



Report and Recommendation of the President to the Board of Directors

Project Number: 50316-001
November 2016

Proposed Loans, Technical Assistance Grant, and Administration of Grant Islamic Republic of Pakistan: National Disaster Risk Management Fund

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 17 October 2016)

Currency unit	–	Pakistan rupee/s (PRe/PRs)
PRe1.00	=	0.0096
\$1.00	=	PRs104.63

ABBREVIATIONS

ADB	–	Asian Development Bank
DRF	–	disaster risk financing
DRM	–	disaster risk management
DRR	–	disaster risk reduction
EAD	–	Economic Affairs Division
EIRR	–	economic internal rate of return
ESMS	–	environmental and social management system
FIP	–	fund implementation partner
FMA	–	financial management assessment
NDMP	–	National Disaster Management Plan
NDRMF	–	National Disaster Risk Management Fund
NFPP-IV	–	National Flood Protection Plan IV
PAM	–	project administration manual
SDR	–	special drawing right
TA	–	technical assistance

NOTE

In this report, “\$” refers to US dollars.

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PROJECT AT A GLANCE

1. Basic Data		Project Number: 50316-001	
Project Name	National Disaster Risk Management Fund	Department /Division	CWRD/PRM
Country Borrower	Pakistan Islamic Republic of Pakistan	Executing Agency	Ministry of Finance
2. Sector		ADB Financing (\$ million)	
✓ Finance	Subsector(s) Infrastructure finance and investment funds Insurance and contractual savings		189.52 11.48
		Total	201.00
3. Strategic Agenda		Climate Change Information	
Subcomponents Inclusive economic growth (IEG) Environmentally sustainable growth (ESG)	Subcomponents Pillar 2: Access to economic opportunities, including jobs, made more inclusive Disaster risk management Global and regional transboundary environmental concerns	Adaptation (\$ million) Climate Change impact on the Project	72.80 Low
4. Drivers of Change		Gender Equity and Mainstreaming	
Components Governance and capacity development (GCD) Knowledge solutions (KNS) Partnerships (PAR)	Components Client relations, network, and partnership development to partnership driver of change Civil society participation Organizational development Knowledge sharing activities Pilot-testing innovation and learning Bilateral institutions (not client government) Implementation Private Sector United Nations organization	Effective gender mainstreaming (EGM)	✓
5. Poverty and SDG Targeting		Location Impact	
Geographic Targeting	No	Rural	Medium
Household Targeting	No	Urban	Medium
SDG Targeting	Yes		
SDG Goals	SDG11, SDG13		
6. Risk Categorization:	Low		
7. Safeguard Categorization	Environment: FI Involuntary Resettlement: FI Indigenous Peoples: FI		
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		201.00	
Sovereign Project loan: Asian Development Fund		125.00	
Sovereign Project loan: Ordinary capital resources		75.00	
Sovereign Capacity development technical assistance: Technical Assistance Special Fund		1.00	
Cofinancing		3.36	
Government of Australia - Grant		3.36	
Counterpart		53.24	
Beneficiaries		28.24	
Government		25.00	
Total		257.60	
9. Effective Development Cooperation			
Use of country procurement systems		Yes	
Use of country public financial management systems		Yes	

I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on proposed loans to the Islamic Republic of Pakistan for the National Disaster Risk Management Fund (project). The report also describes (i) the proposed administration of a grant to be provided by the Government of Australia for the National Disaster Risk Management Fund project, and (ii) the proposed technical assistance (TA) for Capacity Building of Disaster Risk Management Institutions, and if the Board approves the proposed loans, I, acting under the authority delegated to me by the Board, approve the administration of the grant and the TA.¹

2. The proposed project will provide financial, technical, and capacity development support to the National Disaster Risk Management Fund (NDRMF), a not-for-profit association to be incorporated under section 42 of the Companies Ordinance, 1984. The NDRMF will be government-owned and will aim to reduce Pakistan's socioeconomic and fiscal vulnerability to natural hazards and climate variability and change.

II. THE PROJECT

A. Rationale

3. **High incidence and cost of disasters.** Pakistan requires substantial financing to mitigate its significant disaster risk. The country, its population, and assets are increasingly exposed and vulnerable to various natural hazards. According to the Global Climate Risk Index, it was one of the 10 countries most affected by extreme weather events during 1995–2014.² Since 2000, increasing natural hazards have resulted in significant loss of life, economic damage, and the reversal of development gains. Frequent floods have caused the greatest physical damage. Three major floods in 2010, 2011, and 2014 affected more than 30 million people, resulting in more than \$14 billion in damage and losses. In 2005, a major earthquake caused more than 73,000 deaths and \$5 billion in losses. The country also experiences tropical cyclones and droughts; a drought in 2014–2015 affected over 3 million people. These events severely impact the livelihoods of the poor and vulnerable, resulting in mass migration, disrupting trade and commerce, and destabilizing the market. Such events negatively impact government budgets, periodically placing significant additional demands on limited public resources for humanitarian relief, early recovery, and reconstruction.

4. **High vulnerability to climate change.** Climate change is expected to result in increased temperatures, glacial melt, rising sea levels in coastal areas, and changes in the frequency and intensity of precipitation. Extreme weather events such as floods and droughts are likely to become more frequent in Pakistan in the future, potentially increasing disaster losses if appropriate action is not taken. Rapid unplanned urbanization intensifies the exposure and vulnerabilities of the population, especially the poor, increasing disaster risks.

5. **Significant fiscal impact of disasters.** Frequent disasters in Pakistan pose a significant risk to the fiscal stability of the federal and provincial governments. The annual economic impact of flooding alone is estimated at \$1.2 billion–\$1.8 billion, equivalent to 0.5%–0.8% of gross domestic product.³ The toll has been high, totaling \$25.5 billion since 2005. A

¹ The design and monitoring framework is in Appendix 1.

² Germanwatch e.V. 2015. *Global Climate Risk Index 2016: Who Suffers Most from Extreme Weather Events? Weather-Related Loss Events in 2014 and 1995 to 2014*. Berlin.

³ World Bank Group, Global Facility for Disaster Reduction and Recovery. 2015. *Fiscal Disaster Risk Assessment Options for Consideration: Pakistan*. Washington, DC.

significant portion of relief, early recovery, and reconstruction costs is taken from scarce federal and provincial government resources. Each year, the federal government budgets limited resources for post-disaster response, but it often requires significant additional resources to support affected communities and rebuild the country's social and economic infrastructure after disasters. This response puts considerable pressure on public finances, with increases in fiscal deficits and public debt, and diverts scarce funds away from development operations.

6. Evolving disaster risk governance and resource constraints. Since a massive earthquake struck Pakistan in 2005, the government's disaster risk management (DRM) policy and strategy have moved from being largely response-oriented to having a broader approach stressing disaster risk reduction (DRR) and preparedness. Constitutional changes introduced in 2013 have also transferred many responsibilities from the federal to the provincial level. However, progress is limited by financing and capacity constraints. The government has worked extensively, with support from multiple development partners, to promulgate the National Disaster Management Act, 2010 and to establish the National Disaster Management Authority and provincial and district disaster management authorities. The National Disaster Management Act also provides the legal framework for establishing dedicated funds for DRM at the provincial and federal levels. DRM-related planning has become the responsibility of the national and provincial planning ministries and the federal Ministry of Climate Change. Despite this progress, national, provincial, and district disaster management authorities have limited technical capacity. The mainstreaming of DRM in planning and operations is still in its initial stages in all key federal and provincial ministries, departments, and agencies. The project will help accelerate the mainstreaming efforts of entities responsible for DRM by providing dedicated DRR and capacity development resources, and supporting systematic disaster risk assessments and DRM coordination mechanisms at multiple levels. This will facilitate a coherent and institutionalized DRM approach across sectors and among federal, provincial, and local governments.

7. Disaster risk management policy and strategic environment. The government's strategy is to make a long-term commitment to DRM by putting in place policies and plans to address structural and nonstructural aspects of DRM comprehensively and systematically. The national DRR and climate change policies were approved in 2013, while the National Disaster Management Plan (NDMP), which includes an investment program for 2012–2022, was approved in 2012. The NDMP contains 10 core intervention areas and 118 proposed priority actions and programs focused on reducing disaster risk and enhancing the country's ability to manage disasters.⁴ The priority actions cover all stages of the pre- and post-disaster cycle. The draft National Flood Protection Plan IV (NFPP-IV) for 2016–2026 complements the NDMP and focuses on integrated flood risk management.⁵ The two plans have a combined cost of about \$3 billion. The NDRMF will finance eligible subprojects from the two plans, based on detailed vulnerability and risk assessments as well as specific criteria, including adequate economic returns, safeguards, and sustainability (para. 20).

8. ADB assistance and country partnership strategy. The proposed project is in line with the country partnership strategy, 2015–2019 for Pakistan⁶ and the Operational Plan for

⁴ The cost of implementing the NDMP was estimated at nearly \$1.1 billion when the NDMP was formulated in 2012. Since then it has been recognized that the NDMP's investment requirements are significantly underestimated. Government of Pakistan, Ministry of Climate Change, National Disaster Management Authority. 2012. *National Disaster Management Plan: Main Volume*. Islamabad.

⁵ The NFPP-IV is awaiting formal approval and adoption by Pakistan's Council of Common Interests, which is expected in the fourth quarter of 2016.

⁶ ADB. 2015. *Country Partnership Strategy: Pakistan, 2015–2019*. Manila.

Integrated Disaster Risk Management, 2014–2020 of the Asian Development Bank (ADB), which stresses the need for an integrated approach combining DRR, disaster risk financing (DRF), and climate change adaptation.⁷ ADB has been a major partner of Pakistan in the latter's efforts to integrate DRM in its development agenda, and has supported the country's reconstruction efforts after major disasters. ADB support has focused mainly on reconstruction, and it has issued nearly \$2 billion in loans and grants during 2005–2015 for the reconstruction of transport, irrigation and flood protection, housing, education, health, and livelihood infrastructure that is resistant to multiple hazards, together with DRM capacity building. The Flood Emergency Reconstruction and Resilience Project approved in 2015 and the proposed project mark a shift in ADB's focus toward a greater emphasis on DRR and DRF, while continuing to support reconstruction and rehabilitation.⁸ The government has asked ADB to be the lead development partner in this critical area, with the proposed project a key element of ADB's support for DRR and DRF.

9. **Lessons.** The country assistance program evaluation of ADB programs in Pakistan during 2002–2012 emphasizes that ADB must improve its support for integrated disaster prevention and long-term preparedness.⁹ It recommends that ADB further mainstream DRR measures in its infrastructure projects, and work closely with ministries and agencies to improve the disaster resilience of infrastructure and community preparedness. Lessons also indicate that limited government technical and financial capacity and high levels of disaster risk warrant comprehensive and sustained ADB support for all aspects of DRM, in close coordination and partnership with specialized local and international agencies. Experience from ADB programs highlights the need to include well-targeted support for the vulnerable, community involvement in DRM, strong linkages with existing development programs, support for technical innovations for investment sustainability and multi-hazard resilience, and effective coordination and monitoring of future DRM interventions.

B. Impact and Outcome

10. The impact will be a more disaster-resilient Pakistan with reduced socioeconomic and fiscal vulnerability to natural hazards and climate variability and change. The outcome will be increased and sustainable institutional and physical capacity to reduce the socioeconomic and fiscal impacts of natural hazards and climate change.

C. Outputs

11. The project outputs are (i) the NDRMF established and made operational, (ii) investments to reduce vulnerabilities to natural hazards increased, and (iii) analytical work and products to improve the fiscal management of disaster risk completed.

12. **Output 1: The National Disaster Risk Management Fund established and made operational.** Key activities under this output include (i) the full operationalization of the NDRMF, including recruitment of its management team and technical staff; (ii) the establishment of the required governance, due diligence, quality control, and fiduciary arrangements for the NDRMF to function effectively and efficiently; (iii) the provision of capacity building support to assist

⁷ ADB. 2014. *Operational Plan for Integrated Disaster Risk Management, 2014–2020*. Manila.

⁸ ADB. 2015. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Islamic Republic of Pakistan for the Flood Emergency Reconstruction and Resilience Project*. Manila.

⁹ Independent Evaluation Department. 2013. *Country Assistance Program Evaluation: Pakistan: 2002–2012—Continuing Development Challenges*. Manila: ADB.

NDRMF in its start-up phase to ensure that its operations meet its objectives; and (iv) the capitalization of the NDRMF through the establishment of a \$123.3 million endowment fund to ensure the NDRMF's long-term financial viability and sustainability. The NDRMF will establish, operate, and maintain the endowment fund following rules, regulations, and procedures acceptable to ADB. The legal framework for the endowment is provided in the National Disaster Management Act (para 6). The initial contribution from ADB and the government would be invested in low-risk, relatively safe government securities and instruments. Income earned from the endowment fund will be used to cover the NDRMF's full operating costs from the fourth year of its operations. Financial projections indicate that the endowment fund's annual income will significantly exceed planned expenditures. The NDRMF may use the excess income for additional investments in interest- and/or profit-bearing securities and for financing DRR activities, as approved by its board of directors.¹⁰ Under this output, a comprehensive effort strategically directed at resource mobilization would be undertaken to diversify the NDRMF's funding base. This effort would be aimed at multilateral and bilateral organizations, the United Nations system, international and national philanthropic organizations, and the private sector. The NDRMF will also explore opportunities to access global climate financing sources.

13. Output 2: Investments to reduce vulnerabilities to natural hazards increased.

Under this output, the NDRMF will ongrant funds on a cost-sharing basis to eligible fund implementation partners (FIPs) that meet the accreditation criteria¹¹ for eligible subprojects.¹² The FIPs will include federal, provincial, and district government entities; autonomous organizations; civil society; and academia. The NDRMF will provide funding through matching grants of up to 70% for a range of structural and nonstructural interventions. Key activities include (i) retrofitting or building about 300 kilometers of flood protection infrastructure; (ii) retrofitting about 500 public buildings, including schools and health facilities, against multiple hazards; (iii) delivering nonstructural preventive measures, including preparing and implementing national and subnational emergency response plans; (iv) establishing early warning systems, including procuring and installing radars and river, rain, and stream gauges; (v) designing and implementing community-based DRM activities; (vi) conducting analytical work, such as multi-hazard vulnerability risk assessments for vulnerable districts and urban centers covering gender-related vulnerabilities and climate change research and studies; (vii) mainstreaming and monitoring DRR, including developing procedures for analysis and integrating disaster risk during project preparation, and tracking DRR and disaster response expenditure; and (viii) building capacity to strengthen national and local DRM organizations. The NDRMF will assess, prioritize, sequence, and monitor the interventions.

14. Output 3: Analytical work and products to improve the fiscal management of disaster risk completed.

The NDRMF will carry out quantitative risk modeling analysis for the primary natural hazards faced by Pakistan and develop a comprehensive national DRF strategy based on the analysis results. The risk modeling work will be used to derive disaster risk maps and quantitative national and subnational information on the expected levels of loss for hazard events of varying types, intensities, and return periods. The NDRMF will then identify

¹⁰ The endowment fund is projected to generate income of \$9.17 million in 2017, \$9.76 million in 2018, \$10.38 million in 2019, \$10.88 million in 2020, and \$11.44 million in 2021. Annual average operating expenses for the NDRMF are projected at \$2.5 million.

¹¹ The NDRMF will prepare the accreditation criteria following the requirements set out in the project administration manual (PAM), which will be approved by the NDRMF's board of directors and ADB.

¹² The subproject selection criteria are provided in the PAM, which will be further refined and approved by the NDRMF's board of directors. Subproject selection criteria include (i) the inclusion of the subprojects in the NDMP or NFFP-IV, (ii) an economic internal rate of return of at least 12% for works and equipment subprojects, (iii) financial sustainability of the subprojects in the form of assured provision of operation and maintenance funds, and (iv) compliance with ADB safeguard requirements.

appropriate DRF tools, including insurance mechanisms, for each layer of loss based on the combined multi-hazard loss curves to strengthen the country's DRM capability. The tools will also take into account (i) the scale of funding required for each layer of loss; (ii) the speed with which post-disaster funding is required for relief, early recovery, and reconstruction purposes; (iii) the relative cost-effectiveness of alternative instruments for specific layers of loss; (iv) the particular disaster-related needs of vulnerable groups; and (v) the contribution to long-term disaster resilience. This output will support the development of two priority financing instruments identified in the national DRF strategy and initiate the pilot testing of one of them.¹³

D. Investment and Financing Plans

15. The project is estimated to cost \$256.6 million (Table 1).

Table 1: Investment Plan
(\$ million)

		Amount ^a
A.	Base Cost^b	
	1. The NDRMF established and made operational	133.1
	2. Investments to reduce vulnerabilities to natural hazards increased	90.2
	3. Fiscal management of disaster risks improved	10.8
	Subtotal (A)	234.1
B.	Contingencies^c	15.5
C.	Financing Charges During Implementation^d	6.9
	Total (A+B+C)	256.6

NDRMF = National Disaster Risk Management Fund.

a Includes taxes and duties of \$17.5 million to be financed from government resources and fund implementation partners.

b In mid-2016 prices.

c Physical contingencies are computed at 9.50% of the base cost (net of the endowment fund contribution of \$123.3 million by the Asian Development Bank (ADB) and the Government of Pakistan), while price contingencies are computed at 4.48%.

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 plus a spread of 0.5% and 0.1% of the maturity premium. Commitment charges for the ADB ordinary capital resources loan are 0.15% per year to be charged on the undisbursed loan amount. Interest on ADB's Special Fund resources loan has been computed at 2% per year.

Source: ADB estimates.

16. **Financing plan.** The government has requested two loans totaling \$200.00 million, comprising a loan in various currencies equivalent to SDR90.18 million from ADB's Special Funds resources, and a loan of \$75.00 million from ADB's ordinary capital resources to help finance the project. The loan from ADB's Special Funds resources will have a 25-year term, including a grace period of 5 years, an interest rate of 2% per annum during the grace period and thereafter, and such other terms and conditions set forth in the draft loan and project agreements. The ordinary capital resources loan will have a 25-year term, including a grace period of 5 years, 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 (the interest and other charges to be capitalized in the loan), and such other terms and conditions set forth in the draft loan and project agreements. Based on this, the average loan maturity is 16 years, and the maturity premium payable to ADB is 0.1% per year. ADB financing

¹³ The instruments could include support for capitalizing an insurance pool by combining the features of a reserve fund and a risk-pooling mechanism, targeting middle-class homeowner and small and medium-sized enterprise insurance, sharing start-up risk capital with national and international reinsurers, and providing sovereign disaster risk insurance and catastrophe risk insurance to agriculture, micro-enterprise, and financial institutions.

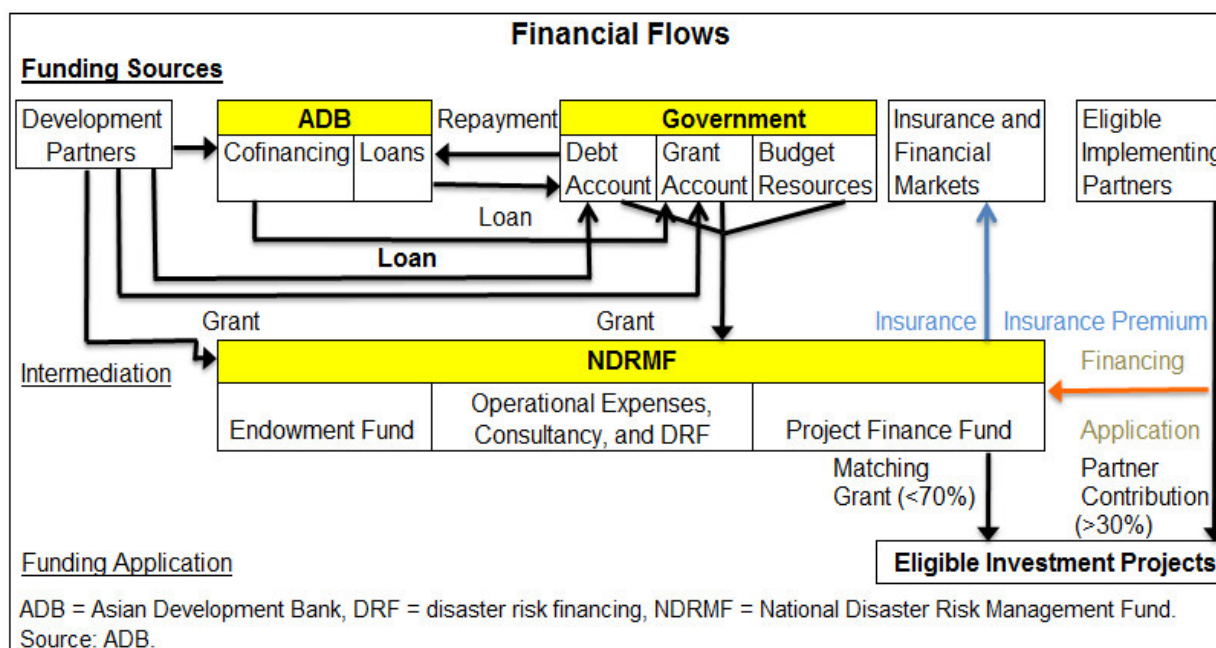
represents 78% of the total project cost. The Government of Australia will provide grant cofinancing equivalent to \$3,361,500, to be administered by ADB. ADB and the Government of Switzerland through the Swiss Agency for Development and Cooperation are discussing possible ADB-administered cofinancing for the NDRMF.¹⁴ The government will contribute \$25.0 million from its own resources, and the FIPs will contribute at least \$28.2 million to the project. The financing plan is in Table 2.

Table 2: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (loan)	75.0	29.2
Special Funds resources (loan)	125.0	48.7
Government of Australia	3.4	1.3
Government of Pakistan	25.0	9.7
Fund implementation partners	28.2	11.0
Total	256.6	100.0

Note: Percentages may not total 100% because of rounding.
Source: ADB estimates.

17. **Financial flows.** All loan and grant funds provided to the government by ADB will be passed on to the NDRMF as a grant, together with the government's budget contribution.¹⁵ The NDRMF will ongrant a portion of the funds to FIPs for eligible subprojects. Eligible FIPs that meet the accreditation criteria will provide at least 30% of counterpart financing. Cofinancing partners may contribute directly to the NDRMF or provide resources for NDRMF activities through the government or a trust fund arrangement with ADB. The NDRMF may also facilitate risk-sharing and risk-transfer arrangements. The risk-financing arrangement could also support distribution and administrative costs and provide capital reserves for a pool. The financial flows are illustrated in the figure.



¹⁴ ADB is in discussion with other development partners to provide additional cofinancing.

¹⁵ Excluding interest during construction and commitment charges.

18. The project is intended to be the first phase of a longer-term partnership between the government and ADB to comprehensively address key DRM and DRF issues. Based on the implementation progress and future satisfactory appraisals, and subject to further Board approval, ADB will consider further financing requests from the government to provide up to \$1 billion through additional financing during 2018–2023, to contribute to the \$3 billion requirement to finance the implementation of the future NDMP and NFFP-IV.

E. Implementation Arrangements

19. **Executing and implementing agencies.** The Economic Affairs Division (EAD) of the Ministry of Finance, Revenue, Economic Affairs, Statistics and Privatization will be the executing agency and the NDRMF will be the implementing agency for the project. The NDRMF is in the process of being incorporated as a not-for-profit association under section 42 of the Companies Ordinance, 1984 (governance arrangements are in para. 26).¹⁶ The EAD will ensure that (i) the NDRMF performs in line with its mandate; (ii) the transfer of contributions from contributors and government counterpart funding to NDRMF accounts is done in a timely manner; (iii) all contribution agreements signed between the executing agency and the contributors for NDRMF operations are implemented; and (iv) a review of the NDRMF's performance is done regularly and reported to ADB.

20. **Role of the National Disaster Risk Management Fund.** The NDRMF will provide financial and technical support to government and nongovernment partners to implement the NDMP and NFFP-IV. It will assess and prioritize subprojects for which ongranting is requested. The NDRMF will (i) adopt acceptable corporate and financial governance and management practices (e.g., the Code of Corporate Governance, 2012); (ii) have its accounts and financial statements audited annually by independent auditors in a manner acceptable to ADB; (iii) have adequate policies, systems, and procedures to assess and monitor subprojects' economic, social, and environmental impacts (e.g., adopt an environmental and social management system [ESMS], and prepare necessary safeguard documents, where applicable); and (iv) ensure that an economic internal rate of return (EIRR) of at least 12% for works and equipment subprojects is achieved. The NDRMF will also monitor the implementation performance of approved subprojects.

21. **Procurement.** The NDRMF will follow ADB's Procurement Guidelines (2015, as amended from time to time) in all institutional procurement, and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) in engaging the consulting services of firms and individuals. ADB procurement guidelines applicable to financial intermediaries will apply to the funds ongranted to FIPs (para. 17). ADB will engage a TA-financed consultant to provide institutional procurement support to the NDRMF during the start-up phase of its operations. The implementation arrangements are summarized in Table 3 and described in detail in the project administration manual (PAM).¹⁷

¹⁶ A company incorporated as a government-owned, not-for-profit association under section 42 of the government's Companies Ordinance, 1984 enjoys all privileges and is subject to all obligations of a limited company. Government-owned section 42 companies have to comply with the Code of Corporate Governance, 2012, which is a robust governance framework.

¹⁷ Project Administration Manual (accessible from the list of linked documents in Appendix 2).

Table 3: Implementation Arrangements

Aspects	Arrangements		
Implementation period	24 November 2016–17 November 2019		
Estimated completion date	17 November 2019 (loan closing date is 17 May 2020)		
Management			
(i) Executing agency	Economic Affairs Division of the Ministry of Finance, Revenue, Economic Affairs, Statistics and Privatization		
(ii) Implementing agency	National Disaster Risk Management Fund		
Procurement	Shopping	10 contracts	\$0.7 million
Consulting services	QCBS: 4 contracts LCS: 2 contracts	636 person-months	\$10.8 million
	Individual consultants	352 person-months	\$2.3 million
Disbursement	The loan and grant proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2015, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank, LCS = least-cost selection, QCBS = quality and cost-based selection.
Source: ADB estimates.

III. TECHNICAL ASSISTANCE

22. A capacity development TA will be associated with the project to fast-track implementation. The TA will support the establishment of the NDRMF's core functions, including the development of (i) quality control and subproject review parameters; and (ii) NDRMF policies, bylaws, and systems for auditing, financial management and control, procurement, safeguards, and gender considerations to speed up the start-up process. The TA will be implemented over 36 months from 10 December 2016. The TA is estimated to cost \$1.1 million, of which \$1.0 million will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-V). The EAD will be the executing agency of the TA. The government will provide counterpart support in the form of staff, accommodation, and other in-kind contributions. The TA will finance 4 person-months of individual international consultants and 136 person-months of individual national consultants. ADB will engage the consultants following its Guidelines on the Use of Consultants (2013, as amended from time to time). Disbursements under the TA will follow ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).¹⁸

IV. DUE DILIGENCE

A. Technical

23. The NDRMF's management team will have primary responsibility for technical due diligence of subprojects to be considered for NDRMF financing. They will conduct technical capacity reviews of potential FIPs for accreditation and undertake technical reviews of all subproject proposals received from FIPs based on subproject selection and prioritization criteria provided in the PAM (footnote 17). The NDRMF technical staff will leverage the capacity and institutional knowledge developed in Pakistan during the implementation of the large portfolio of DRM projects by ADB and other development partners, some of which are ongoing, through the NDRMF's roster of experts. To fast-track implementation and reduce up-front risks, the first group of subprojects will be undertaken with entities that have ongoing or completed DRM projects financed by ADB and key multilateral development partners. The experts hired through

¹⁸ Attached Technical Assistance (accessible from the list of linked documents in Appendix 2).

the associated TA will conduct a third level of due diligence to provide an independent review of the quality and quantity of work completed by the FIPs. They will report directly to ADB.

B. Economic and Financial

24. A comprehensive economic analysis was conducted to estimate the net present value and EIRR of the \$257 million investment. The project team evaluated the benefits of a sample of subprojects proposed in the NDMP by considering the losses averted because of the implementation of flood protection works, early warning systems, and community-based DRM activities. The EIRR estimated for the project is at least 16.83% and NPV is positive. The EIRR of the project exceeds the ADB benchmark of 12.00%. For the purpose of the analysis, the opportunity cost of the endowment investment is included as a project cost. The NDRMF should assess individual DRR subprojects and target investments with high EIRRs of at least 12% to be eligible for financing.

25. To ensure its financial sustainability, the NDRMF will establish an endowment fund with an initial capitalization of \$123.3 million in its first year. By 2021, the endowment fund is projected to generate \$51.6 million in income from short- and long-term investments to cover operational expenses as well as reserve buildup.¹⁹ The sensitivity analysis shows that the NDRMF's projected cash flows are well insulated against adverse systemic developments, such as the return on investment declining or operating expenses increasing due to inflationary and/or cost pressures. Even in the significantly restrictive and unlikely scenario of both negative developments taking place simultaneously, the NDRMF's sustainability remains protected. The NDRMF's endowed capital allocation ensures stable and sustained operations and a buildup of reserves to maintain nonstructural DRM activities even if fund inflows dry out. The NDRMF will also prepare a resource mobilization strategy to solicit private funding actively from domestic and international sources to leverage the financing provided by ADB and the government. This effort will target corporations, multinationals, global climate funds, and high net worth individuals. The NDRMF may charge a management fee to defray incremental administrative costs so that partnerships do not increase existing operating expenses and prevent intermediation costs of core operations from increasing. An investment management policy will be prepared to guide the NDRMF's investment activities.

C. Governance

26. The NDRMF will be regulated by the Securities and Exchange Commission of Pakistan and will be subject to extensive statutory governance and reporting requirements under the Companies Ordinance, 1984 and relevant rules. The NDRMF will have a robust governance and management structure comprising a general body of 40 members, a board of directors with 12–15 members, and a management team headed by a chief executive officer.²⁰ To ensure the success of the new entity, ADB will provide TA support (para. 22).

27. The financial management assessment (FMA) confirmed that the government's budgetary, accounting, and financial reporting and auditing systems and procedures are functioning effectively. The FMA noted that an internal audit function will have to be established at the NDRMF, which also needs to prioritize hiring and putting in place adequate accounting and finance staff. Various risks and mitigation measures are included in the FMA, while key risks are set out in the risk assessment and risk management plan.²¹ Overall, the FMA

¹⁹ The NDRMF's estimated annual operating expenses average \$2.5 million for 2017–2021.

²⁰ A detailed description of the NDRMF's governance structure is in the PAM.

²¹ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

assessed the pre-mitigation financial management risk as *substantial*. The FMA highlighted key issues such as the need for adequate staffing of the NDRMF, capacity building of NDRMF staff, and operationalization of the internal audit function. During the first 6 months, the associated TA will help the NDRMF set up, strengthen, and fully operationalize the NDRMF's core functions, including financial management.

28. Other than institutional procurement by the NDRMF, all procurement will be done by the FIPs, which will be required to follow procurement procedures acceptable to ADB. During the first 6 months of its operations, the NDRMF will prepare a procurement procedural manual and also put in place a procurement framework describing (i) functional responsibilities and accountabilities for procurement activities; (ii) procurement systems and processes, including guidance on anticorruption policies and conflicts of interest; (iii) procurement skills; and (iv) a capacity review process. These processes and systems are subject to ADB review and approval.

29. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the EAD. The specific policy requirements and supplementary measures are described in the PAM.

D. Poverty and Social

30. Although the project is classified *general intervention*, it will directly benefit poor and vulnerable people living in high-risk areas. The NDRMF will finance (i) the carrying out of national and subnational multi-hazard vulnerability risk assessments in 20 vulnerable districts and urban centers, which will help develop informed DRM plans targeting vulnerable populations; (ii) the retrofitting of social infrastructure (e.g., public schools and health facilities) that predominantly serve low-income groups; and (iii) the development of emergency response plans and early warning systems in highly vulnerable districts of the country.

31. The project is classified *effective gender mainstreaming*, with key measures indicated in the gender action plan.²² The NDRMF will establish appropriate procedures,²³ policies, and systems; and build institutional capacity in gender-responsive DRR and disaster response systems.²⁴ NDRMF's core staff will comprise at least 20% women and will include a social and gender officer responsible for implementing and monitoring the project's social, poverty, and gender dimensions. The NDRMF will recruit a short-term expert to guide, review, and support gender activities and plans. TA-financed gender experts will (i) develop the monitoring systems, policies, and guidelines for social and gender-related plans; (ii) develop NDRMF staff capacity; and (iii) independently assess the gender impacts.

E. Safeguards

32. The project is classified *financial intermediary* for the environment, involuntary resettlement, and indigenous peoples. The project will not finance any *category A* subprojects. No significant adverse environmental impacts are anticipated, as most civil works will involve retrofitting or rehabilitating existing facilities. Negative impacts during construction will likely be short term, site-specific, and mitigable. Proposals that involve no or limited involuntary

²² Gender Action Plan (accessible from the list of linked documents in Appendix 2).

²³ Procedures that outline the gender-based review process of subprojects.

²⁴ Gender policy, including key instruments for DRM operations, includes gender mainstreaming criteria for the screening and approval of proposals. The criteria are aligned with the following: Government of Pakistan, National Disaster Management Authority. 2014. *National Policy Guidelines on Vulnerable Groups in Disasters*. Islamabad.

resettlement impacts will be prioritized. No impacts on indigenous peoples are anticipated. An ESMS document has been prepared. The project may finance subprojects classified *category B* for the environment, involuntary resettlement, and indigenous peoples in line with the requirements set out in the ESMS document. The TA consultants will provide initial support to implement the measures outlined in the ESMS. ADB may tap a pool of NDRMF safeguard experts to help conduct safeguard reviews of proposals and implement safeguard plans in subprojects. The NDRMF will adopt an ESMS satisfactory to ADB before the first disbursement for the financing of subprojects. ADB will audit the ESMS annually and review it semiannually.

F. Risks and Mitigating Measures

33. Major risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan (footnote 21). The integrated benefits and impacts are expected to outweigh the cost of the risk mitigating measures.

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
The NDRMF lacks an internal audit function.	The NDRMF will establish an independent internal audit function. Within the first 6 months of NDRMF operations, an internal auditor with strong audit experience and qualifications will be appointed at a senior staff level, and will report to the Audit Committee of the NDRMF's board of directors.
The NDRMF suffers from inadequate financial management, procurement, and safeguard systems.	The TA will help the NDRMF (i) establish an efficient financial management system meeting all statutory requirements of the SECP and the standards of ADB and the NDRMF's contributors; (ii) prepare standard procurement documents and procurement review procedures, and build procurement capacity; (iii) establish disbursement and fund flow protocols; (iv) establish safeguard systems and procedures satisfactory to ADB; and (v) develop and institutionalize a reporting and monitoring system. ADB will also establish a multisector team comprising ADB staff and experts recruited under the TA to oversee and guide the NDRMF's day-to-day activities, and will undertake detailed quarterly review missions to evaluate the NDRMF's performance and progress.

ADB = Asian Development Bank, NDRMF = National Disaster Risk Management Fund, SECP = Securities and Exchange Commission of Pakistan, TA = technical assistance.

Source: ADB

V. ASSURANCES AND CONDITIONS

34. The government has assured ADB that implementation of the project shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the PAM and loan documents.

35. The government has agreed with ADB on certain covenants for the project, which are set forth in the loan and grant agreements.

36. The conditions for loan and grant effectiveness are that (i) the NDRMF has been incorporated as a not-for-profit association under section 42 of the Companies Ordinance, 1984; and (ii) the project agreement, in form and substance satisfactory to ADB, has been duly executed and become fully effective and legally binding on the NDRMF in accordance with its terms.

37. The conditions for loan and grant disbursement are that (i) the NDRMF has appointed financing and accounting specialists for its finance and accounts departments, with qualifications, experience, and expertise acceptable to ADB; (ii) the subsidiary grant agreement, in form and substance satisfactory to ADB, has been duly executed between the government and the NDRMF; and (iii) the NDRMF has established an ESMS, in a manner satisfactory to ADB, before any disbursement is made for an eligible subproject.

VI. RECOMMENDATION

38. I am satisfied that the proposed loans would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve

- (i) the loan of \$75,000,000 to the Islamic Republic of Pakistan for the National Disaster Risk Management Fund, from ADB's ordinary capital resources, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; for a term of 25 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board; and
- (ii) the loan in various currencies equivalent to SDR90,180,000 to the Islamic Republic of Pakistan for the National Disaster Risk Management Fund, from ADB's Special Funds resources, with an interest charge at the rate of 2% per annum during the grace period and thereafter; for a term of 25 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board.

Takehiko Nakao
President

2 November 2016

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
<p>Outcome Increased and sustainable institutional and physical capacity to reduce the socioeconomic and fiscal impacts of natural hazards and climate change</p>	<p>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).</p>	<p>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</p>	<p>The government's commitment to the NDRMF changes over time due to political considerations and competing priorities.</p>
<p>Outputs 1. The NDRMF established and made operational</p>	<p>1a. Requisite governance, operational, fiduciary, and safeguard (including gender) procedures, policies, and systems are in place by December 2016 (2016 Baseline: 0).</p> <p>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).</p> <p>1c. The endowment fund is invested in appropriate vehicles by March 2017 (2016 Baseline: 0).</p> <p>1d. Communication, disclosure, and public relations strategies of the NDRMF are developed by June 2017 (2016 Baseline: 0).</p> <p>1e. A comprehensive ERP for the fund is developed and deployed by 2018 (2016 Baseline: 0).</p> <p>1f. The first request for proposals to FIPs is issued by June 2017 (2016 Baseline: 0).</p> <p>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 Baseline: 0).</p>	<p>1a. Donor review and NDRMF progress reports</p> <p>1b. Minutes of the NDRMF board meeting and NDRMF periodic progress reports</p> <p>1c-i. NDRMF quarterly progress reports</p>	<p>The NDRMF is unable to retain quality human resources to maintain high quality due diligence.</p>

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
<p>2. Investment to reduce vulnerability to natural hazards increased</p> <p>3. Analytical work and products to improve the fiscal management of disaster risk completed</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. An 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. 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 of early warning systems increases by 10% by 2019 (2016 baseline: 80%).</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>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>3a–b. Approved DRF strategy; independent monitoring by ADB-financed TA consultants; and NDRMF quarterly 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>

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 an 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 a 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: \$125.0 million (Asian Development Fund loan)
 \$75.0 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, 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.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=50316-001-3>

1. Loan Agreement: Ordinary Operations
2. Loan Agreement: Special Operations
3. Grant Agreement
4. Sector Assessment (Summary): Finance (Disaster Risk Management)
5. Project Administration Manual
6. Contribution to the ADB Results Framework
7. Development Coordination
8. Attached Technical Assistance
9. Economic and Financial Analysis
10. Country Economic Indicators
11. Summary Poverty Reduction and Social Strategy
12. Gender Action Plan
13. Financial Intermediary: Environmental and Social Management System Arrangement
14. Risk Assessment and Risk Management Plan