic losses in the study areas on: the livelihood at the household level; and the portfolio of at the institutional level</p> <p>-Develop an insurance portfolio model to assess the potential exposure of stakeholders (e.g., farmers, CDFs, etc.) to the catastrophic natural disasters (e.g., drought, floods)</p> <p>- Assess the potential applicability and costs of reinsurance and risk transfer.</p>	12		

			<p>National Consultant -1</p> <p>TOR</p> <ul style="list-style-type: none"> -Build data sets for a quantitative risk analysis -Carry out a quantitative risk analysis of selected key climatic hazards in the selected areas; - Analyze the impact of catastrophic losses in the study areas on: the livelihood at the household level; and the portfolio of at the institutional level -Develop an insurance portfolio model to assess the potential exposure of stakeholders (e.g., farmers, CDFs, etc.) to the catastrophic natural disasters (e.g., drought, floods) 	24		
	Insurance Specialists*		<p>National Consultants -4</p> <p>Qualifications:</p> <ul style="list-style-type: none"> -Master's degree in finance, economics, statistics, actuarial sciences, or equivalent - At least, 8 years of international experience in insurance and reinsurance. - Experience in scoping, designing and piloting disaster risk instruments <p>TOR</p> <ul style="list-style-type: none"> -Develop insurance policy rates, terms and conditions, including those for parametric products; - -Develop underwriting criteria -Assess feasibility of distribution -Establish criteria Audit for risk reserving; - Develop risk transfer strategy mainly through overseas reinsurance arrangements, as well as capital market solutions 	24		
	IT Specialist*		<p>National Consultant -1</p> <p>Qualifications:</p> <ul style="list-style-type: none"> -Master's degree in Information Systems, GIS, IT or related fields - At least 7 years' of experience of supporting use of digital technology applications in insurance <p>TOR</p> <ul style="list-style-type: none"> -Support use of digital technology focusing on digital infrastructure, mobile money (mMoney), interoperability, payment switches, risk governance, digital finance rules and regulations, and security measures. -Assist the pilot and counterparts to develop and implement digital finance solutions, as well as serve as technical advisor. 	18		

		Legal specialist*	<p>National Consultant -1</p> <p>Qualifications:</p> <ul style="list-style-type: none"> -Master's degree in law or equivalent -At least 8 years of experience in insurance and capital markets related law and regulations <p>TOR</p> <ul style="list-style-type: none"> -Review all acts and regulations pertaining DRF -Identify key issues in the legal reform process that need to be addressed to implement the proposed DRF pilot -identify regulations and structures that promote and obstruct gender equity -coordinate with local bodies and working groups to incorporate legal and crosscutting issues in the proposed insurance design 	12		
		Institutional Coordination Specialist*	<p>National Consultant -1</p> <p>Qualifications</p> <ul style="list-style-type: none"> -Master's degree in Sciences Management or related fields -At least seven years of professional experience and skills in crisis response coordination -Good knowledge of international best practice, guidelines and policies relevant to crisis and humanitarian response -Experience in working with governmental institutions and network of stakeholders <p>TOR</p> <ul style="list-style-type: none"> -Ensure proper coordination between the DRF specialists, insurance companies, stakeholders and the government. -Suggest the type of activities which are required for ensuring sustainability of the pilot and long-term institutional strengthening. 	18		
		Communication specialist*	<p>National Consultant – 1</p> <p>Qualifications</p> <ul style="list-style-type: none"> -Master's degree in Media studies, Communications, or related areas -At least 5 years of experience in the area of communication & media with proven experience in the Financial Sector, preferably with international financial institutions -Excellent written and spoken English and Urdu with a good working knowledge of the other regional languages 	18		

			TOR -Design and conduct a perceptions survey to assess community perceptions of and to form a baseline against which to monitor progress of the strategy. -Develop a clear communication and engagement plan with an aim to increase acceptance, reduce risk and improve access -Enhance the organization's credibility and brand -Providing technical guidance and support in their sector advocacy, communication and partnership activities, including action planning and key messaging, and guiding and advising on the preparation of advocacy and communication materials (e.g. Key Issue Briefs, talking points, Q&A, press releases, audio-visual material).			
	Pilot 2: TOR (Same as above)	Position *Intermittent	Number of consultants	Person Months	Total	Cost (\$ million)
		Disaster insurance specialist*	International Consultant -2 (of which 1 will be a Team Leader)	24		1.0
		Actuary*	International Consultant -1	12		
			National Consultant -1	24		
		Insurance Specialists*	National Consultants -4	24		
		IT Specialist*	National Consultant -1	18		
		Legal specialist*	National Consultant -1	12		
		Institutional Coordination Specialist*	National Consultant -1	18		

Consulting Firms Packages, with Person-months and TOR
(Legal and Audit Firms)

S#	Consulting Services	Person-Months	Brief TORs
5	Legal services	36	<ul style="list-style-type: none"> • Advise the Fund and sub-borrowers on legal issues on aspects relating to Grant Agreements, supply contracts, infrastructure construction contracts, social safeguard matters, issues relating to staff/employees, Insurance etc.; • Advise the Fund on legal issues during implementation of Grant Agreements/arrangements; • Define and assist the Fund in amendments, modifications to regulations in relation to the business plan objectives; and • Coordinate with other lead specialists to achieve closure of the project. <p>(Duration: 48 months)</p>
6	Auditors	48	<p>The audit firm, inter alia, will perform the audit on yearly basis applying the accounting principles used for the preparation of the financial statements and on if they were consistently applied.</p> <p>Special attention will be placed on as to whether:</p> <p>All external financing, including counterpart funds, have been used in accordance with the financing agreements, with due attention to economy, efficiency, and only for the purposes for which financing was provided.</p> <ul style="list-style-type: none"> • Goods and services have been procured in accordance with the financing agreement; • All supporting documentation, records and accounts have been maintained in respect of all project activities, (including the expenditures by SOEs); • The Special/imprest account has been used and maintained in conformity with the financing agreement. • Assets procured from project funds exist, are properly safeguarded and there is a verifiable ownership by the Fund or beneficiaries in line with the financing agreement; • Applicable laws have been complied with and that the financial and accounting procedures approved for the project were followed and used. <p>In complying with the International Standards on Auditing, the auditors are expected to pay attention to ADB Handbook on Disbursements.</p> <p>(Duration: 48 months)</p>

Indicative list of Experts to be engaged by the Fund

S#	Technical Experts (National)	Person-Months Intermittent	Education/Experience and TORs
1	Procurement and Contracts Specialist	16 over 48	<p>Have completed 16 years of education preferably in Procurement, Finance, Engineering, Economics etc. General Experience: preferably 15 years Procurement specific: preferably 10 years</p> <ul style="list-style-type: none"> • Provide support to fund staff in reviewing and evaluating proposals and finalizing the grant agreements; • Ensure the proper implementation of M&E framework and review procurement plans/reports of the Fund projects; • Support the fund staff in updating the annual procurement plan regularly and preparing procurement status reports; • Review the EOI documents and provide procurement support to Fund staff and grantees; • Assist the fund staff in ensuring that the procurement rules manual is followed by the Fund grantees; • Conduct regular trainings and workshops on procurement rules and contract management for grant applicants and grantees.
2	Infrastructure Specialist x 2	32 over 48	<p>Have completed 16 years education in Civil Engineering, Urban development etc. an infrastructure engineer with preferably 10 years of experience in constructing and operating, preferably small-scaled community physical infrastructure (i.e. health and education facilities, water supply and sanitation, drainage with rural and urban roads projects)</p> <ul style="list-style-type: none"> • Assist the Fund staff in reviewing EOIs for the selection and ranking of different types of infrastructure projects; • Support Fund staff in monitoring of infrastructure projects; • Help the grant applicants in making their proposals technically qualify for the Fund grant; • Suggest to the Fund staff various contracting mechanisms and infrastructure solutions that could be delivered at a comparatively lower cost; • Conduct trainings and workshops for Fund staff and organizations applying for grants for infrastructure projects.
3	Performance Monitoring Specialist	16 over 48	<p>Have completed 16 years of education in management, project management, civil engineering, engineering management etc. Preferably 10-12 years of specific experience, well-conversant with Project Management tools etc.</p> <ul style="list-style-type: none"> • Periodic review of the M & E system design to incorporate changes in the Fund and GoP priorities and targets, type and quality of data availability at different levels within and outside the Fund and feedback from the ADB and project staff; • Regular review of the operations of the M & E system to check its responsiveness, integrity, sustainability, user-friendliness, etc.; • Prepare and send consolidated progress reports to the ADB (and other donors) regularly; • Assist the grantees of the Fund in preparing the periodic progress reports of their respective projects; • Undertake regular field (monitoring) visits of the projects to validate their information and reporting and ensuring quality; • Digitize and maintain a record of all reports;

			<ul style="list-style-type: none"> Quarterly reports to the Fund management on M & E issues; Undertake regular evaluation studies/missions and facilitate external evaluation consultants/studies and use their results for improving the M & E system; Conduct regular trainings and workshops on the M & E system requirements and operations for the prospective applicants, grantees, and the new Fund staff.
4	Financial Management Specialist	16 over 48	<p>Preferably a Chartered Accountant or a Professional Accountant with experience in Public Financial Management with 10 years of specific experience.</p> <ul style="list-style-type: none"> Support the implementation of financial management, accounting and reporting and internal auditing systems in the Fund; Train the Fund staff on the use of the above systems; Monitor the application of the financial rules manual by the Fund grantees; In consultation with the Fund staff, reviewing of the financial records of the projects to ensure compliance with the required financial procedures; Undertake risk assessment of financial management and accounting system.
5	Social Safeguard Specialist	16 over 48	<p>Have completed 16 years of education in social sciences, sociology or related discipline. At least 10 years' experience familiar with safeguards policies of ADB, WB/IFC and other IFIs</p> <ul style="list-style-type: none"> Support the SGU in the selection and ranking of proposals based on social safeguards component; Upgrade social safeguards manual regularly in consultation with the SGU; Assist the Fund staff in conducting due diligence for grant proposals and help prepare the social safeguard-section of the DDRs; Conduct social safeguards' monitoring of projects identified by the Fund staff; Support the preparation of annual social performance reports by the Fund staff.
6	DRM Specialist	16 over 48	<p>Advance degree (PhD or Master's) in civil engineering, structural, hydraulic and geotechnical engineering or a related discipline. At least 8 years of specific experience on infrastructure engineering, structural engineering, infrastructure mitigation works, or design and implementation of flood, earthquake, or landslide mitigation works. Preferably, some experience in designing and implementing DRM initiatives and policies, either directly related to DRM or in sectors such as water, urban infrastructure, or transport.</p> <ul style="list-style-type: none"> Regularly contribute to or lead high- level dialogue on DRM both inside and outside the Fund; Quarterly review the relevant policy, institutional, and regulatory frameworks; To strengthen government's DRM programs and systems, regularly assess the economic and fiscal impact of natural disasters and review the public sector DRM expenditure; Upgrade risk information programs at the country level to inform infrastructure vulnerability reduction strategies; Advice improvements in the design of systems/procedures for selecting structural vulnerability reduction investments; Lead and coordinate the development of post- disaster infrastructure damage assessment and provide technical advice to the Fund for

			<p>infrastructure reconstruction process;</p> <ul style="list-style-type: none"> • Assist the Fund staff in refining the design of the monitoring and evaluation system for infrastructure risk reduction and maintenance investments in the region; • Arrange regular trainings and workshops relating to DRM policies and frameworks for grantees, new Fund staff and consultants.
7	Multi-Hazard Vulnerability Risk Assessment Specialist	16 over 48	<p>Have completed 16 years of education in geography, urban planning or another relevant discipline Preferably 8-10 years of specific experience in disaster risk assessment and mapping, with international organizations or public sector</p> <ul style="list-style-type: none"> • Conduct Participatory Vulnerability and Risk Assessments (PVRAs) to assess the risks and vulnerabilities in areas identified by the Fund; • Keep the GIS-based Multi-hazard Disaster Risk Reduction database up-to-date, including improvements in the integrated geo-database consisting of various thematic maps (road network map, water supply map, etc.), demographic data, socio-economic data and infrastructural facilities using GIS and remote sensing technologies; • Regularly upgrade the citizen-friendly Multi-hazard Vulnerability Atlas, containing maps of major infrastructures, physical features, land-use and potential risk zones in term of earthquake, water-logging and fire hazards; • Assist the Fund staff in maintaining a list of “Action Items for Disaster Mitigation” based on the latest PVRA and GIS mapping; • Organize frequent workshops on the use of the above disaster management tools at the provincial and national level with relevant stakeholders.
8	MIS Specialist	16 over 48	<p>Have completed 16 years of education preferably in MIS, computer engineering or IT etc. Preferably 8-10 years of specific experience</p> <ul style="list-style-type: none"> • Regularly update MIS requirements through user interviews, document analysis, requirements workshops, business processes’ descriptions, user cases, scenarios, business analysis, task and workflow analysis; • Review functional requirements (Business Requirements Document), Use Cases, GUI, Screen and Interface designs; • Implement the Fund’s MIS in accordance with the decisions of the Fund management; • Conduct frequent trainings and workshops to familiarize Fund staff with the improvements in the MIS; • Provide best practices for quality control, customer services, and project management services.
9	Grants Specialist	16 over 48	<p>Have completed 16 years of education in Finance, MBA, Accounting, Financial Management or Procurement etc. Preferably 8-10 years of specific experience</p> <ul style="list-style-type: none"> • Ensure the application of processes and systems for efficient and effective grant-making activities; • Upgrade systems and tools for efficient grant management and reporting; • Assist the Fund staff in implementing a coordinated approach to the grant-making process; • Help the Fund staff maintain an overview of all grant and contract management issues and an online database of grant applications and grants;

			<ul style="list-style-type: none"> • Support grantees to ensure proper preparation of grant proposals; • In consultation with the Fund staff, prepare regular reports on the grant portfolio and data analyses for key stakeholders.
10	Environment Specialist	16 over 48	<p>Have completed 16 years of education in environmental science/engineering or related discipline. Preferably at least 10 years' experience, familiar with safeguards policies of ADB, WB/IFC and other IFIs</p> <ul style="list-style-type: none"> • Ensure that environmental policies/guidelines for the Fund are being followed; • Regularly upgrade selection criteria and provide desk-review and field support for the screening and categorization of proposals; • Support the Fund staff and the grant applicants in preparing proposals that fulfill environmental criteria/standards and • Regularly conduct environmental monitoring of the projects and prepare annual environmental performance/assessment reports to be sent to the ADB.
11	Gender Specialist	16 over 48	<p>Have completed 16 years of education in gender, development, anthropology, sociology, or social science etc. preferably 8 years' experience working with donors, NGOs, government agencies</p> <ul style="list-style-type: none"> • Assist the Fund staff in upgrading gender policies/guidelines of the Fund; • Review gender toolkit/criteria used for screening the proposals submitted to the Fund on a bi-annual basis; • Assess gender-mainstreaming in the grant proposals and conduct regular workshops for prospective grantees; • In collaboration with Fund staff and other specialists, regularly upgrade scope, methodology and parameters for social and gender vulnerability risk assessments.
12	Climate Change Specialist	16 over 48	<p>Have completed 16 years of education preferably in Environment, Engineering or Climate change etc. Preferably 8-10 years of specific experience</p> <ul style="list-style-type: none"> • Maintain an up-to-date knowledge of the Climate Change policies, strategies and action plans from other countries as well as from national climate change adaptation and mitigation policies, interventions, communications and awareness programmes, capacity building, research and development, and governance; • Regularly review the climate change trends (past, present and future) and their impacts on environment, food, energy and water securities of Pakistan and suggest measures for mitigation and adaptation to the Fund; • Identify climate change adaptation measures to the Fund to protect and preserve water catchment areas and reservoirs against degradation, silting and irrigation system contamination; • Suggest climate change resilient measures to the Fund for improved crop productivity per unit of land and per unit of water by increasing the efficiency of various agricultural inputs, in particular irrigation water; • Ensure that the proposed local initiatives on climate change adaptation and mitigation are synchronized with the already taken initiatives in synergetic way to avoid duplication and ensure efficient outputs and outcomes; • In quarterly reports, suggest improvements in the climate change policies and related action plans that already exist or are being developed at the national, provincial and local level;

			<ul style="list-style-type: none"> Assist the Fund staff and government partners in the development of a monitoring and evaluation strategy for effective achievement of targets relating to Climate Change.
13	Hydrologist	16 over 48	<p>Have completed 16 years of education in Civil Engineering, Hydrology or Water Resources etc. Preferably 8-10 years of specific experience</p> <ul style="list-style-type: none"> Ensure compliance of the criteria developed for the selection/approval of proposals related to hydrology; In consultation with the Fund staff, review all hydrology projects and suggest improvements; Regularly review the DRM policies, systems and frameworks of the provincial irrigation departments; Regularly update flood frequency analyses of all the major vulnerable regions/areas; After input from the irrigation design engineers, establish flood frequency analyses for all cross drainages for which cross drainage facilities are to be provided on any of the main, branch or distributary canals.
14	Structural Design Engineering Specialist	16 over 48	<p>Have completed 16 years of education preferably in Civil Engineering, Hydrology, Geology or Water Resources etc. Preferably 8-10 years of specific experience</p> <ul style="list-style-type: none"> Assist the NDRMF staff in assessing the overall structural and geotechnical (foundation) integrity of the barrage system in Pakistan; Support the NDRMF staff in analyzing design options for all grant proposals for structures to be constructed; Review the detailed structural design, bills of quantities and technical specifications for all grant proposals and report it to the Fund; Ensure procedures/practices that increase the long term structural integrity of bridges, barrages, roads, etc. are followed; Highlight to the NDRMF staff structural design options for cross regulators, distributary and minor canal head regulators, escapes, and road bridges that are cost-effective.
15	Landslide/Stabilization Specialist	16 over 48	<p>Have completed 16 years of education preferably in Forestry, Agriculture Engineering, Environment or Civil Engineering etc. Preferably 8-10 years of specific experience</p> <ul style="list-style-type: none"> Regularly initiate situation analysis based on available information and gather additional information, if required, on landslides and destabilized slopes in Pakistan; Update landslide stabilization strategy based on latest situation analysis and other relevant information; Suggest technical measures to the NDRMF staff and grantees, including engineering and bioengineering techniques, for stabilization of landslides/slopes; Regularly review the plans for land slide stabilization; Assess the institutional capacity of relevant provincial departments on a quarterly basis and prepare capacity building plan including training modules and conduct training sessions for their staff; Assist the NDRMF staff in the production of landslide and mudflow risk assessment guidance, duties and responsibilities on a regular basis; Assess the effectiveness of landslide stabilization proposals submitted to the NDRMF and suggest changes and modifications; Ensure that the proposals developed to undertake landslide, mudflow and fluvial geomorphology surveys and to develop landslide hazard and risk assessment mapping and profiling of all active landslide

			<p>identified by the government are funded and initiated without delay; and</p> <ul style="list-style-type: none"> Promote, guide and share best practices relevant to landslide risk assessment, prevention and mitigation.
16	Web Developer	16 over 48	<p>Have completed 16 years of education preferably in Web Development, IT, or Computer Engineering etc. Preferably 5-7 years of specific experience</p> <ul style="list-style-type: none"> Maintain and upgrade the website regularly and ensure that it has (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; Assist the NDRMF staff and grantees in any issues relating to web development and also provide training to the Fund staff for the maintenance of the website.
17	Meteorologist	16 over 48	<p>Have completed 16 years of education preferably in Environment, Meteorology, Geography or GIS etc. Preferably 8-10 years of specific experience</p> <ul style="list-style-type: none"> Maintain awareness of current and future requirements with respect to the issuance of meteorological advisories and warnings; Sustain and augment awareness of the implementation of meteorological advisories and warnings within the ASIA/PAC Region and any deficiencies; Continually seek ways to improve the operational effectiveness of the meteorological advisory and warning system; Provide timely advice on meteorological issues to other NDRMF employees/consultants as well as grant applicants.
18	GIS Specialist	16 over 48	<p>Have completed 16 years of education preferably in Environment, Geology, Geography or GIS etc. Preferably 8-10 years of specific experience</p> <ul style="list-style-type: none"> Work closely with other technical staff for upgrading geo-spatial database applications and for the procurement of images and geo-referenced data required by the NDRMF staff or grantees; Provide geospatial support to the NDRMF and develop GIS applications that help the Fund in making better decisions; Maintain GIS web portals and upgrade digital maps, using latest technological tools, as directed by the NDRMF staff.
19	Geologist/Geo-Tech Specialist	16 over 48	<p>Have completed 16 years of education preferably in Civil Engineering, Environment, Geology, Soil Engineering, etc. Preferably 8-10 years of specific experience</p> <ul style="list-style-type: none"> Carry out (organize and oversee) regular reviews of foundation conditions of hydraulic structures that are the focus of grant proposals; Assist the grant applicants in the preparation of proposals for improving hydraulic structures and ensure that the criteria designed for the ranking and selection of proposals is being followed; Ensure detailed foundation investigations for the project works are carried out; Supervise the work of the sub-contracted drilling, sampling and testing services for the compliance with best geotechnical practice.
20	Community-based Disaster Risk Management	16 over 48	<p>Have completed 16 years of education preferably in Management, Disaster Risk Management, risk management, Project Management etc. Preferably 8-10 years of specific experience</p> <ul style="list-style-type: none"> Support the review of the CNDRM proposals by the NDRMF staff,

	Specialist (CBDRM)		<p>ensuring that they are in line with NDMP and NFPP IV, NDRMF 's results framework and business plan and the prioritization criteria, and adequate in scope;</p> <ul style="list-style-type: none"> • Assist in the regular up-gradation of the outreach strategy to up-scale CBDRM activities in most vulnerable and risk prone areas of the country; • In consultation with the NDRMF staff, conduct periodic training/orientations of the key partners; • Report on the efforts to incorporate CBDRM measures in all development schemes at appropriate levels; • Advise NDRMF and grantees on the institutionalization of staff and allocation of budgets for sustaining CBDRM activities financed by the NDRMF; • Ensure monitoring mechanisms, developed for CBDRM activities, mechanisms are followed and regularly report on achievement of CBDRM goals, including their sustainability.
21	Disaster Risk Insurance Specialist	16 over 48	<p>Have completed 16 years of education in economics, finance or related field. Preferably 8-10 years of specific experience in the field of insurance</p> <ul style="list-style-type: none"> • Provide assistance in understanding fiscal risk from disasters, quantification and analysis of fiscal risk from disasters; • Regular institutional review of the changing role of public agencies and financial institutions in the financing of natural disasters internationally, based on case studies of actual disasters; • Quarterly analysis and review of the local insurance market conditions for the provision of disaster risk insurance; • Periodic review and improvements in the list of cost-efficient disaster risk financing and/or insurance options taking into consideration the existing fiscal responsibilities and limitations that are identified; • Ensure that the comprehensive risk management framework/strategy devised to integrate disaster risk is being implemented.
Total		352	

Environmental and Social Management System

This document provides guidance to enable the Pakistan National Disaster Risk Management Fund to develop an Environmental and Social Management System satisfactory to ADB. The specific wording is not intended to be prescriptive, but rather to suggest one possible formulation that will meet ADB's requirements.

ABBREVIATIONS

ADB	-	Asian Development Bank
CEO	-	Chief Executive Officer
DDMA	-	District Disaster Management Authority
DP	-	displaced person
DRM	-	disaster risk management
DSPR	-	Detailed subproject report
EAD	-	Economic Affairs Division
EHS	-	environment, health and safety
EIA	-	environmental impact assessment
EMP	-	environmental management plan
EPA	-	Environmental Protection Agency
ESMS	-	environmental and social management system
FIP	-	Fund Implementing Partner
IEE	-	initial environmental examination
IFC	-	International Finance Corporation
IFI	-	international financing institutions
IP	-	indigenous people
IPP	-	indigenous peoples' plan
ISPC	-	Initial subproject concept
LARP	-	land acquisition and resettlement plan
MT	-	Management Team
NDMA	-	National Disaster Management Authority
NDMP	-	National Disaster Management Plan
NDRMF	-	National Disaster Risk Management Fund
NFPP	-	National Flood Protection Plan
NGO	-	non-governmental organization
NOC	-	no-objection certificate
PDMA	-	Provincial Disaster Management Authority
PIAL	-	Prohibited Investment Activities List
SECP	-	Securities and Exchange Commission of Pakistan
SGU	-	Environmental and Social Management Cell
SIA	-	social impact assessment
SPS	-	Safeguard Policy Statement

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I. INTRODUCTION

1. The Government of the Islamic Republic of Pakistan (GOP) is establishing the National Disaster Risk Management Fund (NDRMF, or the Fund) to support an institutionalized mechanism to enhance Pakistan's resilience to disasters by strengthening the government's ability to quickly respond to future disasters triggered by natural hazards. The Fund focuses on: (i) disaster risk reduction; (ii) design, development and seeding of disaster risk financing strategies and instruments; and (iii) partnerships with other organizations to provide relief and recovery support, including livelihood restoration initiatives and reconstruction and rehabilitation of key public infrastructure. NDRMF will provide a common mechanism to pool various contributions from a diverse base of contributors and serve as a vehicle for donor coordination on disaster risk management by the government.

2. NDRMF will support existing government entities and civil society organizations, involved in disaster risk management, including the National Disaster Management Authority (NDMA), Provincial Disaster Management Authorities (PDMA), District Disaster Management Authorities (DDMA), etc. The Fund is in line with existing policies and strategies of the GOP to address disasters, including (i) the Disaster Risk Reduction Policy (2013); (ii) Climate Change Policy (2013); (iii) Vision 2025; (iv) National Disaster Management Plan 2013-2022 (NDMP); (v) the draft National Flood Protection Plan IV (NFPP) (2016-2025); and (vi) Post-2015 Sendai Framework for Disaster Risk Reduction, 2015-2030.

1.1 Fund Sources

3. The Government has requested \$ 200 million from ADB, through a stand-alone loan to contribute to the financing of the NDRMF and draft the National Flood Protection Plan IV (2016-2025). NDRMF will be established and registered according to the appropriate legislation prior to approval of the loan. The loan will finance full staffing of NDRMF, including its management team and technical experts, and fully cover its operating costs. It will ensure that requisite governance and fiduciary arrangements are in place and that Fund operations are efficient and functional. It will also provide policy support, where necessary.

4. The loan will focus on a broad set of activities outlined in NDMP and NFPP IV that will be prioritized based on further analysis. The loan will also focus on developing the Fund operation, and the primary or critical level disaster planning, preparedness, mitigation, early warning systems and response. This could include developing a national disaster risk financing strategy and specific financial risk transfer mechanisms, undertaking multi-hazard disaster and vulnerability risk assessment, upgrading critical early warning and forecasting systems, training and capacity building of key stakeholder including communities, studies and research, developing response plans and mainstreaming of disaster risk management (DRM) into development, and financing critical risk reduction structures. The focus will also be on taking these initiatives further, and fully implementing the risk reduction plans that are well developed and where the institutional capacities have been established. It will focus on priority structural disaster risk reduction interventions identified based on analysis of disaster risk, the behavior of past disasters and related studies and research conducted and will continue to implement DRM measures in order of priority, planning and phasing established during implementation. .

5. Cofinancing is being explored to further increase the overall size of the loan. The Government will make regular (annual) budgetary contributions of not less than 20% of the amount made available by co-financiers and ADB through the loan.

1.2 Financing Windows

6. NDRMF will have three critical windows for providing financing support: i) disaster risk financing; ii) ex-ante disaster risk reduction and; (iii) management of the residual impact of disasters.

Disaster Risk Financing. A disaster risk financing strategy and specific disaster risk financing instruments will be developed based on disaster risk and funding gap analysis. Disaster risk financing instruments will be piloted in collaboration with the private sector, and successful instruments will be scaled up. The output will include a national disaster risk financing strategy, market-based disaster risk financing instruments, a contingent emergency financing option for disaster response, and a targeted safety net scheme to deliver timely support to affected low-income households.

Ex-ante Disaster Risk Reduction. This will support: i) capacity building of national and local disaster risk management organizations; ii) multi-hazard disaster risk assessment and climate change research and studies and mainstreaming vulnerability and risk data into development planning; iii) strengthening multi-hazard forecasting and early warning systems; iv) awareness, training and capacity building in disaster risk management (DRM) and Community Based Disaster Risk Management (CBDRM) and incorporating DRM in basic and advance education systems of the country; v) mainstreaming DRM into national and local development and investment plans; and vi) developing disaster sensitive building codes for public and private infrastructure, disaster risk sensitive land use planning, training of builders and oversight agencies, evaluating disaster risk safety of existing structures, retrofitting critical public infrastructure and building new disaster risk sensitive structures.

Management of Residual Impact of Disasters. This will support: i) developing a national emergency response system with response plans, response centers, equipment and supplies, operational capacities, and tracking systems to monitor and coordinate post-disaster support, including international assistance; ii) developing a mechanism to target low income households, women and children in post-disaster assistance using existing social protection systems and safety nets; iii) livelihoods restoration and recovery of farm and non-farm livelihoods of especially women and vulnerable populations; and iv) capacity development for post-disaster recovery and reconstruction.

1.3 Overall Implementation Arrangement

7. The Economic Affairs Division (EAD) of the Ministry of Finance will be the executing agency for the NDRMF. A special purpose company will be established under Section 42 of the Companies Ordinance for managing the NDRMF.¹² NDMRF will be regulated by the Securities and Exchange Commission of Pakistan (SECP) and will be subject to extensive statutory governance and reporting requirements under the ordinance and relevant Rules. NDMRF will have robust governance and management structures comprised of a General Body of 40 members, a Board of Directors of between 12 and 15 members, and a management team

¹² A company formed "not for profit" purpose and registered under Companies Ordinance 1984. It enjoys all the privileges of a limited company and be subject to all its obligations. Government owned section 42 companies have to comply with Code of Corporate Governance which is a robust governance framework.

headed by a Chief Executive Officer. A Board of Directors will be established in line with the applicable legal framework for establishment of the Fund. The Board will have a rotating donor representative as the deputy-chair. The Board will include representatives of the Cabinet Division, Finance Division, EAD, Climate Change Ministry, NDMA, Planning Commission, Provincial Chief Secretaries, with 51% rotating (every three years) independent members from the contributing partners, and elected (by shareholders) from the private sector, NGOs, community, women and technical experts according to SECP rules. The Chairperson will also be from the independent members of the Board.

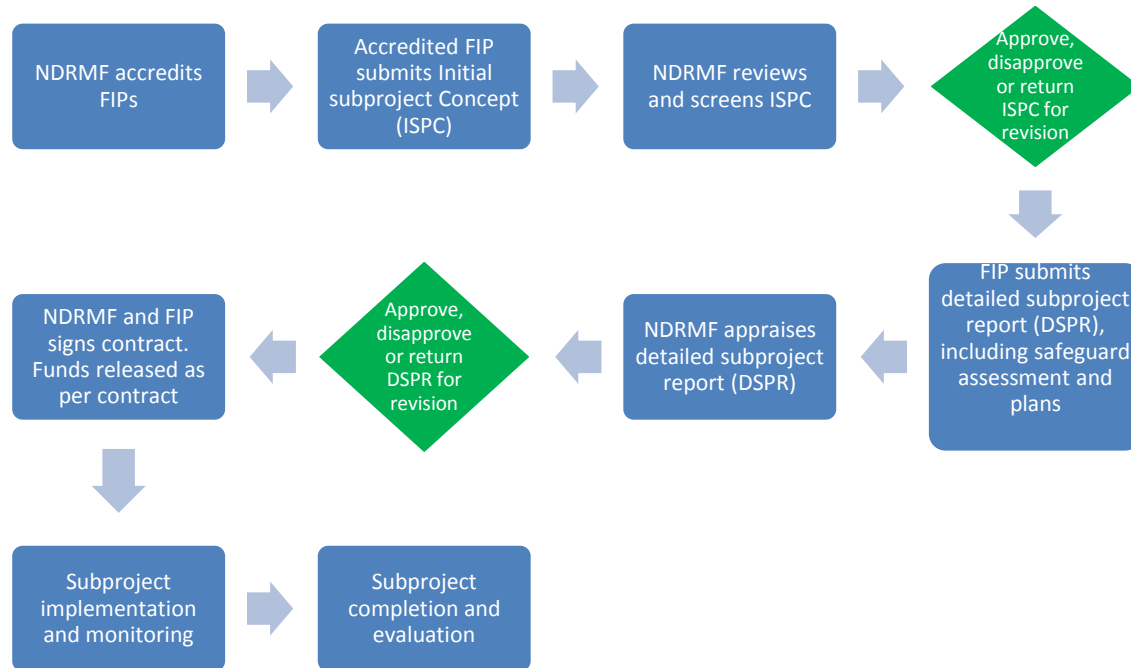
8. The operations of the Fund will be administered by ADB on behalf of the government, and in close association with all donors contributing to the Fund, until the completion of the loan. ADB will have oversight roles in financial management, procurement, safeguards and monitoring and reporting activities of the Fund and the Fund Implementing Partners (FIP) for activities financed by the Fund.

9. After the completion of the loan, the fund administration will solely be the responsibility of the NDRMF Board and Management, and oversight will be performed by the regulator (SECP) and the government as stipulated under the law and articles of associations of the Fund.

10. FIPs can be government entities, international donors, civil society, and academia, and could include public-private partnership models. Entities seeking financing support from the Fund should first be accredited in order to be eligible to receive support. FIP already accredited by reputed international and national funds will be provided special exemptions to fast track the accreditation process. Each FIP will use the resources transferred by NDRMF and carry out activities in accordance with the contract signed between the FIP and NDRMF.

11. Accredited FIPs will submit an application for financing and an initial subproject concept (ISPC) based on criteria approved by the NDRMF Board and scope of activities in line with the NDMP, and NFPP IV. NDRMF will review the ISPC, screen the subproject in terms of safeguards impacts and risks, and recommend appropriate more detailed assessments and plans. Upon approval of the ISPC, the FIP will prepare a detailed subproject report (DSPR) that includes the detailed design, implementation plan, and required safeguards assessments and plans, required government approvals and other documents needed for appraisal of the subproject. Once approved, NDRMF will sign a contract with the FIP for the subproject implementation and release the required funds. During the subproject implementation, the FIP will submit periodic reports, while NDRMF reviews and supervises subproject performance the commitments of the FIP as per the contract. Figure 1 shows the NDRMF basic project cycle.

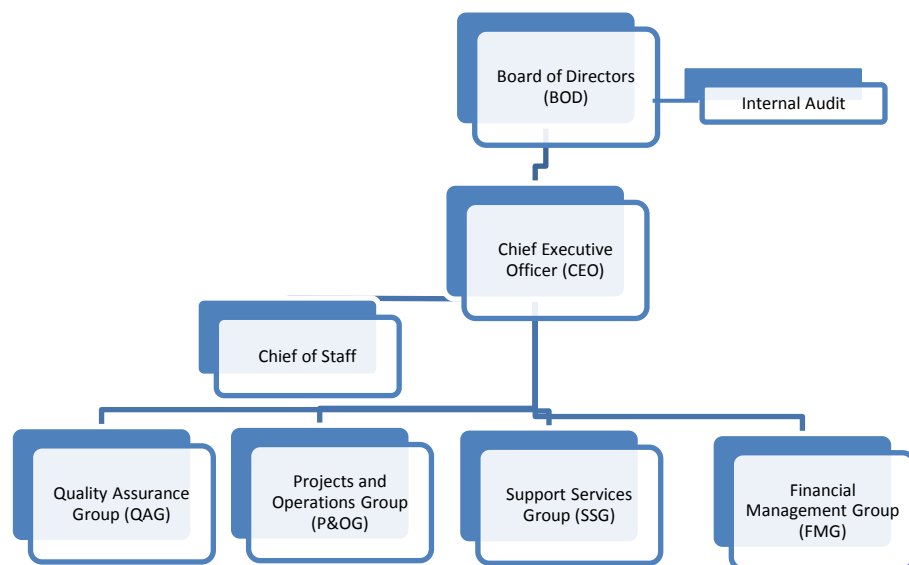
Figure 1: NDRMF Basic Project Cycle



12. The NDRMF Board would: (a) approve activities financed through the Fund; (b) approve the operational guidelines of the Fund; (c) select new FIPs in accordance with the operational guidelines; (d) give strategic guidance and ensure alignment to the NDMP and the NFPP IV; (e) appoint top management and internal/external auditors of the Fund and; (e) review and approve the annual operational budget, annual reports and audit reports.

13. Routine operations will be the responsibility of the Management Team (MT) of the Fund headed by the Chief Executive Officer (CEO), with the Heads of Quality Assurance Group (QAG), Projects and Operations Group (P&OG), Support Services Group (SSG), and Finance Management Group (FMG) as members. The MT will: (a) prepare all documentation required for Board review and meetings; (b) undertake all due diligence required by the Board; (c) prepare periodic reports on the Fund's activities, progress, physical and financial performance, including preparing business and operations plans; (d) initial screening of all proposals for financing in line with operational guidelines; (e) coordinate with sub-committees of Board and with technical committees for review of funding proposal submitted by FIPs; (f) update operational guidelines for Board approval and; (g) coordinate with contributors and the government agencies.

Figure 2: NDRMF Organizational Setup



II. POLICY, LEGISLATION, AND GUIDELINES

2.1 National Environmental Legislation

14. The Pakistan Environmental Protection Agency (Review of IEE/EIA) Regulations 2000 (“the PEPA regulations”), together with section 12 of the Pakistan Environmental Protection Act 1997, requires that every new development project in Pakistan is preceded by an environmental examination. Projects are categorized according to their potential environmental impacts. Projects that have reasonably foreseeable impacts (Schedule I) are required to have IEEs, while projects that have more adverse environmental impact (Schedule II) are required to have EIAs. For projects deemed to have minimal environmental impacts, no further action is required.

15. Under PEPA regulations, the Federal Environmental Protection Agency (EPA) delegated the review of IEEs/EIAs to the provincial EPAs. Thereafter, the rules and regulations under the PEPA 1997 have been adopted by the provinces. To date, the following Acts have been passed by the provincial assemblies: Sindh Environmental Protection Act (2014); KP Environmental Protection Act (2014); Baluchistan Environmental Protection Act (2013); Punjab Environmental Protection Act (2012).

16. The provinces intend to update the related regulation and guidance according to their environmental requirements and sensitivities. Existing IEE/EIA Regulation, National Environmental Quality Standards (NEQS), Rules and Guidelines for Environmental Assessments notified by Pak-EPA are currently being used for compliance. These include the set of EIA guidelines prepared by the federal and provincial EPAs.

17. The Regulations provide details in preparing, submitting, and reviewing IEEs and EIAs. The following is a brief step-wise description of the approval process.

- i) An EIA or IEE is conducted as per the requirement and following the Pak-EPA guidelines;
- ii) The proponent submits the EIA or IEE to the concerned EPA, accompanied by an application in the format prescribed in Schedule IV of the regulations and pay the review fee;
- iii) The EPA conducts a preliminary scrutiny of the completeness of the IEE/EIA for review and replies to the proponent within 10 days;
- iv) In case of EIA, simultaneous to the confirmation of completeness EPA publishes in any English or Urdu national newspaper and in a local newspaper of general circulation in the area affected by the project, a public notice mentioning the type of project, its exact location, the name and address of the proponent and the places at which the EIA of the project can be accessed and fix a date, time and place for public hearing of any comments on the project or its EIA. EPA will also circulate the EIA to the concerned Government Agencies to solicit their comments;
- v) The EPA makes every effort to complete the IEE and EIA review within 45 and 90 days, respectively and accords its approval subject to certain conditions:
- vi) Before commencing construction of the project, the proponent submits (a) an undertaking accepting the EPA conditions, and (b) an EMP with a request for obtaining confirmation of compliance.
- vii) Before commencing operation of the project, the proponent obtains from the EPA a written confirmation of compliance with the approval conditions and requirements of the IEE/EIA.
- viii) The EPA issues confirmation of compliance within 15 days of the receipt of request and complete documentation. The IEE/EIA approval is valid for three years from the date of accord.
- ix) The proponent submits a monitoring report to the EPA after completion of construction, followed by annual monitoring reports during operation.

2.2 National Legislation on Land Acquisition and Resettlement

17. The Land Acquisition Act of 1894 (LAA), as amended, is the main law regulating land acquisition for public purpose in Pakistan. It requires that following an impacts assessment and valuation, land, structures, crops and other improvements are compensated in cash at market rate to titled landowners and registered land tenants/users. In addition, a 15% Compulsory Acquisition Surcharge is provided.

18. Only legal owners and tenants registered with the land revenue department or with formal lease agreements are eligible for compensation/livelihood support. The LAA also does not openly mandate the provision of specific rehabilitation/assistance to poor and vulnerable groups, nor does it require rehabilitation of income/livelihood losses or resettlement costs. There is also no requirement to monitor and assess resettlement outcomes and impacts, and disclose monitoring reports. . In cases of urgency, whenever the Executive District Officer (Revenue) so directs, the Collector, though no such award has been made, may, on the expiration of fifteen days from publication of the notice, take possession of any land needed for public purposes or for a Company.

19. The land acquisition process officially starts with the publication of preliminary notification under Section 4 of the LAA. This is followed with the conduct of surveys, measurements, valuation, inquiry on objections, formal declaration of intent to acquire land, dispute resolution, payment of compensation and taking possession of the acquired land. Table 1 below shows the key processes in the Land Acquisition Act.

Table 1: Salient Features of the LAA 1894

Section 4	Publication of preliminary notification of land acquisition and authorizing the conduct survey.
Section 5	Formal notification of particular land needed for public purpose.
Section 5a	Enquiry on concerns or grievances of the affected people related to land prices.
Section 6	Formal declaration of intent to acquire land.
Section 7	The Land Acquisition Collector (LAC) is directed by the Land Commissioner to take order the acquisition of the land.
Section 8	The LAC is directed to physically mark out, and measure the land to be acquired
Section 9	The LAC gives notice to all 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	The LAC to record statements of the DPs in the area of land to be acquired or any part thereof as co-proprietor, sub-proprietor, mortgage, and tenant or otherwise.
Section 11	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 11 A	Enables the Collector to acquire land through private negotiations upon request of Head of the acquiring department. Upon receipt of any such request the collector is empowered to constitute/notify a committee for assessment of market value of land and verification of title of ownership. On agreement by Head of Acquiring Department, with negotiated market value determined by the committee, the collector shall then direct parties to execute sale deed in favor of acquiring department on stamp paper.
Section 11 B	Provides time limit of six months to complete land acquisition process from the date of notification under Section-4.
Section 16	The LAC takes possession and the land shall thereupon vest absolutely in the Government, free from all encumbrances.
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 land.

Section 23	<p>Matters to be considered in determining compensation— <i>first</i>, market-value of the land at the date of the publication of the notification under section 4, sub-section (1) taking into account transfer of land similarly situated and in similar use, and potential-value of the land to be acquired subject to certain conditions <i>secondly</i>, the damage sustained by the person interested to any standing crops or trees which may be on the land; <i>thirdly</i>, the damage (if any) sustained by the person interested for severing such land from his other land; <i>fourthly</i>, the damage (if any) sustained by the person interested to his other property, movable or immovable, in any other manner, or his earnings; <i>fifthly</i>, reasonable expenses (if any) incidental to being compelled to change his residence or place of business <i>sixthly</i>, the damage resulting from diminution of the profits of the land between the time of the publication of the declaration under section 6 and the time of the Collector's taking possession of the land.</p> <p>In addition to the market-value of the land, a 15% premium is added in consideration to the compulsory nature of the acquisition, if the acquisition has been made for a public purpose and a 25% if the acquisition has been made for a Company.</p>
Section 28	Relates to interest premium to be provided in case of insufficient compensation paid as determined by the court.
Section 31	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.
Section 35	Compensation for temporary occupation and use of any waste or arable land for public purpose, including payment either in a gross sum of money or by monthly or other periodical payments as shall be agreed upon in writing between the Collector and the affected person, and restoration of the land after use.
Section 48A	Additional compensation for damage due to delay in award under Section 11.

2.3 ADB Safeguards Policy (2009)

21. The Asian Development Bank's Safeguard Policy Statement (SPS) 2009 applies to all ADB-financed and/or ADB-administered sovereign and non-sovereign projects, and their components regardless of the source of financing. ADB will not finance projects that do not comply with ADB's SPS, nor will it finance projects that do not comply with the host country's social and environmental laws and regulations, including those laws implementing host country obligations under international law. ADB's SPS sets out the policy objectives, scope and triggers, and principles for three key safeguard areas: environmental safeguards, involuntary resettlement safeguards, and indigenous peoples safeguards. ADB adopts a set of specific safeguard requirements that borrowers/clients are required to meet in addressing environmental and social impacts and risks.

Environmental Safeguards

22. ADB SPS requires that environmental considerations be incorporated into ADB-financed and/or administered projects to ensure that these will have minimal environmental impact and be environmentally sound. Occupational health and safety of the local population should also be addressed, as well as the project workers. Borrowers/clients are required to submit periodic monitoring reports on their implementation performance. A Grievance Redress Mechanism to receive applications and facilitate resolution of affected peoples' concerns, complaints, and grievances about the project's environmental performance must also be established.

23. All loans and investments are screened for potential environmental and social impacts and risks. With regard to environment, categorization is to be undertaken using Rapid Environmental Assessment (REA) checklists, consisting of questions relating to (i) the sensitivity and vulnerability of environmental resources in project area, and (ii) the potential for the project to cause significant adverse environmental impacts. Projects are classified into one of the following environmental categories:

Environment Category A: Project/subproject is likely to have significant adverse environmental impacts that are irreversible, diverse or unprecedented. These impacts may affect an area larger than the sites or facilities subject to physical works. An environmental impact assessment (EIA) is required. Under NDRMF, Environment Category A proposals will not be considered for financing.

Environment Category B: Project/subproject's impacts are site-specific, few, irreversible, and in most cases mitigation measures can be designed more readily than for category A projects. An initial environmental examination (IEE) is required.

Environment Category C: Project/subproject is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications need to be reviewed.

Environment Category FI: Project/subproject involves investment of ADB funds to or through a financial intermediary (FI).

Social Safeguards

24. Social safeguards seek to avoid, minimize, or compensate for adverse involuntary resettlement (IR) and/or impacts to indigenous peoples (IP). ADB administered and/or financed projects are required to identify potential IR and IP impacts early in the project cycle and plan to avoid, minimize, mitigate or compensate for these potential adverse impacts throughout the project cycle to ensure that displaced persons (DPs) are assisted in improving or at least restoring their livelihood and improve the standards of living of the displaced poor and vulnerable groups. ADB SPS requires that those who are adversely affected are meaningfully consulted and informed of options and their eligibility for compensation, and are provided with accessible avenues for grievance redress. Plans and activities for addressing IR and IP impacts are to be monitored and evaluated.

25. Projects/subprojects are classified into one of the following four categories in terms of IR impacts and risks:

IR Category A: Project/subproject will have major IR impacts on 200 or more persons i.e. being physically displaced from housing, or losing 10% or more of their productive

assets (income generating). A resettlement plan, including assessment of social impacts is required. Under NDRMF, IR Category A proposals will not be considered for financing.

IR Category B: Project/subproject that will have major IR impacts on less than 200 persons. A resettlement plan, including assessment of social impacts is required.

IR Category C: Project/subproject is likely to have no IR impacts whatsoever. No further action is required.

IR Category FI: Project/subproject involves investment of ADB funds to or through a financial intermediary (FI).

26. In terms of IP impacts and risks, projects/subprojects are classified into one of the following four categories:

IP Category A: Project/subproject is likely to have significant direct and indirect impacts on IPs' dignity, customary rights on use and access of land and natural resources, socioeconomic status, cultural and communal integrity, health, education, livelihood and social security status, recognition of indigenous knowledge and vulnerability. An Indigenous Peoples Plan (IPP), including assessment of social impacts, is required. Under NDRMF, IP Category A proposals will not be considered for financing.

IP Category B: Project/subproject that will likely have limited impacts on IPs. An IPP, including assessment of social impacts, is required. Where IPs are the overwhelming majority of direct project/subproject beneficiaries, the elements of the IPP could be integrated into the project/subproject design in lieu of preparing a separate IPP.

IP Category C: Project/subproject is likely to have no impacts on IPs whatsoever. No further action is required.

IP Category FI: Project/subproject involves investment of ADB funds to or through a financial intermediary (FI).

Addressing gaps between the Land Acquisition Act and ADB social safeguards

27. Projects/subprojects funded under the NDRMF are required to comply with Pakistan's Land Acquisition Act and ADB SPS requirements. To address the variance in some of the LAA and SPS policy requirements, the following standards and measures will be used for subprojects funded under NDRMF:

- Non-title holders will be compensated at replacement cost for their loss of assets other than land, such as dwellings, and other improvements to the land provided they have been occupying the land or structure prior to the cut-off date for eligibility for resettlement assistance
- Displaced persons (DPs) losing livelihood will be assisted in order to at least restore their lost livelihood
- Efforts will be made to identify DPs who may be considered vulnerable (i.e. poor, widows, orphans and aged) and will be provided with appropriate targeted assistance to help improve their standards of living

- FIPs will be required to submit monitoring reports on a semi-annual basis on the implementation of measures and plans to address IR and IP impacts in subprojects funded under NDRMF.
- No land shall be acquired for any subproject under the emergency acquisition provisions of the Land Acquisition Act (1894)

Table 2: Gap Analysis between LAA 1894 & SPS(2009) and Measures to Address Gaps

Pakistan LAA 1894	IR Safeguards as per ADB SPS 2009	Measures to Address Gaps in NDRMF subprojects
Compensation for land and other assets is based on average values and department unit rates that do not ensure replacement market value of the property acquired. However, LAA requires that a 15% compulsory acquisition surcharge supplement the assessed compensation.	DPs are to be compensated for all their losses at replacement cost, including transaction cost and other related expenses, without deducting for depreciation.	Land valuation is to be based on current replacement (market) value with an additional payment of 15%. The valuation for the acquired housing land and other assets is the full replacement costs keeping in view the fair market values, transaction costs and other applicable payments that may be required.
No provision for resettlement expenses, income/livelihood rehabilitation measures or allowances for displaced poor and vulnerable groups.	Requires support for rehabilitation of income and livelihood, severe losses, and for vulnerable groups.	Provision should be made to pay for resettlement expenses (transportation and transitional allowances), compensate for loss of income, and provide support to vulnerable persons and those severely impacted (considered to be those losing more than 10% of their productive assets).
Lack of formal title or the absence of legally constituted agreements is a bar to compensation/rehabilitation. (Squatters and informal tenants/leaseholders are not entitled to compensation for loss of structures, crops)	Lack of formal title is not a bar to compensation and rehabilitation. All DPs, including non-titled DPs, are eligible for compensation of all non-land assets.	Squatters, informal tenants/leaseholders are entitled to compensation for loss of structures and livelihood and for relocation.
Land acquisition and compensation process is conducted independently by the Land Acquisition Collector following a lengthy prescribed legal and administrative procedure. There are emergency provisions in the procedure that can be leveraged for civil works to proceed before compensation is paid.	Involuntary resettlement is conceived, planned and executed as part of the project. Affected people are supported to re-establish their livelihoods and homes with time-bound action in coordination with the civil works. Civil works cannot proceed prior to compensation.	FIPs will prepare LARPs, as part of project preparation based on an inventory of losses, livelihood restoration measures, Pakistan law and principles enumerated in SPS. Where gaps exist in the interpretation of Pakistan law and resettlement practices, requirements of ADB's involuntary resettlement policy will prevail. Civil works may only proceed after the resettlement plan is implemented and compensation for loss of assets and other allowances (budgeted as part of the project cost) is fully paid.
No convenient grievance redress mechanism except recourse of appeal to formal administrative jurisdiction or the court of law	Requires the establishment of accessible grievance redress mechanisms to receive and facilitate the resolution of DPs' concerns about displacement and other impacts, including compensation	FIPs will establish easily accessible grievance redress mechanism available throughout project implementation that will be widely publicized within respective project area and amongst the DPs.

28. Eligibility and entitlements of displaced persons (DPs) in NDRMF subprojects are shown in Table 3. The types of losses typically encountered vary according to the nature and complexity of the subproject. Additional support may be provided to assist DPs in restoring their livelihood and living standards.

Table .3: Eligibility and Entitlements for DPs affected by NDRMF Subprojects

Type of Loss	Specification	Eligible Person	Compensation Entitlement
1. Agricultural land, including, uncultivable wasteland	All land losses	Legal and legalizable Owner(s) of Land	<ul style="list-style-type: none"> • Cash compensation at replacement cost plus 15% CAS, free of taxes, registration and transfer costs; or • Land for land compensation through provision of plots of equal value and productivity as that of lost.
		Sharecropper/ tenant (registered or not)	<ul style="list-style-type: none"> • Cash compensation equal to the market value of gross annual yield of lost land, proportionate to their share for two years.
		Lessee (registered or not)	<ul style="list-style-type: none"> • Cash equivalent of the market value of the gross yield of lost land for the remaining lease years, up to maximum of three years
		Non-titled user (squatter, encroacher)	<ul style="list-style-type: none"> • No compensation for lost land • Rehabilitation allowance equal to the market value of the gross annual yield of lost land in addition to standard crop compensation. (see Loss Type 7 below)
	Additional provision for DPs losing more than 10% their total operational agricultural holding	Owner / lessee/, sharecrop tenant/squatter/ encroacher	<ul style="list-style-type: none"> • severe agricultural land impact allowance equal to the market value of the gross annual yield of lost land for one year.
2. Temporary impact on arable land	Land required temporarily during civil works	All eligible persons, as above, (with and without title)	<ul style="list-style-type: none"> • Crop compensation for lost season (s) and reclamation of land to original use.
3. Residential/ commercial land		Owner (legal/legalizable)	<ul style="list-style-type: none"> • Cash compensation at replacement cost plus 15% compulsory acquisition surcharge (CAS) free of taxes, registration and transfer costs;
		Renter/ Leaseholder	<ul style="list-style-type: none"> • Cash compensation of a value proportionate to the duration of the remaining lease period.
		Non-titled user (squatter, encroacher)	<ul style="list-style-type: none"> • No compensation for lost land
		Non-titled owners (squatters) occupying land for DWELLING identified by the Census (only those actually occupying the dwellings)	<ul style="list-style-type: none"> • Self relocation allowance (equivalent to one year's income calculated at the prevailing official monthly minimum wage)

Type of Loss	Specification	Eligible Person	Compensation Entitlement
		Non-titled owners (squatters) occupying land for shops/stalls/ kiosks identified by the census and inventory of lost assets (only those actually occupying the facilities)	<ul style="list-style-type: none"> Option to set up a stall through a space rental agreement with respective local governments or authority at a designated commercial area in public land and at a location comparable to the lost location.
4. Residential, commercial, agricultural and community structures		Owner(s), titled and non-titled of the structure and squatters (in case of squatters only those actually occupying the structures and in case of community structures the members of the committee jointly)	<ul style="list-style-type: none"> Cash compensation at replacement cost for affected structures by type of construction and other fixed assets. In case of partial loss cash assistance compensation will be provided to restore the remaining structure. If more than 25% of the building's floor area is affected, cash compensation will be computed for the entire building/structure. <p>Salvaged materials will be free of deductions.</p> <p>A lump sum Transportation Allowance will be paid to relocating households, businesses, agricultural operations and mosques etc. for shifting their belongings, inventory, equipment and installations</p>
		Renter/ Leaseholder	<ul style="list-style-type: none"> Cash compensation equivalent to three months rent or a value proportionate to the duration of the remaining lease.
5. Loss of livelihood during relocation	Residential structures affected	Head of the displaced household	<ul style="list-style-type: none"> Transition Allowance equivalent to 3 months of average monthly household income in the area.
6. Loss of business and employment	Shops, stalls and kiosks.	Business owners; (including, renters and informal settlers and squatters) and employees identified by the census.	<ul style="list-style-type: none"> Cash grant for net income loss for duration of business stoppage (6 months for permanent loss and no more than 3 months for temporary stoppage.)¹³ A one- time cash grant will be paid to affected employees equivalent to 2 month's official monthly minimum wage.
7. Crops	Affected crops	Cultivator of crops irrespective of status of tenure	<ul style="list-style-type: none"> Crop compensation in cash at the full market rate for one year's gross crop yield.
8. Trees	All affected trees	Owner	<ul style="list-style-type: none"> Fruit trees: compensation for mature fruit-bearing trees will comprise of the market rate of the yearly yield multiplied by the number of years required to grow such a tree to the same productive level it was cut; and for immature trees that are yet to bear fruit compensation will be based on the gross expense needed to reproduce the tree to the

¹³ Where tax receipts are not available to establish net business losses of impacted businesses the fixed monthly rate is based on their average monthly income as determined through participatory assessments and surveys. It is assumed that permanently affected business are able to re-establish themselves at another location within a period of 6 months, while those temporarily affected can resume operations within a period of 3 months.

Type of Loss	Specification	Eligible Person	Compensation Entitlement
			<p>same age it was cut.</p> <ul style="list-style-type: none"> Timber trees will be valued based on the market value of their dry wood volume. The wood of the fallen tree will remain with the owner and its value will not be deducted from the compensation.
9. Affected Vulnerable households	Poor and female-headed households and other vulnerable households, including the elderly, identified through the SIA.	Head of the household	<ul style="list-style-type: none"> Lump sum assistance allowance in cash equivalent to 3 months of average monthly household income in the area. Temporary or permanent employment during construction or operation of the facility that necessitated involuntary resettlement, where feasible.
10. Unidentified Losses	Unanticipated impacts	All DPs	<ul style="list-style-type: none"> Dealt with as appropriate during project implementation according to the ADB Safeguard Policy.

Requirements for Financial Intermediaries (FI) Projects

29. For projects involving investment of ADB funds to or through financial intermediaries (FI), an environmental and social management system (ESMS) to be maintained as part of the overall management system to meet national laws and/or ADB's requirements for FI projects. The ESMS should incorporate the following elements: (i) environmental and social policies, (ii) screening, categorization and review procedure; (iii) organizational structure and staffing including skills and competencies in environmental and social areas; (iv) training requirements, and (v) monitoring and reporting. Subprojects that have potential for significant environmental or social impacts should meet all ADB SPS requirements, including information disclosure and consultation and are referred to ADB for review. ADB will monitor the FI's performance on the basis of its ESMS. The FI is required to prepare and submit periodic reports at least annually on the implementation status of its ESMS. For the DRMF, reporting will be done on a semi-annual basis. If the reports or ADB's reviews conclude that the ESMS is not functioning, the FI will prepare and submit a corrective action plan agreed to with ADB and implement it.

Disclosure Requirements

30. All ADB-financed and ADB-administered projects must ensure that relevant information about social and environmental safeguard issues is made available in a timely manner, in an accessible place, and in a form and language(s) understandable to affected people and to other stakeholders so they can provide meaningful inputs into project design and implementation. These include safeguards assessments and plans (IEEs, LARPs, IPPs) and safeguards monitoring reports. For environment category A projects, ADB must post draft EIA reports on its website at least 120 days before Board consideration. However, for NDRMF environment category A subprojects will be excluded from support. For updates and monitoring reports, ADB is required to disclose in its website upon receipt.

Incorporating Social Dimensions and Social Protection

31. ADB Social Protection Strategy (2001) requires ADB to (a) ensure that vulnerable groups that maybe negatively affected by an ADB intervention are adequately compensated and mitigation measures put in place to avoid creating further poverty, (b) comply with internationally recognized core labor standards in the design and formulation of loans, and (c) as part of its regular loan reviews, monitor that these are complied with.

III. ENVIRONMENTAL AND SOCIAL MANAGEMENT POLICY AND APPLICABLE REQUIREMENTS

3.1 Policy

32. The environmental and social management policy of the Pakistan National Disaster Management Fund (NDRMF) was approved by the Board of Directors on [date/month/year] and states that:

33. The objectives of the environmental and social management system are:
- (i) To avoid, and when avoidance is not possible, to minimize and mitigate adverse impacts of NDRMF-funded projects on the environment and affected people; and
 - (ii) To maximize opportunities for environmental and social benefits.
34. NDRMF continually endeavors to ensure and enhance effective environmental and social management practices in all its activities, products, and services with a special focus on the following:
- (i) Ensuring that applicable environmental and social safeguard requirements, as defined in Section 3.2 are met in all proposals and activities that it funds;
 - (ii) Financing FIPs only when the activities or proposals will be designed, constructed, operated, and maintained in a manner consistent with applicable environmental and social safeguard requirements, as defined in Section 3.2;
 - (iii) Integrating environmental and social risk into its internal risk management analysis;
 - (iv) Ensuring appropriate consultation and transparency in its activities;
 - (v) Putting into practice applicable environmental and social safeguard requirements in activities and proposals that it funds; and,
 - (vi) Promoting activities and proposals with environmental and social benefits.
35. This policy will be communicated to all staff and operational employees of NDRMF, through its MT.

3.2 Applicable Environmental and Social Safeguard Requirements

36. NDRMF will ensure that:
- (i) All proposals for funding from FIPs are screened against the Prohibited Investment Activities List (PIAL) (Attachment 1)¹⁴;
 - (ii) All proposals from FIPs with potential significant environmental and/or social impacts (category A) will not be considered for financing under the NDRMF; and
 - (iii) All proposals from FIPs are reviewed, monitored and evaluated against the Pakistan national laws, regulations, and standards on environment, health,

¹⁴ Attachment 1 is based on ADB Prohibited Investment Activities List (Annex 3, Appendix 5, SPS, 2009) and IFC Exclusion List (2007)

safety, involuntary resettlement and land acquisition (including gap filling measures as per paragraph 27 and Table 3), indigenous peoples, and physical cultural resources, as well as NDRMF's social protection requirements (Attachment 2).

3.3 Environmental and Social Institutional Setup

37. NDRMF will have a Safeguards and Gender Unit (SGU) under the Quality Assurance Group (QAG) to support the conduct of safeguards, social protection, and gender due diligence in the project appraisal, monitoring, and reporting. The Director, QAG will be the ESMS Focal Point for the Fund and consolidate inputs from the SGU technical staff. The SGU will have a core technical team composed of an Environment Officer (EO), a Social Safeguards Officer (SSO), and a Social Development and Gender Officer (SDGO), supported by 3 technical/field-support and 2 administration-support staff.

38. **Organization and Responsibilities.** The Director, QAG will report to the CEO and ensure that adequate resources are committed to allow for the effective implementation of this ESMS policy and procedures. Below are the key ESMS-related tasks of the Director, QAG and core SGU staff:

Director, QAG:

- Serve as ESMF focal point for NDRF and have oversight for environmental and social issues (including involuntary resettlement, indigenous peoples' issues, gender, labor, and other social risks) in projects funded under NDRF;
- Ensure that relevant NDRF units and FIPs are fully aware of the ESMS, including the policy, standards, and procedures;
- Supervise the work of the SGU technical staff;
- Consolidate the inputs from the SGU technical staff in the safeguards screening proposals, and review of safeguards plans and discuss to the MT;
- Ensure that subprojects assisted by NDRF are properly monitored in terms of compliance with the safeguards requirements;
- Advise the MT on emerging safeguards issues and risks and propose appropriate measures for addressing these issues and risks;
- Serve as the grievance focal point for NDRF and ensure that the grievance redress mechanism for NDRF is operational and effective;
- sign and endorse the semi-annual environmental and social performance report for submission to ADB, and ensure that ADB is notified if and when the responsible staff has been changed or replaced with new staff;
- Assist the CEO in reporting to the Board on the status of safeguards implementation in projects and overall ESMS implementation;

Environment Officer (EO):

- Support the conduct of training on the ESMS for FIPs and staff of PNDRF
- Screen subproject proposals for environmental impacts and climate change risks, recommend environment categorization and advise on further assessment and due diligence for the review of the proposal;
- Inform the Director, QAG on emerging environmental safeguards issues, risks and complaints and propose appropriate measures for addressing these;

- Supervise the review of environmental assessment reports and plans, confirm compliance with PEPA regulations and prepare due diligence report for category A/B projects
- Validate the conduct of meaningful consultations and disclosure of the project and environmental assessment with key stakeholders and affected people
- Ensure that all ADB category A projects are screened out, the Fund will not finance any ADB Environment category A projects.
- Ensure disclosure of IEE or EIAs (as per PEPA) and environmental monitoring reports in the PNRDF website
- Conduct field visits, oversee the monitoring of subproject implementation for compliance with environmental requirements and preparation of monitoring reports
- Prepare the semi-annual environmental performance report for submission to ADB

Social Safeguards Officer (SSO):

- Support the conduct of training on the ESMS for FIPs and staff of NDRF
- Screen subproject proposals for social safeguards impacts and risks, recommend IR/IP categorization and advise on further assessment and due diligence on social safeguards for the review of the proposal;
- Inform the Director, QAG on emerging social safeguards issues, risks and complaints and propose appropriate measures for addressing these;
- Supervise the review of LARPs/IPPs, confirm compliance with LAA provisions and gap filling measures required under NDRF, and prepare due diligence report for category A/B projects
- Validate the conduct of meaningful consultations and disclosure of the project and environmental assessment with key stakeholders and affected people
- Ensure that all ADB category A projects are screened out, the Fund will not finance any ADB IR/IP category A projects.
- Ensure disclosure of social safeguards documents (such as LARPS/IPPs) and social monitoring reports in the NDRF website
- Conduct field visits, oversee the monitoring of subproject implementation for compliance with social safeguards requirements and preparation of monitoring reports
- Prepare the semi-annual social safeguards performance report for submission to ADB

Social Development and Gender Officer (SDGO):

- Oversee the implementation and monitoring of the Gender Action Framework and related gender action plans aligned with GAF.
- Undertake capacity building of NDMA and PDMAs in planning and implementing social and gender inclusive disaster response programs.
- Review and screen proposals submitted by FIPs from social protection, social development and gender perspective.
- Review NDMA/PDMAs' existing policies and plans related to gender mainstreaming in disaster reduction, preparedness and response and make recommendations for further improvements.
- Prepare monitoring/periodic progress reports against the GAF/GAP targets.

39. **Resources and Capabilities.** The Director, QAG and SGU core and technical support staff will need to be technically qualified to be able to carry out the screening and due diligence or able to review the work carried out by consultant(s). SGU staff should attend ADB sponsored or approved environmental and social safeguard training related to compliance and monitoring activities.

40. NDRMF will maintain a pool of qualified environmental and social consultants who can be called upon to assist in conducting environmental and social reviews as appropriate. Indicative tasks of these safeguards consultants include (i) providing desk-review and field support to the SGU safeguards officers in the screening and categorization of proposals; (ii) assisting in the conduct of safeguards due diligence for the proposed subprojects and helping prepare the environment-section of the DDRs; (iii) conducting external environment monitoring of subprojects (iv) supporting the preparation of annual environmental performance reports

IV. ENVIRONMENTAL AND SOCIAL MANAGEMENT PROCEDURES

4.1 Screening and Categorization

41. At the initial subproject concept (ISPC) review stage, the SGU staff will apply the PIAL. If the proposal involves a prohibited activity, the FIP will be informed that the proposal will not be considered. Otherwise, the SGU staff will indicate the applicable environmental and social safeguard requirements for the proposal.

42. SGU will work with the FIP to make a rapid assessment of the likely environmental and involuntary resettlement impacts and effects on indigenous peoples of a proposal. Depending on the nature and scope of the proposal, the screening may require the conduct of field visits by the SGU staff. The attached rapid environmental assessment checklist (Attachment 3) and social safeguard screening checklist (Attachment 4) are designed to guide the SGU staff in the rapid assessment of impacts. The checklists are used to determine the significance of potential environmental and/or social impacts associated with the proposal. All projects likely to be category A for Environment, IR and IP according to ADB's classification shall be screened out at this stage. It may be mentioned here, that in the case of environmental categorization, ADB and the PEPA have separate methodologies, projects classified B for environment by ADB may be category A according to PEPA. However, all ADB environment category A projects will be excluded. ADB will review all safeguards categorization and other documents within the first 2 years from the establishment of the fund and until a third party assessment shows that the ESMS implementation is satisfactory.

43. Once the checklists and the verification work are completed, the SGU will classify the proposal as one of the following categories:

Table 1: Safeguards Categorization of Proposals for NDRMF support

Category	Environment	Involuntary Resettlement	Indigenous People
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A	likely to have significant adverse environmental impacts that are irreversible, diverse or unprecedented (projects listed in PEPA Schedule II)	200 or more people will experience major IR impacts defined as (i) being physically displaced from housing or (ii) losing 10% or more of productive assets (income generating)	Likely to have significant adverse impacts on indigenous people that directly and indirectly affect their dignity, communal rights, livelihood systems or culture, access to territories or natural or cultural resources, socioeconomic status, education and health.
B	impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A projects (projects listed in PEPA Schedule I)	Less than 200 people will experience major IR impacts (as defined above)	IPs are the sole or overwhelming majority of project beneficiaries and when only positive impacts are identified
C	minimal or no adverse environmental impacts	No IR impacts whatsoever	No IP impacts whatsoever

44. NDRMF will inform the FIP of the applicable requirements as presented in Section 3.2 and summarized in Table 2 including the necessary gap filling measures in accordance with the ESMS. For proposals with potential significant environmental and/or social impacts (Category A), the appraisal team will advise the FIP that their proposal cannot be supported under NDRMF. Outlines for an IEE Study and IEE checklist will be based on PEPA guidelines. Outline for a LARP, and IPP are provided in Attachments 5 and 6, respectively. Within the first 2 years from the establishment of the Fund, ADB will also review all safeguards plans prepared for proposals submitted for financing under the Fund.

Table 2: Safeguard Requirements

Category (Risk Rating)	Safeguards Requirements	Environmental Safeguards	Involuntary Resettlement Safeguards	Indigenous Peoples Safeguards*
Category A (with potential significant impacts)	ADB SPS 2009	To be excluded by NDRMF financing	To be excluded by NDRMF financing	To be excluded by NDRMF financing
Category B (with less significant impacts)	Pakistan Legal requirements for Environment and Resettlement/ land acquisition ¹⁵)	Initial Environmental Examination (IEE)	Land Acquisition and Resettlement Plan (LARP), including gap filling measures as per para 27 and entitlement matrix in Table 3	Summary note on IP in the detailed subproject report (DSPR)
Category C (with minimal or no impacts)	No requirement	No safeguard document required.	No safeguard document required.	No safeguard document required.

* In case IPs will experience IR impacts, a combined RP/IPP may also be prepared.

4.2 Due Diligence

45. The SGU will undertake environmental and social due diligence of the submitted proposals. Depending on the complexity of the proposal, due diligence can be a desk review

¹⁵ For social safeguards, measures for addressing gaps in standards as per paragraph 27 of this ESMS still apply.

(for category C proposals) and based on a site visit (for category B proposals). The due diligence will screen out any ADB category A projects. The FIP must provide all requested information to the appraisal team, and should be able to demonstrate responsiveness with regard to the applicable environmental and social safeguard requirements. A due diligence report will be prepared for all project proposals submitted and the results of the due diligence will be reflected in the report to the review committee of NDRMF, which will take into account these issues in approving the proposal. Attachment 7 provides an outline of a due diligence report.

46. **Category A.** For a proposal likely to be classified as category A according to ADB SPS 2009, for any of their environment, involuntary resettlement, or indigenous peoples impacts, NDRMF will not be allowed to finance the project. All such projects will be screened out.

47. **Category B.** For proposals classified as category B as per ADB SPS, NDRMF will communicate the applicable national legal requirements to the FIP. Projects/subprojects that are at variance in some of the LAA and SPS policy requirements will follow the gap filling measures in accordance with the ESMS. ADB will review all safeguards categorization and documents till the third party assessment shows that ESMS implementation is satisfactory. The FIP will be required to prepare all necessary safeguards documents and present them to the Fund for review and approval. All safeguards documents and due diligence will be reviewed by ADB prior to the approval of the proposal by the Fund till the third party assessment shows that the ESMS implementation is satisfactory. In the case of environmental safeguards, the FIP will obtain environmental clearance from the relevant provincial Environmental Protection Agency. The FIP will be required to share the environmental no-objection certificate (NOC) with the Fund. The Fund will then communicate the approval to ADB as part of its regular reporting.

48. **Category C.** For category C (as per ADB SPS) proposals, there are no environmental or social safeguards requirements.

49. All project agreements will contain appropriate environmental and social covenants requiring projects funded under NDRMF to be in compliance in all material respects with the applicable environmental and social safeguard requirements as defined in Section 3.2.

4.3 Compliance Monitoring and Reporting

50. After a proposal is approved, the Director, QAG will communicate with the FIP and confirm from time to time that the FIP is undertaking the obligations of compliance with all applicable environmental and social safeguard requirements, and NDRMF will also promptly report to ADB any actual or potential breach of the compliance requirements after becoming aware of it. SGU staff will visit the site to verify and monitor the implementation of the safeguards requirements.

51. Environmental and social performance will be evaluated on a semi-annual basis. The benchmark for performance will be the ongoing compliance against the applicable environmental and social safeguard requirements. NDRMF will ensure that the FIP prepares and submits a semi-annual environmental and social monitoring report (Attachments 8 and 9) and will review and assess the FIP's performance on environmental and social safeguard issues. The M&E system to be developed for NDRMF will include information on safeguards compliance status and activities. After 2 years from the establishment of the Fund, a third-party review will be done on the NDRMF ESMS and recommend corrective measures. In case

sufficient capacity has been developed, ADB prior review of proposals categorization and safeguards plans will no longer be required.

52. Based on the review of the semi-annual monitoring reports for Category B projects by the FIPs, the Director, QAG will prepare a semi-annual environmental and social performance report, and submit it to the NDRMF management and ADB¹⁶.

4.4 Information Disclosure and Grievance Redress Mechanism

53. QAG, through its Media and Communication Unit, will develop the website for the NDRMF. All environmental and social information related to the ESMS and projects supported by the fund will be disclosed on the NDRMF website. These include the Board approved environmental and social policy and procedures described in the ESMS, environmental and social assessment documents and plans, environmental approvals for specific subprojects, monitoring and progress reports on subprojects supported by the Fund, annual environment and social safeguards performance report, and NDRMF grievance redress mechanism (including complaints hotline, email and contact numbers).

54. The Director, QAG will ensure that the Fund has a mechanism in place to address complaints that arise at the project level, and non-compliances in accordance with ESMS and national regulations. The Director, QAG (supported by the SGU) will ensure there is a record of the following:

- a. Complaints, grievances, or protests received from local communities, recording dates and organizations involved, actions taken to resolve grievances, any outstanding issues, and proposed measures for resolution;
- b. Details of information disclosure and consultations, if any, with affected people, local communities, civil society groups, and other stakeholders; and
- c. Details of approach/methodology on addressing the concerns and issues raised at consultations.

55. The Fund will ensure that all investment agreements for subprojects contain provisions enabling: (a) ADB's representatives to inspect the subprojects and any relevant records and documents; and (b) ADB, in case of any breach, to require FIPs to bring the subprojects into compliance with all applicable laws and regulations of Pakistan and the SPS.

4.5 Capacity Building

56. Through a CDTA, an ESMS Specialist, supported by 1 national environment specialist and 1 national social safeguards specialist, will be engaged to finalize this ESMS, prepare the ESMS manual, train the relevant PNRDMF staff on the ESMS operations, conduct outreach and orientation for potential FIPs on the Fund's safeguards requirements and processes, specifically on screening out ADB category A projects, assist in the accreditation of FIPs, and in the screening/evaluation of the initial batch of proposals. Additional capacity building of the SGU environment staff will be conducted through ADB REG TA 8663 and for the social safeguards staff, capacity building will be carried out through ADB PRM social safeguards staff. Training on safeguards screening, impact assessment and safeguards plan preparation, due diligence review, monitoring and reporting, information disclosure, stakeholder engagement, and grievance redress mechanism will be designed and implemented under the loan. Independent

¹⁶ This will be until the duration of the loan.

assessment study of ESMS implementation will be carried out two years after the first disbursement. The independent third party assessment will be carried out under the capacity building TA by an independent third party.

4.6 ESMS Audit Scope and Procedure

56. Once the ESMS of the Fund is found to be performing “satisfactorily” after the third party independent detailed assessment study, the Fund will be subjected to an annual independent auditing of its ESMS that will include (a) an assessment of NDRMF’s ability to manage and address all relevant social and environmental risks and impacts of its business and operations, in particular, the issues identified in donor’s safeguard requirements, build NDRMF’s capacity in enhanced safeguards management; (b) a review of NDRMF’s compliance record with applicable laws and regulations in Pakistan related to environmental and social matters, and (c) identify the NDRMF’s and its FIPs’ main stakeholder groups and current stakeholder engagement activities. The audit will cover both the ESMS within NDRMF and selected subprojects for their implementation compliance to safeguard requirements.

57. External and independent resource persons will be identified as ESMS auditors and will undertake this audit. The ESMS auditors will have the experience to do both management systems audits as well as audits of investment projects. Resource persons either as individuals or agencies certified as auditors by reputed accreditation bodies will be employed. NDRMF will ensure that the audit team has a good mix of both auditing and subject knowledge/experience on both environment and social safeguards.

58. SGU will furnish required information on their activities to the auditor and provide proper support and cooperation in the conduct of the audit. All subprojects that are categorized as B will be covered in these audits as long as disbursements have been made in the current or the previous year. Approximately 25% of other subprojects will be selected, and will necessarily include at least one subproject from different subproject types.

59. ESMS auditors will submit an audit report including capacity assessment of and training in safeguards management for NDRMF’s and FIPs’ follow-up. NDRMF will agree on the follow-up action for each of the audit findings and agree on a timeframe to implement the follow-up actions.

ATTACHMENTS

Attachment 1: Prohibited Investment Activities List¹⁷

The following do not qualify for financing under NDRMF:

- (i) production or activities involving harmful or exploitative forms of forced labor¹⁸ or child labor;¹⁹
- (ii) production of or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements or subject to international phase-outs or bans, such as (a) pharmaceuticals,²⁰ pesticides, and herbicides,²¹ (b) ozone-depleting substances,²² (c) polychlorinated biphenyls²³ and other hazardous chemicals,²⁴ (d) wildlife or wildlife products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora,²⁵ and (e) trans-boundary trade in waste or waste products;²⁶
- (iii) production of or trade in weapons and munitions, including paramilitary materials;
- (iv) production of or trade in alcoholic beverages, excluding beer and wine;²⁷
- (v) production of or trade in tobacco;¹⁰
- (vi) gambling, casinos, and equivalent enterprises;¹⁰
- (vii) production of or trade in radioactive materials,²⁸ including nuclear reactors and components thereof;
- (viii) production of, trade in, or use of unbonded asbestos fibers;²⁹
- (ix) commercial logging operations or the purchase of logging equipment for use in primary tropical moist forests or old-growth forests; and
- (x) marine and coastal fishing practices, such as large-scale pelagic drift net fishing and fine mesh net fishing, harmful to vulnerable and protected species in large numbers and damaging to marine biodiversity and habitats.

¹⁷ This PIAL is based on ADB Prohibited Investment Activities List (ADB SPS, 2009) and IFC Exclusion List (2007).

¹⁸ Forced labor means all work or services not voluntarily performed, that is, extracted from individuals under threat of force or penalty.

¹⁹ Child labor means the employment of children whose age is below the host country's statutory minimum age of employment or employment of children in contravention of International Labor Organization Convention No. 138 "Minimum Age Convention" (www.ilo.org).

²⁰ A list of pharmaceutical products subject to phase-outs or bans is available at <http://www.who.int>.

²¹ A list of pesticides and herbicides subject to phase-outs or bans is available at <http://www.pic.int>.

²² A list of the chemical compounds that react with and deplete stratospheric ozone resulting in the widely publicized ozone holes is listed in the Montreal Protocol, together with target reduction and phase-out dates. Information is available at <http://www.unep.org/ozone/montreal.shtml>.

²³ A group of highly toxic chemicals, polychlorinated biphenyls are likely to be found in oil-filled electrical transformers, capacitors, and switchgear dating from 1950 to 1985.

²⁴ A list of hazardous chemicals is available at <http://www.pic.int>.

²⁵ A list is available at <http://www.cites.org>

²⁶ As defined by the Basel Convention; see <http://www.basel.int>.

²⁷ This does not apply to investee companies who are not substantially involved in these activities. Not substantially involved means that the activity concerned is ancillary to an investee company's primary operations.

²⁸ This does not apply to the purchase of medical equipment, quality control (measurement) equipment, and any equipment for which ADB considers the radioactive source to be trivial and adequately shielded.

²⁹ This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20%.

Attachment 2: Social Protection Requirements

The Social Protection Strategy requires NDRMF to comply with applicable labor laws in relation to the projects that it funds. FIPs should take the following measures to comply with the core labor standards³⁰:

- (a) carry out its activities consistent with the intent of ensuring legally permissible equal opportunity, fair treatment and non-discrimination in relation to recruitment and hiring, compensation, working conditions and terms of employment for its workers (including prohibiting any form of discrimination against women during hiring and providing equal work for equal pay for men and women engaged by the FIP);
- (b) not restrict its workers from developing a legally permissible means of expressing their grievances and protecting their rights regarding working conditions and terms of employment; and
- (c) engage contractors and other providers of goods and services:
 - (i) who do not employ child labor³¹ or forced labor³²;
 - (ii) who have appropriate management systems that will allow them to operate in a manner which is consistent with the intent of (A) ensuring legally permissible equal opportunity and fair treatment and non-discrimination for their workers, and (B) not restricting their workers from developing a legally permissible means of expressing their grievances and protecting their rights regarding working conditions and terms of employment; and
 - (iii) whose subcontracts contain provisions which are consistent with paragraphs (i) and (ii) above.

The above measures should be incorporated in the FIPs' environmental management plan (EMP).

The monitoring and reporting requirements should also state that the (i) the FIP will provide NDRMF with an annual report on its compliance with the measures identified above. SGU should monitor the compliance of the FIP and include this in the Annual Environmental and Social Performance Report.

³⁰ The core labor standards are the elimination of all forms of forced or compulsory labor; the abolition of child labor; elimination of discrimination in respect of employment and occupation; and freedom of association and the effective recognition of the right to collective bargaining, as per the relevant conventions of the International Labor Organization.

³¹ Child labor means the employment of children whose age is below the statutory minimum age of employment in the relevant country, or employment of children in contravention of International Labor Organization Convention No. 138 'Minimum Age Convention' (www.ilo.org).

³² Forced labor means all work or services not voluntarily performed, that is, extracted from individuals under threat of force or penalty.

Attachment 3: Rapid Environmental Assessment (REA) Checklist**Project Location
(Province/District):****Project Title:****Fund Implementing****Partner:****Date:**

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	<input type="checkbox"/>	<input type="checkbox"/>	
• Legally protected area (core zone or buffer zone)	<input type="checkbox"/>	<input type="checkbox"/>	
• Wetland	<input type="checkbox"/>	<input type="checkbox"/>	
• Mangrove	<input type="checkbox"/>	<input type="checkbox"/>	
• Estuarine	<input type="checkbox"/>	<input type="checkbox"/>	
• Special area for protecting biodiversity	<input type="checkbox"/>	<input type="checkbox"/>	
B. Potential Environmental Impacts			
Will the Project cause...			
• impairment of historical/cultural areas; disfiguration of landscape or potential loss/damage to physical cultural resources?	<input type="checkbox"/>	<input type="checkbox"/>	
• disturbance to precious ecology (e.g. sensitive or protected areas)?	<input type="checkbox"/>	<input type="checkbox"/>	
• alteration of surface water hydrology of waterways resulting in increased sediment in streams affected by increased soil erosion at construction site?	<input type="checkbox"/>	<input type="checkbox"/>	
• deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in construction?	<input type="checkbox"/>	<input type="checkbox"/>	
• increased air pollution due to Project construction and operation?	<input type="checkbox"/>	<input type="checkbox"/>	

SCREENING QUESTIONS	Yes	No	REMARKS
• noise and vibration due to Project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	
• involuntary resettlement of people? (physical displacement and/or economic displacement)	<input type="checkbox"/>	<input type="checkbox"/>	
• disproportionate impacts on the poor, women and children, Indigenous Peoples, or other vulnerable groups?	<input type="checkbox"/>	<input type="checkbox"/>	
• 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?	<input type="checkbox"/>	<input type="checkbox"/>	
• creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents?	<input type="checkbox"/>	<input type="checkbox"/>	
• social conflicts if workers from other regions or countries are hired?	<input type="checkbox"/>	<input type="checkbox"/>	
• large population influx during Project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?	<input type="checkbox"/>	<input type="checkbox"/>	
• risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction and operation?	<input type="checkbox"/>	<input type="checkbox"/>	
• 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?	<input type="checkbox"/>	<input type="checkbox"/>	
• 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?	<input type="checkbox"/>	<input type="checkbox"/>	
• generation of solid waste and/or hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	
• use of chemicals or hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	
• generation of wastewater during construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	

Preliminary Climate Risk Screening

Screening Questions		Score	Remarks ³³
Location and Design of project	Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather related events such as floods, droughts, storms, landslides?		
	Would the project design (e.g. the clearance for bridges) need to consider any hydro-meteorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc.)?		
Materials and Maintenance	Would weather, current and likely future climate conditions (e.g. prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters likely affect the selection of project inputs over the life of project outputs (e.g. construction material)?		
	Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s)?		
Performance of project outputs	Would weather/climate conditions, and related extreme events likely affect the performance (e.g. annual power production) of project output(s) (e.g. hydro-power generation facilities) throughout their design life time?		

Options for answers and corresponding score are provided below:

Response	Score
Not Likely	0
Likely	1
Very Likely	2

Responses when added that provide a score of 0 will be considered low risk project. If adding all responses will result to a score of 1-4 and that no score of 2 was given to any single response, the project will be assigned a medium risk category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response, will be categorized as high risk project.

Initial Climate Risk Screening (Low, Medium, High): _____

³³ If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.

Environment Safeguards Categorization and Requirements

- **Project Environment Categorization (A, B, C)** _____
- **Environment Safeguards Requirement (IEE/EIA/None)** _____

Other comments: _____

Prepared by: _____
Environment Officer, SGU
Date: _____

Endorsed by: _____
Director, QAG
Date: _____

Attachment 4: Social Safeguards Screening Checklists

**Project Location
(Province/District):**

Project Title:

Fund Implementing

Partner:

Date:

I. Involuntary Resettlement Impact Checklist

Probable Involuntary Resettlement Effects (Please elaborate in the Remarks column)	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 Access to Legally Designated Parks and Protected Areas				
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 state be restricted?				
Information on Displaced Persons:				
Any estimate of the likely number of persons that will be displaced by the Project? <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, approximately how many? _____				
Are any of them poor, female-heads of households, or vulnerable to poverty risks? <input type="checkbox"/> No <input type="checkbox"/> Yes				
Are any displaced persons from indigenous or ethnic minority groups? <input type="checkbox"/> No <input type="checkbox"/> Yes				

II. Indigenous Peoples Impact Screening Checklist

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
A. Indigenous Peoples Identification				
1. Are there socio-cultural groups present in or use the Project area who may be considered as "tribes" (hill tribes, scheduled tribes, tribal peoples), "minorities" (ethnic or national minorities), or "indigenous communities" in the Project area?				
2. Do such groups self-identify as being part of a distinct social and cultural group?				
3. Do such groups maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories?				
4. Do such groups maintain cultural, economic, social, and political institutions distinct from the dominant society and culture?				
5. Do such groups speak a distinct language or dialect?				
6. Have such groups been historically, socially and economically marginalized, disempowered, excluded, and/or discriminated against?				
7. Are such groups represented as "Indigenous Peoples" or as "ethnic minorities" or "scheduled tribes" or "tribal populations" in any formal decision-making bodies at the national or local levels?				
B. Identification of Potential Impacts				
8. Will the Project directly or indirectly benefit or target Indigenous Peoples?				
9. Will the Project directly or indirectly affect Indigenous Peoples' traditional socio-cultural and belief practices? (e.g. child-rearing, health, education, arts, and governance)?				
10. Will the Project affect the livelihood systems of Indigenous Peoples? (e.g., food production system, natural resource management, crafts and trade, employment status)?				

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
11. Will the Project be in an area (land or territory) occupied, owned, or used by Indigenous Peoples, and/or claimed as ancestral domain?				
C. Identification of Special Requirements <i>Will the Project activities include:</i>				
12. Physical displacement from traditional or customary lands?				
13. Acquisition of lands that are traditionally owned or customarily used, occupied or claimed by Indigenous Peoples?				

III. Social Safeguards Categorization and Requirements

a. Involuntary Resettlement Safeguards

- IR Category (A, B, C): _____
- IR Requirement: (LARP, combined RP/IPP, DDR) _____

b. Indigenous People Safeguards

- IP Category (A, B, C): _____
- IP Requirement: (IPP, IP Note, DDR) _____

Other comments: _____

Prepared by: _____
Social Safeguards Officer, SGU
Date: _____

Endorsed by: _____
Director, QAG
Date: _____

Attachment 5: Outline of a Land Acquisition and Resettlement Plan

1. A resettlement plan is required for all Projects with involuntary resettlement impacts. Its 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.

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 identifies the Project area. It also describes the alternatives considered to avoid or minimize resettlement. Includes a table with quantified data and provides 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 gender, vulnerability, and other social groupings, including:

- (i) definition, identification, and enumeration of the people and communities to be affected;
- (ii) description of the likely impacts of land and asset acquisition on the people and communities affected taking social, cultural, and economic parameters into account;
- (iii) discussion of the Project's impacts on the poor, indigenous and/or ethnic minorities, and other vulnerable groups; and
- (iv) identification of 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;
- (iv) summarizes the results of consultations with affected 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 affected 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 affected persons during Project implementation.

F. Grievance Redress Mechanisms

7. This section describes mechanisms to receive and facilitate the resolution of affected persons' concerns and grievances. It explains how the procedures are accessible to affected persons and gender sensitive.

G. Legal Framework

8. This section:

- (i) describes national and local laws and regulations that apply to the Project and identifies 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 sets out the compensation and assistance eligibility criteria and how and when compensation and assistance will be provided.
- (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) specifies all assistance to vulnerable groups, including women, and other special groups; and.
- (iii) outlines opportunities for affected 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 and prepare disaggregated tables based on demographic data and livelihood sources;
 - (ii) 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);
 - (iii) outlines measures to provide social safety net through social insurance and/or project special funds;
 - (iv) describes special measures to support vulnerable groups;
 - (v) explains gender considerations; and
 - (vi) 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; and
 - (iv) includes information about the source of funding for the resettlement plan budget.

L. Institutional Arrangements

13. This section:
- (i) describes institutional arrangement responsibilities and mechanisms for carrying out the measures of the resettlement plan;
 - (ii) includes institutional capacity building program, including technical assistance, if required;
 - (iii) describes role of NGOs, if involved, and organizations of affected persons in resettlement planning and management; and
 - (iv) 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 affected persons in the monitoring process. This section will also describe reporting procedures.

Attachment 6: Outline of an Indigenous Peoples Plan

1. An Indigenous Peoples plan (IPP) is required for all Projects with impacts on Indigenous Peoples. Its level of detail and comprehensiveness is commensurate with the significance of potential impacts on Indigenous Peoples. The substantive aspects of this outline will guide the preparation of IPPs, although not necessarily in the order shown.

A. Executive Summary of the Indigenous Peoples Plan

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

B. Description of the Project

3. This section provides a general description of the Project; discusses Project components and activities that may bring impacts on Indigenous Peoples; and identifies the Project area.

C. Social Impact Assessment

4. This section:

- (i) reviews the legal and institutional framework applicable to Indigenous Peoples in Project context;
- (ii) provides baseline information on the demographic, social, cultural, and political characteristics of the affected Indigenous Peoples communities; the land and territories that they have traditionally owned or customarily used or occupied; and the natural resources on which they depend;
- (iii) identifies key Project stakeholders and elaborate a culturally appropriate and gender-sensitive process for meaningful consultation with Indigenous Peoples at each stage of Project preparation and implementation, taking the review and baseline information into account;
- (iv) assesses, based on meaningful consultation with the affected Indigenous Peoples communities, the potential adverse and positive effects of the Project. Critical to the determination of potential adverse impacts is a gender-sensitive analysis of the relative vulnerability of, and risks to, the affected Indigenous Peoples communities given their particular circumstances and close ties to land and natural resources, as well as their lack of access to opportunities relative to those available to other social groups in the communities, regions, or national societies in which they live;
- (v) includes a gender-sensitive assessment of the affected Indigenous Peoples' perceptions about the Project and its impact on their social, economic, and cultural status; and
- (vi) identifies and recommends, based on meaningful consultation with the affected Indigenous Peoples communities, the measures necessary to avoid adverse effects or, if such measures are not possible, identifies measures to minimize, mitigate, and/or compensate for such effects and to ensure that the Indigenous Peoples receive culturally appropriate benefits under the Project.

D. Information Disclosure, Consultation and Participation

5. This section:

- (i) describes the information disclosure, consultation and participation process with the affected Indigenous Peoples communities that was carried out during Project preparation;
- (ii) summarizes their comments on the results of the social impact assessment and identifies concerns raised during consultation and how these have been addressed in Project design;
- (iii) in the case of Project activities requiring broad community support, documents the process and outcome of consultations with affected Indigenous Peoples communities and any agreement resulting from such consultations for the Project activities and safeguard measures addressing the impacts of such activities;
- (iv) describes consultation and participation mechanisms to be used during implementation to ensure Indigenous Peoples participation during implementation; and
- (v) confirms disclosure of the draft and final IPP to the affected Indigenous Peoples communities.

E. Beneficial Measures

6. This section specifies the measures to ensure that the Indigenous Peoples receive social and economic benefits that are culturally appropriate, and gender responsive.

F. Mitigation Measures

7. This section specifies the measures to avoid adverse impacts on Indigenous Peoples; and where the avoidance is impossible, specifies the measures to minimize, mitigate and compensate for identified unavoidable adverse impacts for each affected Indigenous Peoples groups.

G. Capacity Building

8. This section provides measures to strengthen the social, legal, and technical capabilities of (a) government institutions to address Indigenous Peoples issues in the Project area; and (b) Indigenous Peoples organizations in the Project area to enable them to represent the affected Indigenous Peoples more effectively.

H. Grievance Redress Mechanism

9. This section describes the procedures to redress grievances by affected Indigenous Peoples communities. It also explains how the procedures are accessible to Indigenous Peoples and culturally appropriate and gender sensitive.

I. Monitoring, Reporting and Evaluation

10. This section describes the mechanisms and benchmarks appropriate to the Project for monitoring, and evaluating the implementation of the IPP. It also specifies arrangements for participation of affected Indigenous Peoples in the preparation and validation of monitoring, and evaluation reports.

J. Institutional Arrangement

11. This section describes institutional arrangement responsibilities and mechanisms for carrying out the various measures of the IPP. It also describes the process of including relevant local organizations and NGOs in carrying out the measures of the IPP.

K. Budget and Financing

12. This section provides an itemized budget for all activities described in the IPP.

Attachment 7: Outline of Environmental and Social Due Diligence Report

A. Introduction

1. Project description: title, type of Project, location and setting, amount, size (production capacity, number of staff, etc.).
2. Environmental and social categorization and rationale.
3. Applicable Environmental and Social Requirements. See Section II B of NDRMF's ESMS).

B. Scope of Review and Methodology

1. Documents reviewed (e.g., environmental assessment reports, involuntary resettlement plan, Indigenous Peoples plan, or environmental and social compliance audit reports, copies of permits/licenses, etc.).
2. Methodology adopted (e.g. site visit, inspection report, etc.).

C. Compliance and Liability (by relevant safeguard requirements applicable for the specific project, examine environmental and social issues and compliance)

1. Examine issues in terms of environmental, involuntary resettlement and indigenous peoples impacts, mitigation measures to address these issues (or corrective action plan for existing facilities) and compliance status with applicable ADB environmental and social safeguard requirements and Pakistan national laws, regulations, and standards:
 - (i) Environmental Safeguards
 - (a) appropriate identification of major anticipated environmental impacts and risks;
 - (b) adequacy of environmental assessment (for category A Projects, including the adequacy of alternative analysis);
 - (c) compliance status with applicable requirements on (i) information disclosure, (ii) consultation with affected people and other stakeholders, (iii) occupational and community health and safety, biodiversity conservation and sustainable natural resource management, and physical cultural resources; and
 - (d) adequacy of mitigation measures and EMP (mitigation measures, monitoring and reporting, institutional arrangement, budget), or corrective action plan for existing facilities, if any.
 - (ii) Involuntary Resettlement Safeguards
 - (a) appropriate identification of major anticipated involuntary resettlement impacts and risks (including both physical displacement and economic displacement);
 - (b) adequacy of assessment of social impacts, information disclosure and consultation with affected people and other stakeholders;
 - (c) adequacy of compensation and benefits for displaced persons

- (d) adequacy of resettlement plan (measures to enhance or restore the livelihoods of displaced persons, monitoring and reporting, institutional arrangement, budget), or corrective action plan for existing facilities, if any; and
 - (e) private sector responsibilities under government-manages resettlement.
 - (iii) Indigenous Peoples Safeguards
 - (a) appropriate identification of major anticipated impacts on Indigenous Peoples (including potential impacts on traditional or customary lands under use; relocation of Indigenous Peoples from traditional and customary lands, and impacts on cultural resources);
 - (b) adequacy of information disclosure and meaningful consultation;
 - (c) broad community support, where applicable;
 - (d) adequacy of measures to avoid adverse impacts; and
 - (e) adequacy of Indigenous Peoples plan (benefit sharing, measures to mitigate and minimize adverse impacts, monitoring and reporting, institutional arrangement, budget), or corrective action plan for existing facilities, if any.
 - (iv) Adequacy of grievance redress mechanism arrangements
- 2. Recommend mitigation measures, or corrective action plans, if gaps are identified
- 3. For existing facilities including projects under construction, examine whether there are past or present concerns related to impacts of the facility on the environment, involuntary resettlement, and indigenous peoples and state further actions required/planned by the Project, in particular actions to address any non-compliance problems and liabilities. Also examine whether there are complaints from the public or local communities regarding the project FIP's environmental and social performance.
- 4. State any risk control or mitigation measures to be taken by the project, such as conditions, loan covenants or monitoring and reporting requirements
- D. Other Project Specific Issues, if any**
- E. Conclusion and Recommendations**

Attachment 8: Suggested Scope for a Semi-Annual Environmental Monitoring Report for Fund Implementing Partners

A. Project Name and Summary Information

- (i) Location
- (ii) Scale/size/capacity
- (iii) Reporting period covered by this monitoring report (month/year)
- (iv) Specification of Project stage (design, construction, operation or closure stage)
- (v) Key developments and any major changes in Project location and design, if any

B. Relevant Environmental Permits or Compliance Certificates

- (i) Issued by government agency(ies) (include name of agency)
- (ii) Issuance dates and duration of validity
- (iii) Permit conditions and renewal requirements
- (iv) Other standards and/or certificates (e.g., ISO 14000 Environmental Management Systems and Standards)

C. Grievance Redress Mechanism

- (i) Date established and description of organizational arrangements
- (ii) Complaints, grievance, or protests received from local communities, recorded dates and organizations involved, actions taken to resolve grievances; any outstanding issues and proposed measures for resolution

D. Occupational and Community Health and Safety

- (i) Training programs carried out
- (ii) Incidents³⁴ recorded, including date, scale of damage and injury³⁵, if any; authorities in charge of investigation/recording, and media or community reactions, if any; action taken to respond to the incident; and any outstanding issues and proposed measures
- (iii) Other health and safety events or out-reach activities

E. Environmental Management Capacity

- (i) Number of staff, qualifications and experience in environmental management
- (ii) Awareness of: (i) environmental issues, (ii) health and safety, (iii) national environmental laws and regulations, and (iv) applicable ADB's environmental safeguard requirements
- (iii) Training programs carried out
- (iv) Assessment of environmental management capacity needs (including planned capacity building programs)

³⁴ Including incidents that have caused damage to the environment or to human health, and/or attracted attention of outside parties (e.g., fire, explosion, chemical or oil spill, and pollution release).

³⁵ Including fatalities, serious injuries (requiring emergency treatment or hospitalization), lost time accidents (requiring more than one day off work to recover), and incidents involving compensation claims.

F. Stakeholder Consultation

- (i) Details of information disclosure and consultations, if any, with affected people, local communities, civil society groups, and other stakeholders
- (ii) Details of approach/methodology on addressing the concerns and issues raised at consultations

G. Compliance with Applicable Environmental Safeguard Requirements as Defined in NDRMF's ESMS

Implementation of EMP (citing changes in the EMP, where warranted) at construction or operation phase, focusing on mitigation measures and monitoring program. Attach copies of monitoring reports. If standards or thresholds are exceeded, specify the corrective actions implemented or to be implemented.

H. Other Information and Feedback

Please list any other information that the Bank should be aware of. This may relate to broader environmental matters, community initiatives within your company, positive media or NGO attention, training activities, management system initiatives or cost savings through process efficiency, environment-friendly processes.

Name and Signature

Name:

Date:

Position:

Phone:

Signature:

E-mail:

Attachment 9: Suggested Scope for a Semi-Annual Social Safeguards Monitoring Report for Fund Implementing Partners (FIPs)

A. Introduction

- (i) Brief Project description

B. Physical Progress of Project Components with Resettlement and Indigenous Peoples Impacts

- (i) List of Project components with resettlement and indigenous peoples impacts and progress updates (including engineering progress, and ground clearing, land acquisition and structure demolition progress)

C. Scope of Resettlement Impacts and and/or Impacts on Indigenous Peoples

- (i) Actual scope of land acquisition and resettlement (including the methodology to determine the actual scope of land acquisition and resettlement, and comparison with the scope of impacts in resettlement plan(s))
- (ii) Actual impacts on Indigenous Peoples (including the methodology to determine the actual scope of impacts on Indigenous Peoples, and comparison with the scope of impacts in Indigenous Peoples plan(s))

D. Institutional Arrangements

- (i) Key organizations involved in resettlement plan and/or IPP implementation
- (ii) Progress of activities implemented by other organizations
- (iii) Specific implementation arrangements for Indigenous Peoples

E. Compensation Rates, Payment and Assistance Delivery

- (i) Compensation rates for land, resettlement subsidies, standing crops, and trees
- (ii) Compensation for buildings and allowances for relocation
- (iii) Allocation and utilization of resettlement compensation
- (iv) Payment delivery to affected village groups and individuals
- (v) Assistance delivery to affected Indigenous Peoples

F. Status of Land Acquisition, Resettlement, and Reconstruction

- (i) Housing relocation and reconstruction
- (ii) Provision of replacement agricultural and/or commercial land
- (iii) Restoration of affected public infrastructure and facilities
- (iv) Restoration of land used for construction-related activities
- (v) Implementation progress of income restoration activities
- (vi) Support to vulnerable groups
- (vii) Implementation progress of specific measures for affected Indigenous Peoples

G. Status of Provisions for Indigenous Peoples

- (i) Culturally appropriate beneficial measures for each affected IP groups
- (ii) Mitigation measures for each affected IP groups
- (iii) Capacity Building measures for IP communities in the Project area
- (iv) Broad community support, where required

H. Consultation and Disclosure Activities and Grievance Procedures

- (i) Consultations on compensation standards and fees, relocation options, etc.
- (ii) Specific consultations conducted with Indigenous Peoples on the Project, its impacts and assistance to Indigenous Peoples
- (iii) Any good faith negotiation to resolve major disagreements with Indigenous Peoples
- (iv) Grievances received and actions taken to address them

H. Grievance Redress Mechanism

- (i) Date established and description of organizational arrangements
- (ii) Grievances reported and resolution processes (e.g., nature of grievance, recorded dates and organizations involved, actions taken to resolve grievances, and media or community reactions (if any))

I. Compliance with Applicable Social Safeguard Requirements as Defined in the Section II B of [Name of Bank]’s ESMS

J. Concerns and Work Plan

- (i) Concerns encountered, solutions provided and good practices established
- (ii) Work plan (staffing, training, and work schedules)

Name and Signature

Name:

Date:

Position:

Phone:

Signature:

E-mail

Gender Action Plan

Outputs	Gender Actions	Indicators	Responsibility
1. NDRMF established and made operational.	Ensure that NDRMF has gender policies, screening criteria for project proposals (to be funded under the Project) and guidelines are prepared.	Requisite governance, operational, fiduciary and safeguard (including gender) ³⁶ procedures, policies and systems in place by Dec 2016 (Baseline = No)	National Disaster Risk Management Fund, Implementing Agency with the technical support of Gender Expert hired under TA
	Increase employment opportunities for women in NDRMF.	Fund fully staffed (with at least 20% women) by Mar 2017 (Baseline =0)	National Disaster Risk Management Fund, Implementing Agency
	Ensure that institutional arrangements are in place for monitoring and implementation of GAP	Establishment and staffing of Environmental, Social Safeguards and Gender unit by Apr 2017. 1 Gender Specialist hired under TA for developing gender policy, gender criteria for project selection and overall gender mainstreaming guidelines for the fund by 2017 1 Social and Gender officer (as a core staff) hired at Environment, Social Safeguard and Gender Unit by 2017	National Disaster Risk Management Fund, Implementing Agency and ADB
	Include GAP reporting as part of the Funds' periodic reports and monitoring system	Gender indicators (qualitative and quantitative) incorporated in the monitoring and periodic fund operations progress reports	National Disaster Risk Management Fund, Implementing Agency

³⁶ Gender policy including key instruments for DRM operations include gender mainstreaming criteria (aligned with *National Policy Guidelines on Vulnerable Groups in Disasters*) for the screening and approval of proposals

2. Increased investment to reduce vulnerability to disasters.	Ensure that National and Sub-National emergency response plans and early warning system comply with the National policy guidelines on Vulnerable Groups	National and Sub-National emergency response (gender-responsive) plans and early warning system established across 20 most vulnerable districts/cities/catchments by 2019 (Baseline = tbd) Emergency response plans address women specific needs such as health, sanitation facilities, water, adequate light and separate help desks (for accessing the relief items including food and shelter)	National Disaster Risk Management Fund, Implementing Agency with the support of Social and Gender officer
	Build institutional capacities in gender responsive disaster risk reduction and response systems	Training conducted for NDMA and PDMA's (1 each) in developing gender sensitive disaster response plans by 2017.	National Disaster Risk Management Fund, Implementing Agency with the support of Social and Gender officer
	Ensure that MHVRA includes climate change and gender related vulnerabilities as part of the assessment design and methodology.	MHVRA includes climate change and gender related vulnerabilities in 20 most vulnerable districts and urban centers by 2018 (Baseline = tbd)	National Disaster Risk Management Fund, Implementing Agency with the support of Social and Gender officer
	Collect evidence sex-disaggregated data of people benefitted from the retrofitting of public sector buildings (school and health facilities)	Additional 500 public building (compared to 2016 data) financed from NDRMF (in social sector) safe and multi-hazard resistant by 2019. Sex and age-disaggregated data of people benefitted from the retrofitting of public sector buildings (social sector) is available by 2019	National Disaster Risk Management Fund, Implementing Agency with the support of Social and Gender officer
3. Analytical work and products to improve	Ensure disaster risk financing instruments are gender-inclusive and cater to the needs of	A gender sensitive national DRF strategy developed by Q4, 2018.	National Disaster Risk Management

fiscal management of disaster risks	vulnerable population segments	<p>At least two gender inclusive DRF instruments developed (with targeted interventions for poor and vulnerable population segments), and one piloted by Q4 2019. (Baseline = 0)</p> <p>No. of women benefitted from gender-inclusive DRF instruments</p> <p>Gender impacts of the gender-inclusive DRF instruments documented (with at least two case studies per instrument)</p>	Fund, Implementing Agency with the support of Social and Gender officer
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Long-list of Schemes for the Project

Indicative List of NFPP-IV Schemes
(PKR million)

Sno	Name of Scheme / Problem Area	Geographic Region/Entity	ST	MT	LT	Total	Equivalent
			(2016-2019)	(2020-2022)	(2023-2025)	(2016-2025)	US\$ in millions
1	Raising & strengthening LMB & RMB and embankment to high flood level 2010, Taunsa Barrage.	Punjab	215.0	-	-	215.0	2.056
2	Proposed sloping stud tied at RD 18+000 of Shahwala Groyne. (As per Model Study Report)	Punjab	50.0	-	-	50.0	0.478
3	Proposed sloping stud tied at RD 24+000 of Shahwala Groyne. (As per Model Study Report)	Punjab	45.0	-	-	45.0	0.430
4	Proposed concave convex guide head to be tied to existing Dholewala Groyne. (As per Model Study Report)	Punjab	85.0	85.0	-	170.0	1.626
5	Construction of bund at Indus River near Village Ahmadwale to Rokhni Kacha (Tehsil Isa Khel District Mianwali).	Punjab	200.0	-	-	200.0	1.913
6	Checking seepage and erosion action on country side of LMB RD. 28000 to 45000, Taunsa Barrage.	Punjab	215.0	-	-	215.0	2.056
7	Raising and Strengthening of Jampur Flood Bund and Kotla Mughlan Flood Bund.	Punjab	500.0	-	-	500.0	4.781
8	Strengthening / raising of flood embankment along Link No. 1 RD. 113+000 to RD. 205+220 opposite village Samina	Punjab	225.0	-	-	225.0	2.152
9	Construction of Flood Bund from Bait Qaim Shah, Lundl Pitafi to Ram Pur with one No. J-Head Spur and 2 No. Inverted Hockey Stud along River Indus.	Punjab	-	-	400.0	400.0	3.825
10	Improvement of J-Head spur RD. 165+000, Link No. 1 (River Indus)	Punjab	245.0	-	-	245.0	2.343
11	Improvement of J-Head spur RD. 167+000, Link No. 1 (River Indus)	Punjab	145.0	-	-	145.0	1.387
12	Flood Protection Schemes against River Erosion D/S of Head Bakayani In Bhinda Mehrban and Lundl Pitafi Area.	Punjab	320.0	-	-	320.0	3.060
13	Construction of flood bund on right side of River Indus from D/S Taunsa Barrage to Ghazi Ghat Bridge Complex	Punjab	200.0	1,011.0	450.0	1,661.0	15.884
14	Protection of Rojhan City from flood of River Indus and Hill Torrents.	Punjab	450.0	-	-	450.0	4.303
15	Checking erosion U/S Spur No. 5 on 4th Defence Bund in Dallas Division.	Punjab	367.0	-	-	367.0	3.510
16	Construction of guide wall and Inverted Hockey Spur to protect Basti Bannu Da Hutt Near Rukanpur.	Punjab	300.0	-	-	300.0	2.869
17	Strengthening and Raising 2nd, 3rd Defence Bund and Minchin Flood RD 262+000-315+000	Punjab	116.0	-	-	116.0	1.109
18	Protecting 4th Defence Bund from Erosion of River Indus RD. 0+000 to RD 16+269 by Providing Stone Pitching.	Punjab	100.0	-	-	100.0	0.956
19	Raising Banks and Channelization of escape channel off-taking RD 96+000 Dallas Branch.	Punjab	125.0	125.0	-	250.0	2.391
20	Protecting Machka Dilawara Flood Bund by Providing Stone Pitching RD 0 to RD 38 for safety of local abadies.	Punjab	200.0	-	-	200.0	1.913
21	Raising banks of River Jhelum D/S Mangia to Jhelum City & Cantt on right bank.	Punjab	345.0	-	-	345.0	3.299
22	Raising banks of River Jhelum from Sarai Alamgir upto Malakwal Railway Bridge on Left bank (near Pind Dadan Khan).	Punjab	300.0	-	-	300.0	2.869
23	Flood management of River Jhelum D/S Rasul Barrage to U/S Trimmu including U/S Village Kot-Mulday right side.	Punjab	392.0	-	-	392.0	3.749
24	Flood Management and Channelization of Aik and Pakthu Nullahs upto Khanki Headworks.	Punjab	3,750.0	-	-	3,750.0	35.861
25	Improvement for Protection of Military Installations at Khandaq Post near LOC on right bank of River Munawar Tawi U/S Marala Barrage.	Punjab	60.0	-	-	60.0	0.574
26	Constructing Flood Protection Works D/S Qadirabad Barrage.	Punjab	1,100.0	275.0	-	1,375.0	13.149
27	Constructing Spur D/S Talibwala Bridge right side of River Chenab for safety of Darbar Syed Sahib Shah Mauza Yakewala Tehsil Lalian District Chiniot.	Punjab	200.0	-	-	200.0	1.913
28	Flood management of River Chenab D/S Talibwala to U/S Chiniot Bridge.	Punjab	300.0	-	-	300.0	2.869
29	Remodelling of LMB of Trimmu Barrage	Punjab	261.5	-	-	261.5	2.501
30	Providing training Works near Village Dhussary, Qazian, Thatha Mehmood Shah, Babu Rai etc on River Chenab Left Bank / Side erosion of agricultural land	Punjab	250.0	-	-	250.0	2.391
31	Remodelling of Pindi Bhattian Flood Bund	Punjab	300.0	100.0	-	400.0	3.825
32	Improvement of Flood Bunds of Haveli Canal Circle In Multan Zone, Multan	Punjab	350.0	300.0	175.0	825.0	7.889
33	Protecting Rangpur Canal by Constructing J-Head Spur at RD.292500	Punjab	255.0	-	-	255.0	2.439

Sno	Name of Scheme / Problem Area	Geographic Region/Entity	ST	MT	LT	Total	Equivalent
			(2016-2019)	(2020-2022)	(2023-2025)	(2016-2025)	US\$ in millions
34	Protecting Rangpur Canal by Constructing J-Head Spur at RD.302000	Punjab	159.0	-	-	159.0	1.521
35	Construction of new embankment from 18-Hazari to Rangpur Town	Punjab	330.0	420.0	125.0	875.0	8.368
36	Constructing J-Head Spur to Protect the Rangpur Canal RD 320-334 along Muzaffargarh Flood Bund River Chenab.	Punjab	200.0	-	-	200.0	1.913
37	Constructing J-Head Spur opposite RD 26-27 along Shehr Sultan Flood Bund River Chenab	Punjab	220.0	-	-	220.0	2.104
38	Constructing J-Head Spur opposite RD 150-155 along Muzaffargarh Flood Bund River Chenab	Punjab	-	100.0	150.0	250.0	2.391
39	River Training Works on Left Side of River Chenab D/S of Panjnad Barrage Basti Raqba Pir Mohsin Shah	Punjab	186.0	-	-	186.0	1.779
40	Extension Colony Protection Bund D/S Panjnad Headworks and construction new bund RD 2+000 between LMB to Minchin Ext. Bund.	Punjab	350.0	-	-	350.0	3.347
41	Construction of Spur at RD 45-46/L of Madhoda Bund.	Punjab	200.0	-	-	200.0	1.913
42	Channelization of Deg Nullah	Punjab	4,747.0	-	-	4,747.0	45.395
43	Protecting both sides of Deg Nullah Embankment D/S Chahore Bridge to Jaistry wala by providing stone pitching.	Punjab	400.0	-	-	400.0	3.825
44	Checking Serious erosion of Bain Nullah to save different villages of Distt Narowal.	Punjab	150.0	-	-	150.0	1.434
45	Raising and Strengthening of Kalera Flood Bund	Punjab	175.0	-	-	175.0	1.674
46	Raising Jamlera Flood Bund RD 0-41500, Sutlej River	Punjab	75.0	-	-	75.0	0.717
47	Remodelling of Ghulam Wah Flood Embankment from RD 3+240 - 45+689, Sutlej River	Punjab	165.0	-	-	165.0	1.578
48	Construction of protection bund/ spur Jodhe Key Bund / Spur to Kundiala Amar Singh.	Punjab	60.0	-	-	60.0	0.574
49	Strengthening of river training works of Islam Headworks.	Punjab	250.0	-	-	250.0	2.391
50	Earth Work for Raising & Strengthening of L.M Bund (Old) Mile 6/7 to 13/2.	Sindh	162.0	-	-	162.0	1.549
51	Providing Stone Pitching along Balji Bund from Mile 2/4 to 3/4 and Mile 7/4 to 8/4, Ghotki District.	Sindh	58.0	-	-	58.0	0.555
52	Earth Work Along R.N Bund Mile 12/4 to 22/4.	Sindh	335.0	100.0	-	435.0	4.160
53	Stone Pitching Along R.N Bund Mile 5/0 to 6/0.	Sindh	32.0	-	-	32.0	0.305
54	Providing Stone Apron along Qadirpur Loop Bund from Mile 4/6 to 5/0, Ghotki District.	Sindh	36.0	-	-	36.0	0.344
55	Earth Work Along R.N Loop Bund Mile 0/0 to 3/0, Garkino Loop Bund Mile 0/0 to 2/6.	Sindh	170.0	-	-	170.0	1.626
56	Earth Work along right and left Guide bank, J-Head spur of Guddu Barrage.	Sindh	500.0	-	-	500.0	4.781
57	Constructing Stone Stud along Left Guide Bank of Guddu Barrage.	Sindh	450.0	50.0	-	500.0	4.781
58	Repair / Renovation of stone pitching along Right and Left Guide Bank of Guddu Barrage, U/S Right Spur Bund.	Sindh	300.0	230.0	70.0	600.0	5.738
59	Recouping Stone apron up Stream Divide Wall and Down Stream of Guddu Barrage.	Sindh	200.0	300.0	-	500.0	4.781
60	Constructing Retaining Wall Down Stream of Right Marginal Bund. At Mile 0/0 to 1/5.	Sindh	150.0	450.0	200.0	800.0	7.650
61	Raising and Strengthening along U/S Right Marginal Bund from Mile 0/0 to 5/4 & U/S Right Spur Bund Mile 0/0 to 3/0	Sindh	57.0	-	-	57.0	0.545
62	Providing stone apron and pitching along Sukkur Begari Bund mile 0/0 to 2/0 (Vulnerable point Sukkur City).	Sindh	127.0	-	-	127.0	1.214
63	Construction & repairs to stone pitching of S.M Bund from mile 123 to 172.	Sindh	350.0	-	-	350.0	3.347
64	Earth Work along Loop Bunds	Sindh	-	199.6	-	199.6	1.909
65	Constructing stone pitching, raising and strengthening banks of Kandiaro Escape form RD 22 to 26 R/S and RD 22 to 28 L/S and constructing of stone pitching along Bakhri Loop Bund mile 0/0 to 0/5, 1/6 to 2/5, S.M. Bund mile 2/4 to 3/2, 8/4 to 12/0, Bhago Dero Loop Bund mile 0/0 to 1/6, S.M. Bund 28/4 to 30/0, 66/0 to 68/0 and 72/4 to 74/4.	Sindh	200.0	1,125.0	-	1,325.0	12.671
66	Construction of Spur at mile 12/6 to 12/7 along S. M. Bund.	Sindh	225.0	-	-	225.0	2.152
67	Construction of T- Spur at U/S Dadu - Moro Bridge.	Sindh	626.6	156.6	-	783.2	7.490
68	Construction of stud/apron RD 28+700 to 29+0, 30+0 to 30+325, 30+750 to 31+0 L/S Kandiaro Escape and S.M. Bund mile 12/4 to 12/7, Bakhri Loop Bund 0/0 to 0/1.	Sindh	-	316.2	-	316.2	3.024
69	Raising and Strengthening Razal Dero Bund from Mile 1/4 to 8/7. Faiz Nahar Bund from Mile 43/0 to 48/0. Garkino Bund from Mile 49/0 to 53/0 and Faridabad Bund from Mile 3/6 to 4/0 & Providing Stone Pitching along Main River Bund from Mile 5/5 to 6/2, New Nareja Bund from Mile 0/0 to 2/0 & Faridabad Bund from Mile 3/6 to 4/0.	Sindh	-	-	320.8	320.8	3.068

Sno	Name of Scheme / Problem Area	Geographic Region/Entity	ST	MT	LT	Total	Equivalent
			(2016-2019)	(2020-2022)	(2023-2025)	(2016-2025)	US\$ in millions
70	Constructing Stone Pitching along S.M Bund Mile 0/0 to 0/5, Mile 2/4 to 3/2 and Mile 8/4 to 11/7+250 Kandiaro Sub Division.	Sindh	-	-	200.4	200.4	1.917
71	Stone Pitching from mile 80/0 to 80/4, 81/4 to 83/4, 84/4 to 90/0 along S.M Bund	Sindh	200.0	265.0	-	465.0	4.447
72	Construction of J Spur at mile 105/6 along S.M Bund	Sindh	-	500.0	-	500.0	4.781
73	Construction of studs at mile 106/0, 106/1, 106/3 and 106/4 along S.M Bund	Sindh	100.0	100.0	-	200.0	1.913
74	Earth work along Loop Bunds - Mile-Fur.	Sindh	45.0	-	-	45.0	0.430
75	Earth Work along S.M Bund Mile 112/0 to 123/0 & Providing Stone Pitching from Mile 85/4 to 90/0 & 122/0 to 123/0 & Recouping Stone Apron from Mile 105/3+100 to 106/1+200 in Dad Division.	Sindh	-	100.0	249.2	349.2	3.339
76	Construction Stone Stud at S.M.Bund mile 136/0 +50.	Sindh	225.0	-	-	225.0	2.152
77	Construction Spur No. IV & Stone Apron at S.M.Bund mile 143/3.	Sindh	200.0	-	-	200.0	1.913
78	Remodeling of old Fatehpur Loop Bund mile 2/0 to 4/2.	Sindh	125.0	-	-	125.0	1.195
79	Remodeling of Matari loop bund mile 0/0 to 2/6.	Sindh	170.0	-	-	170.0	1.626
80	Repairs to Hala Spur No. I, II, & III of S. M. Bund.	Sindh	200.0	-	-	200.0	1.913
81	Construction & repairs to stone pitching of S.M Bund from mile 123 to 172.	Sindh	-	500.0	-	500.0	4.781
82	Raising and Strengthening of Main river bund D/S Sukkur Barrage, west feeder Bund, Piryaloi L.Bund Rameja bund at Mile 4/0+125 at Mile 4/2+300 & Mile 4/4+580 in West Division Khairpur	Sindh	-	300.0	550.0	850.0	8.129
83	Providing Stone pitching along SM Branch from RD 00 to 224 IP side (outer slope).	Sindh	692.0	-	-	692.0	6.618
84	Providing Stone Pitching along with Khirther Branch from RD 0 to 116 NIP Side (Outer Slope) during flood emergency 2012.	Sindh	468.2	-	-	468.2	4.477
85	Providing Stone Pitching along N.W. Canal from RD 83 to 180 KBH in (S.K.T.D)	Sindh	890.0	-	-	890.0	8.511
86	R&S of S.M Branch extension of FP Bund from RD 169 to 120 and providing Stone Pitching from RD 120 to 224.	Sindh	1,000.0	1,068.0	-	2,068.0	19.776
87	R&S and providing stone pitching along FP Bund from RD 0 to 220.	Sindh	-	710.0	-	710.0	6.790
88	R&S and providing Stone Pitching along L.S Bund Mile 36/5 to 77/0 (SDD)	Sindh	-	820.0	-	820.0	7.842
89	Providing Stone Pitching along SKT Branch RD 0 to 106 SKT Division	Sindh	200.0	210.0	-	410.0	3.921
90	Restoration of River training works along akil Loop Bund due to damaged in 2013(NDD).	Sindh	300.0	320.0	-	620.0	5.929
91	Retaining Wall along Gaj Diversion Bund (SDD)	Sindh	-	500.0	-	500.0	4.781
92	R&S providing Stone Pitching and Construction of road along sehwan protective Bund RD 0 to 18 (SID)	Sindh	450.0	-	-	450.0	4.303
93	R&S aghani Akil Loop Bund, Akil Link Bund, Ilyas Loop Bund & L.S Bund Mile 0/0 to 1/2 (NDD)	Sindh	-	433.0	-	433.0	4.141
94	Providing Stone Apron and Stone Pitching LS bund 17/0 to 17/4 (NDD)	Sindh	400.0	-	-	400.0	3.825
95	Repairs of bund Sluice along Supro bund and FP bund.	Sindh	200.0	300.0	-	500.0	4.781
96	R&S Providing Stone Pitching from Mile 0/6 + 330 to 4/2, 5/0 to 7/4, 8/0 to 9/4 and Sann Veeh Dar Bund.	Sindh	-	350.0	-	350.0	3.347
97	R&S, Providing stone Pitching along Aral Left Bank from RD 15 to 19.5.	Sindh	325.0	-	-	325.0	3.108
98	Recouping of Stone Apron along Guide Bank Thatta Sujawal Bridge L/S U/s from RD 2+800 to RD 4+000 @ Nose.	Sindh	-	88.9	-	88.9	0.850
99	Recouping of Stone Apron along S.H Bund from Mile 1/6 to 2/1.	Sindh	-	99.9	-	99.9	0.955
100	Development of Routes to Divert Excessive Flood Water of River Indus	Sindh	4,000.0	-	-	4,000.0	38.252
101	Hill Torrents Flood Mitigation for Jacobabad Kashmore Area	Sindh	2,100.0	-	-	2,100.0	20.082
102	Development of Retardation Basin for River Indus in Lakhli Range Near Manjhand	Sindh	-	2,800.0	1,500.0	4,300.0	41.121
103	Up-Gradation & Capacity Enhancement of Kotri Barrage	Sindh	7,000.0	3,000.0	-	10,000.0	95.630
104	Flood Protection Works along Indus River from Tarbela to Attock (Left Bank)	KP	200.0	-	-	200.0	1.913
105	Construction of Marginal Bund for Protection of Gomali University, Chashma Sugar Mills, NHA Road D/S Darya Khan Bridge to Spur No. 27 (57000 feet) (Model study done)	KP	1,100.0	650.0	50.0	1,800.0	17.213
106	Construction of Spur No.35 on Right Side of Indus River.	KP	300.0	116.0	-	416.0	3.978
107	Extension of Spur No.18/A (Model study done)	KP	225.0	275.0	-	500.0	4.781
108	Extension of Spur No.18/B (Model study done)	KP	200.0	150.0	-	350.0	3.347
109	Construction of New J-Head Spur on old Location of Spur No.23 (Model study done)	KP	100.0	300.0	-	400.0	3.825
110	Improvement of T-Head Spur No.24 Right Side of Indus River District D.I.Khan (Model study done)	KP	200.0	200.0	-	400.0	3.825

Sno	Name of Scheme / Problem Area	Geographic Region/Entity	ST	MT	LT	Total	Equivalent
			(2016-2019)	(2020-2022)	(2023-2025)	(2016-2025)	US\$ in millions
111	Construction of Marginal Bund from Spur No 20 to 24 and 27 to 31.	KP	100.0	280.0	220.0	600.0	5.738
112	Construction, Improvement and Extension of Flood Protection Works along Indus River from Chashma to Taunsa Right Bank	KP	200.0	-	-	200.0	1.913
113	Construction, Improvement and Extension of Flood Protection Works along Right Side Indus River from Tarbela to Attock (Swabi Area)	KP	100.0	-	-	100.0	0.956
114	Raising & Strengthening Right Guldewali on Khari Waziran Syphon on Right Bank of Kurram River.	KP	80.0	-	-	80.0	0.765
115	Extension of Left Guldewali on Khari Waziran Syphon on Left Bank of Kurram River.	KP	110.0	-	-	110.0	1.052
116	Raising & Strengthening Right Side Bank of Kurram River D/S of Cantt Spur near Surani Bridge.	KP	130.0	-	-	130.0	1.243
117	Improvement of Spurs in Jandu Khel Area on Left Bank of Kurram River.	KP	100.0	50.0	-	150.0	1.434
118	Strengthening and Raising Right Side Bank of Dowa Nullah	KP	70.0	80.0	-	150.0	1.434
119	Flood Protection Works at Spina Tangee Algada.	KP	40.0	70.0	-	110.0	1.052
120	Construction of Flood Protection Work Kurram River Toor Kot Area and U/S of Thal	KP	70.0	-	-	70.0	0.669
121	Construction of Flood Protection Work at Hangu Tol near Mirubak Village.	KP	55.0	-	-	55.0	0.526
122	Construction of Flood Protection Work at Khanki Tol near Shahu Khel Lodi Khel Area.	KP	-	60.0	-	60.0	0.574
123	Construction of Flood Protection Works for Village Mirazam Machin Khel and Zafabee Khan on Left Bank of Kurram River.	KP	35.0	-	-	35.0	0.335
124	Construction of Marginal Bund along Right Side of Gambila River for Protection of Lakki City and Gambila left bank. Scheme	KP	-	60.0	-	60.0	0.574
125	Construction of Flood Protection Works from Nullahs for Agricultural Lands and Abadies at Abdul Khel, Tami Khel, Sulman Khel, Kotka Bal and many Villages.	KP	-	40.0	30.0	70.0	0.669
126	Construction of Flood Protection Works for Village Abadies and Agricultural Lands at Abdul Khel for Master Ahmad Khan on Chunal Nullah (No. of Villages).	KP	-	60.0	80.0	140.0	1.339
127	Protection of Civil channels from Flood flows in various aigads in Distt: Lakki Marwat.	KP	-	70.0	30.0	100.0	0.956
128	Improvement/Extension and Construction of various Flood Protection Works in Gambila River near Dakki & Indus Highway Bridge from Kurram River.	KP	90.0	-	-	90.0	0.861
129	Construction, Improvement and Extension of Flood Protection Works for Village Kudal on the Left Bank of Kabul River District Charsadda.	KP	36.0	-	-	36.0	0.344
130	Construction, Improvement and Extension of Flood Protection Works for Village Gulshan Abad on the Left Bank of Kabul River District Charsadda.	KP	30.0	-	-	30.0	0.287
131	Construction, Improvement and Extension of Flood Protection Works on the Left Bank of Kabul River & its tributaries (Package-I) District Charsadda.	KP	200.0	-	-	200.0	1.913
132	Construction, Improvement and Extension of Flood Protection Works on the Left Bank of Kabul River & its tributaries (Package-II) District Charsadda.	KP	200.0	-	-	200.0	1.913
133	Construction, Improvement and Extension of Flood Protection Works along Khali River and its tributaries (Package-I) District Charsadda.	KP	300.0	-	-	300.0	2.869
134	Construction, Improvement and Extension of Flood Protection Works for Village Dagi Faizullah on Khali River (Tributary of Kabul River) District Charsadda.	KP	35.0	-	-	35.0	0.335
135	Construction, Improvement and Extension of Flood Protection Works for Village Nahqi & Kharaki on Khali River (Tributary of Kabul River) District Charsadda.	KP	41.0	-	-	41.0	0.392
136	Construction, Improvement and Extension of Flood Protection Works for Village Sukar on Khali River (Tributary of Kabul River) District Charsadda.	KP	35.0	-	-	35.0	0.335
137	Construction, Improvement and Extension of Flood Protection Works for Village Amba Dher on Khali River (Tributary of Kabul River) District Charsadda.	KP	33.0	-	-	33.0	0.316
138	Construction, Improvement and Extension of Flood Works for Village D.H.Q Nowshera on the Left Bank of Kabul River District Charsadda.	KP	240.0	-	-	240.0	2.295
139	Flood Protection Works on Left Side of Adazi River for Protection of villages and agricultural Lands of Ghurambak, Jumat and Gulabad near Veno Ghari.	KP	130.0	-	-	130.0	1.243
140	Flood Protection of Nowshera city and Cantt Area from Kabul River and Hill Torrents.	KP	230.0	-	-	230.0	2.199
141	Construction of Flood Protection Works in various reaches and M-I Areas and channelization of Kabul River in Peshawar & Nowshera District.	KP	450.0	400.0	170.0	1,020.0	9.754

Sno	Name of Scheme / Problem Area	Geographic Region/Entity	ST	MT	LT	Total	Equivalent
			(2016-2019)	(2020-2022)	(2023-2025)	(2016-2025)	US\$ in millions
142	Construction of diversion weir dis of Machni Bridge to un-control distributed water in the 3 creeks for Flood Protection Works in Kabul River.	KP	165.0	-	-	165.0	1.578
143	Construction, Improvement and Extension of Flood Protection Works along Left Side Kabul River District Nowshera	KP	200.0	-	-	200.0	1.913
144	Construction, Improvement and Extension of Flood Protection Works along tributaries of Kabul River PK-16, District Nowshera	KP	120.0	-	-	120.0	1.148
145	Construction, Improvement and Extension of Flood Protection Works along tributaries of Kabul River & its tributaries from Pir Sabaq Village to Khairabad District Nowshera	KP	180.0	-	-	180.0	1.721
146	Construction of Flood Protection Works along Swat River from Kalam to Chakdara and its tributaries from Matta & Kabal Khwar in District Swat.	KP	650.0	300.0	-	950.0	9.085
147	Construction of Flood Protection Works along Panjkora River and its tributaries in District Dir Upper and Lower	KP	150.0	250.0	50.0	450.0	4.303
148	Construction of Flood Protection Works along Chitral River and its tributaries in District Chitral	KP	300.0	-	-	300.0	2.869
149	Construction of Flood Protection Works along Barandu River and its tributaries in District Buner	KP	100.0	-	-	100.0	0.956
150	Construction of Flood Protection Works along Ghurband, Khan, Shang, Liloni, Puran, etc Khwars in District Shangla	KP	500.0	450.0	-	950.0	9.085
151	Construction, Improvement and Extension of Flood Protection Works along Kunhar River from Jalikhat to Brankot Area in reaches.	KP	250.0	-	-	250.0	2.391
152	Construction, Improvement and Extension of Flood Protection Works along Siran River from Manda Cucha to Pethana Area in reaches.	KP	250.0	-	-	250.0	2.391
153	Construction, Improvement and Extension of Flood Protection Works along Daur River from Akhun Bandi to Jhugi Mora Area in reaches.	KP	250.0	-	-	250.0	2.391
154	Construction, Improvement and Extension of Flood Protection Works along Haro River from Chowli Tamawa to Sultanpur Area including its tributaries in reaches.	KP	100.0	-	-	100.0	0.956
155	Construction, Improvement and Extension of Flood Protection Works along tributaries of Daur River in reaches	KP	100.0	-	-	100.0	0.956
156	Construction, Improvement and Extension of Flood Protection Works along tributaries of Kunhar River in reaches	KP	100.0	-	-	100.0	0.956
157	Construction, Improvement and Extension of Flood Protection Works along tributaries of Siran River in reaches	KP	100.0	-	-	100.0	0.956
158	Construction of Flood Protection Works along Khan Khwar & other tributaries in District Shangla	KP	150.0	-	-	150.0	1.434
159	Construction of Flood Protection Work at Kohat Toi near Regi Shino Khel, Mawaz Khan Arai, Jan Wands Civil Channel, and Katchi Banda.	KP	130.0	-	-	130.0	1.243
160	Construction of Flood Protection Work at Kohat near Mosam Khan Banda Village.	KP	90.0	-	-	90.0	0.861
161	Construction of RPW Kohat Toi near Nasrat Khel & Kaghazal Village, Shah Poor Bridge and Shadi Khel Canal.	KP	100.0	90.0	-	190.0	1.817
162	Construction of Flood Protection Works at Lawaghar algada near Chapri Banda, Waggi algara near Pona Banda, Waggi algada near Zarki Naasrati, Lawaghar algada near Chowkara Arai Banda, Lawaghar algada near Takhti Nasrati, Kashu Nullah Palosaki Banda and Kashu Nullah Ihtiar Khel in Karak Distt.	KP	150.0	220.0	30.0	400.0	3.825
163	Flood Protection Work along Khanki River from Orakzai Boundary to Ralsan Bridge.	KP	200.0	-	-	200.0	1.913
164	Construction, Improvement & Extension of Flood Protection Works along Gomai, Tank, Sheikh haider, Daraban & Chudwan Zams and its tributaries including Flood carrier channels upto Indus River in D.I.Khan Division	KP	1,750.0	2,100.0	760.0	4,610.0	44.085
165	Construction, Improvement and Extension of Flood Protection Works along Right Badri Nullah District Swabi.	KP	45.0	-	-	45.0	0.430
166	Construction, Improvement and Extension of Flood Protection Works along Buller Nullah District Swabi	KP	38.0	-	-	38.0	0.363
167	Construction, Improvement and Extension of Flood Protection Works along Naranji Nullah District Swabi	KP	46.0	-	-	46.0	0.440
168	Construction, Improvement and Extension of Flood Protection Works along Shagal Nullah District Swabi	KP	45.0	-	-	45.0	0.430
169	Construction, Improvement and Extension of Flood Protection Works along Mugam Nullah District Mardan	KP	46.0	-	-	46.0	0.440
170	Construction, Improvement and Extension of Flood Protection Works along Zandai Nullah District Swabi	KP	30.0	-	-	30.0	0.287
171	Construction of Flood Protection Works along Kalpani Nullah from Faqir Ban to Newe kille bridge	KP	100.0	-	-	100.0	0.956
172	Construction of Flood Protection Works along Kalpani Nullah from Newe kille bridge to Kandar	KP	150.0	-	-	150.0	1.434

Sno	Name of Scheme / Problem Area	Geographic Region/Entity	ST (2016-2019)	MT (2020-2022)	LT (2023-2025)	Total (2016-2025)	Equivalent US\$ in millions
173	Providing Flood Protection Work along Swat River from Landsakal to Amandara	KP	49.0	-	-	49.0	0.469
174	Providing Flood Protection Work along Swat River from Amandara to Taral	KP	110.0	-	-	110.0	1.052
175	Providing Flood Protection Work along Swat River from Taral to Totakan.	KP	100.0	-	-	100.0	0.956
176	Priority Schemes (4 Nos)	Balochistan	56.0	-	-	56.0	0.536
177	Priority Schemes (5 Nos)	Balochistan	700.0	425.0	225.0	1,350.0	12.910
178	Flood Management Schemes (11 Nos)	Balochistan	300.0	550.0	125.0	975.0	9.324
179	Priority Schemes (4 Nos)	Balochistan	450.0	250.0	80.0	780.0	7.459
180	Priority Schemes (8 Nos)	Balochistan	160.0	25.0	-	185.0	1.769
181	Priority Schemes (18 Nos)	Balochistan	369.0	-	-	369.0	3.529
182	Flood Management Schemes (10 Nos)	Balochistan	300.0	250.0	95.0	645.0	6.168
183	Priority Schemes (19 Nos)	Balochistan	345.0	-	-	345.0	3.299
184	Priority Schemes (16 Nos)	Balochistan	337.3	-	-	337.3	3.226
185	Priority Schemes (12Nos)	Balochistan	315.0	75.0	-	390.0	3.730
186	Flood Management Schemes (6 Nos)	Balochistan	725.0	600.0	175.0	1,500.0	14.344
187	Priority Schemes (8 Nos)	Balochistan	100.0	-	-	100.0	0.956
188	Flood Management Schemes (1 No) Shireen Aab FM Sch.	Balochistan	155.0	45.0	-	200.0	1.913
189	Priority Schemes (10Nos)	Balochistan	240.0	-	-	240.0	2.295
190	Priority Schemes (9 Nos)	Balochistan	326.0	-	-	326.0	3.118
191	Priority Schemes (36 Nos)	Balochistan	603.0	225.0	50.0	878.0	8.396
192	Priority Schemes (19 Nos)	Balochistan	300.0	200.0	50.0	550.0	5.260
193	Priority Schemes (26 Nos)	Balochistan	525.0	200.0	30.0	755.0	7.220
194	Flood Management Schemes (15 Nos)	Balochistan	225.0	175.0	100.0	500.0	4.781
195	Priority Schemes (4 Nos)	Balochistan	410.0	225.0	59.0	694.0	6.637
196	Priority Schemes (18 Nos)	Balochistan	3,600.0	2,300.0	625.0	6,525.0	62.398
197	Raising of Protective Bund in Gilgit River along Right Bank (Ghizar Road) from Afsar Jan House to Ali Poultry Farm Basee Khari, Gilgit City.	Federal Areas	50.0	-	-	50.0	0.478
198	Channelization of Kargah Nullah in Basee Area, Gilgit District.	Federal Areas	21.0	8.0	-	29.0	0.277
199	Channelization of Gilgit River near Chinar Bagh, Gilgit City.	Federal Areas	9.0	8.0	2.0	19.0	0.182
200	Flood protection of Jutal Village downstream with Hunza River, Gilgit District.	Federal Areas	14.0	-	-	14.0	0.134
201	Flood Protection of Nomal Village upstream by Nulter Nullah in Gilgit District.	Federal Areas	9.0	4.0	-	13.0	0.124
202	Construction of Protective Work at Shale Mohammad Land Mussaabad, Jagir Basee, Gilgit District.	Federal Areas	15.0	-	-	15.0	0.143
203	Flood Protection of Abadies (Harchi, Hoper, Shaman) and Cultivated Lands on both Sides of Nagar Nullah (Valley) - 3 Number Works.	Federal Areas	17.0	3.0	-	20.0	0.191
204	Land slide problem along Hunza River (L/S) - Miachare Nagar (F. Study).	Federal Areas	8.0	-	-	8.0	0.077
205	Construction of Protective Works at DHQ Gahkuoh on both River Sides	Federal Areas	140.0	100.0	10.0	250.0	2.391
206	Construction of Protective Works on Ishkoman River at Village Lmmit, Gishgish Paen Barjangle and Nowbahar	Federal Areas	100.0	90.0	38.0	228.0	2.180
207	Construction of Flood Protective bund at Nazber, Barandass, Yasin and Sandi.	Federal Areas	60.0	125.0	40.0	225.0	2.152
208	Construction of Protective bund on various Nullahs at Ghizar District	Federal Areas	115.0	120.0	18.0	253.0	2.419
209	Construction of Protective bund at Mushko Dams and Gahkuoh Pahn.	Federal Areas	23.0	17.0	-	40.0	0.383
210	F. Study and D. Design for all Hill Torrents in Ghizar District.	Federal Areas	100.0	-	-	100.0	0.956
211	Construction of Protective Works at Jal and Thay Niat Valley	Federal Areas	40.0	10.0	-	50.0	0.478
212	Construction of Protective Works at Milkush, Nagaran, Gusher and Niat Proper at Niat Valley Chilas.	Federal Areas	12.0	-	-	12.0	0.115
213	Construction of Protective Works in Bologah Nullah Chilas,	Federal Areas	5.0	65.0	10.0	80.0	0.765
214	Construction of Protective Works at Thore Valley Chilas,	Federal Areas	30.0	31.0	-	61.0	0.583
215	Construction of Protective Works at Hundur Valley.	Federal Areas	7.0	-	-	7.0	0.067
216	Construction of Protective Works at Bunner Valley.	Federal Areas	7.0	2.0	-	9.0	0.086
217	Construction of Protective Work at Faqir Kot, Goriyal, Kulaiot, Ratu, Chugam, Qambarfed Makai Bala & Godai areas, Astore District.	Federal Areas	14.0	3.0	-	17.0	0.163
218	Construction of flood Protective Works at Astore District.	Federal Areas	21.0	28.0	12.0	61.0	0.583
219	Construction of Protective Works at Kharming area, Khpul.	Federal Areas	65.0	15.0	-	80.0	0.765
220	Construction of Flood Protection Works at Pakora Hoto Skardu.	Federal Areas	25.2	-	-	25.2	0.241
221	Construction of Flood Protection Bund in Halqa I, II & III in Skardu.	Federal Areas	83.2	-	-	83.2	0.795
222	Construction of Flood Protection Bund in Halqa IV, V & VI (Rundu, Kharmog and Shigar) District Skardu.	Federal Areas	49.5	-	-	49.5	0.473

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			(2016-2019)	(2020-2022)	(2023-2025)	(2016-2025)	US\$ in millions
223	Construction of Flood Protection Works at Ghowari, Karaming, Khartag, Yougo and Balghar Nuliah District Ghanche.	Federal Areas	65.7	-	-	65.7	0.628
224	Construction of Flood Protection Works at Sogha to Dagboni District Ghanche.	Federal Areas	39.7	-	-	39.7	0.380
225	Construction of Protective Bund Sailing Phase-II District Ghanche.	Federal Areas	27.0	-	-	27.0	0.258
226	Construction of FPW from Inayat Killi to Khar Village at Wataial Khawar.	Federal Areas	48.0	-	-	48.0	0.459
227	Construction of FPW from Mandel area to Khar village at Selku Khawar.	Federal Areas	60.0	12.0	-	72.0	0.689
228	Construction of FPW from Ban Kanangara to Lower Kamangara In Nagagal Khawar.	Federal Areas	47.0	39.0	10.0	96.0	0.918
229	Construction of FPW from Dankoi to Dherakal Village In SalarZai Khawar.	Federal Areas	-	40.0	20.0	60.0	0.574
230	Construction of FPW from Maimal to Serai In Rode Barang.	Federal Areas	30.0	-	-	30.0	0.287
231	Construction of FPW from Kavar Village to Unari In Mamand Khawar.	Federal Areas	45.0	10.0	-	55.0	0.526
232	Construction of FPW from Jar Village to Ali Zai In Loe Khawar Utman Khel.	Federal Areas	10.0	50.0	-	60.0	0.574
233	Construction of Gabion Protection Wall on B/S of Bara River for the Protection of Agrt: land and village abadies from Binal to Tarho kass (Tirah area) Bara Teshil khyber Agency.	Federal Areas	57.0	15.0	-	72.0	0.689
234	Construction of Gabion Protection Wall on B/S of Bara River for the Protection of Agrt: land and village abadies from Mehraban killi to Kachkool (Tirah area) Jammud Tehsil Khyber Agency.	Federal Areas	60.0	37.0	-	97.0	0.928
235	Construction of Gabion Protection Wall on B/S various nullahs of loi shalman & kum shalman for the Protection of Agrt: land and village abadies landi kotal teshil Khyber Agency.	Federal Areas	-	53.0	62.0	115.0	1.100
236	Construction of P.C.C Protection Wall on B/S of Khyber Khwar, Bazar Khwars and Upper Bara River for the Protection of land & village abadies landi kotal teshil Khyber Agency.	Federal Areas	-	79.0	62.0	141.0	1.348
237	Construction of Gabion Protection Wall on B/S of Khwars/River In or the Protection of Agrt: land and village abadies at Maldan for the Protection of Walo Mela, Dry Makhly Tirah area Bara Teshil Khyber Agency.	Federal Areas	39.0	60.0	-	99.0	0.947
238	Construction of Gabion Protection Wall on B/S of Jaba & Chora Khwar Jammud Tehsil Khyber Agency.	Federal Areas	43.0	35.0	-	78.0	0.746
239	Construction of Gabion PW on B/S Zao khwar & other locals algad Bara Tehsil Khyber Agency.	Federal Areas	19.0	73.0	18.0	110.0	1.052
240	Construction of Protection works on B/S of local nullahs on Kajori plan Bara Tehsil Khyber Agency.	Federal Areas	32.0	58.0	-	90.0	0.861
241	Construction of 11 Nos GI Spurs for Protection of Swian Village at Mingak and Kamar Kail at Koochi areas In Lower Kurram River (2 Nos).	Federal Areas	71.0	35.0	-	106.0	1.014
242	Construction of 12 Nos. GI Spurs for Protection of Zangl Kail at Shublan area, Haji Ali Akbar Kail at Kiman area and Siddar Irrigation at Siddara on Kiman Tol area In Upper Kurram River (3 Nos.)	Federal Areas	10.0	75.0	44.0	129.0	1.234
243	Flood Protection Scheme on Kurram River for protection agrt: land and village abadies kunja alizai and D/S to Topakal area.	Federal Areas	27.0	19.0	7.0	53.0	0.507
244	Flood Protection works on Main Algads/rivers In Sada area In Kurram Agency	Federal Areas	29.0	16.0	-	45.0	0.430
245	Flood Protection works on Ziran River In Kurram Agency	Federal Areas	-	15.0	24.0	39.0	0.373
246	Flood Protection works on Shaolazan River In Kurram Agency	Federal Areas	21.0	12.0	-	33.0	0.316
247	Flood Protection works on Shaolazan River In Kurram Agency	Federal Areas	17.0	15.0	-	32.0	0.306
248	FPW on both side of Ambar Khawar from had village to D/S of Ambar Bridge.	Federal Areas	60.0	5.0	-	65.0	0.622
249	Const. of FPW on Auto Khel Khawar for the protection of Iakkai Ser Village In Kamall.	Federal Areas	20.0	-	-	20.0	0.191
250	Const. of FPW on Danish Kool Kavar, U/S & D/S of Danish Kool bridge (Both sides).	Federal Areas	50.0	-	-	50.0	0.478
251	Construction of flood protection wall on Khapakh, Shani Khel Shali Khawar for the protection of Ghabl Foresh near Gandhab.	Federal Areas	20.0	-	-	20.0	0.191
252	Construction of flood protection wall on manzori china, alam kail, and Jarobi dara Khawar for the protection of Ashraf Abad Khwalzai.	Federal Areas	17.0	6.0	-	23.0	0.220
253	Construction of flood protection wall on on sapri khawar for the protection of bahl kore.	Federal Areas	-	18.0	15.0	33.0	0.316
254	Construction of flood protection wall at Road Crossing Point on Palo Jawar Khawar Prang Ghar.	Federal Areas	27.0	6.0	-	33.0	0.316
255	Const. of FPW on Nari Khel Khawar Prang Ghar for the protection of Nari Kail.	Federal Areas	-	16.0	-	16.0	0.153
256	Const. of FPW on Kererra Khawar Prang Ghar for the protection of Kererra Kail.	Federal Areas	23.0	8.0	-	31.0	0.296
257	Const. of FPW on Pindiali Dara Khawar for the Protection of Pindiali Dara Village.	Federal Areas	5.0	15.0	-	20.0	0.191

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			(2016-2019)	(2020-2022)	(2023-2025)	(2016-2025)	US\$ in millions
258	Flood Protection Scheme on B/S of Jana Kore, Asho Khel, Hassan Khel, Mandi & Bora Algads in FR Peshawar.	Federal Areas	22.0	25.0	-	47.0	0.449
259	Flood Protection Scheme on right side of Kurram River in Bland area Upper Orakzai Agency.	Federal Areas	37.0	-	-	37.0	0.354
260	Flood Protection Scheme on both side of Khanki River from Ghalgo to Khawaja Khizar, from Khawaja Khizar to Shaker Tangi and From Khawaray to Lal Baz Garl in Upper Orakzai Agency (3 Nos).	Federal Areas	31.0	-	-	31.0	0.296
261	Flood Protection Scheme on both side of Mastura River from Kalaya to Feroz Khel and from Utman Khel to Bezot in Lower Orakzai Agency (2 Nos).	Federal Areas	35.0	15.0	-	50.0	0.478
262	Flood Protection Scheme on both sides of Mastura River from Sheraz Ghari to Anjani and from Tajl Khel to Und Khel in Lower Orakzai Agency (2 Nos).	Federal Areas	13.0	24.0	3.0	40.0	0.383
263	Flood Protection Scheme on both sides of Kurraz Ailm darga in Orakzai Agency.	Federal Areas	13.0	16.0	-	29.0	0.277
264	Flood Protection Scheme on B/S of Shindand algad near amin khan village D/S area in FR Kohat.	Federal Areas	18.0	12.0	-	30.0	0.287
265	Flood Protection Scheme on B/S of Jamo & Paya algad Jawaki area in FR Kohat.	Federal Areas	19.0	5.5	-	24.5	0.234
266	Flood Protection Bund on B/S Main Algads in Dera Adam Khel area in FR Kohat.	Federal Areas	22.0	9.5	-	31.5	0.301
267	Flood Protection Scheme on B/S of Tochi River from Sherani to Boya Bridge in NWA	Federal Areas	27.0	24.0	-	51.0	0.488
268	Flood Protection Scheme on B/S of Tochi River from Boya Bridge to Tall Bridge in NWA	Federal Areas	25.0	20.0	-	45.0	0.430
269	Flood Protection Scheme on B/S of Tochi River from Tall Bridge to Halder Khel village in NWA	Federal Areas	40.0	23.0	12.0	75.0	0.717
270	Flood Protection Scheme on Chashmal algad in NWA	Federal Areas	16.5	6.0	-	22.5	0.215
271	Flood Protection Scheme on B/S of Khalsora river in NWA	Federal Areas	27.0	2.0	-	29.0	0.277
272	Flood Protection Scheme on B/S of Kaltu river in NWA	Federal Areas	26.0	5.0	-	31.0	0.296
273	Flood Protection Scheme on B/S of Kurram river in NWA	Federal Areas	22.5	18.0	-	40.5	0.387
274	Flood Protection Scheme on B/S of Shawal Algad in NWA	Federal Areas	24.5	9.0	-	33.5	0.320
275	Flood Protection Scheme on B/S of Kurram river in FR Bannu	Federal Areas	31.0	4.0	-	35.0	0.335
276	Flood Protection Scheme on B/S of Khalsora river in FR Bannu	Federal Areas	27.0	8.0	-	35.0	0.335
277	F.P Scheme on B/S of Tochi River in Bakka Khel area in FR Bannu	Federal Areas	26.0	-	-	26.0	0.249
278	Flood Protection Scheme on Nangar Algad in FR Lakkil.	Federal Areas	29.0	-	-	29.0	0.277
279	Flood Protection Scheme on wamula Algad in FR Lakkil.	Federal Areas	13.0	10.0	-	23.0	0.220
280	Flood Protection Work on R/L sides of Tank Zam Algad in Sararogha Tehsil	Federal Areas	10.0	-	-	10.0	0.096
281	Flood Protection Work on R/L sides of Sararogha Area	Federal Areas	14.0	6.0	-	20.0	0.191
282	Flood Protection Work on R/L sides of Shahoor Algad in Sarwakal Sub Division	Federal Areas	20.0	-	-	20.0	0.191
283	Flood Protection Work on R/L sides of Dhana Algad Tehsil Birmal	Federal Areas	19.0	3.0	-	22.0	0.210
284	Flood Protection Work on L/S of Woucha Khawara Algad Tehsil Wana	Federal Areas	10.0	-	-	10.0	0.096
285	Flood Protection Work on Mani Tol Algad Tehsil Shakal	Federal Areas	12.0	-	-	12.0	0.115
286	Flood Protection Work on R/L sides of Tol Khuliah Algad Tehsil Tol Khuliah	Federal Areas	13.0	12.0	-	25.0	0.239
287	Flood Protection Work on R/L sides of Tatti Samar Bagh Algad Tehsil Wana	Federal Areas	10.0	-	-	10.0	0.096
288	Flood Protection Work on R/L sides of Wana Tol Algad Tehsil Wana	Federal Areas	10.0	-	-	10.0	0.096
289	Flood Protection Work on R/L sides of Khalsora Algad Sarwakal Sub Division	Federal Areas	-	8.0	10.0	18.0	0.172
290	Flood Protection Work on R/L sides of Woucha Dhana Algad	Federal Areas	-	8.0	16.0	24.0	0.230
291	Flood Protection Work on R/L sides of Dinawat Yakha China near (GHS) Shahor Algad.	Federal Areas	18.0	-	-	18.0	0.172
292	Flood Protection Work on R/L sides of Tank Zam Algad in FR Tank	Federal Areas	20.0	-	-	20.0	0.191
293	Flood Protection Work on R/L sides of Shuza Algad in FR Tank	Federal Areas	18.0	-	-	18.0	0.172
294	Flood Protection Wall on R/L sides of Tank Zam algad in D/S sobati in FR Tank.	Federal Areas	8.0	19.0	-	27.0	0.258
295	Flood Protection Work on R/L sides of Tangi Algad in FR D I Khan	Federal Areas	23.0	-	-	23.0	0.220
296	Flood Protection Work on R/L sides of Tol Algad in FR D I Khan	Federal Areas	16.0	-	-	16.0	0.153
297	Flood Protection Wall on R/L sides of Sheih Mela, Spina Tangi & Behram Algad in FR D.I.K	Federal Areas	20.0	8.0	-	28.0	0.268
298	Flood Protection Works along Bhimber Nullah, Bhimber City	Federal Areas	45.0	45.0	10.0	100.0	0.956
299	Flood Protection Works along Kadala Nullah Kangra Kalan, Haji Pura and Kadala Bazar, District Bhimber	Federal Areas	45.0	45.0	10.0	100.0	0.956
300	Flood Protection Works along Dhangun Wala Nullah, District Bhimber	Federal Areas	45.0	-	-	45.0	0.430

Sno	Name of Scheme / Problem Area	Geographic Region/Entity	ST (2016-2019)	MT (2020-2022)	LT (2023-2025)	Total (2016-2025)	Equivalent US\$ in millions
301	Flood Protection Works Barnailah Town along Barnala Nallah District Bhimber	Federal Areas	18.0	-	-	18.0	0.172
302	Flood Protection Works along Suketer Nallah Kasguma, District Bhimber	Federal Areas	25.0	-	-	25.0	0.239
303	Flood Protection Works along Bhunder Nallah Channi Kanjal Panjeri In District Bhimber	Federal Areas	85.0	35.0	-	120.0	1.148
304	Protection of Khari Sharif and adjoin areas along Jhelum River, Mirpur and Bhimber Districts.	Federal Areas	304.0	220.0	95.0	619.0	5.919
305	Flood Protection Works at Samwal Shrief District Mirpur	Federal Areas	23.0	-	-	23.0	0.220
306	Flood Protection Works at Chabrian Jattan District Mirpur	Federal Areas	29.0	-	-	29.0	0.277
307	Flood Protection Works at Khokhran Jattan District Mirpur	Federal Areas	30.0	-	-	30.0	0.287
308	Flood Protection Works at Mora Surat District Mirpur	Federal Areas	23.0	-	-	23.0	0.220
309	Flood Protection Works at Ganda Salwani District Mirpur	Federal Areas	37.0	-	-	37.0	0.354
310	Flood Protection Works at Suketer Nallah D/S of Jattan headworks, In District Mirpur	Federal Areas	47.0	-	-	47.0	0.449
311	Flood Protection Works along River Poonch at Mandi, District Kotli.	Federal Areas	335.0	175.0	-	510.0	4.877
312	Flood Protection Works at Gol Village, District Kotli.	Federal Areas	25.0	-	-	25.0	0.239
313	Flood Protection Works Kholratia along Nallah Ban District Kotli	Federal Areas	35.0	-	-	35.0	0.335
314	Flood Protection Works along Thalla Lat Nallah at Annol Sarhota In District Kotli	Federal Areas	75.0	7.0	-	82.0	0.784
315	Flood Protection Works along Nallah Majhan at Nikyal Kotli District	Federal Areas	23.0	28.0	12.0	63.0	0.602
316	Flood Protection Works at Sansa along Nallah Sansa Kotli	Federal Areas	15.0	-	-	15.0	0.143
317	Flood Protection Works along Kala Dab Kotli	Federal Areas	12.0	-	-	12.0	0.115
318	Flood Protection Works at Pakhonar In District Sudhnoti	Federal Areas	30.0	-	-	30.0	0.287
319	Flood Protection Works at Sehr Hafizabad, In District Sudhnoti	Federal Areas	15.0	-	-	15.0	0.143
320	Flood Protection Works at Baral along Baral Nallah In District Sudhnoti	Federal Areas	15.0	-	-	15.0	0.143
321	Flood Protection Works at Thandi Kasi and Gorah Nallah In District Sudhnoti	Federal Areas	27.0	-	-	27.0	0.258
322	Flood Protection Works along Eld Gah Drak, Char Cross and Mityal Mera In District Poonch.	Federal Areas	32.0	-	-	32.0	0.306
323	Flood Protection Works along Battal and Sehra along River Poonch District Sudhnoti	Federal Areas	35.0	-	-	35.0	0.335
324	Flood Protection Works along Village Mandol along River Poonch District Sudhnoti	Federal Areas	25.0	-	-	25.0	0.239
325	Flood Protection Works at Abbaspur Town, Chattri along Abbaspur Nallah In District Poonch.	Federal Areas	40.0	-	-	40.0	0.383
326	Flood Protection Works at Hajira, Doarandi along Hajira Nallah In District Poonch.	Federal Areas	25.0	110.0	15.0	150.0	1.434
327	Flood Protection Works at Baglon along Mahi Nallah In District Poonch.	Federal Areas	25.0	-	-	25.0	0.239
328	Flood Protection Works at Mumtazabadabad Town District Havali	Federal Areas	10.0	-	-	10.0	0.096
329	Flood Protection Works along Bandi Chakyas, Basti Phool Ban Panjir & Tangari In District Havali	Federal Areas	28.0	10.0	-	38.0	0.363
330	Flood Protection Works at Kangra village along Nallah Kangra In District Havali	Federal Areas	15.0	-	-	15.0	0.143
331	Flood Protection Works at Pailan Chudrian zarlen, Soli Zafan, Bangar Bani along Nallah Bathar	Federal Areas	40.0	-	-	40.0	0.383
332	Flood Protection Works at Basan Sharif, along Nallah Basan Havali	Federal Areas	50.0	-	-	50.0	0.478
333	Flood Protection Works at Dargoon & Bandi village along Nallah Rangar In District Havali	Federal Areas	25.0	15.0	-	40.0	0.383
334	Flood Protection Works along Lohar Balla, Dull, Khanpur Mohalla, Patratia, District Bagh	Federal Areas	34.0	25.0	-	59.0	0.564
335	Flood Protection Works along Harf Ghal and Paddar Area Nallah Malwani District Bagh	Federal Areas	30.0	-	-	30.0	0.287
336	Construction of Flood Protection works to protect Bagh City, Bani Pasari, Namanpura along Mehl Nallah, District Bagh.	Federal Areas	225.0	100.0	25.0	350.0	3.347
337	FPWs at Muzaffarabad, Challa Bandi, Makri, Shaukat Line Gojra along Nelum River Muzaffarabad	Federal Areas	170.0	120.0	24.0	314.0	3.003
338	FPWs at Garhi Dupatta Town, Majhol, Rawani along Jhelum River In Muzaffarabad & Hattian Districts.	Federal Areas	110.0	40.0	-	150.0	1.434
339	Flood Protection Works at Shorlan Village along Kunhar River Muzaffarabad	Federal Areas	20.0	-	-	20.0	0.191
340	Flood Protection Works at Sharda Village along Neelum River	Federal Areas	25.0	-	-	25.0	0.239
341	Flood Protection Works at Dadhal Village along Neelum River	Federal Areas	15.0	-	-	15.0	0.143
342	Flood Protection Works at Tajlan Village along Neelum River	Federal Areas	18.0	-	-	18.0	0.172

Sno	Name of Scheme / Problem Area	Geographic Region/Entity	ST (2016-2019)	MT (2020-2022)	LT (2023-2025)	Total (2016-2025)	Equivalent US\$ in millions
343	Flood Protection Works at Ashkot Village along Nallah Chajwah, Neelum	Federal Areas	20.0	-	-	20.0	0.191
344	Flood Protection Works at Joora Village along Nallah Aukhi Neelum	Federal Areas	15.0	-	-	15.0	0.143
345	Strengthening the Observational Network (27 Nos).	PMD	40.0	-	-	40.0	0.383
346	Strengthening the Observational Network (27 Nos).	PMD	10.0	-	-	10.0	0.096
347	Installation of 9 Numbers New QPM Radars (4 Nos. Proposed by PMD and 5 Nos Proposed by Consultants) and Staff Training Component.	PMD	1,950.0	850.0	50.0	2,850.0	27.254
348	Up-Gradation of Existing Radars and Software (7Nos).	PMD	275.0	-	-	275.0	2.630
349	Establish 4 Nos. Flood Early Warning Centres.	PMD	930.0	100.0	-	1,030.0	9.850
350	Upgradation of Flood Early Warning System with studies on RADAR calibration and QPF estimates.	PMD	300.0	-	-	300.0	2.869
351	Improvements in Surface Water Hydrology Project Network.	WAPDA	450.0	100.0	-	550.0	5.260
352	Improvements in Flood Telemetric Network (45 Nos) and O/M Expenditures.	WAPDA	450.0	220.0	40.0	710.0	6.790
353	Improvements in Snow Gauging Stations Network and O/M Expenditures.	WAPDA	360.0	170.0	20.0	550.0	5.260
354	Development of Glacier Monitoring Research Center (GMRC)	WAPDA	200.0	-	-	200.0	1.913
355	Improvements of HF Radios (18 Nos) under WRMD and O/M Expenditures	WAPDA	150.0	-	-	150.0	1.434
356	Feasibility Study - Chinlot Dam on Chenab River	WAPDA	137.0	-	-	137.0	1.310
357	Enhance the Capacity of Government Agencies Responsible for Disaster Management.	NDMA	800.0	400.0	300.0	1,500.0	14.344
358	Develop Capacity of Stakeholders in Post-Disaster Recovery.	NDMA	1,000.0	700.0	300.0	2,000.0	19.126
359	Rescue and Relief Operation by Army.	NDMA	1,100.0	500.0	300.0	1,900.0	18.170
360	Prepare Disaster Management Plans at Various Levels.	NDMA	900.0	200.0	-	1,100.0	10.519

LT = long term, KP = Khyberpakhtunkhwa, MT = medium term, NDMA = National Disaster Management Authority, NFPP = national flood protection plan, PDMA = Provincial Disaster Management Authority, PMD = Pakistan Meteorological Department, ST = short term

Source: Government of Pakistan. Draft National Flood Protection Plan - IV

Activities Identified in NDMP

Strategy		Amount
4.1 Intervention -1 Establish the Institutional and Legal System for Disaster Management		
1	Establish and function disaster management organizations at national, provincial and district levels	2.000
2	Formulate disaster management operation plans for relevant organizations	0.200
3	Implement periodic meetings among the disaster management organizations to monitor the situations.	0.100
4	Implement drills and training of disaster management activities in the organizations to improve their capacities.	-
4.2 Intervention -2 Prepare Disaster Management Plans at Various Levels		
1	Formulate and update disaster management plans at national, provincial, district and community or TMA levels.	1.000
2	Develop hazard specific contingency plans.	1.000
3	Develop sectoral disaster risk management operation in federal ministries, departments and authorities	1.000
4.3 Intervention -3 Establish national hazard and vulnerability assessment		
1	Conduct detailed multi-hazard vulnerability and risk analysis/assessments at national level	14.000
2	Conduct detailed multi-hazard vulnerability and risk analysis/assessments at local level	5.000
3	Conduct research and studies on impact of climate change on glaciers and ice cap	5.000
4.4 Intervention -4 Establish multi-hazard early warning and evacuation system		
1	Strengthen forecasting and early warning systems	168.500
2	Prepare hazard maps at local scale in targeted locations	5.700
3	Strengthen early warning dissemination system	3.100
4	Develop capacity of early warning and evacuation systems	11.200
4.5 Intervention -5 Promotion of training, education and awareness in relation to disaster management		
1	Develop NIDM (National Institute of Disaster Management) to promote human resource development in the field of	20.700
2	Enhance the capacity of government agencies in charge of disaster management.	12.900
3	Promote mainstreaming DRR through capacity enhancement of governmental officers.	2.600
4	Develop the capacity of communities to cope with disasters.	26.200
5	Raise people's awareness of disaster management.	1.900
4.6 Intervention -6 Strengthen awareness program on disaster risk reduction at local level		
1	Enhance knowledge on disasters management in the general public	1.000
2	Establish safe evacuation places in the case of disaster situation	10.000
3	Implement and disseminate CBDRM activities	1.000
4	Disseminate self help and mutual help efforts in disaster management	1.000
5	Establish disaster mitigation measures incorporated with existing development program	1.000
4.7 Intervention -7 Infrastructure development for disaster risk reduction		
1	Develop schools, hospitals and other important public facilities with safe against disasters	100.000
2	Protect important coastal facilities against disasters taking into account climate change	21.000
3	Enforce the building code in construction of buildings	10.000
4	Implement appropriate structural measures in flood prone areas taking into account comprehensive and integrated flood	565.600
5	Enhance disaster risk management capacity in urban areas	11.000
4.8 Intervention -8 Mainstreaming disaster risk reduction into development		
1	Establish disaster risk reduction policies in National Development Plan and National Poverty Reduction Strategy	-
2	Set up sectoral guidelines on mainstreaming disaster risk reduction	1.000
3	Establish criteria to assess development projects from a risk reduction perspective	0.200
4	Improve technical capacity of federal and provincial governments to integrate risk reduction into development plans and	-
4.9 Intervention -9 Establish national emergency response system		
1	Establish and strengthen warehouse or stockpiling system for storing food, medicine, relief supplies and rescue	10.000
2	Enhance emergency response capacities, such as emergency operation centers, Civil Defence and urban search and	10.000
3	Establish a robust communication system and efficient transport and logistics mechanism to be used during emergency	6.000
4	Develop and implement emergency response plans in relevant ministries and departments at federal, provincial and	5.000
5	Establish a National Disaster Management Fund to enable the federal government to organize emergency response	-
4.10 Intervention -10 Capacity Development for Post Disaster Recovery		
1	Prepare guidelines for post disaster recovery programs and activities	1.000
2	Develop capacity of stakeholders in post disaster recovery	3.000
3	Develop system and methodology for recovery needs assessment	1.000
TOTAL		1,040.900

NDMP = national disaster risk management plan

Indicative DRR Schemes

Name of Activity/Subprojects	Unit	Qty	Amount (PKR Mill)	US\$ equivalent
Retrofitting of primary school buildings	Schools	500	945.0	9.037
Retrofitting of Flood Protection Structures	Kilometers	300	5,850.0	55.886
Community-based DRM activities in Union councils	Union Councils	20	313.7	8.000
Strengthening of Early Warning Systems (Radars Installation)	Numbers	2	1,150.3	11.00
Multihazard vulnerability risk assessments	Studies	30	1,218.8	11.66
Total			8,259.0	83.923