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R2016-0057/1

March 31, 2016

Closing Date: Wednesday, April 20, 2016 at 6 p.m.

FROM: The Acting Vice President and Corporate Secretary

Morocco

Integrated Disaster Risk Management and Resilience Program-for-Results

Program Appraisal Document

Attached is the Program Appraisal Document regarding a proposed loan to Morocco for the Integrated Disaster Risk Management and Resilience Program-for-Results (R2016-0057), which is being processed on an absence-of-objection basis.

Distribution:
- Executive Directors and Alternates
- President
- Bank Group Senior Management
- Vice Presidents, Bank, IFC and MIGA
- Directors and Department Heads, Bank, IFC and MIGA

DOCUMENT OF

THE WORLD BANK

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REPORT NO. 104208-MA

PROGRAM APPRAISAL DOCUMENT

ON A

PROPOSED LOAN

IN THE AMOUNT US$200 MILLION

TO THE

KINGDOM OF MOROCCO

FOR AN

INTEGRATED DISASTER RISK MANAGEMENT AND RESILIENCE PROGRAM-FOR-RESULTS

March 29, 2016

SOCIAL, URBAN, RURAL AND RESILIENCE GLOBAL PRACTICE
MIDDLE EAST AND NORTH AFRICA

CURRENCY EQUIVALENTS

(Exchange rate effective February 29, 2016)

Currency Unit	=	Moroccan Dirhams
MAD 1	=	U$0.10
US$1	=	MAD 9.91
€ 1	=	US$1.00

FISCAL YEAR

July 1 – June 30

ABBREVIATIONS AND ACRONYMS

AAL	Average Annual Loss
ABH	Water Basin Agency (*Agence du Basin Hydraulique*)
ACAPS	Insurance and Social Welfare Supervisory Authority (*Autorité de Contrôle des Assurances et de la Prévoyance Sociale*)
ARAP	Abbreviated Resettlement Action Plan
CAS	Budget instrument (*Compte d'Affectation Spéciale*)
BCR	Benefit Cost Ratio
CfP	Call for Proposals
CVC	Center for Control and Coordination (*Centre de Veille et de Coordination*)
CY	Calendar Year
DAA	Directorate of Administrative Affairs (Direction des Affaires Administrative)
DAPS	Insurance and Social Welfare Supervisory Agency (*Direction des Assurances et de la Prévoyance Sociale*)
DLI	Disbursement Linked Indicator
DRM	Disaster Risk Management
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESSA	Environmental and Social System Assessment
FA	Financing Agreement (*Convention de financement*)
FIDS	Simplified Diagnostics Sheet
FIES	Environmental and Social Information Sheet
FLCN	Fund for the Fight against the Impacts of Natural Disasters (*Fonds de Lutte Contre les Effets des Catastrophes Naturelles*)
FSA	Fiduciary System Assessment
FSEC	Solidarity Fund (*Fonds de Solidarité contre les Evénements Catastrophiques*)
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
IGAT	General Inspectorate of Territorial Administration (*Inspection Générale de l'Administration Territoriale*)
IGF	General Inspectorate of Finance (*Inspection Générale de Finance*)
IRR	Internal Rate of Return
IVA	Independent Verification Agent
M&E	Monitoring and Evaluation

MAGG	Ministry of General Affairs and Governance (*Ministère des Affaires Générale et de la Gouvernance*)
MEF	Ministry of Economy and Finance (*Ministère de l'Économie et des Finances*)
MnhPRA	Morocco Natural Hazards Probabilistic Risk Assessment
MoI	Ministry of Interior
PAP	Program Action Plan
PDO	Program Development Objective
POM	Program Operations Manual
PPD	Public Procurement Decree
PforR	Program for Results
SAI	Internal Audit Service in the Treasury and External Finance Directorate (*Service de l'Audit Interne de la Direction du Trésor et des Finances Extérieures)*
SCR	Central Reinsurance Company (*Société Centrale de Réassurance*)
SDC	Swiss Agency for Development and Cooperation
SECO	Secretariat of Economic Development and Cooperation
SG	Secretariat General (*Secrétariat Général*)
SOE	State Owned Enterprise
UNFCC	United Nations Framework Convention on Climate Change

Regional Vice President:	Hafez Ghanem
Global Practice Vice President:	Laura Tuck
Country Director:	Marie Francoise Marie-Nelly
Practice Manager:	Ayat Soliman
Task Team Leaders:	Axel Baeumler / Olivier Mahul

KINGDOM OF MOROCCO

Integrated Disaster Risk Management and Resilience Program-for-Results

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PAD DATA SHEET

Kingdom of Morocco

Integrated Disaster Risk Management and Resilience Program

PROGRAM APPRAISAL DOCUMENT

Middle East and North Africa Region
Social, Urban, Rural and Resilience Global Practice

Basic Information

Date:	March 29, 2016	Sectors:	Flood protection (60%), General finance sector (30%),General agriculture (10%)
Country Director:	Marie-Francoise Marie Nelly	Themes:	Urban planning and housing policy (10%); City-wide infrastructure and service Delivery (40%); Water resource management (20%); Other financial sector development (30%)
Practice Manager/Director:	Ayat Soliman/Ming Zhang		
Program ID:	P144539		
Team Leader(s):	Axel Baeumler/ Oliver Mahul		

Program Implementation Period:	Start Date: 04/20/2016	End Date: 12/31/2021	
Expected Financing Effectiveness Date:	06/01/2016		
Expected Financing Closing Date:	12/31/2021		

Program Financing Data

[x] Loan [ ] Credit	[ ] Grant	[ ] Other

For Loans/Credits/Others (US$, millions):

Total Program Cost:	258.00	Total Bank Financing :	200.00
Total Cofinancing :	58.00	Financing Gap :	0

[redacted]

Financing Source	**Amount** (US$, millions)
BORROWER/RECIPIENT	58.00
IBRD/IDA	200.00
Total	258.00

[redacted]

Borrower: The Kingdom of Morocco

Responsible Agency: Ministry of Interior

Contact:	Mr. Nour-Eddine Boutayeb	Title:	General Secretary
Telephone No.:	011212537215558	Email:	nboutayeb@interieur.gov.ma

Responsible Agency: Ministry of Economy and Finance

Contact: Mr. Fouzi Lekjaa		Title: Director	
Telephone No.:	011212537677266	Email:	lekjaa@db.finances.gov.ma

[redacted]

Expected Disbursements (in US$, millions)

Fiscal Year	2017	2018	2019	2020	2021	
Annual	65	20	49	37	29	
Cumulative	65	85	134	171	200	

[redacted]

Program Development Objective(s)

To improve the institutional framework to finance disaster risk reduction activities and strengthen financial resilience to natural disasters for targeted populations in the Program area.

Compliance

Policy

Does the program depart from the Country Assistance Strategy in content or in other significant respects?	Yes [ ]	No [X]
[redacted]		
Does the program require any waivers of Bank policies applicable to Program-for-Results operations?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [ ]

Is approval for any policy waiver sought from the Board?	Yes [ ] No [X]
Does the program meet the Regional criteria for readiness for implementation?	Yes [X] No [ ]

Overall Risk Rating: Substantial

Legal Covenants

Name	Recurrent	Due Date	Frequency
Adoption of the POM [Article IV Section 4.01]	No	Effectiveness	n.a.

Description of Covenant
The Program Operations Manual, in form and substance satisfactory to the Bank, has been adopted by the Borrower.

[redacted]

Team Composition

Bank Staff

Name	Title	Specialization	Unit
Abdoulaye Keita	Sr. Procurement Specialist	Procurement	GGODR
Aissatou Diallo	Sr. Finance Officer	Finance	CTRLA
Alejandra Linares-Rivas	Disaster Risk Management Specialist	Disaster Risk Management	GSURR
Andrea Liverani	Program Leader	Social Development	GSURR
Andrea Zanon	Sr. Disaster Risk Management Specialist	Disaster Risk Management	GSURR
Axel Baeumler	Task Team Leader	Economist	GSURR
Charlene d’Almeida	Program Assistant	Operational Support	GSURR
Franck Bessette	Sr. Financial Management Specialist	Financial Management	GGODR
Imad Saleh	Operations Advisor	PforR Advisor	OPSPQ
Jean-Charles de Daruvar	Sr. Counsel	Legal	LEGAM
Jose Angel Vilallobos	Sr. Insurance Specialist	Peer Reviewer	GFMDR
Laila Moudden	Financial Analyst	Financial Management	GGO23
Mohamed Medouar	Sr. Rural Development Specialist	Agriculture	GFADR
Mook Bangalore	ET Consultant	Disaster Risk Modelling	GCCCE
Nathalie Munzberg	Sr. Counsel	Legal	LEGAM
Niels Holms-Nielsen	Lead Disaster Risk Management Specialist	Peer Reviewer	GSURR
Najat Yamouri	Sr. Social Development Specialist	Citizen Engagement	GSURR
Olivier Mahul	Head/ Co-Task Team Leader	Disaster Risk Finance	GFMDR
Rama Krishnan Venkateswaran	Lead Financial Management Specialist	Financial Management	GGODR
Sofia Bettencourt	Lead Operations Officer	Peer Reviewer	GCCDR
Soumia Driouch	Program Assistant	Operational Support	MNCMA

Stephane Hallegatte	Sr. Economist	Peer Reviewer	GCCCE
Taoufiq Bennouna	Sr. Natural Resources Mgmt. Specialist	Environmental Systems	GENDR
Vincent Roquet	Sr. Social Development Specialist	Social Systems	GSURR
Xioalan Wang	Sr. Operations Officer	Peer Reviewer	GSURR
Non Bank Staff			
Name	**Title**	**Specialization**	
Abdelsalaam Dahman Saidi	Consultant	Risk Management	
Alexandra Niesslein	Consultant	Social Systems	
Angelo Bonfiglioli	Consultant	Environmental Systems	
Charles Scawthorn	Consultant	Risk Assessment	
Erwann Michel-Kerjan	Consultant	Risk Strategy	
David Webber	Consultant	Operations Adviser	
Sara Boughedir	Consultant	Operational Support	

I. STRATEGIC CONTEXT

A. Country Context

1. **Morocco has been enjoying a steady political and economic development trajectory in recent years**. In contrast with the historic events that have swept through the Middle East and North Africa region in the wake of the Arab Spring since 2011, Morocco has remained stable. Morocco's economy has also performed relatively well. The average growth rate of its non-agricultural sectors has been 3.7 percent since 2007, despite successive external shocks, most notably the global financial and subsequent Eurozone crises and, during 2010–2014, the high price of oil of which Morocco is a large importer. Gross domestic product (GDP) per capita has doubled in nominal terms relative to the early 2000s, and reached US$3,070 in 2014. Morocco's economic growth has greatly contributed to reducing poverty and boosting shared prosperity. However, poverty, inequality, and vulnerability remain widespread and continue to constitute important development challenges. Although extreme poverty has almost been eradicated, nearly 11.5 percent of the population, or 3.9 million Moroccans, remain vulnerable in 2014 and are under constant threat of falling back into poverty.[1] The wellbeing of the bottom 40 percent of the population has also improved, but Morocco's Gini coefficient at 0.41 signals a relatively high level of income inequality.

2. **Morocco remains vulnerable to a number of different exogenous shocks, including from natural hazards**. Several natural disasters have affected communities throughout the country in recent years. Morocco's natural disaster risk is of both chronic and acute nature. Flooding is a chronic recurrent problem, and floods in Tangier (2008), Al Gharb (2009), and in Guelmin (2014) caused deaths, major economic loss, and asset destruction. Between 2000 and 2013, Morocco experienced 13 major flood events that together killed 263 persons and caused over US$427 million in direct property damage.[2] The most recent major flood in Guelim (2014) alone caused 47 deaths and overall economic losses of US$600 million.[3] Moreover, Morocco has the potential for massive acute events, as shown by the 1960 Agadir earthquake, which killed 12,000 and injured 25,000 Moroccans. It virtually destroyed the city even though it was only magnitude 5.8 (comparable events in other countries rarely kill at all), and left the population homeless and deprived many of their livelihoods. The potential for earthquake loss was shown in the 2004 Al-Hoceima magnitude 6.4 earthquake, which killed 628 people and injured over 1,000. Direct economic loss for the 2004 earthquake was US$400 million. The potential exists for much larger earthquakes such as in Fes or Tangiers, which are situated close to or on the European/ African plate boundary. In recognition of these vulnerabilities the government has begun to

[1] Extreme poverty (measured at US$1 PPP per day per person) has been almost eradicated in Morocco and relative poverty (US$ 2.15 PPP per day per person) declined from 15.3 percent in 2001 to 4.2 percent in 2014. The 1.5 percent vulnerable population refers to those with per capita expenditure between relative poverty at national threshold and 1.5 times this threshold. Vulnerable people are not poor, but at high poverty risk. Source: Haut-Commissariat au Plan (2015). *Morocco between Millennium Development Goals and Sustainable Development Goals; Achievements and Challenges*.
[2] EM-DAT, www.emdat.be; in 2014 US dollars and note that the above amount only captures property damage. Data on total economic losses are incomplete.
[3] TARGA, & Zurich Insurance. (2014). *Risk Nexus Morocco floods of 2014 : what we can learn from Guelmim and Sidi Ifni*.

significantly enhance its overall approach to managing risk, starting with risks from natural hazards as a first priority.

3. **Reducing the impact of natural hazards is of central importance for the World Bank Group's twin goals of ending extreme poverty and boosting shared prosperity in a sustainable manner.**[4] While growth in recent decades has reduced poverty and boosted shared prosperity in Morocco, shocks such as natural hazards, if not well managed, can threaten progress towards both twin goals. Natural hazards have disproportionate negative impacts on low-income populations in Morocco, both in terms of impact and the ability to adapt. On impact, for a given hazard, a simple vulnerability[5] analysis suggests that in Morocco, the vulnerability of assets of poor people (defined as the bottom 20 percent) is 69 percent higher than for the assets of non-poor people. Additionally, poor people already have a larger percentage of their assets in material form, and are thus more vulnerable to natural hazards. Poor people are also less able to adapt to shocks through having access to financial resources (savings and borrowing). Only 5 percent of poor people have some form of access to finance, compared to 17 percent of non-poor people. These two findings – of higher vulnerability and less ability to adapt – suggest that when a natural hazard strikes, low-income populations are hit the hardest.

4. **The impact of natural hazards is exacerbated by climate change, an area of particular interest for Morocco in light of the 22nd Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) which will be hosted by Morocco in 2016.** Morocco, similar to other countries in the region, will be affected by climate change at both 2°C and 4°C warming levels, particularly due to increased projected heat extremes and reduction of water availability. In a +2°C world, heat extremes will occur in about 30 percent of summer months almost everywhere in the Middle East and North Africa region, and an average 35 cm sea-level rise by the end of the century is projected for a +1.5°C world, for example, for Tangier on Morocco's Atlantic coast.[6] Rainfall in the interior of Morocco could decrease by as much as a third in summer months.[7] More than 20 million Moroccans out of a total population of 33.8 million live in urban areas with the urban population projected to increase by over 4 million by 2030[8]. Urbanization is an exacerbating factor for vulnerability and will increase the exposure of people and economic assets to disasters, especially in coastal areas where the largest cities and economic assets are typically located and where 42 percent of the coastline will be at high risk of erosion and floods by 2030. For example, Casablanca, Morocco's largest city, is currently home to 3.3 million people and is expected to grow by more than 50 percent to over 5 million residents by 2030, with some of this urban expansion expected to occur in more risk-prone areas. The city is already highly vulnerable to flooding, coastal erosion, and marine inundation and its vulnerability will only become more pronounced.

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[4] World Bank. 2016. *Shock Waves: Managing the Impacts of Climate Change on Poverty*.
[5] Vulnerability is defined as the potential damage to housing stock due to flood events.
[6] World Bank Group. 2014. *Turn Down the Heat: Confronting the New Climate Normal*.
[7] World Bank Climate Change Portal:
http://sdwebx.worldbank.org/climateportalb/home.cfm?page=country_profile&CCode=MAR&ThisTab=ClimateFuture
[8] Haut-Commissariat au Plan (2014): *Recensement Général de la Population et de l'Habitat*.

B. Sectoral (or Multisectoral) and Institutional Context

Morocco's Natural Disaster Risk Profile

5. **Morocco is exposed to significant recurrent hazards and faces the potential for major catastrophes**. Recognizing that disasters can have severe human and economic impacts, Morocco has invested significantly in recent years in order to better understand and quantify its exposure to its most important natural hazards with the objective to better assess and thus manage its risks. As part of its long-standing partnership with the World Bank on integrated risk management (see Box 1), Morocco has developed a state-of-the-art GIS-based catastrophe risk modeling, Morocco Natural Hazards Probabilistic Risk Assessment (MnhPRA). This new capability allows for a macro level analysis for risks of earthquake, flood, tsunami, drought and landslide across Morocco. Morocco has also developed disaster-related macroeconomic modeling capability to capture long-term impact of these catastrophes on the national economy and specific sectors, as well as to inform policy options for reducing the effects of disasters. These tools are already used by the Ministry of Economy and Finance (*Ministère de l'Économie et des Finances*, MEF) in the implementation of Morocco's catastrophic risk insurance program as envisaged by the associated draft law. As such, Morocco has good analytical tools in place to measure its overall exposure to natural disasters and guide its emerging national risk management and resilience strategy.

Box 1. Morocco's Evolving Approach toward Integrated Disaster Risk Management and Resilience

The Government of Morocco and the World Bank have had a partnership on risk management since 2008. Initially, this partnership focused on providing Technical Assistance on inputs for an integrated risk management strategy, covering multiple risks the country is facing including: (i) natural disasters, (ii) commodity (energy) price volatility risk, and (iii) risks in the agricultural sector. The outcome of the Technical Assistance provided is summarized in the 2013 World Bank Publication "Building Morocco's Resilience: Inputs for an Integrated Risk Management Strategy"[9] which highlighted disaster risk as a particular concern and led to the Government officially requesting in 2012 a new lending operation. The choice to focus on disaster risk management (DRM) was driven by client demand to focus on a subset of risks in order to move toward concrete institutional reform changes and risk and vulnerability reduction results on the ground. Since then, the Bank has worked closely with the General Secretary of the Ministry of Interior (MoI) in efforts to redesign the existing Fund for the Fight against Natural (FLCN) Disasters (*Fonds de Lutte contre les Effets des Catastrophes Naturelles)* to become a "national resilience fund". The Bank has also continued to provide Technical Assistance to MEF on disaster risk insurance and finance issues. This more focused engagement aims at providing the basis for a changed operational approach in Morocco to managing risks in a more integrated manner (but starting with a specific subset of risks first) in line with the recommendations of the 2014 World Development Report on "Risk and Opportunity".

6. **The impacts of recurrent medium size disasters and rarer but more severe events on Morocco's budget and the economy are sizeable**. As of 2013, Morocco's total built environment exposure amounts to MAD 2.7 trillion (or equivalently about MAD 84,000 per capita). Buildings represent about 70 percent of the total value at risk, with the remaining 30 percent consisting of infrastructure for water and wastewater, ports, airports, rail and roads, and the electrical network. Given this exposure and Morocco's hazard environment, modeling indicates that natural hazards losses average a minimum of MAD 7.8 billion per year[10], with about 60 percent of losses due to flooding events. Moreover, annual averages are only one aspect of Morocco's vulnerability, the potential for very severe events being the other. According to a

[9] World Bank Group. 2013. *Building Morocco's Resilience: Inputs for an Integrated Risk Management Strategy*.
[10] Idem and Global Climate Change Risk Index 2016.

World Bank study, there is a 67 percent probability that over the next 30 years a single event will cause losses of MAD 25 billion or greater.[11] Aggravating this situation is the lack of catastrophic risk insurance – except for large private industrial or commercial assets, there is currently no insurance against the economic consequences of natural disasters in Morocco.

7. **Morocco's population is not sufficiently aware of its risk exposure and sees risk management as the government's responsibility**. People in most countries, and Morocco is no different, have an expectation that government is actively working to reduce catastrophic risk and is prepared to adequately respond when disaster strikes. Failure to meet this expectation can quickly lead to major unrest and social tensions.[12] To avoid such failure, a proactive approach to managing disaster risk is needed. However, the government can only do so much – a key step for reducing disaster risk will be to raise awareness about risk exposure and how to mitigate potential impact at the local level. Unless a disaster has recently affected people personally, it is common to underestimate the risk of disasters: "it's not going to happen to us". As a result, local investment in risk reduction measures and risk awareness programs are often not seen as a priority until after a disaster, when it is too late. This is particularly challenging for the poorest populations with a lower level of education and few means to protect themselves. A recent survey on community-level perception of risks[13] in four urban and rural communes in the provinces of Guelmin, Hoceima, Taounate and Chefchaouen indicates a general awareness of exposure to disaster risks (84 percent of respondents owned their own home and wished to reduce the potential damage to their property), but hazard-specific knowledge was limited (89 percent of the respondents considered floods as the main risk, even in highly seismic areas). Although all respondents recognized that they could play a role in the management of natural hazards, including through community action, 81 percent thought that investing in risk management is a local and national government responsibility. Understanding these perspectives and limitations is important when designing disaster risk mitigation and resilience actions.

Institutional Set-up and Current Weaknesses

8. **Morocco's DRM practices, until recently, were characterized by institutional fragmentation and a predominantly reactive approach**. Like in many middle-income countries, Morocco's approach has been heavily weighted towards crisis response and has remained highly sectoral. Each disaster created duplicative "urgent" new programs in the affected area, resulting in an imbalanced approach nation-wide. DRM initiatives are often implemented in silos (per ministry, per type of risk) and suffer from institutional fragmentation with little coordination between the relevant government agencies. Institutionally, risks are insufficiently understood, and are managed by different agencies in an uncoordinated manner. Different stages within the risk management cycle (i.e. preparedness, mitigation, recovery) are also managed in silos and the required linkages are not consistently made. For example, MoI, to date, is mandated with overall crisis management, and prevention and preparedness for local governments but other mandates lie with different sectoral Ministries (see Box 2). All these factors combined have been an impediment to Morocco's ability to develop a comprehensive and

[11] Idem.
[12] Pelling, M., and Dill, K. 2010. *Disaster politics: tipping points for change in the adaptation of sociopolitical regimes.* Progress in Human Geography, 34(1), 21–37.)
[13] World Bank Group. 2013. *Morocco Community Based Disaster Risk Management*.

more effective approach to risk management, covering all its various dimensions, recognizing interdependencies across risks and geographical areas and demonstrating a learning curve based on experiences.

Box 2. Overview of the Institutional Context for DRM in Morocco

MoI and the **MEF** are central players in DRM. MoI is in charge of crisis prevention (Article 1 from Decree N° 2-97-176/ 1997) and is also the lead Ministry for crisis response (Circular N°23 and 172 Plan ORSEC, *Programme d'organisation des secours à l'échelon départemental, en cas de catastrophe*). At the local level, Governors are in charge of overall inter-ministerial coordination on the ground during a crisis (Article 102 of the Constitution, articles 2 et 3 of the Dahir / 1977); the Center for Control and Coordination (*Centre de Veille et de Coordination*, CVC) in MoI is in charge of coordinating emergency situations and assisting the local governments during crises. The Civil Protection is in charge of crisis intervention on the ground both at the local and national levels, in full coordination with the Governors and MoI's CVC; the General Secretary of MoI who reports directly to the Minister, is in charge ("*ordonnateur*") of Morocco's FLCN (Law 40-08/ 2009 Budget Law). The MEF has a mandate to finance risk management projects through the annual budget allocation to line ministries and provide appropriations for the FLCN. In addition, the MEF has been in charge of developing Morocco's catastrophic insurance law and, of course, the MEF bears all fiscal liabilities after a disaster occurs.

Line Ministries and associated Departments have functional risk management responsibilities. The **Department of Environment** under the **Ministry of Mines, Energy, Water and Environment** has the mandate for elaborating, in collaboration with Ministries, a strategic approach for risk management covering preparedness and response (Decree N° 2-99-922/ 2000). The **Ministry of Urban and Territorial Planning** has the mandate to develop laws and regulations on disaster risk prevention in urban planning, including on land use and building standards (a seismic building code was developed in 2002 (Decree n°2-02-177, February 22, 2002) and updated in 2011. The **Department of Water** has the mandate for flood and drought management and mitigation (Water Law 10-5/1995). The Water Basin Agencies (ABS, *Agences Hydrauliques de Bassin)* have the mandate to mitigate flooding at the local level. The **Ministry of Transportation and Equipment** and the **Department of Energy** are in charge of protecting respectively the transportation infrastructure (rail, roads, bridges, harbors, airports, etc.) and the energy-related infrastructure (power supply, transmission and distribution). The **Ministry of Agriculture** is in charge of managing all disaster risk-related impacts on the agricultural sectors (droughts, floods, etc.) and developing an agricultural risk management strategy. Within the Ministry of Agriculture its irrigation department is in charge of protecting irrigation infrastructures against floods.

Specialized agencies and research institutes also play key roles. The **National Meteorology Department** leads all activities related to weather and climate information, including research activities (Decree N° 2-94-724/ 1994). The **National Center for Scientific and Technical Research** (*Centre National pour la Recherche Scientifique et Technique*) conducts research on seismic activity and has produced maps of the national seismic hazard zones. The *Haut Commissariat aux Eaux et Forêts* is in charge of forest fire monitoring.

9. **The Government recognizes that a more proactive, ambitious, transparent, and results-based strategy needs to be implemented, so as to increase the country's resilience to natural disasters**. The Government's efforts need to be better coordinated to assure institutionalization and sustainability of its risk management activities. With increasing visibility of government actions, including in light of increased social media in the aftermaths of disasters, transparency across a wide range of government DRM actions is essential, from risk reduction investment selection, to how projects are implemented and evaluated. Furthermore, as part of Morocco's ongoing decentralization process, there is the need to assure a territorially more balanced approach of risk management activities in which subnational government entities lead not only post disaster response but also local risk reduction actions. This is fully in line with the recently approved Organic Law on decentralization (June 2015) in Morocco, which further empowers subnational government to lead local development efforts. At the central Government level, MoI plays the pivotal role in DRM through its crisis response functions via the CVC and

the Civil Protection Agency and its central position within the Government, which allows it to coordinate horizontal (across ministries) and vertical (between national and local governments) integration.

C. Relationship to the Country Partnership Strategy and Rationale for Use of Instrument

10. **The proposed Program for Results (PforR) operation will contribute toward the World Bank Group's twin goals of ending extreme poverty and boosting shared prosperity in a sustainable manner, given that the poor are often affected the most by natural disasters exacerbated by the impact of climate change.** It is also consistent with the Bank Group's Country Partnership Strategy for Morocco for 2014–2017 (Report No. 86518-MA) discussed by the Board of Executive Directors on April 1, 2014. In particular, it will support Results Area 2, "Building a Green and Resilient Future" and specifically Strategic Outcome 2.1 "Strengthen Management of Soil, Coastal, and Water Resources" which includes the Bank's support to addressing climate change issues and Strategic Outcome 2.2 "Better Integrate Mechanisms to Prevent and Mitigate against Natural Disasters". It will also support Results Area 3, "Strengthening Governance and Institutions for Improved Services" in several ways. Specifically, it will contribute to the achievement of Strategic Outcome 3.2 "Enable more transparent and accountable management of public resources" through the effective establishment of a structured funding mechanism for risk management in Morocco. It will also support Strategic Outcome 3.3 "Improve capacity to plan, manage and assess the delivery of key services, especially at the local level" by strengthening national and local-level capacity to plan for and manage risk.

11. **The proposed operation is also aligned with the new Middle East and North Africa Regional Strategy.** The Program will contribute to *renewing the social contract* by helping the Government of Morocco to build capacity at various levels to more effectively respond to citizens' demand for protection against shocks. The Program will have a focus on smaller and poorer communities, which are often the least prepared to deal with vulnerabilities. It will also contribute to employment creation (e.g., through civil works) and significantly leverage the private sector through the introduction of a comprehensive catastrophic risk insurance scheme. Specifically, the Program introduces a public-private partnership for the financing of recovery from catastrophes whereby the private insurance industry will offer (compulsory) catastrophic risk insurance guarantee to insured households and small and medium enterprises, deepening the domestic insurance market and creating new insurance business opportunities. Citizen participation is also embedded in the design of the operation in line with the new provisions in Morocco's Constitution. In addition, by redirecting Morocco's risk management from ex-post response toward an ex-ante culture of preparedness, the Program can serve as a model of how to "stay ready/prepared" for a variety of shocks, an approach that could be replicated under the *resilience to refugee and migration shocks* and *reconstruction and recovery* pillars of the Regional Strategy.

12. **Rationale for use of the PforR instrument**. The PforR has been identified as the most appropriate lending instrument for a number of reasons. First, the PforR is an effective instrument to ensure that the Bank's assistance provides incentives for achievement of concrete results by directly linking Bank disbursements to intended results. In addition, the instrument

allows for targeting Bank implementation support, including through the mobilization of technical assistance, on the achievement of these results. Second, the PforR is well suited to support a government program that aims to improve the strategic management of an existing expenditure framework, including through more transparent investment selection processes and better monitoring and evaluation (M&E). Third, the PforR enables the Borrower to use its own systems and focus Bank support on improving their efficiency and effectiveness, including on fiduciary and social and environmental issues.

II. PROGRAM DESCRIPTION

A. Government Program

13. Morocco has begun developing an integrated DRM reform program, which combines elements of institutional reform with risk reduction investments and risk insurance to ensure that residual risks that cannot be cost-effectively mitigated are efficiently financed. The Government program consists of the consolidation and further development of Morocco's risk management activities and specifically aims to: (i) improve Morocco's institutional DRM framework and capacity; (ii) scale up disaster risk reduction investments in both structural and non-structural measures[14] and assure such investments are transparently selected, strategic, and cost effective; and (iii) protect vulnerable populations and economic assets through creation of catastrophic risk insurance and a financial safety net for the most vulnerable who are often not insured.[15]

Subprogram One: Promoting Institutional Reform and Capacity Building

14. The objective of the first Subprogram is to further develop Morocco's existing institutional DRM structure. As an initial step, the Government has begun improving its approach to managing disaster risks with a focus on promoting ex-ante mitigation and preparedness, to complement its post-event recovery activities. To this end, the Government has begun to fundamentally reform its FLCN so that it can develop into a "national resilience fund". The reform seeks to establish a more systematic process within the Government of Morocco, addressing DRM in an integrated manner covering DRM activities implemented by central government line ministries and other national entities (horizontal integration) and also by provincial and local governments (vertical integration). It thereby aims to improve Morocco's strategic orientation and governance arrangements for DRM around the improved operation of the FLCN, with a focus on ex-ante mitigation and preparedness.

[14] DRM distinguishes between structural measures – those that directly reduce damage – and non-structural measures that indirectly will lead to damage reduction. Structural measures are typically engineering projects such as flood protection walls or seismically retrofitting buildings. Non-structural measures are often broader in their nature, such as building codes, hazard mapping and warning systems, and also include activities such as risk awareness campaigns and risk analysis. For further information, see http://www.unisdr.org/we/inform/terminology#letter-s.

[15] Morocco's need for a more proactive approach to risk management, the reduction of institutional fragmentation, and development of a risk insurance framework was a key conclusion of the multi-year partnership between the Government of Morocco and the World Bank (see also Box 1).

Box 3. Operating Experience of the FLCN to date

The FLCN was established by the 2009 Budget Law as a budget instrument (*Compte d'Affectation Spéciale*, CAS)[16] within MoI, in response to a series of natural catastrophes in Morocco, specifically the floods in Gharb province in 2008. The total budget of the CAS-FLCN for the period 2009–2012 was MAD 1,960 million, composed of an initial MAD 861 million donation from Saudi Arabia in the immediate aftermath of the 2008 floods, MAD 300 million from the Hassan II Fund for Economic and Social Development, and MAD 800 million from the national budget over this four year period (MAD 200 million per year). A total of MAD 830 million or 43 percent of the funds went to reconstruction and repair of areas affected by the floods (e.g., damaged roads, irrigation infrastructure, emergency program for housing flood victims and housing reconstruction, and support for post-disaster business re-startup). In addition, funds were allocated to pre-disaster risk reduction measures and preparedness, including flood protection works and construction or improvement of weather stations for improved quality and accuracy of weather forecasts. This preventative investment portion represented MAD 800 million or 40 percent of the FLCN's 2009–2012 budget resources. The remaining MAD 310 million (17 percent), was spent for emergency response preparedness, including equipment for the Civil Protection Agency.

15. During this initial period (2009–2104), the FLCN mainly played the role of a budgetary intermediary, redistributing funds from donations and governmental budget allocations to central government line Ministries. Moreover, there were no clear selection criteria regarding the type of projects to be financed and most of the selection was done on an ad hoc basis, with no analytical basis for allocating fund proceeds and no systematic evaluation and ongoing monitoring during implementation (beyond MoI's management of the approval of FLCN allocations). The FLCN was essentially designed as a temporary response to a specific disaster, but continued to receive a MAD 200 million annual allocation from the national budget in 2013, 2014, and 2015. The Government has recognized the need and opportunity to transform the FLCN to improve ex ante risk reduction efforts in high risk areas rather than using it mainly as a vehicle for reactive disaster response. This requires fundamentally restructuring FLCN's goals and mode of operation, as well as increasing its transparency, including through specifying clear eligibility and selection criteria for rule-based selection of projects.[17]

16. In this context, the Government has decided that the newly re-designed FLCN will provide co-financing of, and technical capacity building support to, a number of risk reduction projects each year. It will specifically focus on eligible risk reduction activities that measurably reduce disaster losses and protect life and property. It will also provide operational tools, training and capacity building to those who implement programs to make their community safer. As such the emerging "national resilience fund" will complement ongoing risk management activities undertaken by the line Ministries and local governments with a more targeted approach, incentivizing additional risk management activities, focusing on a set of specific projects selected for their quality and impact and supported by a multi-stakeholder approach. It will in particular establish a more effective "bottom-up" process of preparing risk reduction projects—and help to put local governments in charge of risk management.

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[16] A CAS in Morocco is a dedicated national budget instrument which allows for the allocation of resources earmarked for specific expenditures under the supervision of an "*ordonnateur*".

[17] These goals and some initial reform measures to be undertaken by the Government were identified as part of continued Technical Assistance provided by the World Bank in 2014 and early 2015; see: *CAS-FLCN. Eléments d'information pour la définition des axes prioritaires et des critères de sélection des projets soumis à financement, et mise en place opérationnelle*.

17. The Government seeks to institutionalize the improved governance of the redesigned FLCN by establishing a dedicated inter-ministerial Steering Committee comprised of key stakeholders across the Moroccan Government. The Steering Committee has de facto already been set up and met throughout 2015 but the GoM will in addition formalize the FLCN's new governance structure - as well as its revised strategic mandate – through a corresponding specification in the Budget Law and associated circulars. This will specify the membership of the Steering Committee to include—at the General Secretary levels—MoI (chair), MEF, Ministry of General Affairs and Governance (*Ministère des Affaires Générale et de la Gouvernance*, MAGG), the Ministry of Urban Planning and Territorial Development, etc. The Steering Committee will be supported by a Secretariat housed in the General Secretary's office of MoI, in charge of managing the selection and M&E process as specified in paragraph 49 and detailed in the Program Operations Manual (POM) throughout implementation. The selection of disaster risk reduction projects will be conducted by a larger National Selection Commission composed of representatives from different line Ministries, supported by technical experts, as needed.[18] The institutional reform agenda for the FLCN is explicitly designed to incorporate lessons of experience into the evolving risk management architecture of Morocco, including in terms of feeding into the development of a national disaster risk and resilience management strategy.

Subprogram Two: Scaling up Disaster Risk Reduction Activities

18. The objective of the second Subprogram is to expand the number and range of risk reduction projects through incentive financing provided by the reformed FLCN for eligible structural and non-structural risk reduction projects. This financing would be provided as co-financing, solicited through annual "Call for Proposals" (CfP), to eligible subprojects proposed and implemented by line ministries, provincial and local governments, public agencies and/or State-owned Enterprises (SOEs). The Steering Committee can also directly provide co-financing under conditions specified in the POM outside of the CfP provided that it does not exceed 20 percent of the total amount of FLCN funds allocated to eligible sub-projects.

19. The Government launched its first CfP in February 2015 for the allocation of available FLCN funds at the time, based on initial eligibility and selection criteria, developed with World Bank support.[19] The objective was to establish a "proof of concept", including in terms of demonstrating demand for FLCN funding, with lessons to be incorporated and institutionalized in subsequent CfPs from 2016 onward. The first CfP generated 91 proposals (with a total investment volume in excess of MAD 3 billion), of which 23 were selected with a total co-financing by the FLCN of MAD 251 million and over MAD 1 billion in total investment. An encouraging element lies in the balanced portfolio of selected projects, with 17 from regional and local governments and some non-structural activities. There is also good geographical representation across the country, corresponding to the higher hazard locations as identified through MnhPRA. Finally, the CfP encourage local governments with more limited financial resources to apply for funding by providing them a higher level of co-financing led to nine out of the 17 proposals from regional and local governments selected coming from such local governments (see Annex 1).

[18] The National Selection Commission and Secretariat will be established by circulars issued by MoI.
[19] The CfP 2015 was for an existing FLCN allocation from Morocco's own financial resources.

20. Future CfPs will be governed by details specified in the POM, which includes templates for the application form (*Cahier des charges*) with updated eligibility and selection criteria. The eligibility criteria, which build on those used in the first CfP, are provided for illustrative purposes only and will be further specified in the POM. They would include the following: first, the proposal has to demonstrate the local exposure to a specific risk of natural disaster and to focus on one or both of the two priorities of the FLCN (i.e. the protection and security of the people and/or the protection of physical assets to reduce economic losses). Second, the proposal can be for non-structural activities (e.g., risk assessment, risk awareness campaigns, and risk planning) or small structural investments, but cannot be for large structural investments that could have a negative impact on the population and the environment (see paragraphs 63 and 64 in section 4.C on social and environmental aspects). Third, the proposal can only be submitted by a line ministry, provincial and local government and its affiliated bodies, public agency and/or SOE.[20] Fourth, the proposal needs to demonstrate that the project will reduce exposure to natural disaster risk. The Steering Committee aims to particularly support sub-projects of local governments with more limited financial resources.[21]

21. The eligible applications will be ranked by the National Selection Commission according to specific selection criteria. Key indicative selection criteria (see Box 4) will be specified in detail in the POM and will include technical and financial feasibility, effectiveness, and implementation capacity along all key dimensions, including environmental, social and fiduciary issues, as well as the follow-up and treatment of beneficiaries' perspectives and grievances.

Box 4. Indicative Set of Selection Criteria for Co-Financing by the FLCN

For indicative purposes, selection criteria are shown below which build on the experience of the first CfP. The POM will specify measurable indicators which will be used as a filter for selecting projects:

Criterion 1: Disaster risk reduction objective and expected results are clearly defined (Relevance criterion). Indicators for this criterion verify that the main components of the project are fully focused on risk reduction and that results to be achieved by each activity are clearly defined.
Criterion 2: **A relevant and up-to-date technical study is available (Feasibility criterion).** This criterion focuses on a detailed review of the technical documentation of the application (is the documentation up to date, or older, is it focused on the proposed project or is it a broader study without direct link with the project?).
Criterion 3: Estimated costs are adequate and appropriately justified (Economic criterion). Indicators here verify unit costs according to pre-established reference points. Standard economic rates such as return on investment, can be used for this criterion.
Criterion 4: Limited environmental and social impact, assessed according to a pre-established framework (Environmental and Social criterion). Assessment forms included in the Cahier des Charges and attached to the POM will allow to evaluate environmental and social criterion. Social indicators will also include aspects on citizen engagement in terms of the identification, design, and implementation of the project.
Criterion 5: A technical and financial partnership covering all needs of the subproject is clearly established (Technical and Financial Partnership criterion). These indicators will focus on quality of the proposed partnership, the mobilized financial contributions, and an assessment of implementing agencies and their partners'

[20] It cannot be led by individuals, NGOs or firms in the private sector. This eligibility criterion was included in the 2015 CfP under the Government program. In future CfPs, the Government may decide to open applications also to non-state actors (NGOs etc.).
[21] Details to be provided in the POM. For the 2015 CfP, smaller municipalities were defined as 35,000 inhabitants or less. This can be revisited during implementation in order to develop a better pro-poor measure (going beyond the size of the municipality which is a proxy).

capacity to implement projects in line with the required social, environmental and fiduciary requirements.

22. In addition to improving the selection process, the second Subprogram will also include explicit emphasis on ensuring that the selected projects will be implemented so as to achieve the intended results. To this end, MoI together with MEF will sign a Financing Agreement (FA) (*convention de financement*) with the implementing agencies and their partners, which will specify all implementation requirements, including on social, environmental and fiduciary aspects. The FA will also specify the reporting requirements to the Steering Committee, which will form part of the M&E system to be introduced for the reformed FLCN. Implementation progress as well as results achieved by FLCN-funded projects will be published on a dedicated page of the interactive website to ensure transparency and increase accountability.

23. Overall, Subprogram Two is expected to significantly increase the number and quality of Morocco's disaster risk reduction projects ranging from non-structural projects such as smaller projects on local planning, hazard and risk mapping, public education etc. and somewhat larger efforts such as emergency warning systems and small-scale flood protection works, to more major structural programs such as larger flood protection works and seismic retrofitting of critical facilities (e.g., schools, hospitals and city halls) etc. The results from these projects will substantially contribute to the better protection of citizens against the impacts of natural hazard events – specifically, the potentially significant saving of lives, as well a greatly reduced property and economic loss. Another important result will be increased risk management capacity of government at all levels.

Subprogram Three: Improving Disaster Risk Financing and Insurance

24. As part of an integrated DRM strategy, residual catastrophic risks that cannot be cost-effectively mitigated should be efficiently financed. The objectives of the third Subprogram are therefore to: (i) design and implement a national insurance program against natural disasters for homeowners and businesses; and (ii) design and implement a dedicated Solidarity Fund (*Fonds de solidarité contre les événements catastrophiques*, FSEC) to partially compensate uninsured households affected by catastrophic events.

25. The overall Moroccan insurance market is ranked the third largest within the Arab world, but almost no insurance currently exists against catastrophic risk. Large industrial and commercial firms can seek insurance coverage against catastrophe risks from their Moroccan insurers. Yet property catastrophic risk insurance (for houses and cars) is under-developed since insurers consider such risks uninsurable. This creates a situation where most people expect the government to intervene or assume they will have to handle their loss by themselves, which can create social tension in the aftermath of a disaster. When the government has provided post disaster compensation, it has typically been done on an ad hoc basis.

26. The Government has contemplated the introduction of a National Catastrophic Risk Insurance Program (*Regime de couverture des consequences d'événements catastrophiques*) to improve the financial resilience of Moroccan citizens at risk. The current draft law (*Projet de loi n. 110-14*), developed with input provided by the World Bank, builds on and improves the initial draft law (*Projet de loi n. 34-08*) first discussed in 2008. The draft law went through an extensive consultation process with the private sector, and especially the domestic insurance industry, led

by the insurance supervisory authority, previously the Insurance and Social Welfare Supervisory Agency - *Direction des Assurances et de la Prévoyance Sociale* (DAPS), and now the Insurance and Social Welfare Supervisory Authority - *Autorité de Contrôle des Assurances et de la Prévoyance Sociale* (ACAPS). The draft law aims to compensate: (i) the victims who become permanently injured or die because of a catastrophe; and (ii) the destroyed assets, and especially private dwellings. This coverage would be provided through a dual program: (i) make mandatory a multi-hazard catastrophe extension of guarantee in property, automobile and third-party liability insurance policies with fixed tariffs; and (ii) establish a dedicated FSEC which would compensate uninsured victims, including poor households who cannot afford insurance. The insurance pillar of the program would follow international good practices.

27. The draft law designs a dual system to provide (basic) coverage against (natural and man-made) catastrophic events for both insured and uninsured households. In particular, the draft law entitles poor households (who are mainly uninsured) to receive (limited) financial compensation from the FSEC for personal injuries (including permanent disability and death), and loss of principal residence and loss of use of principal residence caused by catastrophic events. While this compensation scheme is not designed to cover all personal injuries and property losses, it offers a basic coverage that allows the affected poor households to obtain compensation for individual permanent disability/death and loss of principal residence (when this residence is inhabitable). This program is pro-poor as it creates a legal framework that gives affected poor households the right to receive financial compensation in case of a catastrophe. Most developing countries, including Turkey where catastrophic risk insurance is well developed through the Turkish Catastrophe Risk Insurance Pool, tend to support affected poor households through ad-hoc financial program, where the affected households do not know in advance if they will be compensated. This uncertainly contributes to their low resilience to disasters.

Box 5. National Catastrophic Risk Insurance Program

The draft catastrophic risk insurance law aims to improve the financial resilience of Morocco through a dual scheme founded on market-based insurance and solidarity principles. The draft law aims to cover (i) victims with bodily injury resulting to permanent disability or death and (ii) assets affected by natural and man-made disasters. The draft law modifies the current Insurance Law (n.17-99) and makes the multi-hazard (natural and man-made) catastrophe extension of guarantee mandatory in all property insurance policies, motor third party liability insurance policies, and third-party liability insurance policies. This means that any insured property is automatically covered against natural and man-made catastrophes. It also means that through the mandatory extension of the catastrophic risk insurance guarantee under the motor third party liability insurance that covers the vehicle owner and his/her family, the draft law will provide compensation for permanent disability/death to more than six million people or at least 18 percent of the population of Morocco. This compulsory guarantee will be financed through an additional insurance premium on the abovementioned insurance policies, to be fixed by decree. The draft law also establishes the FSEC as a legal entity. The FSEC aims to compensate non-insured households against loss of principal residence that becomes inhabitable, loss of use of the principal residence, and personal injuries (permanent disability and death) in case of a disaster. The FSEC would be mainly funded through: (i) initial contribution as set in the government budget law and (ii) additional taxes as set by decree. These taxes represent the contributions of the policyholders and the insurers.

28. The draft law brings in the private insurance sector. The proposed catastrophic risk insurance program is co-financed with the private sector through a public-private partnership to effectively share catastrophe risks. It relies on the financial capacity of the domestic insurance industry backed by the international reinsurance markets to finance catastrophe losses of insured

assets and individuals, financed through additional (mandatory) insurance premiums. In order to make this additional premium affordable for the policyholders and to protect the private insurance industry against major catastrophe losses, the draft law sets a system of maximum aggregate insurance payouts beyond which insurance payouts would be prorated. The draft law also includes a public guarantee against default risk of international reinsurers. It proposes an innovative combination of market-based catastrophic risk insurance (through mandatory guarantee within property insurance, automobile liability insurance, and third party liability insurance policies) and dedicated solidarity-based compensation system through the FSEC. The draft law aims to increase the number of residential, commercial, and industrial properties insured against catastrophes, but this increase would still be limited in the first years as the property insurance penetration is still relatively low in Morocco. It is estimated that less than 5 percent of residential dwellings have property insurance. In addition, through the mandatory extension of guarantee under motor third party liability insurance, all vehicle owners and their family members would be automatically covered against personal injury (resulting into permanent disability or death), which means that about 6 million people in Morocco would be compensated for disability and death caused by disasters.

B. Program Development Objective and Key Results

29. The program development objective (PDO) is to improve the institutional framework to finance disaster risk reduction activities and strengthen financial resilience to natural disasters for targeted populations in the Program Area.

C. PforR Program Scope

30. The "PforR" Program (the "Program") is defined by: (i) the Program duration; (ii) the Program area; and (iii) the Program activities supported.

31. **Program duration:** The Program will be implemented over five years from April 2016 to December 2021.

32. **Program area:** The Program will include the following geographic areas: the regions of Tanger-Tétouan-Al Hoceima, l'Oriental, Fès-Meknès, Rabat-Salé-Kénitra, Béni-Mellal-Khénifra, Casablanca-Settat, Marrakech-Safi, Draâ-Tafilalet, Souss-Massa, and the provinces of Guelmim, Tan-Tan, and Sidi-Ifni.

33. **Program activities:** The Government requested support for all three Subprograms of the Government program. The specific Program activities will be:

- **Subprogram One: Promoting Institutional Reform and Capacity Building.** Strengthening the existing institutional DRM structure through the following:

  (i) Establishment of an improved governance structure for the FLCN, including the establishment of the Steering Committee, the National Selection Commission and the Secretariat;

(ii) Establishment of a transparent and results focused process for the allocation of FLCN resources for the financing of Eligible Subprojects, as well as a M&E system for the Eligible Subprojects funded by FLCN;

(iii) Capacity building for improved DRM for line Ministries, local governments, public agencies, and state owned enterprises in the Program Area; and

(iv) Development of a national integrated disaster risk and resilience management strategy.

- **Subprogram Two: Scaling up Disaster Risk Reduction Activities.** Carrying out of Eligible Subprojects to be financed by FLCN and relevant Ministries, local governments and public agencies or state-owned enterprises.
- **Subprogram Three: Improving Disaster Risk Financing and Insurance.** Designing and implementing a national insurance program against catastrophic events for homeowners and businesses, and establishing the FSEC, a dedicated solidarity fund to compensate uninsured households affected by catastrophic events.

34. **Exclusions.** The Program would exclude reconstruction projects after a disaster event and those that do not meet World Bank policies for eligibility for PforR financing. Specifically, the Program will not include any activities assessed to have significant adverse impacts on the environment and/or affected people, as defined in the Bank Policy and Directive on PforR Financing, nor procurement of works, goods, and services under high-value contracts above the Operations Procurement Review Committee thresholds.

35. The relationship between the Government program and the Program for the operation is shown in Table 1 below with the grey shaded areas highlighting the Program.

Table 1. Government Program and the Program (in grey)

Subprogram One: Promoting Institutional Development and Capacity Building		
(i) Establishment of an improved governance structure for the FLCN, including the establishment of a Steering Committee, National Selection Commission and Secretariat; (ii) Establishment of a transparent and results focused process for the allocation of FLCN resources for the financing of Eligible Subprojects, as well as of a M&E system for the Eligible Subprojects funded by FLCN; (iii) Capacity building for an improved DRM for line Ministries, local governments, public agencies, and state owned enterprises; (iv) Development of a national integrated disaster risk and resilience management strategy.	Program Area	Non-Program Area
Subprogram Two: Scaling up Disaster Risk Reduction Activities		
Eligible Subprojects to be financed by FLCN and relevant Ministries, local governments and public agencies or state-owned enterprises.	Post disaster event reconstruction activities financed by the FLCN; Activities that have a significant adverse impact on the environment and/or affected people and high value contracts, as defined in the Bank Policy and Directives on PforR Financing.	

Subprogram Three: Improving Disaster Risk Financing and Insurance		
Designing and implementing a national insurance program against catastrophic events for homeowners and businesses, and establishing the FSEC, a dedicated solidarity fund to compensate uninsured households affected by catastrophic events.	Program Area	Non-Program Area

36. **Program Expenditure Framework.** For Subprograms One and Two, the Program Expenditure Framework consists of funds allocated to the CAS-FLCN and the corresponding co-financing mobilized. Specifically, it is expected that MAD 170 million will be allocated on an annual basis to finance eligible subprojects from the FLCN. This financing contributes initially 70 percent of the total cost of eligible subprojects with project proponents and their partners contributing the remaining 30 percent. This co-financing will increase to 50 percent in the last year of the Program. The FLCN will therefore significantly leverage additional financial resources. Total expenditures under Subprogram One and Two are estimated to be MAD 1,436 million (approximately US$145 million) over the Program period. For Subprogram Three, the Program Expenditure Framework consists of financial resources mobilized to establish the FSEC. Total financial contributions for establishing FSEC are estimated to be MAD 1.1 billion (approximately US$111 million) during the five years of the Program. These funds would come from the government's initial contribution and additional taxes.[22] The overall Program Expenditure Framework for the years 2016 to 2020 is summarized in Table 2 below.

Table 2. Program Financing 2016–2020 (US$, millions)

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Subprogram 1 - Institutional Reform and Capacity Building[23]	2	3	3	3	3	**14**
Subprogram 2 - Risk Reduction Activities	22	24	26	28	31	**131**
Subprogram 3 - Disaster Risk Financing and Insurance	–	–	–	55	56	**111**
Total	**24**	**27**	**29**	**86**	**90**	**256**

Table 3. IBRD Contribution 2016–2020 (US$, millions)

Source	Amount	% of Total
IBRD financing	200	78
Co-financing	56	22
Total	**256**	**100**

[22] Estimated figures for Subprogram Three are only indicative since the current draft law does not specify the amount of financial resources of FSEC. They will be fixed by the implementation decree once the law is approved.
[23] Estimated as 10 percent of total FLCN and partner financing.

37. **Program beneficiaries, including gender related aspects**. The Program will have direct and indirect beneficiaries both at the national and subnational level. Under Subprogram One Government officials working at local and national level will gain significant knowledge and competencies in managing risks. Under Subprogram Two, direct beneficiaries will include residents, business owners, and employees in the protected areas (in the case of flood protection), students and teachers (in the case of school retrofitting), and residents and workers in the affected areas (in the case of natural hazards warning systems). With Subprogram Three supporting the introduction of catastrophic risk insurance in Morocco, beneficiaries will also include owners of specified insurance policies (and particularly car owners) and – importantly — the uninsured population, which will be entitled to (capped) financial compensation through the FSEC. The poor will likely benefit most from the Program as they are often the least prepared and most impacted by disasters – and have limited financial capacity to cope. Improved DRM policies and institutions will indirectly benefit the population more broadly, including through the better management of fiscal contingent liabilities. Special emphasis will also be given to capturing gender specific Program benefits, including through capturing gender related aspects in the Results Framework (see Annex 2).

38. **Citizen Engagement**. Beneficiary feedback will be mainstreamed at the local level, especially through the deliberation of involved Local Community Councils (*Conseils communaux*). It will also be mainstreamed through (i) consultations with the direct beneficiaries of the FLCN-funded subprojects, and (ii) an online and offline grievance redress mechanism (GRM), which will be specified in the POM and linked to the website of the FLCN. The process will promote participation, contribute to proactively managing expectations, build local buy-in, and strengthen citizens' ownership of the subprojects for more sustainable development results.

39. **GRM**. The Program also integrates beneficiary feedback[24] through the establishment of online and offline GRM. The GRM will be developed both at the local and national level to capture community feedback on subprojects as well as feedback related to environmental, social and fiduciary risks. At the national level, an interactive website will be launched with an integrated online GRM platform. At the local level, the GRM will build on existing MoI complaints handling mechanisms, strengthening them by integrating systematic feedback as a critical tool for promoting transparency and accountability throughout the implementation of subprojects. A GRM manual will be produced to promote a consistent approach to handling complaints and grievances across all FLCN subprojects.

D. Disbursement Linked Indicators and Verification Protocols

40. Progress towards the PDO will be measured through the following PDO level indicators, corresponding to the Program's three subprogram areas.

- PDO Indicator 1: The FLCN strategic orientation and governance structure are redesigned with a focus on disaster risk reduction;

[24] Beneficiaries are defined as any citizen who is directly affected by the subproject.

- PDO Indicator 2: Cumulative number of beneficiaries from eligible risk reduction subprojects (% women);
- PDO Indicator 3: Minimum number of people in the Program Area insured for bodily injury against catastrophic events[25];
- PDO Indicator 4: Establishment and operationalization of the FSEC to protect the uninsured.

41. **Disbursement Linked indicators (DLIs)** have been selected to reflect critical elements of performance required to achieve the PDO (see also the results chain in Annex 4). All DLIs are indicators in the Results Framework, both at the PDO and intermediate indicator level. Particular attention has been paid to ensuring that the DLIs are: (i) fully aligned with government priorities and are implementable by the responsible implementation entities; (ii) are achievable yet challenging; (iii) are clearly measurable and independently verifiable; and (iv) allow for a smooth disbursement profile over the period of Program implementation. In addition, the DLIs are designed to be mutually supporting and reinforce the overall Program objective. For example, DLIs 1 to 4 and 6 focus on the institutional reform aspects of the Program and ensure that the FLCN allocation process is transparent and the FLCN is financially sustainable. The improved institutional architecture on risk management in Morocco will provide the basis for improved results from scaled-up risk management activities, as captured in DLI 5. Finally, DLIs 7 and 8 capture required actions to ensure that Morocco's population and businesses are financially protected after a disaster strikes.

Table 4. DLIs

DLIs	Amount Allocated (US$, millions)
DLI 1: The FLCN strategic orientation and governance structure are redesigned with a focus on disaster risk reduction	35.0
DLI 2: Cumulative amount of FLCN funds allocated to eligible subprojects	25.0
DLI 3: Minimum percentage of FLCN funds allocated to eligible non-structural subprojects	8.0
DLI 4: Minimum percentage of total funding of eligible subprojects provided by the entities responsible for implementation and their partners	22.0
DLI 5: Cumulative value of total funding of completed eligible subprojects achieving disaster risk reduction targets	40.0
DLI 6: Minimum percentage of entities responsible for the implementation of eligible subprojects having received technical assistance and/ or training	10.0
DLI 7: Adoption of the catastrophic risk insurance legislative and regulatory framework and minimum number of people in the Program Area insured for bodily injuries against catastrophic events	34.5
DLI 8: Establishment and operationalization of the FSEC to protect the uninsured	25.0
Capitalized front-end fee	0.5
Total	**200.0**

42. The verification of progress toward the achievement of the Program's objectives will be carried out every year by an Independent Verification Agent (IVA). The IVA will provide independent confirmation of the results reported by the Steering Committee to the World Bank.

[25] Catastrophic events are defined as per the draft law n.110-14.

Based on its experience in other PforR operations in Morocco, the IVA will be the IGAT (*Inspection Générale de l'Administration Territoriale*) for DLIs #1 to #6 and SAI (*Service de l'Audit Interne de la Direction du Trésor et des Finances Extérieures*) for DLIs #7 and #8. The IVA will verify all DLIs through both a desk review and, if needed, physical inspection of a sample of projects funded under the Program. This independent verification of results will accompany any disbursement request to the World Bank.

E. Capacity Building and Institutional Strengthening

43. The capacity building activities under the Program will be based on a three pronged approach. First, MoI and MoF/ACAPS will develop an annual capacity building plan to be implemented under the Program, which is also part of the Program Action Plan (PAP). An implementation plan for all first year activities was agreed upon at appraisal. Particular emphasis for capacity building under Subprograms One and Two will be on strengthening the Program systems in terms of ensuring that the most appropriate structural and non-structural risk reduction investments are selected and implemented so as to achieve the intended results, in line with the required technical, social, environmental and fiduciary standards. This could involve specialized workshops and training ahead of project selection to help with the preparation of high quality structural and non-structural investments as well as specific implementation support for some of the weaker project implementation agencies. Under Subprogram Three, dedicated capacity building measures will support the implementation of the catastrophic risk insurance program, including actuarial analyses to ensure the financial sustainability of the program, the drafting of implementation legal documents, and the implementation of a rapid loss adjustment and compensation mechanisms based on international experience. Second, an international risk management expert, seconded from the Swiss Government and funded by the Swiss Agency for Development and Cooperation (SDC), will work with MoI on the implementation of the Program. The secondee has been identified and is already co-located with MoI since July 2015 for an initial period of up to two years. The secondee will play a critical role in terms of providing technical and management support to MoI (the Steering Committee, National Selection Commission, and the Secretariat) on all aspects of Program implementation and support the Secretariat in preparing, monitoring and evaluating FLCN-funded projects. Finally, the Bank has mobilized resources for Technical Assistance from the Global Facility for Disaster Reduction and Recovery (GFDRR) and the Secretariat of Economic Development and Cooperation (SECO) to directly provide capacity building on all aspects of Program implementation.

III. PROGRAM IMPLEMENTATION

A. Institutional and Implementation Arrangements

44. The Ministries in charge of Program implementation are MoI and MEF. Specifically, for Subprograms One (Institutional Reform and Capacity Building) and Two (Scaling up of Disaster Risk Reduction Activities), the General Secretariat of MoI will be the responsible implementation agency given that the General Secretary of MoI is the *Ordonnateur* of the FLCN. As described in Section II, new governance structures will be established under the Program which will be codified through a provision in the Budget Law (see also more details

below) and associated Government circulars (captured also in DLI 1). Subprogram Three (Disaster Risk Insurance and Finance) will be implemented by MEF with the support of ACAPS.

45. For the new governance of the FLCN, three entities are being created. The *Steering Committee* will be presided over by the General Secretary of MoI and include MEF, the Ministry of Government Affairs and Governance, and the Ministry of Urban and Territorial Planning etc. with representatives at the General Secretary. The Steering Committee will set the strategic direction for the FLCN; define and review the eligibility and selection criteria for sub-projects to be co-financed by FLCN; provide a sounding board for line Ministries' and local governments' priorities in relation to eligible sub-projects; monitor and evaluate the results of FLCN-supported eligible sub-projects in the Program Area; and oversee and provide guidance to both the *National Selection Commission* and the Secretariat. The National Selection Commission will manage the transparent selection of FLCN co-financed projects. The Commission will operate under the guidance of the Steering Committee and include representatives from the relevant Ministries and Public Agencies, supported as needed by external technical experts.

46. A *Secretariat* will also be created to support the work of the Steering Committee and the National Selection Commission and will be established at the office of the General Secretary of MoI. The Secretariat will be responsible for the day to day Program coordination and management in line with the POM and will also serve as the Bank's interface for the Program. The Secretariat will be in charge of preparing the Annual Program Reports. The Secretariat will also mobilize resources for required capacity building and training activities. For all its work, the Secretariat will be able to draw on resources from within concerned departments of MoI and MEF, and be supported, as needed, by qualified consultants to ensure that the Program is implemented in line with the requirements of the POM.

Table 5. Key Implementation Agencies

	Functions	**Composition**
Steering Committee	• Set the strategic direction for FLCN • Defining and reviewing the selection eligibility criteria for the sub-projects to be co-financed by FLCN • Providing a sounding board for line Ministries' and local governments' priorities in relation to eligible sub-projects • Monitor and evaluate the results of the Eligible Sub-projects in the Program Area • Oversee and provide guidance to both the National Selection Commission and the Secretariat	• MoI (Chair) • MEF • MAGG • Ministry of Urban and Territorial Planning etc.
Selection Commission	• Manage transparent selection of eligible sub-projects to be co-financed by the FLCN; • Recommend selected projects to Steering Committee for final decision.	• Representatives of key line ministries • Additional technical experts on an as needed basis
Secretariat	• Support the work of the Steering Committee and National Selection Committee • Monitor day to day coordination and the management of the Program • Direct interaction with selected subprojects • Creation and management of the interactive FLCN website, including the M&E system	• 1-2 staff* • International expert seconded from SDC

	• Organization of resources for Capacity Building and Training activities • Preparation of Program Reports	

Note: *Can rely on dedicated functional departments within MoI and MEF for additional support.

47. *Program Financial Statements*. The Borrower will have the Program Financial Statements audited. The stakeholders involved in the Program will each prepare the required Financial Statements for the audit.

48. *Implementation of activities* that are co-funded by the FLCN will be the responsibility of the concerned line Ministries, provincial and local governments, public agencies, and/or State-owned Enterprises. Implementation responsibility will cover all subproject management dimensions, including mobilizing co-financing, procurement, contract management, management of environmental and social aspects, and monitoring and reporting on project progress. The *Ordonnateur* of the FLCN, the General Secretary of MoI, together with MEF, will sign a FA with each implementing agency to ensure that subprojects are implemented so as to achieve their intended objectives and meet the requirements in the POM. Subprojects' technical audits, including on technical implementation aspects, will be conducted by IGAT.

B. Results Monitoring and Evaluation

49. The Program will be monitored building on Government systems. The Results Framework (Annex 2) provides the basis on which the Secretariat will measure and report on the progress of Program implementation. The Secretariat will prepare an Annual Program Report which will include evidence of progress on all results indicators included in the Results Framework, results related to DLIs, and evidence of compliance with requirements of the PAP. The Annual Program Report will in particular build on MoI's M&E system for subprojects to be co-financed by FLCN and incorporate additional inputs from the MEF for Subprogram Three. MoI's M&E system will be detailed in the POM and will be based on the information provided by the project proponents of the FLCN, in line with requirements specified in the Financing Agreement. The Annual Program Report will be submitted to the Bank no later than 90 days after the end of each calendar year. The Annual Program Reports will also provide the basis for the Program mid-term review, under the supervision of the Steering Committee and in collaboration with the World Bank.

C. Disbursement Arrangements

50. Disbursement of Bank loan proceeds will be made at the request of the Borrower upon achievement of DLIs conditional on the arrangements made in the verification protocol. Two indicators are scalable (DLI#2 and DLI#5) with the disbursement of the financing proceeds proportional to the progress towards achieving the DLIs. These DLIs will be disbursed on the basis of the formula which will be used to determine the amount of loan proceeds to be disbursed relative to the level of achievement of the DLI. An advance in the amount of up to US$50 million (or 25 percent of the IBRD loan amount) may be disbursed once the loan becomes effective to facilitate the achievement of DLIs' results. This potential advance would be available throughout Program implementation on a revolving basis. In addition, a partial disbursement in the amount of up to US$50 million (or 25 percent of the IBRD loan amount) on account of DLIs

achieved on or after January 1, 2015, and before the date of the Loan Agreement (i.e. loan signing date) is expected to be made upon effectiveness.

51. Withdrawal applications. The MEF will provide the World Bank with evidence of achievement or partial achievement of a DLI. Following the World Bank's review of the complete documentation, including any additional information considered necessary, the Bank would send an official communication to MoI and MEF as to the achievement of the DLI(s) and the level of Program financing proceeds available for disbursement against each particular DLI. Disbursement requests (Withdrawal Applications) will be submitted to the World Bank by MEF using the Bank's e-disbursement system and standard disbursement form along with a Request for Advance signed by the Government's authorized signatory. A copy of the Bank's official communications confirming achievement of the DLI(s) will be attached to the disbursement requests.

IV. ASSESSMENT SUMMARY

A. Technical (including Program Economic Evaluation)

52. **The Program is strategically relevant because it aims to render Morocco more resilient to shocks and corresponds to good international risk management practices**. As outlined in Section I, Morocco is demonstrably vulnerable to natural hazards which are being increasingly exacerbated by urbanization as well as climate change, a particular concern for Morocco as the host country for the 22nd Conference of the Parties to the UNFCCC in 2016. Mitigating the impact of natural hazards is therefore of central importance for sustained improvements in poverty reduction and shared prosperity. In addition, the impact of natural hazards constitutes a significant explicit and contingent fiscal liability to the Government. The Program is strategically designed to address these issues and builds on good risk management practices. The Program conforms to core principles for effective DRM, including: moving from a culture of post disaster response and fragmented and sector-based inventions to a more proactive and ex-ante focus on risk reduction; targeting local action by having local communities be increasingly responsible for DRM, including for prevention; and providing improved risk governance structures and incentives to catalyze new and scaled-up risk reduction activities. In Morocco's case, this is provided through the restructured FLCN which will explicitly target increased DRM at the local level as well as ensure a good balance between small scale structural and non-structural measures. The Program also contains a clear emphasis on better using risk analytics by building on and mainstreaming the use of Morocco's disaster risk modeling capability. And finally, institutional reform and risk reduction investments are complemented by a specific program dedicated to disaster risk insurance to ensure that residual risks that cannot be cost-effectively mitigated are efficiently financed. More broadly, linking the work on DRM to a broader risk and resilience management approach, the Program is also in line with emerging best practices on "resilience" as, for example, articulated in the 2014 World Development Report on "Risk and Opportunity".

53. **The strategic focus and design of the reforms envisaged for the FLCN under Subprograms One and Two are technically sound**. The choice of a dedicated funding mechanism presents several advantages over financing DRM solely from the general budget. First, the FLCN provides explicit financial incentives to target risk reduction activities. Too

often, governments pressed for budgetary resources reduce or postpone risk reduction spending. The situation is typically worsened if no disaster has occurred in the country in recent years. Second, a dedicated funding mechanism, if well designed, can be a successful coordination tool. Risk management does not currently have a “natural home” within Morocco’s government structure and establishing a strategic governance mechanism can therefore help engage lead ministries responsible for strategic investment decisions regarding preparedness for natural disasters. Third, the funding mechanism can directly support visible and well-defined risk management operations at the local level. A dedicated fund, which provides both co-financing and technical guidance, can give a voice and establish new institutional arrangements that bring local communities and key ministries together to address local risk management needs. Fourth, transparency is enhanced to the extent that an appropriate objective-setting and eligibility framework as well as a selection process are adopted, complied with, and audited. Fifth, accountability is enhanced through the creation of an effective M&E system to ensure that the intended results are achieved. As such, Morocco’s emerging national resilience fund will complement ongoing risk management activities undertaken by the line Ministries and local governments with a more targeted approach, focusing on projects selected for their quality and impact and supported by a multi-stakeholder approach.

54. **The design of Subprogram Three on disaster risk finance and insurance is also technically sound**. The draft catastrophic risk insurance law aims to clarify the responsibility of the public and private stakeholders against catastrophic events and the risk sharing rules, and to promote market-based catastrophic risk insurance. The draft law went through an extensive stakeholder consultation process, started in 2008, led by DAPS. In particular, DAPS led extensive discussions with the domestic insurance industry to ensure that they can underwrite catastrophe risks without affecting the overall sustainability and performance of the non-life insurance market (which is growing but still under-developed). To do so, it establishes a comprehensive financial protection system for both insured and uninsured households (covering both individual permanent disability/death and assets). The draft law makes the extension of guarantee against natural (and man-made) disasters compulsory within voluntary property insurance policies. However, given the low penetration of property insurance in Morocco, the draft law also extends this compulsory guarantee to compulsory motor third party liability insurance and compulsory third party liability insurance. By doing so, the draft law can reach approximately 2 million automobile owners and their families in Morocco (approximately 6 million people) and insure them against disability/death caused by catastrophic events (even if they were injured while they were not in the car). Recognizing also that many households and especially poor households are not insured, the draft law establishes an FSEC to partially compensate uninsured victims of disasters (against loss in principal residence and permanent disability/death). This unique and innovative compensation scheme makes explicit and legally binding the compensation of the uninsured victims of disasters. The draft law builds on a strong public-private partnership by relying on the private insurance and reinsurance companies and policyholders for the financing of this program: the compulsory extension of guarantee in the

insurance policies will be financed by an additional (cat) premium; likewise the FSEC will be mainly financed through taxes and government's initial contribution.[26]

55. **The expenditure framework and flow of funds is clear and builds on Morocco's existing budgeting systems, including Morocco's emerging budget reform**. The Program's expenditures will be reflected in the general state budget (*Budget Général de l'Etat*), principally through a dedicated account, the CAS-FLCN, which is used in Morocco to reflect the earmarking of public resources to specific purposes. The CAS-FLCN will receive standard contributions through the general budget and leverage additional financing resources through co-financing of individual subprojects (which is also specified in DLI 4). The CAS-FLCN is a budgetary envelope that is a specific section within the budget documents which is voted by Parliament in the same form and at the same time as the rest of the annual budget; is under the spending authority (*Ordonnateur*) of the Minister of Interior (for the FLCN); is not submitted to cancelation of uncommitted balance at the end of the fiscal year; and except for the above, follows the same rules as the general budget. The CAS-FLCN is presented annually to Parliament with an expenditure framework. It is also subject to interim budget execution reports and part of the year-end budget execution report submitted to the Supreme Audit Institution. The Program will significantly help improve the effectiveness and efficiency of public expenditures by improving not only the strategic allocation of CAS-FLCN resources but also enhancing M&E to ensure that public funds achieve their intended purposes. For Subprogram Three, public funds will be allocated from a fraction of Morocco's existing insurance tax, in addition to contributions for insurers and policy holders.

56. **Supporting the Program through the provision of public funds is fully appropriate.** Public funding for DRM investments is common across almost all countries due to a number of factors including: structural and non-structural natural disaster risk reduction often involves projects in which everyone benefits, the classic case for public funding. Clear examples are a flood protection structure or early warning systems – they protect everyone (benefits are difficult to restrict to only those who pay); there is also under-investment in ex ante risk reduction due to many institutional challenges and built-in biases to focus mainly on ex-post response which calls for additional incentives to be provided to promote ex ante mitigation actions. For disaster risk insurance, due to the high consequence/low probability nature of natural hazards, the insurance industry on its own prefers to avoid natural disaster insurance, and would only provide such insurance when the premium is exceedingly attractive. As a result, government intervention is required, including in terms of providing coverage for the uninsured, which includes the poorest and most vulnerable segments of society. Together all elements of the Program will significantly enhance the efficiency and effectiveness of public expenditures.

57. **The Program's direct economic impact will be significant and positive**. In general, ex-ante disaster risk investments have been demonstrated to be significantly more cost-effective relative to ex-post response. As shown in Box 6, calculations performed using MnhPRA indicate very positive benefit cost ratios (BCRs) for typical activities that will be financed under the

[26] In order to assess the overall financial impact of Morocco's catastrophic risk insurance, the World Bank is currently assisting the MEF and the ACAPS in the financial analysis of the program, in order to inform the implementation legal documents to set the levels of the various financial contributions and additional premiums.

Program, ranging as high as 54 for early warning systems.[27] International experience fully corroborates this finding and suggests that, if appropriately managed, disaster risk reduction projects can achieve high internal rates of return (IRRs).[28/29] Returns tend to be higher for non-structural and small scale structural activities that are not very capital-intensive and those that are community-based with participatory approaches, important aspects that are especially incentivized under this Program.[30] Overall, implementation of the Program would have significant economic benefits compared to the counterfactual "without project" scenario as Morocco would under this scenario continue to remain predominantly reactive and deal with the social and economic consequences of disasters only ex-post, forgoing important opportunities to reduce Morocco's risk profile.

Box 6. BCRs of Selected Risk Mitigation Investments

Using MnhPRA, 51 different mitigation scenarios were examined, such as seismic strengthening of buildings, flood warning systems, structural measures for flood protection, evacuation mapping and elevating buildings to protect against floods. The scenarios considered high-risk areas such as Al-Hociema and Nador province for earthquake, Kenitra province for floods, coastal areas of the country for tsunami, and selected key provinces such as Fes and Agadir. BCRs for the 51 scenarios ranged from 54.3 to 1.1. Projects to be funded under the Program could include

Mitigation	Area	Occupancy	BCR
Flood Warning System	Ouregha (Sebou)	Overall	54.3
Flood Warning System	Ouregha (Sebou)	Residential	45.6
Culverts on Rail Road (flood protection)	Gharab	Rail-line	34.6
Flood Warning System	Ouregha (Sebou)	Essential Facilities	12.1
Tsunami Evacuation Mapping	Coastal Morocco	Population	8.3
Flood Mitigation of Residential Buildings for New Township	Kenitra	Residential	8.2
Flood Mitigation of Government Buildings for New Township	Kenitra	Government Buildings	7.2
Seismic Retrofitting	Nador	Hospitals	5.8
Risk Assessment for New Township	Kenitra	Buildings	5.7
Seismic Risk Assessment for New Schools	Whole Morocco	Schools	4.4

those listed below or be similar in nature. The top ten scenarios in terms of BCR were:

58. **The economic value of the disaster risk finance and insurance program is also positive**. The proposed catastrophic risk insurance program is expected to generate several social and economic benefits. For the Government, introducing a compulsory catastrophic risk insurance guarantee (for the insured) and a compensation system for the non-insured households through the FSEC, allows the government to clarify its contingent liability related to catastrophic events. Too often, financing recovery cost after natural disasters among the various stakeholders is left unspecified, which creates a de facto implicit contingent liability for the government (as

[27] World Bank. 2013. *What If Scenario Analysis Report, Morocco Natural Hazards Probabilistic Risk Analysis and National Strategy Development*.
[28] Multihazard Mitigation Council. 2006. *Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities.*
[29] http://hazardmitigation.calema.ca.gov/hazard_mitigation_success_stories
[30] For the 2015 CfP, no IRR could be calculated as projects were at different stages of preparation, including early stages such at pre-feasibility stage.

the government faces social pressure to compensate the victims of a disaster although it has no legal obligation). In addition, the Program enables Morocco to transfer a fraction of potential disaster losses to the private insurance sector, thereby reducing the government's (implicit) contingent liability. For households, the catastrophic risk insurance program provides households with more certainty about the financial support they can expect to receive after a disaster. According to the preliminary actuarial analysis conducted by the World Bank, insured households would receive on average MAD 700 million every year as insurance payouts from floods and/or earthquakes, while uninsured affected households could receive MAD 800 million on average from the FSEC every year. In addition, such a program should provide faster payouts since the payout structure is already pre-defined. Some economic analyses show that immediate cash payment following a disaster have significant welfare benefits, especially for the poor households; the value of US$1 paid in the wake of a disaster is worth at least US$2.5 paid several weeks later.[31] For the domestic insurance industry, the program will expand the non-life domestic market. Preliminary actuarial analysis conducted by the World Bank estimates that this will generate approximately MAD 840 million in additional annual insurance premium volume, or 4.5 percent of the 2014 non-life premium volume in Morocco. In case of a major disaster (e.g., with a 100 year return period), the preliminary actuarial analysis of the World Bank estimates that the insurance industry would inject approximately MAD 1 billion as insurance payouts in the economy, a large fraction of this amount coming from foreign reinsurers as the catastrophic risk insurance business is mainly transferred to the international reinsurance market (usually in excess of 90 percent).[32]/[33]

59. **The World Bank value added is significant.** It is based on both a long engagement with Morocco on various aspects of risk management as well as its significant global experience developing operational programs in support of countries' DRM policies and programs. The Bank has had a partnership with Morocco on risk management since 2008 (see Box 1) and has extensively supported Morocco in developing its approach to risk management along all key dimensions, including the development of a risk assessment (MnhPRA), the reform of the FLCN and the support to the catastrophic risk insurance program. Based on the Bank's in-depth engagement over the past seven years, the Bank is uniquely positioned to support Morocco's next phase of risk management by operationalizing Morocco's ambitious reform agenda. In doing so, it can draw on extensive global experience developing operational programs in support of countries' DRM policies and programs, including from FONDEN in Mexico, Colombia's Adaptation Fund, Philippines' Disaster Resilience Fund, the Turkish Catastrophe Insurance Pool, the Romanian Catastrophe Risk Insurance Pool, and the Southeast Europe and Caucasus Regional Catastrophe Risk Insurance Facility.

[31] Clarke and Hill. 2013. *Cost-Benefit Analysis of the African Risk Capacity Facility*.
[32] Interestingly, while the literature discussed extensively the core economic role that insurance can play, especially on inclusive growth and the credit function (Lester 2014), the literature is rather silent on quantitative economic benefits of catastrophic risk insurance programs.
[33] The preliminary actuarial analysis conducted by the World Bank is purely indicative and depends heavily on the assumptions about the coverage parameters of insured and uninsured people. These parameters are being refined by the MEF and the ACAPS.

B. Fiduciary

60. The Bank performed a Fiduciary System Assessment (FSA) as per the Bank Policy and Directive for PforR Financing through analysis of available documents and working sessions with the main stakeholders. The FSA covered the Program's institutional arrangements, financial management and procurement systems, and governance systems, both at the overall Program management level, as well as at the level of the implementing agencies and their partners. In particular, a sample of potential beneficiary entities was assessed, including several cities and a governorate. Findings from the assessment, as well as a review of existing analytical and diagnostic work, conclude that the Program's fiduciary systems provide reasonable assurance that the financing proceeds will be used for intended purposes, with due attention to the principles of economy, efficiency, effectiveness, transparency, and accountability. The Government will use its own systems to take all appropriate measures to prevent fraud and corruption in connection with the Program. The Bank's Guidelines on Preventing and Combating Fraud and Corruption in Program-for-Results Financing, dated February 1, 2012 and revised July 10, 2015 (the Anti-Corruption Guidelines) will apply.

61. The assessment identified a number of deficiencies and weaknesses at the country, as well as the implementation levels. Specifically, at the country level, Morocco is equipped with numerous institutions with a mandate to hear and decide on grievances and claims related to activities covered by the reforms supported by this PforR. However, some weaknesses exist in relation to the complaints handling mechanism and the mechanism for efficient management of fraud and corruption in contract execution. At the implementation level, there is: (i) weak capacity of some project proponents to design, implement, and manage projects, to conduct procurement and properly handle financial management; and (ii) lack of tools to measure fiduciary performance, etc. Overall, the Program fiduciary risk is rated substantial. The fiduciary framework mandates the inclusion of fiduciary concerns as criteria for the selection of eligible projects. Remedial fiduciary actions have been identified in the PAP. The PAP intends to help mitigate the fiduciary risks and weaknesses identified, in particular by building capacity both at the overall Program management level at MoI to assess fiduciary implementation capacity, and at the level of individual project implementing agencies. These actions are complemented by a set of key fiduciary performance indicators for the monitoring of Program fiduciary performance as specified in the FSA. These indicators will flag needed adjustments during Program implementation. Therefore, the Program's fiduciary systems provide reasonable assurance that the financing proceeds will be used for intended purposes.

C. Environmental and Social Effects

62. An Environmental and Social System Assessment (ESSA) has been conducted by the Bank for the proposed PforR. The ESSA has reviewed the capacity of existing national and local environmental and social management systems to implement the Program in a sustainable manner. The draft ESSA report was shared with counterparts and discussed during a consultation workshop organized on November 5, 2015.

63. Two categories of investment activities are eligible for funding under the Program: (i) those that apply to planning, improved knowledge, or public awareness programs for populations

at risk of natural disasters (non-structural activities); and (ii) and those that involve public works for protection against natural disasters (small to medium size structural activities).

64. The activities supported by the Program are expected to have overall positive social and environmental effects and its adverse impacts are anticipated to be moderate. By its very nature, a PforR excludes funding of all activities that are likely to have significant adverse impacts on the environment and/or affected people (e.g., activities that are typically classified as Category A). Therefore, in compliance with World Bank Policy and Directive for PforR Financing, the following will be excluded from the Program:

- Any activity that raises potentially significant environmental and social risks and impacts that are multiple, varied, irreversible, and unprecedented;
- Any activity proposed in the context of a wider program that raises potentially significant environmental and social risks and impacts that are multiple, varied, irreversible, and unprecedented;
- Any activity: (i) in a Site of Biological and Ecological Value identified within the boundaries of Morocco; (ii) that would significantly transform protected areas or natural habitats or that would substantively modify biodiversity areas; and/or (iii) that would cause irreversible damage to archaeological and historical cultural heritage resources;
- Any activity that would require significant displacement of persons, land acquisition, or restriction of access to economic, collective, or natural resources.

65. The ESSA has identified a number of shortcomings in the environmental and social legal and institutional systems that apply to the Program. The capacity of the various national and local institutional entities responsible for managing environmental and social aspects related to projects funded by the Program is uneven and requires targeted support under the Program. As part of the assessment, participating entities will apply specific screening tools to evaluate for each project the level of its social and environmental impacts, and specific instruments including adequate mitigation measures will be elaborated to comply with applicable procedures. Thus, with a view to filling the gaps identified in the ESSA, the Program will support specific measures to strengthen the performance of the Moroccan environmental and social management systems. Different measures (detailed in Annex 6) are mainly related to the following aspects: (i) environmental and social management systems; (ii) M&E; and (iii) environmental and social management capacities.

66. Specifically, the Program will support the preparation and adoption of an Environmental and Social Technical Manual. Among other things, the manual will establish clear procedures to help the preparation and the submission of eligible structural projects to the FLCN, namely by: (i) presenting a typology of investments that are compatible with the Bank's policy and guidance for PforR Financing; (ii) proposing "screening tools" aimed at identifying the projects' potential social and environmental risks and impacts; (iii) proposing templates to assess the scale or magnitude of social and environmental risks and impacts; (iv) proposing templates for the preparation of comprehensive reports on the implementation of social and environmental mitigation measures; and (v) presenting the elements allowing project proponents to develop specific instruments which include environmental and social mitigation measures

(Environmental and Social Impact Assessments [ESIAs], Environmental and Social Management Plans [ESMPs] and Abbreviated Resettlement Action Plans [ARAPs]) and which comply with the Government and with WB policy and guidance for PforR Financing. The Program will also include activities to strengthen the capacities and awareness of all stakeholders on issues related to sustainable social and environmental management of the Program.

67. Communities and individuals who believe that they are adversely affected as a result of a Bank supported PforR operation, as defined by the applicable policy and procedures, may submit complaints to the existing program GRM or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address pertinent concerns. Affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate GRS, please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

68. Morocco is equipped with numerous institutions with a mandate to hear and decide on grievances and claims related to activities supported by the proposed PforR. The existence of grievance and appeal mechanisms and their recent promotion to the constitutional level provide them with the necessary independence and financial autonomy, as well as expanded powers for self-referral. The World Bank's GRS system does not minimize the value of the Moroccan system of grievance management.

D. Risk Assessment

(a) Integrated Risk Assessment Summary

Table 6. Risk Rating

Risk	Rating
Technical	Substantial
Fiduciary	Substantial
Environmental and Social	Substantial
DLI	Moderate
Overall Risk	**Substantial**

(b) Risk Rating Explanation

69. The overall risk of the operation is substantial. A significant risk relates to **technical risk**. Although the large majority of non-structural and structural risk reduction activities are expected to involve relatively standard and/or smaller scale infrastructure investment programs (and therefore are likely to have only limited technical risks), some implementation agencies, especially at the local government level, are less familiar with DRM activities, in particular in terms of risk reduction, as this is a newer area of engagement and responsibility for them. Strong capacity building support will therefore be required to ensure that subprojects are implemented

so as to achieve intended results. Additional risk mitigation is provided by ensuring that IGAT will conduct technical projects audits. **Environmental and social risks** are likely to be substantial due to the number of implementation agencies involved, including at the local government level, where capacity for environmental and social management is weaker. However, in compliance with Bank Policy and Directive for PforR Financing, the Program is designed to avoid the selection of activities that have significant social and environmental risks and impacts. A substantial risk would remain in the area of **fiduciary management** in light of multiple implementation agencies involved, including at the local government level where capacity is weaker. **DLI risks** are identified as moderate as a well-balanced and clearly defined set of DLIs was developed during preparation and fully agreed with Government counterparts, including MEF and MoI. In addition, other actions aimed at reducing these risks are currently planned and/or implemented by the Government. Results from these measures could therefore be reflected in the risk assessment of this operation.

E. Program Action Plan

70. Based on the technical, fiduciary, and environmental and social assessments, a time-bound PAP, detailed in Annex 8, has been agreed with the Government. The inputs to the PAP, stemming from the three assessments, focus on the most critical actions, expected to best support the Program to deliver its results. As part of Program implementation support, the Bank will monitor adequate and timely implementation of the PAP.

Annex 1: Detailed Program Description

Program Development Objective

1. The PDO is to improve the institutional framework to finance disaster risk reduction activities and strengthen financial resilience to natural disasters for targeted populations in the Program Area.

PforR Program

2. The "PforR" Program (the "Program") is defined by: (i) the Program duration; (ii) the Program area; and (iii) the Program activities supported.

3. **Program duration:** The Program will be implemented over five years from April 2016 to December 2021.

4. **Program area:** The Program will include the following geographic areas: the regions of Tanger, Tétouan-Al Hoceima, l'Oriental, Fès-Meknès, Rabat-Salé-Kénitra, Béni-Mellal-Khénifra, Casablanca-Settat, Marrakech-Safi, Draâ-Tafilalet, Souss-Massa, and the provinces of Guelmim, Tan-Tan, and Sidi-Ifni.

5. **Program Activities:** The Government requested support for all three Subprograms of the Government program. The specific Program activities will be:

- **Subprogram One: Promoting Institutional Reform and Capacity Building.** Strengthening the existing institutional DRM structure through the following:

(i) Establishment of an improved governance structure for the FLCN, including the establishment of the Steering Committee, the National Selection Commission and the Secretariat.

(ii) Establishment of a transparent and results focused process for the allocation of FLCN resources for the financing of Eligible Subprojects, as well as a M&E system for the Eligible Subprojects funded by FLCN.

(iii) Capacity building for improved DRM for line Ministries, local governments, public agencies, and state owned enterprises in the Program Area.

(iv) Development of a national integrated disaster risk and resilience management strategy.

- **Subprogram Two: Scaling up Disaster Risk Reduction Activities.** Carrying out of Eligible Subprojects to be financed by FLCN and relevant Ministries, local governments and public agencies or state-owned enterprises.

- **Subprogram Three: Improving Disaster Risk Financing and Insurance.** Designing and implementing a national insurance program against catastrophic events for homeowners and businesses, and establishing the FSEC, a dedicated solidarity fund to compensate uninsured households affected by catastrophic events.

6. **Exclusions**. The Program would exclude reconstruction projects after a disaster event and those that do not meet World Bank policies for eligibility for PforR financing. Specifically, the Program will not include any activities assessed to have significant adverse impacts on the environment and/or affected people, as defined in the Bank Policy and Directives on PforR Financing, nor procurement of works, goods, and services under high-value contracts above the Operations Procurement Review Committee thresholds.

7. The relationship between the Government program and the Program for the operation is shown in Table 1.1 below with the grey shaded areas highlighting the Program.

Table 1.1. Government Program and the Program (in grey)

Subprogram One: Promoting Institutional Development and Capacity Building		
Establishment of an improved governance structure for the FLCN, including the establishment of a Steering Committee, National Selection Commission and Secretariat; Establishment of a transparent and results focused process for the allocation of FLCN resources for the financing of Eligible Subprojects, as well as of a M&E system for the Eligible Subprojects funded by FLCN; Capacity building for improved DRM for line Ministries, local governments, public agencies, and state owned enterprises; Development of a national integrated disaster risk and resilience management strategy.	Program Area	Non-Program Area
Subprogram Two: Scaling up Disaster Risk Reduction Activities		
Eligible Subprojects to be financed by FLCN and relevant Ministries, local governments and public agencies or state-owned enterprises.	Post disaster event reconstruction activities financed by the FLCN; Activities that have a significant adverse impact on the environment and/or affected people and high value contracts, as defined in the Bank Policy and Directives for PforR Financing.	
Subprogram Three: Improving Disaster Risk Financing and Insurance		
Designing and implementing a national insurance program against catastrophic events for homeowners and businesses, and establishing the FSEC, a dedicated solidarity fund to compensate uninsured households affected by catastrophic events.	Program Area	Non-Program Area

Table 1.2. Typology of Structural and Non-Structural Investments

DRM distinguishes between structural measures – those that directly reduce damage – and non-structural measures that indirectly will lead to damage reduction. Structural measures are typically engineering projects such as flood protection works or seismically retrofitting buildings. Non-structural measures are often building codes, risk awareness campaigns. The list below is for illustrative purposes.	
Structural	**Non-Structural**
Flood protection infrastructure, in both rural and urban areas linked with existing hydrological network such as dikes, river levees, flood walls, diversion channels and	Hazard mapping to more accurately define zones of high flood, seismic, tsunami, landslide and other risk, and mainstream them into land use planning

holding basins; also improvement of drainage system.	documents *("Cartes d'aptitudes à l'urbanisation")*.
Small scale community-based risk-resilient infrastructure such as earth retaining walls and debris flow dams.	Mainstreaming of disaster risk dimensions into municipal plans (social-economic, *Plan Communal de Development* [PCD]).
Elevation of public infrastructures exposed to flooding (public buildings, bridges, airports, harbors, etc.).	Improvement of disaster risk information systems, including disaster risk assessment tools, training on those tools, general information and communication technology system for risk assessment and monitoring.
Seismic retrofitting of public buildings such as schools, hospitals, fire and police stations and key government offices.	Disaster risk reduction plans for a locality or a region.
Stabilization, reinforcement of ground at risk of landslide or erosion.	Warning, evacuation, and detailed crisis management plan.
Coastal erosion prevention infrastructures (reinforcement of natural barriers, dikes).	Information, awareness raising and training for populations (civil society, enterprises) on risk management behaviors (training for self-protection, awareness campaign for enterprises, schools).
Strategic withdrawal and/or preventive displacement for dwellings at risk of submersion and/or flooding.	Improved regulations to increase resilience, and dedicated structure to monitor application of these regulations (zoning, building codes, etc.).
	Early warning systems (for flood, landslide, early earthquake warning, tsunami).

8. The CfP implemented during 2015 gives an initial sense of the type of specific activities likely to be included under Subprogram Two. Out of the 91 proposals received by the Fund, 23 ended up being selected from the first call of proposals for a total co-financing by the FLCN of MAD 251 million (close to the currently available funding amount) and over MAD 1 billion in total investment. The remainder is financed by project proponents' own resources. The proposals are briefly summarized in Table 1.3 below. It is encouraging that the portfolio of selected projects is balanced, with a large number of projects led by local governments and communities (17 out of 23). As anticipated, the latter tend to be smaller in size than those co-financing projects led by line ministries and public entities. There is also a relatively balanced geographical representation across the country. Finally, nine out of the 17 proposals selected are by smaller communities.[34] The CfP implemented during 2015 gives an indication of the possible projects during the Program implementation period between 2016 and 2021.

Table 1.3: List of Selected FLCN Co-financed Projects in 2015[35]

N°	Implementing Authority	Description of Project	Total Amount (MAD millions)	FLCN Amount (MAD millions)
Local Governments (Normal Conditions)				
1	Municipality of Tissa	Flood protection infrastructures (city center of Tissa)	47.2	14.2
2	Provincial Authority of Sidi Ifini	Risk information and warning capacities (Province of Sidi Ifini)	18.8	5.8
3	Provincial Authority of Al Hoceima	Flood protection infrastructures (Province of Al Hoceima)	170.0	30.0

[34] Less than 35,000 people.
[35] These projects were selected during the first CfP, with not all of the Financing Agreements signed in March 2016.

4	Municipality of Sidi Slimane Cherraa	Flood protection infrastructures (city of Sidi Slimane Cherraa)	46.0	13.8
5	Municipality of Azrou	Flood protection infrastructure (city of Azrou)	20.0	6.0
6	Municipality of El Jadida	Flood protection infrastructure (city of El Jadida)	23.0	6.9
7	Region Sous-Massa-Drâa	Earthquake risk information and planning (Greater Agadir area)	30.0	9.0
8	Municipality of Ouled Hassoune	Flood protection infrastructures (city of Ouled Hassoune)	29.4	9.0
Local Governments (Special Conditions)				
9	Municipality of Imintanout	Flood protection infrastructure (city of Imintanout)	36.6	10.0
10	Provincial Authority of Al Haouz	Flood protection infrastructure (town of Ourika)	10.4	6.0
11	Provincial Authority of Sidi Kacem	Flood protection infrastructure (Province of Sidi Kacem)	13.3	8.0
12	Municipality of Fennassa Bab Al Hait	Flood protection infrastructure (town of Fennassa Bab Al Hait)	2.7	1.6
13	Municipality of Mazguitem	Flood protection infrastructure (town of Mazguitem)	5.6	3.3
14	Municipality of Tiout	Flood protection infrastructure (Oasis of Tiout)	13.6	8.1
15	Municipality of Fnideq	Flood protection infrastructure (city of Findeq)	7.2	4.3
16	Municipality of Bni Smih	Flood protection infrastructure (city of Bni Smith)	8.0	4.8
17	Municipality of Bir Jdid	Flood protection infrastructure (city of Bir Jdid)	7.0	4.2
Line Ministries				
18	Delegate Ministry of Water	Flood protections (city of Nador)	195.0	30.0
19	Ministry of Public Work and Transport	Coastal erosion protection infrastructure (city of Lâayoune)*	60.0	18.0
20	Ministry of Urban and Regional Planning	Disaster risk urban planning (for 5 large urban areas)	50.0	15.0
Public Agencies				
21	University Mohammed V of Rabat/ INAU	Risk Information (central Rif area)	3.0	0.9
22	Promotion and Development Agency of the North	Landslide reinforcement and stabilization (city of Al Hoceima)	200.0	30.0
23	National Institute of Geophysics, National Center for Scientific and Technical Research (*Centre National pour la Recherche Scientifique et Technique*)	Warning systems for earthquakes and tsunamis (National territory)	40.8	12.2
	TOTAL		**1,038**	**251**

Note: * Project is not part of the Program area.

Citizen Engagement Implementation

9. **Citizen Engagement.** Beneficiary feedback will be mainstreamed at the local level, especially through the deliberation of involved Local Community Councils (*Conseils communaux*). It will also be mainstreamed through: (i) consultations with the direct beneficiaries of the FLCN-funded subprojects and, (ii) online and offline GRM, which will be specified in the POM and linked to the website of the FLCN. The process will promote participation and will contribute to proactively managing expectations, build local buy-in, and strengthen citizens' ownership of the subprojects for more sustainable development results.

10. **GRM.** The Program also integrates beneficiary feedback through the establishment of online and offline GRM. The GRM will be developed both at the local and national level to capture community feedback on subprojects as well as feedback related to environmental, social and fiduciary risks. At the national level, an interactive website will be launched with an integrated online GRM platform. At the local level, the GRM will build on existing MoI complaints handling mechanisms, strengthening them by integrating systematic feedback as a critical tool for promoting transparency and accountability throughout the implementation of subprojects. A GRM manual will be produced to promote a consistent approach to handling complaints and grievances across all FLCN subprojects.

Role of Development Partners

11. The Swiss Government through the SDC and the SECO has been a major partner on risk management in Morocco. The Swiss Government provided significant funding to GFDRR in support of the development of Morocco's risk assessment tool, MnhPRA. In addition, SDC contributed funding through its Global Program for Climate Change for "just in time" assistance and TA for the reform of the FLCN. SECO and the multi-donor FIRST initiative provided funding for the disaster risk finance and insurance technical assistance program. The Organization for Economic Cooperation and Development (OECD) is currently undertaking an independent assessment of Morocco's risk management architecture. The German Technical Cooperation (GIZ, *Gesellschaft for Internationale Zusammenarbeit*) is providing support on climate change development challenges. The French Development Agency (*Agence Francaise de Development*) has provided assistance on agricultural sector risk insurance. The UN is supporting Morocco through United Nations International Strategy for Disaster Reduction (UNISDR). Going forward, the Swiss Government continues to be a core partner of the Program, including through mobilizing and funding the secondment of an international expert to work with MoI on the implementation of the Program (especially Subprograms One and Two) as well as by mobilizing further TA support for the disaster risk financing and insurance work (Subprogram Three). GFDRR is also continuing to support Morocco. This program is also aligned with the G7 Climate Risk Insurance Initiative, led by Germany, which aims to stimulate the creation of effective climate risk insurance markets globally complementing climate change adaptation and enhancing economic growth and poverty reduction.

Fiduciary Implementation

12. In the context of the overall Program implementation framework, the Secretariat housed in MoI, within the General Secretary's office, under the guidance of the Steering Committee will be responsible for coordinating the implementation of the fiduciary aspects of the Program, including through the preparation of Annual Program Report. The Direction of Administrative Affairs (*Direction des Affaires Administrative*, DAA) of MoI will provide fiduciary support to the Secretariat. As part of the selection of projects, specific fiduciary criteria will be defined, to assess the fiduciary capacity of the project sponsors. This will allow to identify the needs for fiduciary support and capacity building for the sponsors of selected projects. Those needs for capacity building will be taken into consideration in the overall capacity building plan of the Program, under the responsibility of the Secretariat. In addition, then FA signed between MoI/MEF and the project implementing agencies and their partners will specify all the fiduciary implementation responsibilities of each party in the implementation of the projects to ensure that

funding proceeds are used for intended purposes. Also, the FA will specify for each project, the implementation schedule, including the planning of procurement (critical deadlines) and the requirements for financial reporting and audit. All detailed reporting guidelines will be included in the POM to be adopted by MoI. It has to be noted that this reporting covers the entire Program, irrespective of the funding source (Bank or other).

13. The Borrower will have the Program Financial Statements audited. The stakeholders involved in the Program will each prepare the required Financial Statements for the audit.

Environmental and Social Implementation

14. The implementation of safeguards also falls within this overall implementation framework. During project selection, the screening tools aimed at assessing the importance of social and environmental impacts of projects co-financed by FLCN will be based upon a Simplified Diagnostics Sheet (FIDS) and will require, depending on results of the screening: (i) exclusion of the project from funding under the Program if it involves significant environmental and/or social risks and impacts; (ii) an ESIA, ESMP, and/or an ARAP if the project involves moderate to moderately low environmental and/or social risks and impacts; or (iii) an Environmental and Social Information Sheet (FIES) if the project involves low or minimal environmental and social risks and impacts. These screening tools will be outlined in an Environmental and Social Technical Manual that will be appended to the POM. Additional guidance to project proponents will be provided through the preparation of guidebooks on (i) Environmental and Social Management, including on public consultations and resettlement; and (ii) GRM as well as related public information brochures. The Secretariat will coordinate the social and environmental work and will be supported as needed by additional expertise.

Program Monitoring and Evaluation

15. The Program will be monitored and reported on using the existing Government systems. The Results Framework (Annex 2) provides the basis on which the Secretariat will monitor and report on progress of Program implementation. Specifically, the Secretariat will prepare an Annual Program Report which will include evidence of progress on all results indicators included in the results framework, results related to DLIs, and evidence of compliance with requirements of the PAP. The Annual Program Report will build on MoI M&E system for subprojects to be co-financed by FLCN and incorporate additional inputs from the MEF for Subprogram Three. The Annual Program Report will be submitted to the Bank no later than 90 days after the end of each calendar year.

Annex 2: Results Framework Matrix

Program Development Objective: To improve the institutional framework to finance disaster risk reduction activities and strengthen financial resilience to natural disasters for targeted population in the Program area.												
PDO Level Results Indicators	**Core**	**DLI**	**Unit of Measure**	**Baseline**	**Target Values**					**Frequency**	**Data Source/Methodology**	**Responsibility for Data Collection**
					CY2016	**CY2017**	**CY2018**	**CY2019**	**CY2020**			
PDO Indicator 1: The FLCN strategic orientation and governance structure are redesigned with a focus on disaster risk reduction	☐	☒	Text	The FLCN focuses mainly on post disaster event risk response outside the context of a larger DRM strategy	Preparation of: (i) draft provisions to be included in the Borrower's 2017 budget law, regarding the establishment of the Steering Committee, and the inclusion of local governments (*collectivités territoriales*) among the beneficiaries of FLCN financing; and (ii) draft circulars (*Circulaires*) to be issued by MoI	(i) the Borrower's 2017 budget law includes provisions regarding the establishment of the Steering Committee, and the inclusion of local governments (*collectivités territoriales*) among the beneficiaries of FLCN financing; and (ii) circulars (*Circulaires*) regarding the establishment of the National Selection Commission and the Secretariat have been issued by	The Steering committee, the National Selection Commission, the Secretariat and the FLCN website are maintained	The Steering committee, the National Selection Commission, the Secretariat and the FLCN website are maintained. A national integrated natural DRM strategy is prepared by the Steering Committee.	The Steering committee, the National Selection Commission, the Secretariat and the FLCN website are maintained. A national integrated natural DRM strategy is adopted by the Steering Committee.	Annual	Program Progress Report with supporting documents	MoI/ Secretariat

					regarding the establishment of the National Selection Commission and the Secretariat. The Minister of Interior has decided on the annual allocation from the FLCN for the financing of Eligible Sub-projects	MoI. An interactive FLCN website that provides public access to information, handles grievances, and reports on the M&E system, has been created						
PDO Indicator 2: Cumulative number of beneficiaries from eligible risk reduction subprojects (% women)[36]	☐	☐	#	0	–	–	1,000 (50)	4,000 (50)	40,000 (50)	Annual	Program Progress Report with supporting data	MoI/ Secretariat
PDO Indicator	☐	☒	#	0	–	–	-	5.85 million	5.85 million	An	Program Progress	MEF/ ACA

[36] This indicator is a conservative estimate of potential number of beneficiaries protected by projects co-financed by the FLCN, counting direct and indirect beneficiaries from structural and non-structural activities. Exact estimates are difficult as the totality of investments and allocation between structural and non-structural investments, as well as the type of risk reduction investments (i.e., flood protection vs seismic retrofitting) is not known ex ante. Indicator will be reviewed and updated at mid-term in light of the underlying actual investment decisions made.

3: Minimum number of people in the Program Area insured for bodily injury against catastrophic events[37]										nual	Report with data on actual insurance coverage (from MEF/ACAPS)	PS
PDO Indicator 4: Establishment and operationalization of the FSEC to protect the uninsured	☐	☒	Text	-	–	The implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law regarding the establishment of the FSEC are prepared by the MEF and ACAPS	The implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law regarding the establishment of the FSEC are adopted by the Government	FSEC received initial financial contributions as per the provisions of the catastrophic risk insurance law	-	Annual	Program Progress Report and written evidence of implementation legal documents referred to in Article 71 of draft law and financial contributions received by FSEC.	MEF/ACAPS and FSEC
Intermediate Results Area 1: Promoting Institutional Reform and Capacity Building												

[37] Catastrophic events are defined as per the draft law n.110-14.

Intermediate Results Indicator 1: Minimum percentage of entities responsible for the implementation of eligible subprojects having received technical assistance and/or training	☐	☒	%	0	0	50	50	50	50	Annual	Program Progress Report	MI/ Secretariat
Intermediate Results Indicator 2: Improved risk assessment models developed and operational	☐	☐	Text	No	–	–	Probabilistic catastrophe risk models for i) evaluation and assessment (MoI), and ii) catastrophic risk insurance program as per the draft law (MEF) are developed	Probabilistic catastrophe risk models for i) evaluation and assessment (MoI), and ii) catastrophic risk insurance program as per the draft law (MEF) are operational	–	Annual	Program Progress Report and revised cat risk model	MoI/ Secretariat
Intermediate Results Area 2: Scaling-up Disaster Risk Reduction Activities												
Intermediate Results	☐	☒		0	MAD 170 million	MAD 340 million	MAD 510 million	MAD 680 million	MAD 850 million	An	Program Progress	MI/ Secret

Indicator 3: Cumulative amount of FLCN funds allocated to eligible subprojects											nual	Report	ariat
Intermediate Results Indicator 4: Minimum percentage of FLCN funds allocated to eligible non-structural subprojects	☐	☒	%	0	0	10	10	10	10	Annual	Program Progress Report	MI/ Secretariat
Intermediate Results Indicator 5: Minimum percentage of total funding of eligible subprojects provided by the entities responsible for implementation and partners	☐	☒	%	0	0	35	40	45	50	Annual	Program Progress Report	MI/ Secretariat
Intermedia	☐	☒		0	0	0	MAD 100	MAD 350	MAD 600	A	Program	MI/

te Results Indicator 6: Cumulative value of total funding of completed eligible subprojects achieving disaster risk reduction targets							million	million	million	nnual	Progress Report	Secretariat
Intermediate Results Area 3: Improving Disaster Risk Financing and Insurance												
Intermediate Results Indicator 7: Adoption of the catastrophic risk insurance legislative and regulatory framework	☐	☒	Text		The draft catastrophic risk insurance law is transmitted by the General Secretary of the Government (*Secrétariat Général du Gouvernement*) to the relevant Ministries, and is adopted by the Government Cabinet (*Conseil du Gouvernement)*	The draft catastrophic risk insurance law is transmitted to the Parliament, and the implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law and providing for the effectiveness of the insurance scheme, are prepared by the MEF and ACAPS	The implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law and providing for the effectiveness of the insurance scheme, are adopted by the Government	–	–	Annual	Program Progress Report and written evidence of actual adoption of the law and implementation legal documents referred to in Article 71 of the draft law.	MEF/ACAPS

Annex 3: Disbursement Linked Indicators, Disbursement Arrangements and Verification Protocols

Table 3.1. Disbursement Linked Indicator Matrix

	Total Financing Allocated to DLI	***As % of Total Financing Amount***	***DLI Baseline***	***Indicative timeline for DLI achievement***				
				CY2016	***CY2017***	***CY2018***	***CY2019***	***CY2020***
DLI 1: **The FLCN strategic orientation and governance structure are redesigned with a focus on disaster risk reduction**			The FLCN focuses mainly on post disaster event risk response outside the context of a larger DRM strategy	Preparation of: (i) draft provisions to be included in the Borrower's 2017 budget law, regarding the establishment of the Steering Committee, and the inclusion of local governments (*collectivités territoriales*) among the beneficiaries of FLCN financing; and (ii) draft circulars *(Circulaires*) to be issued by MoI regarding the establishment of the National Selection Commission and the Secretariat.	(i) the Borrower's 2017 budget law includes provisions regarding the establishment of the Steering Committee, and the inclusion of local governments (*collectivités territoriales*) among the beneficiaries of FLCN financing; and (ii) circulars *(Circulaires*) regarding the establishment of the National Selection Commission and the Secretariat have been issued by MoI.	The Steering committee, the National Selection Commission, the Secretariat and the FLCN website are maintained.	The Steering committee, the National Selection Commission, the Secretariat and the FLCN website are maintained. A national integrated natural DRM strategy is prepared by the Steering Committee.	The Steering committee, the National Selection Commission, the Secretariat and the FLCN website are maintained. A national integrated natural DRM strategy is adopted by the Steering Committee.

	Total Financing Allocated to DLI	*As % of Total Financing Amount*	*DLI Baseline*	*Indicative timeline for DLI achievement*				
				CY2016	***CY2017***	***CY2018***	***CY2019***	***CY2020***
				(US$8 million)	US$7 million)			
				The Minister of Interior has decided on the annual allocation from the FLCN for the financing of Eligible Sub-projects. (US$7 million)	An interactive FLCN website that provides public access to information, handles grievances, and reports on the M&E system, has been created. (US$7 million)			
Allocated amount (US$, millions):	35	17.5		15	14	0	3	3
DLI 2: Cumulative amount of FLCN funds allocated to eligible subprojects			0	MAD 170 million	MAD 340 million	MAD 510 million	MAD 680 million	MAD 850 million
Allocated amount (US$, millions):	25	12.5		5	5	5	5	5
DLI 3: Minimum percentage of FLCN funds allocated to eligible non-structural subprojects			0	0	10	10	10	10
Allocated amount (US$, millions):	8	4		0	2	2	2	2
DLI 4: Minimum percentage of total funding of eligible subprojects provided by the entities			0	0	35	40	45	50

	Total Financing Allocated to DLI	*As % of Total Financing Amount*	*DLI Baseline*	*Indicative timeline for DLI achievement*				
				CY2016	*CY2017*	*CY2018*	*CY2019*	*CY2020*
responsible for implementation and their partners								
Allocated amount (US$, millions):	22	11		0	8	8	3	3
DLI 5: Cumulative value of total funding of completed eligible subprojects achieving disaster risk reduction targets			0	0	0	MAD 100 million	MAD 350 million	MAD 600 million
Allocated amount (US$, millions):	40	20	-	0	0	6.67	16.7	16.6
DLI 6: Minimum percentage of entities responsible for the implementation of eligible subprojects having received technical assistance and/or training			0	0	50	50	50	50
Allocated amount (US$, millions):	10	5		0	4	2	2	2
DLI 7: Adoption of the catastrophic risk insurance legislative and regulatory framework and minimum number of people in the Program Area insured for bodily injuries against catastrophic events			–	The draft catastrophic risk insurance law is transmitted by the General Secretary of the Government (*Secrétariat Général du Gouvernement*) to the relevant Ministries, and is adopted by the Government	The draft catastrophic risk insurance law is transmitted to the Parliament, and the implementation legal documents referred to in Article 71 of the draft catastrophic	The implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law and providing for the effectiveness of the	5.85 million	5.85 million

	Total Financing Allocated to DLI	*As % of Total Financing Amount*	*DLI Baseline*	*Indicative timeline for DLI achievement*				
				CY2016	*CY2017*	*CY2018*	*CY2019*	*CY2020*
				Cabinet (*Conseil du Gouvernement)*	risk insurance law and providing for the effectiveness of the insurance scheme, are prepared by MEF and ACAPS	insurance scheme are adopted by the Government		
Allocated amount (US$, millions):	34.5	17.25		14.5	7	5	8	0
DLI 8: Establishment and operationalization of the FSEC to protect the uninsured			-	-	The implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law regarding the establishment of the FSEC are prepared by the MEF and ACAPS	The implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law regarding the establishment of the FSEC are adopted by the Government	FSEC received initial financial contributions as per the provisions of the catastrophic risk insurance law	-
Allocated amount (US$, millions):	25	12.5		0	9	8	8	0
Capitalized front-end fee			-	-	-	-	-	-

	Total Financing Allocated to DLI	*As % of Total Financing Amount*	*DLI Baseline*	*Indicative timeline for DLI achievement*				
				CY2016	*CY2017*	*CY2018*	*CY2019*	*CY2020*
Allocated amount (US$, millions):	0.5	0.25	-	0.5	0	0	0	0
Total Financing Allocated (US$, millions):				**35**	**49**	**36.67**	**47.67**	**31.66**

Table 3.2. DLI Verification Protocol Table

#	*DLI*	*Definition/ Description of achievement*	*Scalability of Disbursements (Yes/No)*	*Protocol to evaluate achievement of the DLI and data/result verification*		
				Data source/agency	*Verification Entity*	*Procedure*
1	The FLCN strategic orientation and governance structure are redesigned with a focus on disaster risk reduction	DLI1 measures the evolution of the institutional arrangements and management of the FLCN as well as the progress of the development of the national integrated DRM strategy. Yr 1: All documents that are required for the preparation of: (i) the draft provisions to be included in the Borrower's 2017 budget law, regarding the establishment of the Steering Committee, and the inclusion of local governments (*collectivités territoriales*) among the beneficiaries of FLCN financing; and (ii) draft circulars (*Circulaires*) to be issued by MoI regarding the establishment of the National Selection Commission and the Secretariat. These	No	Program Progress Report/ Secretariat	IGAT	The Government of Morocco provides official documentation demonstrating that all agreed milestones have been reached each year. DLI results and accuracy of information will be independently verified.

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
		documents will reflect that new strategic orientation of the FLCN focuses on risk reduction. *Risk reduction* is defined as an action resulting in an expected decrease in loss given the occurrence of a natural hazard—before a disaster event occurs. The Minister of Interior has decided on the annual allocation from the FLCN for the financing of Eligible Sub-projects. An annual allocation from the FLCN is defined by the inclusion of the allocations in the FLCN budget program (*programme d'emploi*). The minutes of the meetings of the governance bodies of the FLCN and the process of the CfP (launch, selection, and approval of sub-projects) will be verified. Yr 2: Evidence that: (i) the Borrower's 2017 budget law includes provisions regarding the establishment of the Steering Committee, and the inclusion of local governments (*collectivités territoriales*) among the beneficiaries of FLCN financing; and (ii) circulars *(Circulaires*) regarding the establishment of the National				

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
		Selection Commission and the Secretariat have been issued by MoI. In addition, an interactive FLCN website will be created which shall be accessible by the public and provide information on subproject eligibility, selection criteria, status and results, and shall provide a mechanism for the public to submit and track grievances and their resolution. Yr 3: Achievement will be measured by the fact that the Steering Committee, the National Selection Commission, the Secretariat and the FLCN website are maintained and fulfil their intended functions. *Maintained and fulfill their intended functions* means the governance arrangements specified in the Budget law and associated circulars, as well as the FLCN website are being implemented as planned. Yr 4: Achievement will be measured by the fact that the Steering Committee, the National Selection Commission, the Secretariat				

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
		and the FLCN website are maintained and fulfil their intended functions. In addition, a *national integrated natural DRM strategy* will be prepared in line with the requirements of the POM. It is a document that assesses the lessons learned from FLCN's experience to date and sets DRM goals and their priorities for Morocco. *Risk management goals* means an acceptable level of risk and resilience, and corresponding management structures and procedures, that Morocco will achieve at a stated point in the future. *Preparation* means production of the strategy ready for adoption by FLCN. Yr 5: Achievement will be measured by the fact that the Steering Committee, the National Selection Commission, the Secretariat and the FLCN website are maintained and fulfil their intended functions. In addition, the national integrated natural DRM strategy will be adopted. *Adoption* means formal				

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
		approval of the document by FLCN Steering Committee (justified by the minutes) and publication of the strategy on the FLCN webpage.				
2	Cumulative amount of FLCN funds allocated to eligible subprojects	DLI2 measures the cumulative amount of FLCN funds allocated to eligible sub-projects as specified in the POM. The Steering Committee following a recommendation of the National Selection Commission and based on a set of clear eligibility and selection criteria approves annually a list of eligible subprojects focusing on risk reduction. *Cumulative amount of FLCN funds* allocated is calculated as the cumulative sum of funding from the FLCN for those subprojects whose proponents and their partners have signed an FA with MoI and MEF. *Focusing* means the primary and major effort of a subproject. *Risk reduction* means that the eligible subproject's outcome is credibly expected to result in lower losses (that is, decreased deaths, injuries, property loss and economic activity) given the occurrence	Yes	Program Progress Report/ Secretariat	IGAT	The Government of Morocco provides evidence on FLCN funds allocated to eligible subprojects focusing on risk reduction. DLI results and the accuracy of information will be independently verified.

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
		of a natural hazard. Risk reduction will need to be documented in the application forms submitted for FLCN financing and be measurable and verifiable (for example, by flood maps before and after project implementation).				
3	Minimum percentage of FLCN funds allocated to eligible non-structural subprojects	DLI3 measure the percentage of funds allocated to non-structural subprojects relative to the total of all subprojects. The Steering Committee following a recommendation of the National Selection Commission approves annually a list of eligible non-structural subprojects. *Percentag*e of FLCN funds is calculated as the sum of funding for non-structural eligible subprojects versus all eligible subprojects, both of whose proponents have signed an FA. *Non-structural* subprojects are subprojects, such as risk assessments, planning, capacity building/ training, awareness raising and early warning systems.[38]	No	Program Progress Report / Secretariat	IGAT	The Government of Morocco provides evidence on FLCN funds allocated to eligible non-structural subprojects. DLI results and accuracy of information will be independently verified.

[38] See http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/EASTASIAPACIFICEXT/EXTEAPREGTOPRISKMGMT/0,,contentMDK:22239627~pagePK:

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
		A list of non-structural projects will be specified in the POM. For the purposes of this project, small-scale structural subprojects whose total investment is less than MAD 5 million are considered non-structural.				
4	Minimum percentage of total funding of eligible subprojects provided by the entities responsible for the implementation and their partners	DLI4 measures the leverage factor of FLCN financing. The Steering Committee ensures that a minimum percentage of additional financing is mobilized to complement FLCN funding received by selected eligible subprojects. Additional financing would be mobilized by entities responsible for implementation and their partners. *Additional Financing* will need to be confirmed in writing through the FA. *Minimum percentage* is measured by the financing mobilized by entities responsible for implementation and their partners relative to total cost of subprojects as shown in signed FAs. *Entities responsible for*	No	Program Progress Report/ Secretariat	IGAT	The Government of Morocco provides evidence on total financing sources of eligible subprojects. DLI results and accuracy of information will be independently verified.

34004173~piPK:34003707~theSitePK:4077908,00.html and http://www.preventionweb.net/english/professional/terminology/v.php?id=505 for further information.

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
		implementation are those entities submitting a subproject's application to FLCN, and assume the financial, management and legal responsibility for the subproject. They are likely to include line ministries, local and provincial governments, public entities and state-owned enterprises. *Partners* are any other entity except FLCN, who participate in the project through financial, management, beneficiary or other mechanisms. The verification is based on the amounts mobilized by partners as described in the FA.				
5	Cumulative value of total funding of completed eligible subprojects achieving disaster risk reduction targets	DLI5 measures the value of FLCN financing mobilized for the completed projects achieving their disaster risk reduction targets. The Steering Committee provides evidence that eligible subprojects achieve their risk reduction targets. *Cumulative value of funding* is the sum of the total costs of completed eligible subprojects that have received funding from FLCN. A subproject is considered	Yes	Program Progress Report/ Secretariat	IGAT	The Government of Morocco provides evidence that completed eligible subprojects have achieved risk reduction targets. DLI results and the accuracy of the information will be independently verified.

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
		completed when the subproject proponent provides FLCN (a) for structural subprojects, a Provisional Completion Report issued as per Morocco regulations and *Cahier des Charges*, and (b) for non-structural subprojects, a Declaration of Completion issued by the subproject proponent. *Achieving disaster risk reduction targets* means that eligible subprojects have achieved the targets determined by a baseline, as agreed at the selection stage and verified at project completion. Each subproject's baseline and risk reduction targets shall be defined in the application form submitted for FLCN funding. *Risk reduction targets* vary depending on the type of risk reduction activity undertaken and could include: • For flood protection projects: the number of people and value of economic assets within the mitigated flood risk zone (MFRZ), defined as the area within the pre-project 100 year flood				

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
		zone, and outside the post-project 100 year flood zone; • For earthquake protection projects: estimated reduction in loss (people not killed and savings of economic assets) to be achieved by the project; • For early warning systems: the number of people within the area served by an early warning system; • For planning activities: the estimated reduction in loss (people not killed and savings of economic assets) achieved by improved hazard planning; • For capacity building activities: number of institutions and people trained in improved risk management practices. Verification will be based among other things on: completion of project, adherence to the FA and adherence to the technical specifications as defined in the application documents that were used to define the reference values and disaster risk reduction targets.				

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
6	Minimum percentage of entities responsible for implementation and their partners having received technical assistance and/or training	DLI6 measures the percentage of entities responsible for the implementation of sub-projects financed by the FLCN who received technical assistance and/ or training relative to the total number of implementing agencies. The Steering Committee provides evidence that entities responsible for implementation have received technical assistance and/ or training each year in either technical or fiduciary or social or environment areas, per an *Annual Capacity Building and Training Plan*. Each year (starting in the second year) an Annual Capacity Building and Training Plan is developed that targets specific capacity building and training needs for entities responsible for implementation and their partners). *Receiving technical assistance or training* is defined for the purposes of this DLI as have received at least one training event (at a minimum one person attending one training event) or a technical assistance (consulting services mobilized) in either technical	No	Program Progress Report/ Secretariat	IGAT	The Government of Morocco provides evidence of technical assistance and/ or training received. DLI results and the accuracy of the information will be independently verified.

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	***Verification Entity***	***Procedure***
		or fiduciary or social or environment areas relevant to the Program.				
7	Adoption of the catastrophic risk insurance legislative and regulatory framework and minimum number of people in the Program Area insured for bodily injuries against catastrophic events	Yr 1: The draft catastrophic risk insurance law is transmitted by the General Secretary of the Government (*Secrétariat Général du Gouvernement*) to the relevant Ministries, and is adopted by the Government Cabinet (*Conseil du Gouvernement)* Yr 2: The draft catastrophic risk insurance law is transmitted to the Parliament, and the implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law are prepared by the MEF and ACAPS Yr 3: The implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law are adopted by the Government. Yr 4–5: Actual coverage of people by the catastrophic risk insurance achieved. The insurance program will provide coverage against property damage and bodily injury (permanent disability	No	Program Progress Report, including specific information on insurance aspects and copies of the draft law and copies of implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law. MEF/ACAPS.	SAI	The Government, through MEF/ACAPS, provides evidence of actual approval of the draft law, and preparation and adoption of implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law. The Government also provides written detailed evidence on the coverage provided by the catastrophic risk insurance law, such as number of auto and property insurance policies sold. DLI results and accuracy of information will be independently verified.

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure
		or death). Evidence shall rely on the number of people covered for bodily injury, and data on the current insurance market in Morocco; such that number of automobile liability insurance policies sold, number of residential property insurance policies sold. *Actual coverage* means the number of people in the Program Area insured for bodily injury against catastrophic events.				
8	Establishment and operationalization of the FSEC to protect the uninsured	Yr 2: The implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law regarding the establishment of the FSEC are prepared by the MEF and ACAPS. Yr 3: The implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law regarding the establishment of the FSEC are adopted by the Government. Yr 4: FSEC received initial financial contributions as per the provisions of the catastrophic risk insurance law	No	Program Progress Report, copies of legal documents referred to in Article 71 of the draft catastrophic risk insurance law regarding the establishment of the FSEC, MEF/ACAPS	SAI	The Government, through MEF/ACAPS, provides evidence of actual approval of the draft law, and preparation and adoption of implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law regarding the establishment of the FSEC. The Government also provides written detailed evidence on the first financial contributions to the FSEC. DLI results and accuracy of information will be independently verified.

#	DLI	Definition/ Description of achievement	Scalability of Disbursements (Yes/No)	Protocol to evaluate achievement of the DLI and data/result verification		
				Data source/agency	Verification Entity	Procedure

Table 3.3. Bank Disbursement Table

#	*DLI*	*Bank financing allocated to the DLI*	*Deadline for DLI Achievement*	*Minimum DLI value to be achieved to trigger disbursements of Bank Financing*	*Maximum DLI value(s) expected to be achieved for Bank disbursements purposes*	*Determination of Financing Amount to be disbursed against achieved and verified DLI value(s)* [4]
1	The FLCN strategic orientation and governance structure are redesigned with a focus on disaster risk reduction	35	Before closing date except for year 1, 2, and 3 where the DLI value needs to be met in each year	n.a.	n.a.	Pass/ fail Yr 1 disbursements a) (US$8 million) based on evidence of preparation of: i) the draft provisions to be included in the Borrower's 2017 budget law, regarding the establishment of the Steering Committee, and the inclusion of local governments (*collectivités territoriales*) among the beneficiaries of FLCN financing; and (ii) draft circulars *(Circulaires*) to be issued by MoI regarding the establishment of the National Selection Commission and the Secretariat. b) (US$7 million) based on evidence that the Minister of Interior has decided on the annual allocation from the FLCN for the financing of Eligible Sub-projects. Yr 2 disbursements a) (US$7 million) based on evidence that (i) the Borrower's 2017 budget law includes provisions regarding the establishment of the Steering Committee, and the inclusion of local governments (*collectivités territoriales*) among the beneficiaries of FLCN financing; and (ii) circulars *(Circulaires*) regarding the establishment of the National Selection

#	DLI	Bank financing allocated to the DLI	Deadline for DLI Achievement	Minimum DLI value to be achieved to trigger disbursements of Bank Financing	Maximum DLI value(s) expected to be achieved for Bank disbursements purposes	Determination of Financing Amount to be disbursed against achieved and verified DLI value(s) [4]
						Commission and the Secretariat have been issued by MoI b) (US$7 million) based on evidence that an interactive FLCN website that provides public access to information, handles grievances, and reports on the M&E system, has been created. <u>Yr 4 disbursements</u> (US$3 million) based on evidence that the Steering committee, the National Selection Commission, the Secretariat and the FLCN website are maintained. In addition, a national integrated natural DRM and resilience strategy prepared by the Steering Committee. <u>Yr 5 disbursements</u> (US$3 million) based on evidence that the Steering Committee, the National Selection Commission, the Secretariat and the FLCN website are maintained. In addition, the national integrated natural DRM and resilience strategy was adopted by the Steering Committee.
2	Cumulative amount of FLCN funds allocated to eligible subprojects focusing on risk reduction	25	Before closing date	MAD 100 million	MAD 850 million	Formula-based <u>Yr 1–Yr 5 disbursements</u> will be made based on evidence of allocation of FLCN funds to eligible risk reduction subprojects. For each MAD 1,000 of FLCN allocation to eligible risk reduction subprojects, US$ 29.4 may be made available for withdrawal by the Borrower. The actual disbursement in each year is calculated according to: Formula: *Loan amount allocated to the DLI divided by the DLI end-line value for CY20*

#	DLI	Bank financing allocated to the DLI	Deadline for DLI Achievement	Minimum DLI value to be achieved to trigger disbursements of Bank Financing	Maximum DLI value(s) expected to be achieved for Bank disbursements purposes	Determination of Financing Amount to be disbursed against achieved and verified DLI value(s) [4]
						multiplied by the number by which the actual result achieved for a given CY exceeds the results achieved for the previous CY. In addition, for withdrawals to be made available to the Borrower, every year at least MAD 100 million will need to be allocated to eligible risk reduction subprojects from the FLCN.
3	Minimum percentage of FLCN funds allocated to eligible non-structural subprojects	8	DLI value needs to be met in each year starting from the second year	≥ 10%	≥10%	Pass/ fail <u>Yr 2–Yr 5 disbursements</u> (US$2 million in each year) based on evidence that the specified percentage of FLCN funds are allocated to eligible non-structural subprojects. In addition, for withdrawals to be made available to the Borrower, every year at least MAD 100 million will need to be allocated to eligible risk reduction subprojects from the FLCN (minimum condition for disbursement under DLI 2).
4	Minimum percentage of total funding of eligible subprojects provided by the entities responsible for implementation and their partners	22	DLI value needs to be met in each year starting from the second year	30%	50%	Pass/ fail <u>Yr 2–Yr 3 disbursements</u> (US$8 million in each year) based on evidence that a minimum level of additional funding was mobilized for subprojects co-financed by the FLCN. <u>Yr 4–Yr 5 disbursements</u> (US$3 million in each year) based on evidence that a minimum level of additional funding was mobilized for subprojects co-financed by the FLCN. In addition, for withdrawals to be made available to the Borrower, every year at least

#	DLI	Bank financing allocated to the DLI	Deadline for DLI Achievement	Minimum DLI value to be achieved to trigger disbursements of Bank Financing	Maximum DLI value(s) expected to be achieved for Bank disbursements purposes	Determination of Financing Amount to be disbursed against achieved and verified DLI value(s) [4]
						MAD 100 million will need to be allocated to eligible risk reduction subprojects from the FLCN (minimum condition for disbursement under DLI 2).
5	Cumulative value of total funding of completed eligible subprojects achieving disaster reduction targets	40	Before closing date	0	MAD 600 million	Formula-based. Yr 3–Yr 5 disbursements will be made based on evidence that the FLCN co-financed eligible subprojects achieve risk reduction targets. For each MAD 1,000 completed works of eligible risk reduction subprojects, US$66.7 may be made available to the Borrower. The actual disbursement in each year is calculated according to: Formula: *Loan amount allocated to the DLI divided by the DLI end-line value for CY20 multiplied by the number by which the actual result achieved for a given CY exceeds the results achieved for the previous CY.*
6	Minimum percentage of entities responsible for the implementation of eligible subprojects having received technical assistance and/or training.	10	DLI value needs to be met in each year starting from the second year	50%	50%	Pass/ fail Yr 2 disbursements (US$4 million) based on evidence that the minimum percentage of entities responsible for implementation of eligible subproject have received technical assistance and/ or training. Yr 3–5 disbursements (US$2 million) based on evidence that the minimum percentage of entities responsible for implementation of eligible subproject have received technical assistance and/ or training.
7	Adoption of the					Pass/ fail

#	DLI	Bank financing allocated to the DLI	Deadline for DLI Achievement	Minimum DLI value to be achieved to trigger disbursements of Bank Financing	Maximum DLI value(s) expected to be achieved for Bank disbursements purposes	Determination of Financing Amount to be disbursed against achieved and verified DLI value(s) [4]
	catastrophic risk insurance legislative and regulatory framework and minimum number of people in the Program Area insured for bodily injuries against catastrophic events	34.5	Before closing date	5.85 million people in years 4 and 5	> 5.85 people in years 4 and 5	Yr 1 disbursement (US$14.5 million) based on evidence that the draft catastrophic risk insurance law is transmitted by the General Secretary of the Government (*Secrétariat Général du Gouvernement*) to the relevant Ministries, and is adopted by the Government Cabinet (*Conseil du Gouvernement).* Yr 2 disbursement (US$7 million) based on evidence that the draft catastrophic risk insurance law is transmitted to the Parliament, and the implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law and providing for the effectiveness of the insurance scheme, are prepared by the MEF and ACAPS. Yr 3 disbursement (US$5 million) based on evidence that the implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law and providing for the effectiveness of the insurance scheme are adopted by the Government. Yr 4 disbursement (US$8 million) based on evidence that at least 5.85 million people are insurance for bodily injuries against catastrophic events, as per the catastrophic risk insurance law.
8	Establishment and operationalization of the FSEC to protect the uninsured	25	Before closing date	n.a.	n.a.	Pass/ fail Yr 2 disbursement (US$9 million) based on evidence that the implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law regarding the

#	DLI	Bank financing allocated to the DLI	Deadline for DLI Achievement	Minimum DLI value to be achieved to trigger disbursements of Bank Financing	Maximum DLI value(s) expected to be achieved for Bank disbursements purposes	Determination of Financing Amount to be disbursed against achieved and verified DLI value(s) [4]
						establishment of the FSEC are prepared by the MEF and ACAPS <u>Yr 3 disbursement</u> (US$8 million) based on evidence that implementation legal documents referred to in Article 71 of the draft catastrophic risk insurance law regarding the establishment of the FSEC are adopted by the Government. <u>Yr 4 disbursement</u> (US$8 million) based on evidence that the FSEC received initial financial contributions as per the provisions of the catastrophic risk insurance law.

Note: n.a. = Not applicable.

Annex 4: Summary Technical Assessment

A. Program Strategic Relevance

Morocco's Emerging Approach to Managing Risks and Resilience

1. **Starting in 2008, the Government of Morocco has begun to explore options for managing a variety of risks the country is facing in a more strategic and integrated manner**. Supported by the World Bank through a series of Technical Assistance programs, the Government has looked at multiple risks, including i) natural disasters, ii) commodity (energy) price volatility risk, and iii) risk in the agricultural sector. The outcome of this Technical Assistance is summarized in the 2013 World Bank Publication "*Building Morocco's Resilience: Inputs for an Integrated Risk Management Strategy*"[39] which highlighted disaster risk as a particular concern. The Government decided to focus on DRM as a priority and as the focus of the new lending operation, so as to start with a subset of risks and enact concrete institutional reform changes and risk and vulnerability reduction results on the ground. This more focused engagement aims at providing the basis for a changed operational approach in Morocco to managing risks in a more integrated manner – but starting with a specific subset of risks first – in line with the recommendations of the 2014 World Development Report on "Risk and Opportunity". The choice of focusing on natural disasters has also been driven by an increasing recognition of the social tensions that have and may continue to surface in affected and non-affected areas, in addition to the fact that natural disasters had been one risk area that has been least understood or proactively managed in recent years, despite a series of disasters that have hit the country. The recent 2014 floods in south Morocco that were managed not proactively enough and delays in the rescue and relief actions were partly due to the high fragmentation of the governance structures and the weak inter-agency coordination.

Human and Physical Exposure to Natural Disasters

2. **Morocco remains vulnerable to a diverse set of natural hazards which are being exacerbated by climate change and rapid urbanization**. The most frequent hazards in Morocco are flood and drought – flooding in late 2014 in the south of the country caused over US$100 million in damage, and floods in Tangier (2008) and Al Gharb (2009) caused significant economic loss and asset destruction. Frequent disasters such as flood and drought are a burden to economic development and can drive victims into poverty. Less frequent but more severe earthquakes have the potential to significantly impact Morocco's budget and cause widespread suffering. The potential for catastrophic earthquakes in Morocco is significant – the 1960 Agadir earthquake, although extremely small by earthquake standards (magnitude M_w 5.8) caused deaths of over 12,000 Moroccans and left many others homeless, as well as causing major loss of property and livelihoods. The Al-Hoceima earthquake of 2004 killed over 600 people and injured over 1,000, left many homeless and completely destroyed many assets. Morocco lies on the Africa-Eurasia plate boundary, so that the North and in general the region of the Atlas mountains have high seismic risk – several of Morocco's major cities, including Fes, Meknes and Tangier, are highly vulnerable to earthquake.

[39] World Bank Group. 2013. *Building Morocco's Resilience: Inputs for an Integrated Risk Management Strategy*.

3. **Morocco has quantified its exposure to its most important natural hazards**. As part of the Technical Assistance program, a probabilistic risk assessment, i.e., MnhPRA, was developed and employed to analyze earthquake, flood, tsunami, drought and landslide risk. For a total exposure of MAD 2.7 trillion (or equivalently about MAD 90,000 per capita), average annual loss (AAL) due to natural hazards is estimated to be MAD 7.8 billion as shown in Table 4.1. Based on probabilistic analyses, over the next 30 years there is a 95 percent chance of having an earthquake or flood causing losses amounting to MAD 5 billion or greater, a 90 percent chance of having an event causing losses of MAD 10 billion or greater and a 65 percent chance of having an event causing losses of about MAD 25 billion or greater.

Table 4.1. Natural Hazards estimated losses for varying return periods (MAD millions)[40]

Hazard	Exposure	AAL	Loss Cost	Return Period (years) *Very Probable → Probable → Possible*				
				20	**50**	**100**	**500**	**1,000**
Earthquake	2,700,000	850	0.0003	4,523	9,570	15,317	35,800	47,000
Flood	2,700,000	4,177	0.0016	22,275	26,161	27,556	29,717	34,100
Tsunami	2,700,000	125	0.00005	2	3	404	28,013	58,852
Drought (3 crops only)		2,696	na	15,678	16,638	17,367	18,035	na
Sum		7,848	*not directly additive*					

Sources: World Bank Group. 2013. *Building Morocco's Resilience: Inputs for an Integrated Risk Management Strategy*.

4. **Table 4.1 also shows the estimated impacts for disaster scenario,** which range from "Very Probable" to "Probable", "Possible" and "Rare but Possible" events. These levels represent scenarios the government should prepare for or at least consider:

- "Very Probable" corresponds to events occurring every few decades.
- A "Probable" corresponds to a "1 in 100 years" event, which should not be misunderstood – in actuality, it can occur at any time, and has a probability of 0.01 (1/100) of occurring in any year. Despite being seemingly rare, such events seem to occur all too frequently. Buildings, bridges and other infrastructure are quite likely to experience Probable events during their design life and are in fact typically designed for these (and somewhat larger) events, although older infrastructure often has not been so designed and may require retrofitting. Fiscal, economic and emergency planning similarly has to be able to respond to Probable events.
- "Possible" corresponds to a "1 in 1,000 years" probability of occurrence – infrastructure may often survive such events although with major damage, and fiscal, economic and emergency planning should at least consider such events.
- Lastly, "Rare but Possible" corresponds to a "1 in 10,000 years" (not shown in Table 4.1 above) probability of occurrence – infrastructure will be heavily damaged by

[40] Total Exposure Value Buildings and Infrastructure (MAD millions); AAL (MAD millions); Loss Cost = AAL / Total Exposure.

such events, and fiscal, economic and emergency planning often overwhelmed. While difficult to fully prepare for such events, they should at least be considered.

5. In the last few years, the Pakistan (2005), Wenchuan (2008) and Haiti (2010) earthquakes, the Indian Ocean (2004) and Japan (2011) tsunamis, tropical cyclones Nargis in Myanmar (2008), Sandy in New York (2012), and the Thai floods (2011) were all somewhere in the range of Probable to Possible. A large earthquake in, for example, Fes has the potential for tens of thousands of fatalities and significant economic loss.

6. **These hazards, however, vary in their impact on sectors and parts of the country**. Sectoral breakdown of losses are not uniformly distributed across Morocco:

- *Earthquake hazard* is concentrated primarily in the north of Morocco and, to a lesser extent, on a line running through Fez and Marrakech to Agadir. Five provinces (Nador, Al-Hoceima, Berkane, Taza, Tetouan) representing 8 percent of the total national building exposure have an earthquake AAL[41] of 34 percent of the national building earthquake AAL. This means that on average, for buildings only, 8 percent of the building exposure contributes 34 percent of the earthquake potential loss. Clearly, if the risk of 8 percent of Morocco's buildings can be reduced, Morocco's overall earthquake risk can be significantly decreased.
- *Floods* are a chronic problem for Morocco and on average cause significantly more damage than earthquakes, with a total AAL of MAD 4.2 billion. While flood risk affects most parts of Morocco, MnhPRA identified that four provinces (Kenitra, Tetouan, Casablanca and Sidi Kacem) contribute 60 percent of the total building flood risk.
- *Droughts*. MnhPRA estimated AAL for cereal production due to drought to be approximately MAD 2.7 Billion. Ninety percent of Moroccan agriculture is traditional and dependent on rain, and is highly vulnerable to not only droughts and floods but also pests and diseases. The three regions most exposed are Sousse-Massa-Draa, Meknes, and Marrakech-Tensift. Overall, it is estimated that the total exposure of the cereral portion of the agriculture sector to various risks was MAD 75 billion in 2008, increasing to MAD 185 billion in 2020.

Poverty Reduction and Shared Prosperity Relevance

7. **Reducing the impact of natural hazards is of central importance for sustained improvements in poverty reduction and shared prosperity**. The Program's focus on support for preventative risk reduction actions will significantly benefit poor and vulnerable populations, not only through direct loss reduction but through higher investments by firms and households given a lower potential for disasters. Evidence suggests that, in the presence of unmanaged risk, poor and low-income households tend to under-invest in productive assets (e.g., farmers plant low-return, low-risk crops). Proactive DRM (i.e., weather stations, early warning systems, etc.) can therefore incentivize more productive investments. Furthermore, analyses suggest the

[41] AAL is the sum of losses anticipated over some long-term future period (e.g., the next 100 years) divided by the length of that period. More specifically, it is the frequency-weighted mean of all future losses.

vulnerability (defined as the potential damage to housing stock due to flood events) of the assets of the poor (where poor is defined as the bottom 20 percent) is 69 percent higher than the vulnerability of the assets of the non-poor.[42] Reducing the vulnerability of the poor's assets has therefore a much greater relative benefit and can also speed up recovery since productive assets remain intact. Morocco's approach to disaster risk insurance, especially by establishing a FSEC for uninsured people is also important. Since poor and low-income households have higher vulnerability and less ability to smooth economic shocks due to less access to financing (including insurance), government support is necessary after a disaster event. Evidence from flood and drought in a variety of contexts suggest that poor households reduce consumption after a disaster, for example by reducing food in-take and taking children out of school. These hardship measures have long-term implications for human capital, especially for children, and worsen intergenerational poverty. Having the FSEC in place will allow poor households to receive support sooner, easing hardship significantly. Evidence from ex-post surveys of floods and droughts also suggest disbursing payments soon after a disaster substantially reduces overall disaster losses.

B. Technical Soundness

Program Ownership, Focus and Design

8. **The Program is based on strong government ownership, technically sound and fully aligned with international best practices.** The Program directly responds to the government of Morocco's request to support the implementation of an improved approach to managing risks and resilience. The Program conforms to core principles for effective DRM, including: moving from a culture of post disaster response and fragmented and sector-based in inventions to a more proactive and ex-ante focus on risk reduction; targeting local action by having local communities be increasingly responsible for DRM, including for prevention; and providing improved risk governance structures and incentives to catalyze new and scaled-up risk reduction activities. In Morocco's case, specific attention has been paid to target increased DRM at the local level as well as to ensure a good balance between structural and non-structural measures, reflecting the fact that non-structural measures are oftentimes particularly impactful and cost effective. The Program also contains a clear emphasis on better using risk analytics by building on and mainstreaming the use of Morocco's disaster risk modeling capability. Risk institutional reform and reduction activities are also complemented by a specific Subprogram dedicated to disaster risk insurance to ensure that residual risks that cannot be cost-effectively mitigated are efficiently financed, including through the establishment of the FSEC.

9. **For Subprograms One and Two, the Program adopts international practices to the specific country circumstances in Morocco, including in terms of the redesign of the FLCN.** The proposed redesign of the FLCN follows international practices in countries, including from Mexico, Indonesia, France and the United States, which have put in place mechanisms to promote ex-ante risk mitigation investments. These good practices include the following parameters: clarify that the FLCN does not aim at financing large-scale infrastructure projects nor should its resources be used to pay a large portion of the losses after a disaster; the FLCN

[42] World Bank. 2015 (Draft). *Socio-economic resilience to floods in 90 countries*.

embraces co-financing instead of full financial support as its modus operandi in order to increase overall ownership of project implementing agencies and scale up risk reduction investments; the FLCN has a transparent organizational design combining different ministries and levels of governments; selection of projects funded by the FLCN is based on transparent selection criteria; no member can evaluate a project if there is a conflict of interest; both non-structural and structural risk reduction activities are supported; support is provided for both national public entities and local communities; there is a dedicated effort to help small/ more vulnerable communities; there is an audit process in place, for technical and fiduciary aspects; the identity of those who receive funding, the nature of their project and level of funding is also made public. More broadly, linking the work on DRM to a broader risk and resilience management approach, the Program also is in line with emerging best practices on "resilience" as, for example, articulated in the 2014 World Development Report on "Risk and Opportunity".

10. **The establishment of the catastrophic risk insurance program under Subprogram Three, which relies on a public private partnership and the establishment of the FSEC, is innovative.** The Program builds on previous catastrophic risk insurance programs supported by the World Bank, such as the Turkish Catastrophe Insurance Pool, the Mongolia Index-Based Livestock Insurance Project, the Romanian Catastrophe Risk Insurance Pool, and the Southeast Europe and Caucasus Regional Catastrophe Risk Insurance Facility. These programs have demonstrated that public-private partnerships can enable the development of sustainable, competitive domestic catastrophic risk insurance markets and allow for cost-effective catastrophe risk transfer from homeowners and enterprises to the private insurance and reinsurance markets. The development of such domestic markets is usually hampered by (i) limited good-quality data, catastrophe risk models and specialized technical expertise for the development of actuarially sound catastrophic risk insurance products; (ii) lack of production systems (pricing, underwriting, claims settlement, risk management and reinsurance operations) to support catastrophic risk insurance products, which require major investments for insurers which are often not justified given the current low volume of catastrophe insurance business; (iii) lack of risk-based regulatory requirements, leading insurers to engage in unsustainable price competition that is not compatible with the inherent risk of this business; (iv) lack of consumer awareness of their own disaster risk exposures and/or insurance products that can help them mitigate those risks. Governments often play the role of reinsurers of last resort by providing ad hoc financial assistance to homeowners and businesses in the aftermath of natural disasters thus creating wide-spread expectations of government assistance and weakening consumers' interest in catastrophe insurance. All these issues are addressed in the design of the catastrophic risk insurance program.

11. **The Program can also build on strong risk analytics which have been applied during the preparation process**. A guiding principle of modern management is "what gets measured gets managed." An important element of the Government of Morocco's DRM program has been the development of MnhPRA, a GIS-based software package that builds an inventory of the country's assets at risk and the hazards that threaten these assets, and allows for analysis to estimate the impacts of these hazards on the assets. MnhPRA thus permits measurement of disaster risk, a key step towards managing that risk. For example, applying MnhPRA to the identified FLCN co-financed projects during the 2015 CfP shows that approximately 73 percent of the project funding is allocated to flood risk reduction activities, and 27 percent to geohazards (i.e., earthquake and landslide) risk reduction activities. This distribution seems reasonable given that floods are frequent occurrences in Morocco, and have affected more than 10 times as much

of the population as geohazards. The geographical distribution of projects, especially flood related projects, also seems reasonable which overlays the local government projects on the major river systems and earthquake hazard of Morocco. While geohazards are only addressed by two projects, one of these projects is in Agadir, where over 12,000 were killed in an earthquake in 1960, and the other in Al Hoceima with hundreds of deaths in the 2004 earthquake. MnhPRA will be further developed so that it can be used to more proactive identify risk reduction options in "disaster risk hotspots" and also in the evaluation of the FLCN co-financed projects. In terms of disaster risk insurance, MnhPRA is being used to inform the government on the financial and fiscal implications of the draft catastrophic risk insurance law. In particular, it can help MEF and ACAPS set the additional catastrophe insurance premium to finance the compulsory extension of guarantee, and define the financial strategy of the FSEC. Preliminary actuarial analysis of the World Bank shows that the average annual disaster loss (earthquakes and floods) is estimated at MAD 700 million for the compulsory cat risk insurance program and at MAD 800 million for the FSEC.[43]

Program Institutional Framework and Sustainability

Overall Program Management

12. **The Program builds on strong Government ownership and at its core is being managed by two established and high capacity institutions: MoI and MEF**. For the improved governance of the FLCN, a Steering Committee will be formally established and will be presided over by the General Secretary of MoI and include the MEF, the MAGG, and the Ministry of Urban and Territorial Planning etc., with representatives at the General Secretary level. The Steering Committee will set the strategic direction for Morocco's risk management policies as they relate to the use of the FLCN. Specifically, key functions will include: i) setting the strategic direction for the FLCN; ii) defining and reviewing the selection eligibility criteria for the sub-projects to be co-financed by FLCN; iii) providing a sounding board for Line Ministries' and local government priorities for the eligible sub-projects; iv) monitoring and evaluating the results of eligible sub-projects in the Program Area; and v) overseeing and providing guidance to both the National Selection Commission and the Secretariat.

13. A **National Selection Commission** will also be formally established to manage the transparent selection of FLCN co-financed projects. The Commission will operate under the guidance of the Steering Committee and include, among others, representatives from the relevant ministries and public agencies, including MoI, MEF, MAGG, the Ministry of Urbanism and Territorial Planning, the Ministry of Energy, Mining, Water and Environment, the Ministry of Agriculture, the Ministry of Transport and Equipment, as well as any other Ministry, Department, Public Agencies related to the FLCN mandate. Technical experts can also support the National Selection Commission. The Commission will assure that there is no conflict of interest for the members of this Commission to evaluate a specific application.

14. A **Secretariat** will be created to support the work of the Steering Committee and the National Selection Commission and will be established at the office of the General Secretary of

[43] Those estimates are sensitive to multiple assumptions. They are being refined with MEF and ACAPS.

MoI. The Secretariat will be responsible for day to day coordination and management of the Program in line with the POM and also serve as the Bank's interface for the Program. The Secretariat will also be in charge of preparing the Annual Program Reports. The Secretariat will be supported by an international expert mobilized and financed by the SDC and additional support may be provided, as needed, by qualified consultants to ensure that the Program will be implemented in line with the requirements of the POM. The Secretariat, together with the Steering Committee and National Selection Commission, will also provide oversight on the FLCN-funded projects, in particular by assessing at the selection stage, the capacity of implementing agencies and their partners to carry out the project so that they can achieve intended results, and by supporting, as needed, implementing agencies and their partners during the implementation through targeted capacity building.

Table 4.2. Program's Main Stakeholders and Role in Program Implementation

Institution		**Role Played in Program Implementation**
MoI	General Secretariat	Responsible for the provision of strategic guidance for the Program, Head of Steering Committee, *Ordonnateur* of the FLCN, Responsible for the Secretariat
		Secretariat: Day to day management of the Program; support to Steering Committee and National Selection Commission
	IGAT	Responsible for (i) technical audit of participating Program Entities, and (ii) independent verification of DLIs 1-6
	DAA	Support to Secretariat on fiduciary management aspects
MEF	General Secretariat	Member of Steering Committee
	Budget Department	In charge of Program budgeting
	General Inspectorate of Finance	Responsible for audits of the Program Financial Statements
	Internal Audit Service of the Department of Treasury and External Finances	Responsible for the independent verification of DLIs 7 and 8
	Insurance Supervisor[44]	Technical leader of the National Catastrophic Risk Insurance Program
MAGG	General Secretariat	Member of Steering Committee
Ministry of Urban and Territorial Planning	Directorate of Urban Planning	Member of Steering Committee
Courts of Accounts (incl. at the regional level)		In charge of external audit of public entities and local governments
Procurement Control Commission		In charge of handling the Program's public procurement complaints
Central Body for the Prevention of Corruption		In charge of investigating the Program's fraud and corruption complaints
Line Ministries, Local Governments, Public Agencies, and State-owned Enterprises		In charge of implementing FLCN co-financed projects, incl. mobilizing co-financing, contract management and procurement, and monitoring and reporting on project progress.
Water Basin Agencies		In charge of technical studies related to water/ flood protection projects

[44] MEF/ACAPS (since effectiveness of the Law 64-12 concerning the creation of ACAPS).

15. The Borrower will have the Program Financial Statements audited. The stakeholders involved in the Program will each prepared the required Financial Statements for the audit.

16. The implementation of **Subprogram Three** (Improving Disaster Risk Financing and Insurance) falls within this overall framework and the MEF is a core member of the Steering Committee. In addition, the MEF is the technical leader in the development of the draft catastrophic risk insurance law and, based on the proposal made by ACAPS, it will draft the implementation legal documents. The draft law establishes a Committee of catastrophic events (*Commission de suivi des évènements catastrophiques*). Its mandate is to collect information following the occurrence of a disaster, to propose whether this disaster should be declared as a catastrophic event, to propose the declaration of state of calamity and to assist the FSEC in the evaluation of the damage of non-insured victims. The draft law also establishes the FSEC as a legal entity. The FSEC will be managed by a Board chaired by the Prime Minister (or delegated authority) and with representatives of public agencies (including ACAPS) and insurance/ reinsurance industry. The draft catastrophic risk insurance law, including the establishment of the FSEC, builds on solid institutions: ACAPS, MEF and the Central Reinsurance Company (*Société Centrale de Reassurance*). The Central Reinsurance Company has been the national reinsurer since 1960, benefits from a state guarantee, has good financial strength (rated BB+ by Moody's), and serves Morocco's rapidly growing private insurance market. The Government has been working towards a catastrophic risk insurance program for the past decade with technical assistance from the World Bank.[45] The ACAPS has the technical capacity to assist in the implementation of the catastrophic risk insurance law, especially the insurance component. In addition, the ACAPS would continue to provide advisory services (including actuarial support) to contribute to the preparation of the implementation legal documents of the draft law. Grants have already been mobilized to assist ACAPS. Previous drafts of the law faced technical challenges and legislative hurdles. The revised draft law, which has been revised by the ACAPS and discussed with the private insurance sector in collaboration with the Word Bank, is scheduled to be submitted to the *Conseil du Gouvernement* and then to the Parliament in 2017. Its implementation will constitute a major shift toward ex ante financial management of disasters, although strong political commitment and technical and operational support will still be required.

Implementation Level

17. **Implementation of activities** that are co-funded by the FLCN will be the responsibility of the concerned Line Ministries, provincial and local governments, public agencies and/or SOEs. Implementation responsibility will cover all project management dimensions, mobilizing co-financing, procurement, contract management, management of environmental and social aspects, and monitoring and reporting on project progress. The *Ordonnateur* of the FLCN, the General Secretary of MoI, together with the MEF, will sign a FA (*convention de financement*) with each implementing agency and their partners to ensure that projects will be implemented so

[45] The World Bank, with funding from FIRST Initiatives, provided the DAPS with technical assistance to assess the financial sustainability of the proposed program, including the actuarial methodology to set the additional cat risk insurance premium. Some of its recommendations (such as defined list of insurable perils and specific maximum coverage for industrial assets, increased role of the private domestic insurance sector) has been adopted in the revised draft law.

as to achieve their intended objectives and meet the requirements specified in the POM. The Secretariat, supported as needed by qualified consultants, will also ensure compliance with the provisions of the FA.

18. At the *national level*, the likely implementing agencies and their partners for structural and non-structural investments will include the Ministry of Urban and Territorial Planning, the Ministry of Equipment, Transport and Logistics, the Ministry of Agriculture, the Ministry of Energy, Water, and Environment, and to some extent the Ministries of Health and Education (i.e., for building retrofits). It could also include public agencies such as the National Institute of Geophysics and National Centre for Scientific and Technical Research (CRNST) or the High Commission for Water and Forest, and the National Meteorological Office. All these agencies are well qualified and experienced in their respective domains technically. The review of the proposals under the first CfP reflected the likelihood that these ministries and agencies will bring forward the bulk of the national-level projects.

19. At the *subnational level*, the likely implementing agencies will be Provincial Authorities or Municipalities with varying degrees of technical capacities. During preparation a sample of local governments was assessed, in particular in terms of their ability to implement the proposed subprojects based on the projects received under the first CfP. A large number of subprojects was in the area of small scale flood protection works. These have been prepared by the sampled local governments jointly with the Moroccan Water Basin Agency (*Agence du Basin Hydraulique*, ABH), which is responsible for flood protection works in various river basins of Morocco. Morocco's ABHs are well recognized for their technical expertise in the area of flood control, with extensive experience in the design and construction of flood control structures. Overall, there are nine ABHs in Morocco with detailed knowledge and experience in their respective river basins.[46]

20. Nevertheless, given the varying level of technical capacity of some of the potential implementing agencies and their partners, especially at the subnational level, the Program will be designed to screen at project selection for more complex projects and/ or weaker implementation capacities and establish a dedicated capacity building program where needed, including through the mobilization of additional consultants to support the implementation of subprograms.

21. Program is also designed to include **technical audits**. As part of its role as the IVA, the IGAT will conduct technical audits to ensure that projects are implemented according to required standards. IGAT has significant experience of conducting technical audits, in particular at the subnational level, based on qualified staff of engineers and other professionals who routinely provide independent quality assurance review processes for MoI.

C. Program Expenditure Framework and Financial Sustainability

22. **The latest comprehensive assessment of Public Financial Management (PFM) systems in Morocco was published in 2009 (Public Expenditure and Financial**

[46] ABH Loukkos (Tétouan), ABH Tensift (Marrakech), ABH Guir-Ghris Ziz (Errachidia), ABH Oum Er Rbia (Beni Mellal), ABH Sakia El Hamra-Oued Eddahab (Laayoune), ABH Sébou (Fès), ABH Bouregreg (Ben Slimane), ABH Moulouya (Oujda), ABH Souss Massa (Agadir).

Accountability (PEFA) assessment) and concluded that "the credibility of the budget is rated good overall". Payment arrears have ceased to be substantial. In terms of comprehensiveness and transparency, detailed fiscal and budget information is accessible to the public, including from the websites of the MEF and Parliament. Most funds transfers to regional and local governments are governed and effected through transparent arrangements and following defined rules. However, certain gaps need to be closed in the provision of information about programs financed by international donors and the consolidation of administrative budget data, and there are lags in the financial reporting on public enterprises. The process of preparing the annual budget is orderly and well established and gives the technical ministries adequate time to participate in the drafting of the budget estimates within the timeframe required for Government's submission of the budget to Parliament. Predictability of budget execution is satisfactory and arrangements for monitoring flow of funds are ensured. Government ministries, departments and agencies are fully capable of planning their expenditures, even though major in-year adjustments to budget allocations are frequently made due to changes in revenue available for supplementary appropriations (*fonds de concours*). Control and audit were found to be good overall for procurement and payroll, especially given plans to systematically increase scheduling of joint audit work by ministerial audit departments and the MEF's Inspector General's team in order to better detect any flaws in control systems. The Court of Accounts (*Cour des comptes*) is fully engaged in its role as external auditor of the management and use of public funds. The frequency and scope of its audits, which are steadily increasing, are rated average, as is follow-up of their recommendations. The review of the budget law (*loi de finances*) by the two houses of Parliament is clearly defined in the Constitution and the Government follows these procedures. Many detailed reports are annexed to the budget law and supplemented as required, by written responses from the technical ministries to questions posed by members of Parliament and by the parliamentary finance commissions.

23. **Morocco is also undertaking an important budget reform to improve the transparency and effectiveness of public expenditure management at the central and local level**. While budget classification at the level of central government is aligned with international norms,[47] Morocco does not yet publish a multiannual budget framework, which is foreseen in the Organic Budget Law reform. The current reform aims to achieve this objective through the adoption of a programmatic budget structure and performance objectives and indicators. The swift implementation of this reform would increase the consistency between the budget and the government's priorities. Transfers to agencies and local governments are currently recorded but not their own revenues in the absence of consolidated accounts.

24. **The Program's financial sustainability and funding predictability at the central level do not pose a risk**. The analysis recently carried out by the Bank on Morocco indicates that the public debt and external debt sustainability framework at the central level remains sustainable although it would weaken under scenarios of medium-term downside risks. Indeed, when the debt sustainability analysis is based on alternative scenarios, the debt stock remained high over the period 2014–2020. All the six bound tests[48] proved sustainable for the central

[47] COFOG (Classification of the Functions of Government) developed by the OCDE
[48] The Scenarios are as follows: B1: Real interest rate is at baseline plus one standard deviations; B2: Real GDP growth is at baseline minus one-half standard deviation; B3: Primary balance is at baseline minus one-half standard

government debt over the medium term, as well as the five external debt tests. Morocco has also demonstrated its willingness and capability to adjust policies and introduce corrective measures to overcome the adverse effects of shocks. Morocco managed to keep its investment grade rating and its access to international financial markets with relatively favorable conditions. The successful implementation of the Government of Morocco's revamped development strategy would ensure that the negative effects of most of the anticipated risks discussed above are weathered successfully.

25. **Program proceeds will be mobilized and spent as a part of the Budget of the State and will follow the same rules, processes, controls and reporting obligations**. Program proceeds under Subprograms One and Two will be reflected in the CAS-FLCN. As mentioned above, the FLCN was established by the 2009 Budget Law as a CAS within MoI. The FLCN will receive annual contributions through the general budget in line with Morocco's annual budgeting process. The FLCN has in the past years been receiving MAD 200 million from the government budget per year. It is envisioned that the Government will continue to allocate annually at least this amount over the program implementation period and an annual allocation of FLCN fund proceeds to eligible risk reduction sub-project of at least MAD 170 million is specified as a DLI in the operation so as to ensure FLCN's financial predictability and sustainability (with the remainder to be used for other purposes, such as emergency response). The CAS-FLCN is a budgetary envelope that: is a specific section within the budget documents which is voted by Parliament in the same form and at the same time than the rest of the Budget; is under the spending authority (*ordonnateur*) of a Minister (Minister of Interior for the FLCN); is not submitted to cancellation of uncommitted balance at the end of the fiscal year; except for the above, follows the same rules than the general budget. The CAS-FLCN is presented annually to Parliament with an expenditure framework. It is also subject to interim budget execution reports and part of the year-end budget execution report submitted to the Court of Accounts. In addition, for Subprogram Three a Government contribution is foreseen which will be used for the initial funding of the FSEC and will be determined by the Budget Law.

26. **Transfers from the CAS-FLCN to individual project implementing agencies will be made according to a specific disbursement plan and according to rules and processes agreed upon in a FA**. The selection process for individual projects will include an evaluation of the financial management and procurement capacity as well as an appreciation of the risk of corruption. Once the project is deemed eligible for funding, an FA will be signed between MoI and the implementing entity. The FA will cover the disbursement modalities (based in most cases on work advancement justifications) and prospective calendar as well as fiduciary obligations, especially in terms of reporting. The FA will provide details and template forms to this effect. Implementing entities and their partners will likely only be public sector entities, with bank accounts that are part of the Treasury network and with management and reporting rules that are clearly defined in laws and regulations. Bank proceeds will cover structural and non-structural risk reduction expenses for eligible projects. This includes works, goods and services. Eligibility criteria will define the nature of the works and exclude specific categories and will also define the specific geographic areas where works might be ineligible.

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deviation; B4: Combination of B1-B3 using one-quarter standard deviation shocks; B5: One time 30 percent real depreciation in 2015; and B6: 10 percent of GDP increase in other debt-creating flows in 2014.

27. **Program Expenditure Framework.** For Subprograms One and Two, the Program Expenditure Framework consists of funds allocated to the CAS-FLCN and the corresponding co-financing mobilized. Specifically, it is expected that MAD 170 million will be allocated on an annual basis to finance eligible subprojects from the FLCN focusing on risk reduction. This financing contributes initially 70 percent of the total cost of eligible subprojects with project proponents and their partners contributing the remaining 30 percent. This co-financing will increase to 50 percent at the last year of the Program. The FLCN will therefore significantly leverage additional financial resources. Total expenditures under Subprograms One and Two are estimated to be MAD 1,436 million (approximately US$145 million) over the Program period. For Subprogram Three, the Program Expenditure Framework consists of financial resources mobilized to establish the FSEC. Total financial contributions for establishing FSEC are estimated to be MAD 1.1 billion (approximately US$111 million) during the five years of the Program. These funds would come from the government's initial contribution and additional taxes. [49] The overall Program Expenditure Framework for the years 2016 to 2020 is summarized in Table 4.3 below.

Table 4.3. Program Financing 2016–2020 (US$, millions)

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Subprogram 1 - Institutional Reform and Capacity Building[50]	2	3	3	3	3	**14**
Subprogram 2 - Risk Reduction Activities	22	24	26	28	31	**131**
Subprogram 3 - Disaster Risk Financing and Insurance	–	–	–	55	56	**111**
Total	**24**	**27**	**29**	**86**	**90**	**256**

Table 4.4. IBRD Contribution 2016–2020 (US$, millions)

Source	Amount	% of Total
IBRD financing	200	78
Co-financing	56	22
Total	**256**	**100**

D. Program Results Framework and Disbursement Linked Indicators

28. **Program progress will be monitored through the detailed Results Framework**. The Program supports three broad and interrelated results areas in support of the PDO which is to improve the institutional framework to finance disaster risk reduction activities and strengthen

[49] Estimated figures for Sub-Program Three are only indicative since the current draft law does not specify the amount of financial resources of FSEC. They will be fixed by decree once the law is approved.
[50] Estimated as 10% of total FLCN and partner financing.

financial resilience to natural disasters for targeted population in the Program area. The three results areas as follows:

- **Results Area One (Promoting Institutional Development and Capacity Building):** The first results area focuses on improving Morocco's institutional DRM structure. This will be achieved through the reform of the FLCN, with the objective of transforming it into a "national resilience fund" characterized by improved management processes, including an increased focus on ex-ante disaster risk reduction, better investment decisions based on transparent selection processes and a clear M&E system. Morocco's institutional capacity will also be strengthened by ensuring that national and local-level institutions are better prepared for the onset of natural hazards. Furthermore, citizen participation and engagement in risk management will be enhanced. Together, this will lead to more strategic, evidence-based and participatory approach of how disaster risks and resilience are being managed in Morocco.
- **Results Area Two (Scaling up Disaster Risk Reduction Activities):** The second results area aims at increasing actual protection of beneficiary population and asset in Morocco by scaling up structural and non-structural ex-ante DRM activities. It aims at ensuring an appropriate balance between structural and non-structural activities, in light of potentially high BCRs of non-structural (i.e., awareness raising campaigns, early warning systems, etc.) interventions, as well as at increasing the role of local governments in risk reduction. This will help institutionalize a risk management process in Morocco which is less fragmented and more integrated both horizontally (i.e. different ministries and national government agencies) and vertically (i.e. between national and local governments). By targeting in particular local governments significantly enhanced capacity for risk management at the regional and communal level will be achieved.
- **Results Area Three (Improving Disaster Risk Financing and Insurance):** The third results area complements results areas 1 and 2 by focusing on providing financial protection through disaster risk insurance as residual risks that cannot be cost-effectively mitigated need be efficiently financed. In addition, the FSEC will ensure that special attention is given to the most vulnerable population and communities, which are often uninsured. This will help ensure that Morocco's approach to risk management is comprehensive in the sense of complementing institutional reform and capacity building (results area 1) not only with risk reduction investments (results area 2) but also with a strategic approach to financial management and insurance against catastrophic events.

29. The PDO level indicators of the Results Framework correspond to these three broad results areas. In addition, intermediate results indicators have been developed so as to reflect key intermediate results required to meet the PDO as well as to capture additional key, specific aspects of the Program's, including gender related aspects, improved risk management analytical tools and the implementation of risk management activities at the subnational level, which is key given that local communities are most directly impacted by disaster events (see Annex 2).

30. **DLIs have been selected to reflect critical elements of performance required to achieve the PDO**. All DLIs are indicators in the Results Framework. Particular attention has been paid to ensuring that the DLIs are (i) fully aligned with government priorities and are implementable by the responsible implementation entities; (ii) are achievable yet challenging at the same time; (iii) are clearly measurable and independently verifiable; and (iv) allow for a smooth disbursement profile over the period of Program implementation. In addition, the DLIs are designed to be mutually supportive and reinforce the overall Program objective. For example, DLIs 1 to 4 and 6 focus on the institutional reform aspects of the Program and ensure that the FLCN allocation process is transparent and the FLCN financially sustainable. The improved institutional architecture on risk management in Morocco will provide the basis for scaling up risk management activities, as captured in DLI 5. DLIs 7 and 8 capture required actions to ensure that Morocco's population and businesses are financially protected after a disaster strikes. The results chain presented in Table 4.5 below highlights how DLIs related to the key issues, activities, outputs, and outcomes under the Program.

Table 4.3. Program's Results Chain

Issues	Activities/Inputs	Outputs	Outcomes	Related DLI
Results Area 1: Promoting Institutional Development and Capacity Building				
No DRM architecture in place to ensure strategic orientation of and coordination within the government of Morocco	Actions to strengthen disaster risk and resilience governance coordination mechanisms	Establishment of FLCN Steering Committee, National National Selection Commission and Secretariat; Development of national disaster risk and resilience management strategy	Strengthened system to strategically manage disaster risks and resilience in Morocco	DLI# 1
Lack of transparent management process, including in terms of M&E, of FLCN financed projects	Actions to strengthen management process, including M&E, for FLCN co-financed projects	Introduction of annual CfP and M&E system for the FLCN	More transparent and results oriented approach to managing the FLCN	DLI#1 & #2
Lack of citizen engagement in Morocco's risk management	Actions to improve a more systematic approach to citizens' engagement	Introduction of beneficiary feedback processes and GRM	Systematic integration of citizens' feedback in risk management	DLI#1, #2, #4 & #5
Results Area 2: Scaling up Disaster Risk Reduction Activities				
Lack of strategic approach to funding disaster risk reduction investments for local governments and at the national level	Annual allocation of FLCN funds to co-finance disaster risk reduction investments for local governments at the national level	Disaster risk reduction investments implemented at local and national levels	Protection of population and assets against natural hazards	DLI# 2 (financing stage) DLI# 4 (selection stage) DLI# 5 (implementation stage)

Lack of focus on non-structural risk reduction investments	Minimum annual allocation of FLCN funds to co-finance non-structural risk reduction activities	Non-structural risk reduction activities implemented	Protection of population and assets against natural hazards, specifically through non-structural activities	DLI#3
Results Area 3: Improving Disaster Risk Financing and Insurance				
Low insurance coverage against catastrophic events	Actions to introduce Morocco's national catastrophic risk insurance program in Morocco	Adoption of draft catastrophic risk insurance law and implementation of implementation legal documents	Insurance coverage of population and assets against catastrophic events	DLI#7
Lack of financial protection of uninsured population against catastrophic events	Actions to establish FSEC in Morocco, as required by the catastrophic risk insurance law	Legal establishment of FSEC in Morocco	Financial protection of uninsured population and principal residences	DLI#8

31. **Reporting progress on the Results Framework will be the responsibility of Secretariat and builds on Government systems**. Specifically, the Secretariat, housed at MoI, will prepare an annual Program Report (including reporting on all PDO-level and intermediate results indicators, evidence of results related to DLIs, and evidence of compliance with requirements of the PAP). The Program Results Report will be submitted to the Bank no later 90 days after the end of the calendar year. The reporting arrangements for the Bank build on the efforts to improve the M&E system MoI will put into place to measure implementation progress achieved under FLCN funded projects, as specified in the FA signed between MoI/MEF and project implementing agencies and their partners. In this sense, the results framework builds on and uses the government's own M&E systems that will be established to increase the transparency of the reformed FLCN. In addition, the Secretariat will also work jointly with the MEF to integrate all required information for results area three, on disaster risk financing and insurance.

E. Program's Economic Impact

32. The Program's economic impact is assessed by looking at (i) the impact disasters can have on Morocco's GDP and fiscal balance; (ii) highlighting the rationale for the use of public funds in reducing Morocco's risk profile; (iii) estimating the direct economic impact by comparing a "with Program" and "without Program" scenario; and (iv) specifying the Bank's value added in supporting Morocco's reform projects.

Fiscal and Economic Relevance

33. **Fiscal and economic impacts of natural hazards are significant in Morocco.** Table 1 in Section A above shows the estimated direct damage losses by sector for two levels of disaster – Probable and Possible. Table 4.6 below shows direct damage and production losses for a Rare but Possible events, providing a more comprehensive assessment of the fiscal and economic

impacts of disasters. In Table 4.7 the range of production losses reflects results from two different economic models – the Input-Output (IO) model which typically produces the higher number and is the magnitude of economic losses likely to be estimated immediately after a disaster, and the Computable General Equilibrium model which typically produces the lower number and is the magnitude of economic losses likely to actually occur *if* resilience-enhancing economic policies have been introduced ex ante *and* loss mitigating economic policies are introduced in a timely manner ex post the disaster. Also shown are the averages of these estimates as percentages of Morocco's Production Base, GDP and National Budget, respectively. As can be seen in Table 4.6 total estimated losses for Morocco range from MAD 50 to 160 billion (the latter being the "Rare but Possible" earthquake). While this level of disaster is difficult to fully prepare it at least requires consideration and perhaps some preparation, since this level of event causes losses of more than half the Government annual budget and 20 percent of national GDP. Even a Possible flood has the potential for losses amounting to 17 percent of the Government's annual budget[51] and 6 percent of national GDP. Such events would cause fiscal, and probably economic, crises and Government development strategies would be severely disrupted.

Table 4.4. Property and Economic Production Losses in a "Possible" to "Rare but Possible" Disaster[52] vs. Production, GDP and Budget

National Losses (MAD billion)			
Total Property Damage	MAD 111	MAD 34	MAD 59
Total Production Loss	MAD 43~52	MAD 11~14	MAD 22~26
Total (PD + PL)	**MAD 154~163**	**MAD 45~48**	**MAD 82~85**
Average as Percentage of PRODUCTION BASE (base = MAD 1,009 billion)			
Total Property Damage	11	3	6
Total Production Loss	4	1	2
Total (PD + PL)	16	5	8
Average as Percentage of GDP (base = MAD 800 billion)			
Total Property Damage	14	4	7
Total Production Loss	5	1	3
Total (PD + PL)	20	6	10
Average as Percentage of NATIONAL BUDGET (base = MAD 276 billion)			
Total Property Damage	40	12	21
Total Production Loss	16	4	8
Total (PD + PL)	58	17	30

[51] In general in the risk assessment arena, the larger the event the longer is the return period (and the lower the probability). Even though infrequent, it is a mistake to disregard large events – just in the last few years, the 2004 Indian Ocean Earthquake and Tsunami was approximately a "600 year" event, and the 2011 Japan Earthquake and Tsunami a "1,000 year" event.

[52] "Rare but Possible" disaster corresponds to an earthquake with an annual probability of 1/10,000 and flood or tsunami with an annual probability of 1/1,000.

Rationale for the Use of Public Funds

34. **Supporting the Program through the provision of public funds is fully appropriate.** Public funding for DRM investments is common across almost all countries due to a number of factors including: structural and non-structural natural disaster risk reduction often involves projects in which everyone benefits, the classic case for public funding. Clear examples are a flood protection structure or early warning systems – they protect everyone (benefits are difficult to restrict to only those who pay); there is also under-investment in ex ante risk reduction due to many institutional challenges and in-built biases to focus mainly on ex-post response which calls for additional incentives to be provided to promote ex ante mitigation actions. For disaster risk insurance, due to the high consequence/ low probability nature of natural hazards, the insurance industry on its own prefers to avoid natural disaster insurance, and would only provide such insurance when the premium is exceedingly attractive. As a result, government intervention is required, including in terms of providing coverage for the uninsured which included the poorest and most vulnerable segments of society. Together all elements of the Program will significantly enhance the efficiency and effectiveness of public expenditures, both in the context of the reform of the FLCN and disaster risk insurance Subprograms.

Box 4.1 "What-if" Scenarios

"What-if" is an analysis of the benefits and costs of a particular risk reduction action. For example "*what if* schools are strengthened for earthquake?" The *"what if…?"* question asks "*what* are the benefits *if*… [some action is taken]."

In the context of disaster risk reduction, benefits are typically avoided future losses, which (given they haven't yet occurred) are calculated based on the probability of their occurrence – that is, probabilistic risk analysis. While greater and greater benefits accrue with more and more mitigation, there is also increasing cost, and one seeks an 'optimum' level of mitigation, which is the point at which the decreasing loss equals the increasing cost of mitigation. Probably the most common method of determining the optimum level of mitigation is benefit-cost analysis, which seeks to determine the BCR of a particular mitigation action—the higher the BCR, the more *bang* (benefits, that is, avoided loss) *for the buck* (cost of mitigation).

Using MnhPRA, 51 different mitigation scenarios were examined, such as seismic strengthening of buildings, flood warning systems, structural measures for flood protection, evacuation mapping and elevating buildings to protect against floods. The scenarios considered high-risk areas such as Al-Hociema and Nador province for earthquake, Kenitra province for floods, coastal areas of the country for tsunami, and selected key provinces such as Fes and Agadir.

BCRs for the 51 scenarios ranged from 54.3 to 1.1. The total cost of mitigation for all 51 what-if scenarios was MAD 9.3 billion. The top ten scenarios in terms of BCR were:

Mitigation	Area	Occupancy	BCR
1. Flood Warning System	Ouregha (Sebou)	Overall	54.3
2. Flood Warning System	Ouregha (Sebou)	Residential	45.6
3. Culverts on Rail Road (flood protection)	Gharab	Rail-line	34.6
4. Flood Warning System	Ouregha (Sebou)	Essential Facilities	12.1
5. Tsunami Evacuation Mapping	Coastal Morocco	Population	8.3
6. Flood Mitigation of Residential Buildings for new township	Kenitra	Residential	8.2
7. Flood Mitigation of Government Buildings for new township	Kenitra	Government Buildings	7.2
8. Seismic Retrofitting	Nador	Hospitals	5.8
9. Risk assessment for new township	Kenitra	Buildings	5.7
10. Seismic Risk assessment for new schools	Whole Morocco	Schools	4.4

The total cost for the top ten portfolio was MAD 2.7 billion, which achieved a benefit (net present value of future losses) of MAD 26.5 billion, or a BCR of 9.8. Using a simplified analysis assuming all capital investment being made at project initiation, this is equivalent to an **IRR of 29 percent.** Critically, **over 5,800 lives would be saved, and injuries and trauma reduced for a correspondingly larger population**.

Source: World Bank 2012. What If Scenario Analysis Report, Morocco Natural Hazards Probabilistic Risk Analysis and National Strategy Development. The Ministry of General Affairs and Governance, prepared by RMSI Ltd.

Direct Program Economic Impact

35. The Program's economic impact will be beneficial and significant. Analyses performed using MnhPRA ("What-if" Scenarios, see box) indicate very positive BCRs for typical measures undertaken under the Program, ranging as high as 54. Additional economic benefits accrue from jobs created and multiplier effect of expenditures in the economy. Based on estimates of MnhPRA, an investment of MAD 2.7 billion would save over 5,800 lives and correspondingly reduce injuries and trauma for a much large population, while achieving benefits of MAD 26.5 billion, equivalent to a BCR of 9.8 and IRR of 29 percent. These results are based on selecting the ten most cost-beneficial mitigation actions from a set of 51 that were examined using MnhPRA. The IRR is based on a simplified calculation assuming all capital investment being made at project initiation (see box for more details).

36. **International experience further reinforces these findings** – that if appropriately managed disaster risk reduction projects, especially those that are community-based with participatory approaches, can achieve high IRRs and have significant economic spin-off effects. A major study of disaster mitigation for the US Congress[53] found that, overall, mitigation produced BCRs of four. Evidence based on DRM activities in developing countries confirms this finding.[54] There is a clear rationale for public intervention as, in general, DRM investments mitigate market failures and provide public goods type infrastructure. Returns tend to be higher for simpler activities that were not very capital-intensive – that is, local community projects, which is a key focus of the Program.

Table 4.5. Summary of BCR values in disaster risk reduction projects

Country	Hazards	BCR max
Malawi	Drought	24.0
Sudan	Drought	1,800.0
Fiji	Flood	7.3
India	Drought	3.5
Nepal	Earthquake	2.0
World (35)	Flood	60.0
World (35)	Wind damage	6.07
World (35)	Earthquake	5.1
Fiji	Flood	7.3
Germany	Flood	9.0
Austria	Flood	1.7
Peru	Flood	3.8
Indonesia	Flood	2.5
Philippines	Flood	31.0
Nepal	Flood	3.5

[53] Multihazard Mitigation Council. 2006. *Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities*. National Institute of Building Sciences (prepared for FEMA).
[54] *Understanding the Economics of Flood Risk Reduction: A Preliminary Analysis (2012)* See http://www.gfdrr.org/understandingeconomicsoffloodriskreduction

Country	Hazards	BCR max
Nepal	Flood	18.6
Iran	Flood	1.3
Pakistan	Flood	25.0
India	Flood	2.5
Pakistan	Flood	25.0
Bangladesh	Cyclone; flood	4.9
India	Flood	57.8
Philippines	Flood; lahar	30.0
USA	All	5.1; overall average 4
China	All	4.0

37. **The economic value of the disaster risk finance and insurance program is also positive**. The proposed catastrophic risk insurance program is expected to generate several social and economic benefits. For the Government, introducing a compulsory catastrophic risk insurance guarantee (for the insured) and a compensation system for the non-insured households through the FSEC, allows the government to clarify its contingent liability related to catastrophic events. Too often, financing recovery cost after natural disasters among the various stakeholders is left unspecified, which creates a de facto implicit contingent liability for the government (as the government faces social pressure to compensate the victims of a disaster although it has no legal obligation). In addition, the program enables Morocco to transfer a fraction of potential disaster losses to the private insurance sector, thereby reducing the government's (implicit) contingent liability. For households, the catastrophic risk insurance program provides households with more certainty about the financial support they can expect to receive after a disaster. According to the preliminary actuarial analysis conducted by the World Bank, insured households would receive on average MAD 700 million every year as insurance payouts from floods and/or earthquakes, while uninsured affected households could receive MAD 800 million on average from the FSEC every year. In addition, such a program should provide faster payouts since the payout structure is already pre-defined. Some economic analyses show that immediate cash payment following a disaster have significant welfare benefits, especially for the poor households; the value of US$1 paid in the wake of a disaster is worth at least US$2.5 paid several weeks later.[55] For the domestic insurance industry, the program will expand the non-life domestic market. Preliminary actuarial analysis conducted by the World Bank estimates that this will generate approximately MAD 840 million in additional annual insurance premium volume, or 4.5 percent of the 2014 non-life premium volume in Morocco. In case of a major disaster (e.g., with a 100 year return period), the preliminary actuarial analysis of the World Bank estimates that the insurance industry would inject approximately MAD 1 billion as insurance payouts in the economy, a large fraction of this amount coming from foreign reinsurers as the cat risk insurance business is mainly transferred to the international reinsurance market (usually in excess of 90 percent).

[55] Clarke and Hill. 2013. *Cost-Benefit Analysis of the African Risk Capacity Facility*.

World Bank Value Added

38. **World Bank value added is significant**. It is based on both a long engagement with Morocco on various aspects of risk management as well as its significant global experience developing operational programs in support of countries' DRM policies and programs. The Bank has had a partnership with Morocco on risk management since 2008 (see Box 1) and has extensively supported Morocco in developing its approach to risk management along all key dimensions, including the development of a risk assessment (MnhPRA), the reform of the FLCN and the support to catastrophic risk insurance program. Based on the Bank's in-depth engagement over the past seven years, the Bank is uniquely positioned to support Morocco's next phase or risk management by operationalizing Morocco's ambitious reform agenda, building on the work completed to date. In doing so, it can draw on extensive global experience developing operational programs in support of countries' DRM policies and programs, including from FONDEN's in Mexico, Philippines Disaster Resilience Fund, the Turkish Catastrophe Insurance Pool, the Romanian Catastrophe Risk Insurance Pool, and the Southeast Europe and Caucasus Regional Catastrophe Risk Insurance Facility.

F. Technical Risk Rating and Mitigation Measures

39. **Technical risk is assessed as substantial.** The Program is well founded institutionally and at its core is being managed by two established institutions: MoI and MEF. MoI is primarily in charge of Subprograms One and Two and the MEF in charge of Subprogram Three. For Subprogram Three, ACAPS is the technical leader for the implementation of the catastrophic risk insurance law and as the insurance regulator well qualified to do so. The main risks identified in the Technical Assessment pertain to the implementing agencies and their partners' capacity to effectively implement projects co-financed under Subprogram One and Two. This stems from the fact that the operation cuts across multiple sectors and responsible line Ministries, Public Agencies as well as layers of government. In addition, local governments are less familiar with implementing risk reduction activities as this is a newer area of engagement and responsibility for them. Technical risks are therefore assessed to be substantial despite the fact that a large majority of non-structural and structural risk management activities involve relatively standard and/ or smaller scale infrastructure investment program. It is envisaged that specific technical strengthening activities are included under the Program, including, as required, through the mobilization of qualified consultants. The Program also specifically targets upstream capacity building actions, targeted to working with potential project proponents to develop and submit good quality projects to be co-financed by the FLCN. Importantly, technical audits will be conducted by the IGAT, a well-qualified department in MoI, to ensure that the funded projects are implemented in line with the required technical standards. There is a residual risk in terms of ensuring that the co-financing required for FLCN funded projects materializes, but the risk is mitigated by requiring firm commitment for co-financing as part of the FA signed between MoI, MEF and project implementation agencies and their partners.

G. Input into the PAP

40. A PAP has been developed to identify key actions required to ensure successful Program implementation, including in light of the key risks identified. Technical aspects of the PAD are shown in Annex 8 and include three broad categories. First, actions to establish a transparent

management, including with respect to M&E of investments financed by the FLCN. Second, actions to support the successful selection and implementation of risk reduction projects co-financed by the FLCN (training, capacity building, etc.). Third, actions to further develop Morocco's risk assessment and monitoring, including in the area of actuarial modeling required for the implementation of the draft catastrophic risk insurance law.

Annex 5: Summary Fiduciary Systems Assessment

1. **Purpose of the FSA.** The main principles that guided the preparation of the FSA are to ensure that: the fiduciary systems for the program are reliable and offer reasonable assurance for transparency, accountability with clear decision making and performance, that the capacities in place are adequate for proper implementation of program activities and appropriate use of the funds; and that the risks identified are properly mitigated. The FSA comprises an integrated assessment of the risks relating to the Program's procurement, financial management, and fraud and corruption aspects. It provides an assessment of the fiduciary systems applicable to the Program, the institutional arrangements defined for the Program and the fiduciary risks associated to the Program. It also measures recommended as part of the PAP to mitigate the key risks identified so as to be able to track and improve the fiduciary performance. On fraud and corruption aspects, the FSA assessed the availability of fiduciary information, the oversight of Program activities, the management of complaints, the GRM and the fight against fraud and corruption.

2. **The nature of the Program makes it difficult to predict the individual entities likely to access the funds.** Indeed, the activities to be principally financed under the Program will be selected following calls for proposals, launched periodically (on a yearly basis). In general, the categories of entities that will access FLCN funding are potentially central or deconcentrated government entities such as ministries, governorates, autonomous government agencies (i.e., *établissements publics* and *agences de bassin*), or SOEs on the one hand and local government entities such as Municipalities, Associations of Municipalities, Municipality-owned enterprises (i.e., *Sociétés de Patrimoine, Sociétés de Développement Local*), or local government agencies on the other hand.[56] In this context, the FSA places particular emphasis on evaluating the Program systems at the level of MoI as one of the key Program implementation agencies, especially for Subprograms One and Two.[57]

Procurement and Financial Management

3. **The FSA builds on the experience and knowledge of Moroccan Public Procurement and Financial Management systems (ongoing dialogue on procurement reforms, specific studies such as the "Enabling procurement reforms in Middle East and North Africa, case of Morocco", 2009 PEFA (national), 2007 CFAA, etc.), previous diagnostics, past experience with communes, SOEs and ministries and reports including audits.** A main feature of this Program is its cross cutting and cross-sectoral nature, with involvement of several entities as described in the paragraph above (i.e., ranging from ministries to SOEs and communes, including remote, small and medium). The fiduciary rules and procedures applicable to the Program refer all to the country systems and are described in this FSA.

4. **The Program's flow of funds was discussed and agreed with the Budget Directorate of the MEF.** Bank proceeds will be reflected in the general state budget (*Budget Général de l'Etat*), under the CAS-FLCN. They will be transferred to the single treasury account of the State at the TGR. Beneficiaries (project proponents) will also use accounts that are part of this network

[56] For the typology of activities see Annex 1.
[57] Subprogram three will be implemented by the MEF.

of accounts (ministries, municipalities, government agencies, other public sector entities). Following calls for proposal and project selection of projects to be co-financed through the CAS-FLCN, the beneficiaries (projects proponents) will sign an FA with MoI to detail the specific arrangements for the financing of risk management and resilience investments. The calendar, conditions, amounts, and procedures for the transfer of funds between MoI and the project proponents will be specified in the FA. Disbursement of Bank proceeds will be made at the request of the Borrower upon achievement of DLIs. The disbursement arrangements for the Program may allow for advances once the Program becomes effective.

5. **Accounting and financial reporting are primarily handled by the TGR in relationship with the line ministries and communes.** Monthly budget execution reports are published with less than 3-month delay in its Monthly Statistical Bulletin for Public Finance (*Bulletin Mensuel des Statistiques des Finances Publiques*), published on TGR website. These monthly statements on budget execution will provide line ministries and communes with access to detailed data on the execution of their budgets and help them prepare a quarterly update of budget execution. With the Government Fiscal Management Information System (GFMIS) in place, line ministries and local governments have access to most data on their budget execution on a real time-basis. However, SOEs do not have access to that system (GFMIS) and therefore, will have to generate financial information on their budget and particularly those related to the Program, using specific systems.

6. **Procurement will be conducted in accordance with the public procurement decree (PPD) (State, local governments and administrative SOEs) or specific procurement rules compliant to a large extent with the PPD (non-administrative SOEs, autonomous government agencies).** A new PPD was adopted in December 2012 and came into effect on January 1, 2014. It addresses some of the main weaknesses and gaps that characterized Moroccan public procurement system, with regard to transparency, accountability, efficiency, risks of corruption, and mechanisms to manage complaint and to redress grievance. The key features of the decree are the following: (i) it constitutes a unified regulatory framework for procurement applicable to public sector (state, local governments and administrative state-owned enterprises) and (ii) it brings the selection of architect in line with the principles of competition and equal treatment of bidders. Following this reform, all non-administrative SOEs and autonomous government agencies have been requested to revise their procurement rules to comply with the new decree (which is done in most of the cases).

7. **Apart from the PPD and the specific procurement rules, standard bidding documents (SBD) including General Conditions of Contracts exist.** Together with the decree, they provide to the procuring entities the tools they need to conduct their procurement activities. The General Conditions of Contracts include provisions for management of contractual relations between the contractor and the employer. They will be used for all the Program.

8. **The use of electronic procurement portal (ref. art 147 of PPD)** has increased the availability of procurement related information such as bid opportunities, calls for proposals, cost estimates, contract-related documentation and results of tendering publicly available. Moreover, the electronic procurement system includes additional features like the electronic submission of bids, a suppliers ‘database, electronic reverse auctions, and grouped purchases. Their use is limited only to entities subject to the PPD (State, local governments and administrative SOEs).

So far, the experience on the use of electronic procurement is very limited and its impact not yet assessed.

9. **Procurement Planning and the publication of the plans are made mandatory by the PPD.** Each public procuring entity is required according to the PPD, to publish its procurement plan, which shall include all contracts planned for the fiscal year, under its budget. The publication should be done at least two national newspapers (one in Arabic and one in a foreign language) and on the procurement electronic portal, no later than the end of the first quarter of each fiscal year. This requirement fosters the access to information on procurement opportunities for all potential bidders.

10. **Setting of non-monetary criteria for the evaluation of bids is a challenge.** In most of the cases, bid evaluation criteria are solely based on prices, whereas other criteria than price expressed in monetary term could improve the cost effectiveness in procurement.

11. **The PPD fosters open competitive bidding as the default procurement method.** It requires that bidding opportunities be advertised in at least two newspapers (one in Arabic and the other in a foreign language) and on the public procurement portal. For each bidding process, a procurement committee is set up, comprising representatives of the procuring entity and the Controller of the Ministry of Finance (TGR or DEPP). The controller's main role is to ensure that the rules and procedures are followed accordingly. In particular cases where the estimated contract amount does not exceed MAD 200,000, the shopping method could be used. This threshold could be raised exceptionally for LG up to MAD 500,000 by decision of the Minister of Interior, on a case-by-case basis.

12. **Controls oversight of procurement and audits.** There are many controls and oversight over the procurement and contract award process, all laid out in the PPD. They are performed by the controller of the MEF (TGR for ministries and LG and DEPP for SOEs). The controls look at the compliance with the provisions of the PPD in terms of quality of bidding documents, respect of bidding procedures including advertisement and opening and they also review for approval approval/formal clearance ("Visa préalable") the evaluation report and the draft contract. For LG, other controls (review and approval) on procurement by MoI (Governor of the province) may apply.

13. **All the implementing entities are subject to external audits**. These audits are conducted respectively by the IGF for ministries, public administrative and SOEs, and by IGAT for local governments and non-administrative SOEs. Furthermore, the Supreme Audit Institution (*Cour des Comptes*) could audit all public entities, irrespective of their nature.

14. **The complaints management in procurement has been identified as one of the main weaknesses of the Moroccan procurement system**[58] as it was viewed as not independent enough and did not offer sufficient guarantee for an effective and fair treatment for bidders. The treatment of procurement complaints (non-judicial) was part of the responsibilities of the "*Commission des marches*" (CDM), composed only of representatives of public entities (no

[58] ref. UCS assessment in 2011

private sector or civil society). The CDM has no power to suspend ongoing procurement processes and its decisions are not binding. When courts are involved, the judicial decision takes too long and happens usually after contract execution. To modernize and improve the efficiency of the current system, the government has embarked in an ambitious reform process to transform the CDM into a *"Commission Nationale de la Commande Publique" (CNCP)* that is more independent, and has the authority to make binding decisions and to suspend ongoing procurement processes. It comprises representatives from private sector and civil society, in addition to public entities. The decree creating the CNCP has been approved by the council of government in September 2015. CNCP has the mandate to handle and manage complaints in procurement and contract execution. Other responsibilities of the CNCP include (i) regulation of policies, documents and standards for public procurement and (ii) coordination and oversight of training in procurement.

15. **Fraud, corruption, and debarment of Contractors**. Morocco's new constitution, enacted on July 1, 2011, explicitly mentions the need to fight corruption and to ensure good governance and transparency as fundamental tools of public sector management. It also recognizes the right to citizen participation in government decision-making and public engagement, as well as the right to access public information. The new Constitution sets the ground for more transparency and efficient use of public resources, through Title II on conflict of interest, misconduct in public procurement, misuse of public funds, greater transparency, accountability, and fight against fraud and corruption and through Title XII for good governance.

16. The National Human Rights Council (*Conseil national des Droits de l'Homme* - CNDH) was established by the 2011 Constitution[59] as a successor of the former Advisory Human Rights Council (*Conseil consultatif des Droits de l'Homme* - *CCDH*) to consolidate the country's rule of law. The Council is a constitutional body equipped with legal and financial autonomy and independence vis-à-vis the legislature, executive and judiciary branches. It is mandated to hear a broad range of complaints any claim for violation of human rights (including social and economic rights as well as fraud in public administration matters). The Council and its thirteen regional commissions received 41,704 complaints and grievances from its establishment in 2011 to 2013. A significant part of complaints brought to the Council related to allegations of violations of the rights of users of public administration services. In addition, the Council is empowered to initiate and conduct necessary investigations and inquiries in case of violations (*autosaisine*) and recommends sanctions.

17. The Institution of the Ombudsman (*L'Institution du Médiateur*) is a constitutional body that was established by the new Constitution[60] to replace the former Grievances Office (*Diwan Al Madalim*). The Ombudsman's mandate covers handling complaints and grievances of citizens, domestic or foreign individuals or legal entities against the administration (including regional and local governments) and organizations that benefit from financial support of the State. The Government is obliged by law to respond within a time limit to any Ombudsman request. The Ombudsman has been granted legal and financial autonomy as well as independence towards the legislature, executive and judiciary branches. The Ombudsman is, in addition, empowered with

[59]Article 161 of the 2011 Constitution.
[60]Article 162 of the 2011 Constitution and Royal Decree n° 1-11-25 of March 17, 2011.

capacity of investigation on its own initiative (*autosaisine*). It is free and easily accessible as grievances, complaints and claims can be introduced through regular or registered mail, fax or internet. Four regional offices have been created and are operational to represent the institution at the local and regional level and facilitate access for citizens. According to its latest annual report, the total number of complaints and grievances treated by the institution reached 1,919 in 2013, a majority of which involved MoI, the MEF, the Ministry of Education, the Ministry of Employment and Social Affairs, and regional and local governments. Complaints brought to the Ombudsman mostly related to administrative, real estate and financial and legal cases.

18. The Government will use its own systems to take all appropriate measures to prevent fraud and corruption in connection with the Program. The Bank's Guidelines on Preventing and Combating Fraud and Corruption in Program-for-Results Financing, dated February 1, 2012 and revised July 10, 2015 (the Anti-Corruption Guidelines) will apply. The Bank's debarment list, which is easily accessible, will be checked by all procuring entities before awarding contracts. The Government has developed experience on this with the EU Anti-Fraud Office. MoI will handle and report to the Bank allegations occurring under the Program via the annual reports during Program implementation. Discussions have been held with the Government on the World Bank's prerogative of administrative inquiry for allegations of fraud and corruption. The Government's collaboration with the Bank on the administrative inquiries into allegations which the Bank intends to pursue has been confirmed during appraisal. In accordance with the Bank's Anti-Corruption guidelines for PforR operations, the Program will take steps to ensure that "any person or entity debarred or suspended by the Bank is not awarded a contract under or otherwise allowed to participate in the Program during the period of such debarment or suspension". MoI will verify the names of the contractor against the Bank's database[61] of debarred or suspended contractors to ensure that no such contractor is awarded any contract under the Program.

19. The Borrower will: (a) take all appropriate measures to ensure that the Program is carried out in accordance with the Bank's Anti-Corruption Guidelines; (b) take all appropriate measures to prevent fraud and corruption in connection with the Program, including (but not limited to) adopting and implementing appropriate fiduciary and administrative practices and institutional arrangements to ensure that the proceeds of the Loan are used only for the purposes for which the Loan was granted; (c) promptly inform the Bank of all credible and material allegations or other indications of fraud and corruption in connection with the Program that come to its attention, together with the investigative and other actions that the Borrower proposes to take with respect thereto; (d) unless otherwise agreed with the Bank with respect to a particular case, take timely and appropriate action to investigate such allegations and indications; report to the Bank on the actions taken in any such investigation, at such intervals as may be agreed between the Borrower and the Bank; and, promptly upon the completion of any such investigation, report to the Bank the findings thereof; (e) if the Borrower or the Bank determines that any person or entity has engaged in fraud and corruption in connection with the Program, take timely and appropriate action, satisfactory to the Bank, to remedy or otherwise address the situation and prevent its recurrence; and (f) ensure that any person or entity debarred or suspended by the

[61] https:// www.worldbank.org/debarr

Bank is not awarded contract under or otherwise allowed to participate in the Program during the period of such debarment or suspension.

20. **In addition to MoI (which is in charge Program management, specifically Subprograms One and Two), several other entities such as ministries, local governments and SOEs and public agencies will be in charge of the implementation of Program activities.** As part of the arrangement for the management of the Program, the DAA of MoI, will provide support to the Program coordination unit (the Secretariat) on all fiduciary aspects. It has dedicated services and experienced staff working on fiduciary matters, according to the Moroccan rules: planning, budgeting, procurement, accounting, reporting, etc. The DAA is already involved in other operations financed by the Bank in Morocco (ex. INDH2, Local government support project) and is well familiar with Bank procedures. Within the DAA, the division of Budget and Accounting on the one hand and the division of Procurement on the other, will be the main divisions involved in the Program. The division of Budget and Accounting will responsible for programming the annual budget of the Program, the management of the budget including release of funds to selected projects proponents according to the FAs signed by MoI and the MEF and the project proponents (cf. Article 22 Organic Law on Finance, 1998), processing of payment request on contracts and transmission to Treasurers, etc.. The division of Procurement will be responsible for procurement and approval of payments for all activities directly managed by MoI within the program (Secretariat General). Also as part of its fiduciary role, the DAA will be responsible for producing the financial statements for purposes of the financial audit of the Program. For all projects selected following the CfP, the project proponents (ministries, local governments and SOEs) will have the responsibility to handle procurement and financial management. Among the local governments (municipalities, provinces, prefecture and region), there is a need to distinguish provinces, prefectures and large urban communes, which are usually well structured and have dedicated staff for management of fiduciary, from rural communes and small and medium size urban communes that have generally weak capacities and insufficient staff, and lack training. As for the ministries and SOEs, they have in general, dedicated and well organized services for management of fiduciary, with experienced staff. However, there are a few common issues which relate to staff workload that have negative impact on performance and the lack of training on fiduciary topics such as budget management, procurement, internal audit, financial management, etc. It is key to the Program's risk mitigation that fiduciary aspects of project proposals and the fiduciary capacity of project managing entities will be part of the criteria for the selection of projects. Project proponents will prepare and submit periodical reports including fiduciary aspects and performance, to MoI, according to an agreed format. Furthermore, an information management system will be developed to help monitor and evaluate the implementation of projects and activities funded. All information collected from regional level will be aggregated at central level and help make decisions when needed, to improve the program and individual projects and activities' performances.

21. **The overall risk for the Program has been rated Substantial.**

22. Considering the systemic constraint on the budgetary system in Morocco and the potential weakness of some project proponents, mitigation measures are proposed in the PAP. A few indicators are also proposed to monitor fiduciary performance over the implementation.

23. The main risks identified in the Program are the following:

- Lack of independent appeal system and efficient process for handling complaints;
- Quality and timeliness of annual audited and financial statements;
- Low fiduciary capacity among a few category of project proponents, namely rural communes;
- Delay in the transfer of financial resources for the Program (from General Budget to CAS-FLCN and from CAS-FLCN to project proponents' account);
- Delays in bidding process and contracts award and payment;
- Issue associated with the quality of design and specifications;
- Lack of technical skills for preparation of quality bidding documents and accurate cost estimates;
- Issue of capacity for contract management;
- Non-compliance with procurement procedures;
- Issues of weak contract supervision and lack of training.

24. To mitigate the risk identified, the following set of actions are proposed as part of the PAP:

- In addition to the newly created CNCP (decree approved by the council of government on September 2015) that has the responsibility to manage complaints arising in procurement and contract management, set up a GRM for the program. Such a system could also feed the procurement complaints system managed by the CNCP;
- Support for the design and supervision of works. In the case of subprojects, including works for construction or retrofitting of infrastructures, it will be required to the proponent to use the services of qualified firms or their own departments with the relevant expertise in case the proponent is a public entity, to assist in the technical design of these works and in the supervision of the works;
- Profile of project proponents and capacity building program. Following the selection of sub projects, MoI will assess the project proponents to establish the profile of each of them and therefore to identify the capacities in place and the needs for capacity building. Such an assessment will lead to the establishment of fiduciary training needs for each proponent and the establishment of an annual training plan for the program. The training plan will be implemented as part of the program of action.

Measurement of Fiduciary Performance of the Program

25. The following fiduciary indicators are proposed. They will be monitored and the recommendation and correctives measures proposed will complement the actions proposed above, to mitigate the risks identified and improve Program execution.

a. Procurement:

- Bidding processes conducted according to plan;
- Time period for payment of invoice;

b. Financial management

- Timeliness of annual financial statements of the program;
- Timeliness of program annual audit report.

Annex 6: Summary Environmental and Social Systems Assessment

Objective and Context

1. An ESSA has been conducted to inform the preparation of the PforR operation related to the Integrated Disaster Risk Management and Resilience Program in Morocco.

Approach and Objectives of the ESSA

Approach

2. The ESSA examines the environmental and social management systems applicable to the Program with a view to evaluating their compliance with the provisions of the Bank Policy and Directive on PforR Financing, to which the Program must conform. It is intended to ensure that the environmental and social risks of the Program are well managed and that the Program is in compliance with the principles of sustainable development.

3. The preparation of the ESSA and the drawing up of measures aimed at strengthening the environmental and social management system has benefited from various sources of information and a broadened consultation process, including namely the following:

- Review of available documents and data related to: national environmental and social procedures and related regulatory frameworks applicable to the Program; relevant environmental and social reports; analysis of capacities relating to the environmental and social safeguard instruments of the institutions participating in the Program; and World Bank documentation related to PforR and ESSA.
- Consultative meetings with technical staff of a number of ministerial departments (MoI, Ministry of Environment, Ministry of Urban and Regional Planning) as well as with civil society representatives (*Banque Alimentaire*).
- The pre-appraisal mission led by the WB in May 2015 conducted an analysis of project documents received by the Government in April 2015 following the first CfP of the FLCN, in order to do a preliminary assessment of social and environmental risks and identify the types of project the PforR could finance in compliance Bank policy and guidance. The mission carried out field visits for a sample of projects

(large, medium and small scale) in Rabat and Taounate, which allowed for a better understanding of issues.

- A public consultation workshop was held on November 9, 2015, with the participation of technical staff of the government, development partners, civil society organizations and the private sector. A summary of the draft ESSA report was distributed prior to the meeting. Comments provided during the workshop have been taken into account in the ESSA and a complete list of participants as well as a summary of their comments were annexed to the ESSA.
- Before Program appraisal in December 2015, the draft ESSA report was publicly distributed through the Infoshop of the World Bank, as well as on the website of the World Bank offices in Rabat and comments were requested from the public for a period of one month.

Objective

4. The evaluation of the environmental and social systems is intended to ensure that the program does not imply any major environmental and social risk and that implemented systems allow for an appropriate identification and mitigation of potential risk. The ESSA has two ways of considering the compliance of the Program's systems with these principles: (i) based on the systems as defined by laws, regulations, procedures, etc. ("*the system as defined*"); and (ii) based on the capacity of the institutions of the Program to operate the systems efficiently ("*the system as applied in practice*").

Main Environmental and Social Effects of the Program

5. The very nature of the PforR excludes any investment implying significant adverse environmental impacts (i.e. Category A projects). Therefore, in compliance with the Bank Policy and Directive on PforR financing, the Program will exclude:

- all activities that are judged to be likely to have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people;
- any proposed intervention as part of a larger program involving major negative environmental and social impacts, irreversible and unprecedented;
- any intervention: (i) in a Site of Biological and Ecological Value across the Moroccan territory; (ii) that would transform significantly protected areas and natural habitats or significantly alter biodiversity areas; and / or (iii) that would irreversibly damage the cultural resources of archaeological and historical nature;
- any intervention that would require significant displacement of populations or land acquisition, or would induce significant restrictions of access to economic assets or resources.[62]

[62] Due to the limited capacity of local authorities to manage expropriation processes, projects requiring large numbers of house demolitions (10 and more) in order to minimize the risk of natural disasters (flood, landslide, etc.),

6. Two categories of activities will be eligible for funding under the Program: 1) those related to planning, improving knowledge or raising public awareness on disaster risks (non-structural activities); and 2) those related to the construction of technical prevention infrastructures (structural activities of small and medium scale).

7. **Non-structural activities** can play a leading role in the collective preparation to disaster risk and the development of a culture of prevention. They include planning, management, information and communication technology, capacity building and institutional activities that are directly related to DRM. They can contribute to a better use of resources and contribute indirectly but significantly to risk reduction.

8. **Structural activities** refer to actions reducing exposure and vulnerability to disaster risks by implementing physical mitigation measures, such as building collective protection structures against flooding in urban areas and in rural areas, retrofitting of existing buildings against seismic risk, development of early warning systems, development of small infrastructure works to increase the resilience of rural communities, earth stabilization, etc.

9. Generally, structural activities are the most likely to induce environmental or social consequences. Furthermore, based on the indications of the investments already made by the FLCN from its creation in 2009, we can predict that **the vast majority of subprojects will relate to flood prevention and management**. According to a World Bank study on Morocco for the period between 1900 and 2008, floods in Morocco have been the most important natural hazard affecting the country, in terms of people impacted, including with relatively high human losses (earthquakes are less frequent, and affect a smaller population, although they are much more deadly).

10. A preliminary review of the projects from the first CfP received in April 2015 indicates that the majority of projects eligible for funding under the FLCN relate to **small to medium scale flood protection, which raise low to moderate environmental and social risks**. Such projects that have mostly been submitted by local governments are included in territorial planning and meet well-documented needs. Their technical design is supervised by the Hydraulic Basin Agencies (ABH) and is the subject of further analyzes. Their implications in terms of land acquisition are minimal especially since they involve mostly interventions in the Public Water Domain. A limited number of non-structural projects, such as warning systems, and mapping of risk areas was also submitted by national, regional or local authorities. These projects do not raise any particular environmental or social risk. Only a few projects submitted by local authorities may not be eligible for funding from the World Bank because of certain characteristics: (i) large numbers of house demolitions (10 and more) in order to mitigate the risk of disasters (flooding, landslides, etc.); (ii) risk management interventions within a larger program having major negative, irreversible and unprecedented environmental and social impacts; or (iii) risk management interventions in a geographic area that is not covered by the Program.

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or projects affecting 200 persons or more for land acquisition, loss of economic assets or loss of access to resources, will be excluded from the PforR.

11. While Moroccan law does not require it yet, it is expected that in the context of the PforR, environmental and social diagnoses will be conducted for each of the projects submitted to FLCN funding to assess the type of planning tool required based on the size and the importance of environmental and social impacts. If necessary, comprehensive ESIAs should be conducted for each of the projects submitted to FLCN requiring ESMPs or ARAPs meeting the requirements of the World Bank. These assessments should take into account the bioclimatic characteristics of different agro-ecological zones of Morocco where future investments will be made.

12. Overall, the Program activities **will have environmental, social and economic benefits,** since flood our drought protection infrastructures will not only allow to protect habitats, cropland and pasture areas located in the vicinity, but will also help to protect the soil against erosion, protect water resources in watersheds, protect against siltation and protect downstream infrastructure. Proposed activities should be beneficial for local populations because the vast majority of investments will focus on improving flood protection infrastructure, which will also have a positive effect on infrastructure and private and public services (schools, hospitals, etc.). Nevertheless, these investments could have negative social consequences in the event where building, moving and/or retrofitting infrastructure would require significant displacement of populations or land acquisition, or would induce significant restrictions of access to economic assets or collective and natural resources. If they were poorly designed, such investments could also have negative impacts on health and public security (breaking dikes or dams, worsening of flood risk, etc.). All subprojects with significant social effects should come with a social assessment study, and be subject to public consultation to ensure their viability and social acceptability.

13. Taken individually, all the potential negative effects of the proposed Program appear to be minimal. In the long run, however, the cumulative effect of these negative impacts could prove to be moderate. For structural projects with significant environmental and/or social effects, mitigation measures should be defined and implemented in each of these phases. In terms of social and environmental management of the investments of the proposed program, the first activity implemented as part of this operation will be the identification of the level and the importance of environmental and social impact of any project to be funded under this operation provided by the application of an FIDS. For projects that have not been rejected (non-classified projects "Category A") specific environmental and social instruments will be developed, with the identification of adequate social and environmental mitigation measures and corresponding action plans. This is particularly related to the following tools:

- ESIA for projects involving *moderate* environmental and social risks;
- ESMP for projects involving *moderate* and *moderately low* environmental and social risks;
- FIES for projects with *low or minimal* environmental and social risks;
- ARAP for any structural project involving land acquisitions and requiring physical displacement of people and / or loss of access to resources natural or economic assets.

Evaluation of National Systems

Legal and Regulatory Framework

14. Morocco has a relatively advanced legal framework governing environmental and social management that includes impact assessments and the adoption of anticipatory, prevention and conservation measures.

15. In regards to environmental impacts, the Moroccan legal framework addresses both the majority of aspects related to environmental protection, pollution abatement and improving the living environment, including preventive instruments (Environmental Impact Assessment, EIA) and incentives (financial assistance and tax incentives), as well as coercive measures against natural and legal persons committing acts that are detrimental to the environment. Concerning EIAs, the most important legislative text is *Law no. 12-03 of 12 May 2003*, the objective of which is to minimize the negative impact of projects and improve ecological sustainability, In Morocco, the EIA constitutes a valuable legal tool which subordinates the administrative authorization of any project subject to EIA requirements to an environmental acceptability decision. This legal framework has been complemented by the recent adoption (in March 2014) of the *National Charter on Environment and Sustainable Development*, which promotes a balance between environmental, economic and social dimensions, and aims at improving the living environment of citizens, enhancing sustainable management of natural resources, and promoting economic activities respectful of the environment. The actual experience of Moroccan authorities in implementing the environmental legal framework is still relatively limited, especially at the level of local authorities, due to the recent publication of numerous application decrees.

16. The Moroccan legal framework also responds proactively to the requirements of natural resources preservation and disaster risk prevention. This is reflected particularly in *Decree No. 2-97-176* (December 15, 1997), which allows MoI to intervene mainly through its *Civil Protection Directorate* when disasters occur, and the *Law on Water 10-95*, adopted in 1995 (State Secretariat for Water), which has helped to highlight the importance of the protection of people and property against weather and climate hazards.

17. The new Constitution of 2011 pays attention, in particular, to the consultation and participation of the public in decision-making processes. Overall aspects relating to the information and participation of the public are guaranteed by the Constitution, and specific aspects are guaranteed by the organic laws of the local communities. Respect for property is a fundamental principle of Moroccan law. The national legislation relating to expropriation includes provisions ensuring compensation for rights holders. Specifically, the public domain is protected by provisions ensuring its direct use by the public or by a service of general interest. Voluntary donations of land and temporary occupation of land are usually practiced by the municipalities in accordance with formal procedures and legalized (agreements, licenses or purchase contracts).

Institutional Framework

18. The Ministries in charge of Program implementation through the FLCN are MoI and MEF, who will be supported by an inter-ministerial Steering Committee as well as by a General Secretariat set up under MoI. MoI plays a key role in the management of natural disaster risks in the Public administration, be it through its horizontal coordination role of sectoral ministries or through its vertical coordination role between different levels of central, regional and local

authority. The main institutions that are responsible for natural DRM (*CVC*, *Gendarmerie Royale*, *Protection Civile,* etc.) come directly under the authority of the MI. The MEF also plays a central role in the funding and monitoring of national inter-sectoral programs such as those funded by the FLCN.

19. The main actors that are responsible for implementation of projects funded by the FLCN – as well as for management of their environmental and social impacts – include:

(a) Institutions directly involved in flood prevention (such as the Ministry of Mines, Energy, Water and Environment, the Ministry of state responsible for the Public Hydraulic Domain and for Water Basin Agencies (*Agences Hydrauliques de Bassin* - AHB); the High Commission for Water and Forests (*Haut Commissariat aux Eaux et Forêts*), local governments, the High Council for Water and Climate, Prefectural and Provincial Commissions for Water, the Regional Offices of Agricultural Development (ORMVA), etc.

(b) Institutions in charge of urban management and planning (such as the Ministry of Urban and Regional Planning, the Ministry of Housing and Urban Policy, the Directorate of Rural Affairs within MoI, the Ministry of Public Works, Transportation and Logistics, Prefectures and Provinces, local authorities, regional, provincial and communal councils, Urban Agencies, Regional Delegations or Inspectorates of Land Development and Housing);

(c) Institutions in charge of monitoring disaster risk (such as the National Geophysical Institute or the National Directorate of Meteorology) ;

(d) Institutions in charge of administration, mobilization and protection of populations (such as MoI, the *CVC*, the *Gendarmerie Royale*, the *Protection Civile*, etc.).

20. The capacity of these various institutional entities to ensure adequate environmental and social management of projects proposed for funding under the Program is uneven and will require tailored support, both at the level of the national coordination ministries as well as at the level of regional and local project implementation entities.

21. The Environment Department which is responsible for management of the EIA process has good experience and skills, particularly in the field of EIA reviews, control of project implementation, and environmental monitoring (air, water, soil), through the *Laboratoire de l'Environnement*. National and local authorities as well as civil society organizations are beginning to master public consultations approaches in the framework of new policies and projects.

22. Moreover, several ministries and public agencies such as MoI, the General Directorate of Local Authorities (DGCL) and at the local level, Municipal Commissions, have experience in land acquisition operations necessary for the performance of their duties - even if these are often conducted through amicable land acquisitions rather than compulsory expropriations. Many executives and social development specialists have learnt from the resettlement experiences of the Social Development Agency (ADS) as part of the cleanup operations in slums in the large cities of Morocco.

Adequacy of Applicable Systems

23. Generally, Moroccan legislation on environmental and social protection is adequate and contains several texts and documents, covering many aspects. However, several of these texts are outdated (dating back to the period of the Protectorate), and they have not been updated. Moreover, due to the lack of implementation means, legal provisions specified in the legislation are not automatically applied.

24. The national EIA system is clear and well integrated into the decision making process. It ensures the appropriate treatment of environmental impacts of new projects that are subject to EIA, the detailed analysis of environmental impacts and the identification of measures to be implemented in order to eliminate, mitigate or adjust negative impacts to acceptable levels. At the institutional level, the public entity responsible for managing the EIA system is well experienced and has the skills needed, particularly for EIA reviews, monitoring the implementation of ESMPs and conducting environmental monitoring (air, water, soil). Several stakeholders intervene directly or indirectly in the system (authority, petitioners, civil society, etc.) and are well informed about the procedures applied in the different phases of the EIA process. They have benefited from several dissemination workshops and trainings in recent years.

25. Nevertheless, Law 12-03 also presents a certain number of shortcomings or weaknesses, at least with regards to the World Bank's Bank Policy and Directive on PforR Financing. A draft reform of Law 12-03 is currently under preparation and should be able to address a number of these shortcomings, especially regarding the following: (i) integration of the concept of strategic evaluation into safeguards procedures; (ii) updating the list of projects subject to EIA (with an expansion of the types of projects and their standards); (iii) adoption of a decree creating an "*environmental police*"; (iv) identifying a more suitable and binding system of offenses / penalties with clarification of procedures; (v) establishing an accreditation system for consulting firms; (vi) introducing an *Environmental Notification* template for projects whose environmental impact is not very significant (instead of a comprehensive EIA) and significantly reducing the time spent reviewing files ; and finally (vii) the possibility of establishing environmental review committees at the sub regional level. However, this law is currently in draft form and once approved, will have to be followed by one or more decrees (which can be a lengthy process). Since all of these measures are designed to make regulations more consistent with the principles of the Law on the *National Charter on the Environment and Sustainable Development* adopted in March 2014, more focus should be placed on a strategic vision for internal requirements in sustainable development, with the ultimate goal of integrating environmental considerations into all decision-making processes.

26. Furthermore, the expropriation law has shortcomings in terms of the treatment of customary or informal rights and the treatment of rights of unauthorized occupants (squatters). The application of national procedures on resettlement, particularly at the level of local authorities, faces many challenges in terms of lack of expertise and transparency. Land management in Morocco, especially in the urban peripheries and rural areas, is also facing many problems related to the multiplicity of land tenure regimes, the inadequacy of frequently outdated laws, and governance issues.

27. In general, regarding implementation procedures, the greatest weaknesses observed at the level of Local Authorities involve the absence of environmental and social supervision and monitoring mechanisms and the limited involvement of local communities – and particularly of women – in decision-making processes. Despite the fact that land acquisitions are made in accordance with formal and legalized procedures (agreements, licenses or purchase contracts), weaknesses in social management are mainly related to the treatment of compensation files for acquired land, assets, or access to economic resources, to the information provided to the public regarding their rights, and to situations that are not provided for under Moroccan legislation (missing or incomplete land titles, persons without land titles, etc.).

28. In order to address these weaknesses and fill these gaps in compliance with Bank policy and guidance for PforR financing , the following actions are recommended:

- Preparation of an ESIA for projects involving *moderate* environmental and social risks;
- The ESIA will be completed by an ESMP (in compliance with Bank Policy and Directive, including stakeholders' consultations) for projects involving moderate risks with public consultations of stakeholders involved;
- For projects with *moderately low* environmental and social risks only an ESMP will be developed with public consultations of stakeholders involved;
- An ARAP will be also elaborated for any structural project involving land acquisitions and requiring physical displacement of people and/or loss of access to resources natural or economic assets;
- Preparation of an FIES for projects with *low or minimal* environmental and social risks.

Conclusions and Recommendations

29. Three sets of recommendations emerge from the ESSA:

- The **first set of recommendations** is related to *Strengthening environmental and social management systems*, with specific elements concerning the organization of sensitization meetings for the dissemination of the ESSA recommendations; and the preparation of an *Environmental and Social Technical Manual*. This Manual will serve as guide for all stakeholders to comply with environmental and social measures. The Manual will be prepared with the support of the World Bank and used by:

    (a) Projects proponents to help them identify the nature and potential social and environmental impacts of projects submitted for FLCN financing, and necessary instrument to be developed;

    (b) Members of the National Selection Commission of the FLCN, in order to allow them to assess the relevance of candidate projects with objective criteria.

    (c) The *Environmental and Social Technical Manual* will include – among other things:

- Methodology to use the FIDS to help sort projects according to the scope of their social and environmental impacts

(i) Methodology to prepare an ESIA study

(ii) Methodological approach to prepare an ESMP

(iii) Practical methodology to prepare an ARAP

(iv) Methodology for the preparation of an FIES.

(v) Methodology to monitor and evaluate the implementation of mitigation measures and filling the forms for environmental and social monitoring

(vi) Methodological approach to prepare and conduct public consultations.

- The **second set of recommendations** relates to *Strengthening capacities to develop tools*, including building capacities to: (i) mastering the *Technical Manual*; and (ii) mastering the development of a set of environmental and social management tools – such as the FIES, ESIA, ESMP and ARP, according to the nature and the importance of social and environmental risks

- Finally **the third and final set of recommendations** relates to *Strengthening capacities to monitor implementation of developed instruments and mainly the mitigation measures*", including precise initiatives concerning building capacities to monitor use of social and environmental tools.

30. Table 6.1 presents all the elements of the ESSA's Action Plan which are included in the PAP. The cost of all identified actions, regarding both environmental and social aspects of the ESSA will be integrated into the overall budget of the Program.

Table 6.1. ESSA Action Plan

N°	Action	Action Description	Responsible Party	Timeline
1. STRENGTHENING ENVIRONMENTAL AND SOCIAL MANAGEMENT SYSTEMS				
1.1	**Public awareness and information dissemination**	Organization of public awareness meetings and dissemination of ESSA recommendations	MoI, in collaboration with the Ministry in charge of Environment and the World Bank	Six months after the Effective Date of the Loan Agreement/ Program
1.2	**Environmental and Social Technical Manual**	(i) Preparation of an Environmental and Social Technical Manual for the FLCN. This Manual will part of the POM and (ii) Organization of a workshop to validate the Environmental and Social Technical Manual	World Bank in collaboration with MoI and the Ministry in charge of Environment	Within three months after the signature of the FA of sub-projects.
2. STRENGTHENING CAPACITIES TO DEVELOP TOOLS				
2.1	**Environmental and social management tools**	Organization of capacity building initiatives aimed at: • Mastering the Technical Manual • Mastering the process of filling the FIDS • Mastering the preparation of the ESIA • Mastering the preparation of the ESMP • Mastering the preparation of an FIES And also: • Mastering the preparation of an ARAP	Each project proponent who is developing projects approved by the National Selection Commission of the FLCN Under the supervision of MoI and with support and advice from involved ministerial departments.	Within twelve months after the Effective Date of the Loan Agreement/ Program
3. STRENGTHENING CAPACITIES TO MONITOR IMPLEMENTATION OF THE TOOLS				
3.1	**Initiatives aimed at building capacities to monitor implementation of the tools**	Building the capacities of all concerned stakeholders to monitor implementation of environmental and social tools and agreed mitigation measures	Each project proponent who is developing subprojects which were approved by the National Selection Commission of the FLCN Under the supervision of	One time per year during Program Implementatio n based on specific needs.

			MoI and with support and advice from involved ministerial departments.	

Annex 7: Integrated Risk Assessment

MOROCCO: Integrated Disaster Risk Management and Resilience Program

<table>
<tr><td colspan="5">1. PROGRAM RISKS</td></tr>
<tr><td>1.1 Technical Risk</td><td>Rating:</td><td colspan="3">Substantial</td></tr>
<tr><td rowspan="2">Description: The main technical risks relate the overall management of the FLCN reform agenda and the implementation of eligible subprojects co-financed by the FLCN. Subprojects would include a variety of risk reduction projects, a majority of which are expected to be relatively standard non-structural and small scale structural projects. Larger complex structural works (i.e., flood protection that involve significant risks) are excluded from this operation, which will limit the riskiness of the infrastructure related investments. In addition, there is a risk that the law on the catastrophic risk insurance will not be passed or only passed with some delay which may impact the implementation of Subprogram Three.</td><td colspan="4">Risk Management: During preparation, the Borrower and the Bank reached an agreement on the key parameters of FLCN’s new modus operandum and ensured strong ownership in particular at the level of MoI (and other key stakeholders) to manage the proposed reform of the FLCN. In addition, the Program entails significant capacity building measures in particular for local governments with weaker capacity for managing risk reduction projects co-financed by the FLCN. Additional capacity building support is provided to MoI though a seconded International Expert to work on all aspects of Program implementation. Finally, IGAT will conduct technical audits to ensure that all projects are implemented in line with technical requirements. In terms of the catastrophic risk insurance law, the law is already submitted to the General Secretary of the Government, and its approval is expected during the Program implementation period (building on multiple years of consensus building efforts in Morocco). Finally, the Bank has mobilized grant resources to support all aspects of Program implementation over the medium term with additional technical assistance.</td></tr>
<tr><td>Responsible: Borrower</td><td>Stage: Implementation</td><td>Due Date : Recurring</td><td>Status: Ongoing</td></tr>
<tr><td>1.1 Fiduciary Risk</td><td>Rating:</td><td colspan="3">Substantial</td></tr>
<tr><td rowspan="2">Description: The Program involves financial relationships between the State and various entities which are not pre-defined but will be progressively selected. These entities, mostly municipalities, ministries and autonomous government agencies (etablissements publics), have varying financial management capacities, with entities at the local government level expected to have the weakest capacity. In addition, procurement management capacity is also varying and at the country level there are weak complaints handling mechanism and mechanism for efficient management of fraud and corruption.</td><td colspan="4">Risk Management: The Program will be supported by strong PFM systems at the country level, notably in terms of intergovernmental fiscal relationships, AGA and SOE monitoring and supervision and general budget processes. In addition, Program design is articulated around a strong selection process for project implementing entities that will look into issues of capacity, notably in terms of financial management, procurement and corruption risks. The General Secretariat (Secrétariat Général) of MoI is responsible for gathering financial information and provide the Bank with regular interim financial reports as well as annual audited financial statements for the Program. The capacity of the General Secretariat is deemed sufficient. Project implementation will include capacity building activities (including on new PPD) on Bank procurement and financial management guidelines. The Bank will also ensure close supervision during implementation period. The PAP includes the implementation of GRM at the local level for participating cities. If needed, municipally-owned entities will benefit from tailored capacity strengthening initiatives and be subjected to closer monitoring during implementation to ensure mitigation of fiduciary risk. The PAP includes several fiduciary measures based on the findings of the FSA. Those measures will help mitigate the fiduciary and corruption risks and improve the capacity of the various actors, in financial management and procurement.</td></tr>
<tr><td>Responsible: Bank</td><td>Stage: Implementation</td><td>Due Date : Recurring</td><td>Status: Ongoing</td></tr>
<tr><td>1.2 Environmental and Social Risk</td><td>Rating:</td><td colspan="3">Substantial</td></tr>
</table>

Description: Program-related environmental and social risks are likely to be substantial due to the number of implementation agencies involved, including at the local government level where capacity for environmental and social management is weaker. The Program is designed in order to avoid the selection of activities that raise significant social and environmental risk through precise eligibility criteria for Program activities. Selected activities will also have to comply with specific requirements related to environmental and social management, public consultations, GRM, and land acquisition.	**Risk Management:** The Program Environmental and Social Technical Manual will ensure a robust screening process. Additional measures to increase the counterpart's environmental and social management system are proposed through the ESSA and incorporated in the Program design.				
	Responsible: Bank		**Stage:** Implementation	**Due Date :** Recurring	**Status:** Ongoing
1.4 DLI risks	**Rating:**	**Moderate**			
Description: The main risk relates to difficulty of verification of some DLIs, in particular in light of the fact that the complete scope all Program activities, i.e., all FLCN co-financed investments, is not fully known which made it difficult to estimate precisely the Program beneficiaries/ results during Program preparation. This risk relates in particular to DLI 5. All other DLIs are clearly identifiable at preparation stage.	**Risk Management:** During preparation, the Bank worked closely with counterparts, including MEF and MoI, to identify and define a well-balanced set of DLIs, reflecting the Programs focus on institutional reform, financing risk reduction activities and implementing the catastrophic risk insurance law. The DLIs are clearly defined in the PAD. Risk related to DLI 5 are managed by ensuring that both a baseline is established at the annual selection stage for FLCN co-financed subprojects and independent technical audits are conducted to help verify results.				
	Responsible: Borrower		**Stage:** Implementation	**Due Date :** Recurring	**Status:** Ongoing
2. OVERALL RISK RATING: Substantial					

Note: L = Low; M = Moderate; S = Substantial; H = High.

Annex 8: Program Action Plan

N°	Action Description	Due Date	Responsible Party	Completion Measurement
Program Management				
1	Develop an M&E system for the management of the FLCN	12 months after the Effectiveness Date	MoI	An M&E system for the FLCN is created
2	Create an interactive website of the FLCN that (i) provides public access to information, (ii) handles grievances, and (iii) reports on the M&E system	18 months after the Effectiveness Date	MoI	The interactive website of the FLCN is created
3	Include in the FA between MoI/ MEF and the implementing agencies of eligible subproject of the FLCN, provisions to make available technical, environmental, social and fiduciary expertise	Annually (At signature date of the FA)	MoI/MEF	The FA included provision for adequate capacity of FLCN subproject proponents
4	Prepare and implement a capacity building plan including on technical, social, environmental and fiduciary aspects	Annually (starting from 2017)	MoI	Submission and implementation of annual capacity building plan to strengthen implementation agencies
5	Prepare and implement an action plan for technical and fiduciary audit recommendations made by auditors	Annually	MoI	Recommendations made by technical and fiduciary auditors are implemented
6	Develop probabilistic catastrophe risk models for (i) evaluation and assessment of risks (MoI), and (ii) catastrophic risk insurance program as per the draft law (MEF/ACAPS)	36 to 48 months after the Effectiveness Date	MoI/MEF/ ACAPS	The catastrophe risk modeling tools are developed within 36 months and operational within 48 months after the Effective Date of the Loan Agreement.
Social and Environmental				
7	Develop GRM for the FLCN at the national (website of the FLCN) and local levels	18 months after the Effectiveness Date–at the national level-and 6 month after signature of the FA by the project proponents – at the local level	MoI	GRM are in place
8	Prepare simplified technical guides for FLCN subprojects on: (i) Environmental and Social Management, incl. on public consultations and resettlement; and (ii) GRM	18 months after the Effectiveness Date	MoI	Technical guides finalized
Fiduciary[63]				
	Alignment with the triennial budget	For Effective Date of the 2019	MoI/ MEF	CAS-FLCN amended

[63] Regarding the action related to the availability of fiduciary competences for the implementation of subprojects, on must refer to the action n°3 under "Program management".

N°	Action Description	Due Date	Responsible Party	Completion Measurement
	programming updated on a yearly basis for the CAS-FLCN	Budget Law		for the 2019 Budget
	Include in the FA between MoI and project proponents of timeline for project implementation	For each signature of FA	MoI	The FA included implementation timelines

Annex 9: Implementation Support Plan

1. The objectives of the Implementation Support Plan (ISP) are (i) to monitor implementation progress of the Program (including its PAP) and the implementation of the risk mitigation measures defined in the technical, fiduciary, and safeguard assessments and (ii) to provide the counterpart with the technical advice necessary to facilitate the achievement of the PDO and contribute to the quality of the capacity building of stakeholders by providing best practices, benchmarks and training.

2. The Bank will provide regular implementation support to the Borrower as appropriate, including for the implementation of the PAP. Formal implementation support missions and field visits will be carried out semi-annually. The main focus of the implementation support is summarized below:

Table 9.1. Main Focus of Implementation Support

Time	***Focus***	***Skills Needed***	***Resource Estimate (US$)***	***Partner Role***
First twelve months	Task Team Leadership and Program supervision	Project management	150,000 BB	SDC financed international expert co-located with MoI to support Program Management with a focus on Subprograms One and Two (expert will start work before Program effectiveness)
	Technical support and capacity building	Risk management		
	M&E support and capacity building	M&E		
	Procurement support and capacity building	Procurement		
	FM support and capacity building	FM		
	Social development support and capacity building	Social development		
	Environmental support and capacity building	Environmental management		
	Technical support to risk financing agenda	Risk Finance		
12–48 months	Task Team Leadership and Program Supervision	Project management	100,000 BB per year	Continued support by SDC financed international expert co-located with MoI (financing agreed in principle with SDC as a continuation of year one activity)
	Technical support and capacity building	Risk management		
	Procurement supervision	Procurement		
	FM supervision	FM		
	Environmental supervision	Environment management		

	Social development supervision	Social development		
	Technical support to risk financing agenda	Risk Finance		

Note: BB = Bank budget.

Table 9.2. Task Team Skills Mix Requirements for Implementation Support (per year)

Skills Needed	***Number of Staff Weeks per Year***	***Number of Trips per Year***	***Comments***
Task Team Leader	8	2	*Based in HQ*
Risk Management Specialist	4	2	*International consultant*
Risk Modeling Specialist	4	2	*International consultant*
Risk Financing Specialist	4	2	*Based in HQ*
Risk Management Specialist	4	0	*Local consultant*
Procurement Specialist	3	0	*Based in Country Office*
Financial Management Specialist	3	0	*Based in Country Office*
Environment Specialist	4	1	*Based in HQ*
Social Specialist	4	1	*Based in HQ*
M&E Specialist	4	1	*Based in HQ*
Operations Analyst	5	2	*Local consultant*

Table 9.3. Role of Partners in Program Implementation

Name	***Institution/Country***	***Role***
International expert seconded to work with MoI on Program implementation, especially Subprogram One and Two	SDC - Switzerland	Support MoI Program Implementation, especially Subprogram One and Two

3. It is also expected that Technical Assistance resources will be made available to provide implementation support on all aspects of the Program, including on risk financing and insurance.