DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

Peru

## PROGRAM TO REDUCE THE VULNERABILITY OF THE STATE TO

## **DISASTERS III**

(PE-L1138)

LOAN PROPOSAL

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## **CONTENTS**

## PROJECT SUMMARY

I.	DES	SCRIPTION	1
	A.	Background	1
	B.	Objectives and description	9
II.	Fin	ANCIAL STRUCTURE, RESULTS, AND RISKS	11
	A.	Financing instrument	11
	B.	Expected outcomes	11
	C.	Economic rationale	
	D.	Social and environmental risks	13
	E.	Other risks and special issues	
III.	MA	NAGEMENT AND IMPLEMENTATION PLAN	14
	A.	Program execution and administration	14
	B.	Monitoring and evaluation of results	14
	C.	Policy letter	14

## ANNEXES

Annex I Summary Development Effectiveness Matrix (DEM)

Annex II Policy matrix

	ELECTRONIC LINKS				
Req	Required				
1.	Policy letter http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38866332				
2.	Means of verification matrix http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38631632				
3.	Results matrix http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38631633				
Opt	ional				
1.	Monitoring and impact evaluation plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38636395				
2.	Program economic analysis http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38636383				
3.	Safeguard policy filter report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38631771				
4.	Project risk management http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38633366				
5.	Design Note. Program to Reduce the Vulnerability of the State to Disasters http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35219503				
6.	Analysis of strategic actions to move forward with regulatory and institutional reform of disaster risk management in Peru http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35219505				
7.	Catastrophe risk profile http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35103315				
8.	Peru: Risk Management Index (IDB; 2014) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38571340				
9.	Law 29664 creating SINAGERD http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36194294				
10.	Natural disaster risk management in Peru: Elements for a financial strategy <a href="http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35395144">http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35395144</a>				

- 11. Sector note on disaster risk management in Peru http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36200328
- 12. Environmental and social strategy http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38634690
- 13. Alternative financial instruments to contain and transfer risk http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35103312
- 14. Methodology for disaster risk and risk management indicators http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36194362
- 15. Comparative matrix of commitments between PBPs II and III http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=38631630

#### **ABBREVIATIONS**

CAF CENEPRED	Andean Development Corporation Centro Nacional de Estimación, Prevención y Reducción del Riesgo de Desastres [National Center for Disaster Risk Estimation, Prevention, and Reduction]
DGETP	Dirección General de Endeudamiento y Tesoro Público [National Debt and
	Public Revenue Office]
DGR	Dirección de Gestión de Riesgos [Risk Management Office]
DM	Disaster Management
EM-DAT	Emergency Events Database
FEF	Fondo de Estabilización Fiscal [Fiscal Stabilization Fund]
FP	Financial Protection and Governance
iGOPP	Index of Governance and Public Policy for disaster risk management
INDECI	Instituto Nacional de Defensa Civil [National Civil Defense Institute]
IR	Identification of Risks
LIBOR	London Interbank Offered Rate
MEF	Ministry of Economy and Finance
NFPS	Nonfinancial public sector
PBP	Programmatic policy-based loan
PCM	Office of the President of the Council of Ministers
PPE	Programa Presupuestal Estratégico en el marco del Presupuesto por
	Resultados [Strategic Budgetary Program in the Framework of the Results- based Budget]
PP-068	Programa Presupuestal de Reducción de la Vulnerabilidad y Atención de
	Emergencias por Desastres [Budgetary Program for Vulnerability
	Reduction and Disaster Response]
RMI	Risk Management Index
RR	Risk Reduction
SINAGERD	Sistema Nacional de Gestión del Riesgo de Desastres [National Disaster
	Risk Management System]
SNIP	Sistema Nacional de Inversión Pública [National Public Investment
	System]

#### **PROJECT SUMMARY**

### PERU PROGRAM TO REDUCE THE VULNERABILITY OF THE STATE TO DISASTERS III (PE-L1138)

Financial Terms and Conditions					
D	Dama	hlia af Dama	Flexible Financing Facility*		
Borrower:	Repu	blic of Peru	Amortization period:	8 years	
Executing agency:	Ministry of Economy and Finance		Original weighted average life**	7.25 years	
(M		7)	Disbursement period::	12 months	
Source		Amount (US\$)	Grace period:	6.5 years	
	\$4-1)		Interest rate:	LIBOR-based	
IDB (Ordinary Cap	ital)	25 million	Inspection and supervision fee:	***	
Local		0	Credit fee:	***	
Total 25 million		25 million	Currency of approval: U.S. dollars from	the Bank's Ordinary Capital	
Project at a glance					

**Program objective:** The program objective is to strengthen and modernize the regulatory, institutional, and public policy framework for integrated disaster risk management. Specifically, the program will support a series of reforms aimed at strengthening the legal and institutional framework at the level of institutions with governing and sector authority, including financial management of disaster risk, and implementation of the Budgetary Program for Vulnerability Reduction and Disaster Response in the framework of the results-based budget established in the General Law on the National Budgetary System of Peru. Specifically, the program makes structural policy reform commitments in three components: (1) macroeconomic stability; (2) governance and development of the legal framework; and (3) development of instruments and capacity-building for sector-based and territorial management.

#### Special contractual clauses:

The single disbursement of resources will be subject to fulfillment by the borrower of the conditions set forth in Annex II (Policy Matrix) of this document, as well as others established in the loan contract.

Exceptions to Bank polices: None.					
Project qualifies as:	SEQ 🗌	PTI 🗌	Sector 🗌	Geographic 🗌	Headcount 🗌

\* Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency and interest rate conversions, subject in all cases to the final amortization date and the original weighted average life (WAL). When considering such requests, the Bank will take market conditions into account, along with operational and risk-management considerations.

\*\* The final original WAL will be calculated based on the date the loan contract is signed.

\*\*\* The credit and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the corresponding policies.

## I. **DESCRIPTION**

## A. Background

## 1. Introduction

1.1 The proposed program is the third of three programmatic policy-based loans (PBPs) to support the Peruvian government in implementing a legal and institutional reform process aimed at strengthening and modernizing the regulatory, institutional, and public policy framework for integrated disaster risk management, in line with Law 29664, which creates the National Disaster Risk Management System (SINAGERD), enacted in the framework of the second loan in this programmatic series (loan 2554/OC-PE), which was approved in July 2011 for US\$25 million. One notable achievement of the first operation (loan 2413/OC-PE), approved in September 2010 for US\$25 million, was the creation of the Strategic Budgetary Program in the Framework of the Results-based Budget (PPE), specifically for integrated disaster risk management, which facilitated an exponential increase in public investment in this area (paragraph 1.8). The present operation involves financing of up to US\$25 million from the Bank's Ordinary Capital, with a single disbursement proposed for 2014, once the policy reform conditions agreed on in the attached Policy Matrix have been fulfilled. This programmatic series is an essential part of the Bank's agenda for promoting disaster risk management in Peru, and is complemented by the financial coverage now provided through a US\$300 million contingent loan (PE-X1006), with technical studies on risk financed through technical cooperation operations,<sup>1</sup> and operations financed by the World Bank and the Andean Development Corporation (CAF) in the framework of the government's Strategy to Reduce the Vulnerability of the State to Disasters.

## 2. Macroeconomic situation

1.2 Peru continues to show sustained economic growth. In 2013, its real gross domestic product (GDP) expanded by 5.0% (6.3% in 2012). The recent growth is due to more buoyant nonprimary manufacturing, trade, and services sectors and, on the demand side, was driven primarily by private investment and consumption. Beyond its rapid growth, Peru remains one of the region's most stable economies, with a 2.9% inflation rate at the end of 2013, again within the Central Bank target. In 2013, the terms of trade deteriorated slightly, resulting in a 9.4% decline in total exports relative to 2012, mainly as a result of lower prices for exportable raw materials. Imports, for their part, increased by 2.6% in the same period. In 2012, the trade balance showed a small deficit (US\$365 million). The economic outlook remains positive for the coming years, with expected year-on-year growth rates of 5.0% to 6.0% of GDP for 2014-2015 and expected inflation anchored in the monetary policy range for the same period. The external sector outlook remains sound and, for 2013, a modest current account deficit is expected, in line with expected economic growth, financed entirely through foreign direct investment

<sup>&</sup>lt;sup>1</sup> Operations RS-T1120, PE-T1143, PE-T1212, PE-T1228, RG-T2064, RG-T2174, and RG-T2165.

flows. In that context, external financial conditions remain stable for Peru, with one of the region's lowest country risks and a DBRS, Fitch, Standard & Poor's (S&P) and Moody's investment grade rating. Gradual fiscal consolidation has also been noted in the nonfinancial public sector (NFPS), which showed a surplus of 0.8% of GDP at the close of 2013—1.3 points less than recorded in 2012. For the relevant future, the government's fiscal program envisages declining financing needs. For 2014, debt repayments of approximately 0.7% of GDP are expected which, together with the expected surplus for the year, are giving rise to gross NFPS financing requirements of approximately -0.6% of GDP. For subsequent years, gross fiscal savings are likewise expected. It should be noted that in the base case fiscal scenario, gross NFPS financing needs from 2014 to 2016 are very low or negative. The amount of this third operation (US\$25 million) is equivalent to some 6.8% of the 2014 multilateral organization disbursements. Although the programmatic series has already helped to reduce fiscal financing requirements through disbursement of the first two PBPs (US\$50 million), its greatest value added is the reduction of losses associated with natural disasters by improving the fiscal risk profile, reducing uncertainty, and promoting long-term growth. The country's most recent arrangement with the International Monetary Fund ended in January 2009. Since then, Peru has been subject to periodic macroeconomic monitoring in the framework of the Article IV consultations.<sup>2</sup>

#### 3. Diagnostic assessment of the problem

1.3 The diagnostic assessment made at the start of the programmatic series identifies Peru as one of the countries in the Hemisphere most vulnerable to multiple natural hazards. In fact, between 1970 and 2010, Peru was impacted by 109 disasters, 72% of which were caused by climatic phenomena (droughts, floods, frosts, mudslides) and 28% by geophysical events (seismic activity, volcanic eruptions, and landslides). These disasters caused over 74,000 deaths and affected 18 million persons (EM-DAT, 2010). During this period, Peru was the Latin American country with the highest number of deaths and the second-highest number of victims (trailing only Brazil, whose population is six times greater). In terms of damage from climatic events, it is important to note the impact of the El Niño phenomenon, which, during the severe episodes of 1982-1983 and 1997-1998, caused estimated losses of US\$6.8 billion (CAF, 1999). Earthquakes are another type of disaster that has caused the country major economic losses. For example, the Pisco earthquake in 2007 caused US\$2 billion in damage. Intensive changes in land use, related especially to rapid urban growth, infrastructure development in risk areas, and environmental degradation of watersheds, are contributing to the Peruvian population's mounting physical exposure and vulnerability to disasters. In the last year, natural phenomena in Peru have killed 91 and affected over 740,000,

<sup>&</sup>lt;sup>2</sup> The International Monetary Fund monitors the economic and financial policies of its member countries. This process is known as Article IV consultations.

and have damaged over 68,000 homes. Rains have destroyed over 19,000 hectares of crops and impacted another 44,000 hectares (<u>Peruvian government, 2007; 2014</u>).

- 1.4 According to the most recent <u>study of Peru's catastrophe risk profile</u> prepared by the Bank (ATN/JF-9349-RS) (2008), it is estimated that the country has over US\$450 billion in exposed infrastructure. In the case of an extreme seismic event similar to the 2010 Haitian or Chilean quakes (i.e., with a 100-year or more recurrence), Peru could suffer losses of up to US\$43 billion, i.e., 21% of GDP. The study found that, should such an event occur, the public sector would not have the financial capacity to cover the fiscal liabilities associated with such a loss. The study's findings are now considered conservative, because the exposed infrastructure value has risen owing to the country's significant economic growth since 2008.
- 1.5 Moreover, the System of Indicators of Disaster Risk and Risk Management<sup>3</sup> indicated that, prior to the reform process promoted by the programmatic series in 2010 in Peru,<sup>4</sup> performance in key components (i.e., identification of risks, risk reduction, disaster management, and financial protection) was in the early stages. Conditions of governance of disaster risk management were at an unsatisfactory level (paragraph 1.7). The Risk Management Index (RMI), which measures the level of this performance on a scale from 0 (minimum) to 100 (maximum), shows relative improvement per component between 1995 and 2008, from 8.46 to 28.42; but compared to other countries in the region with similar exposure to hazards, this index shows a relatively weaker performance (IDB, 2014).



#### Figure 1: Risk Management Index in the regional context (2008)

<sup>&</sup>lt;sup>3</sup> Used by the Bank since 1990 for 24 of the region's countries.

<sup>&</sup>lt;sup>4</sup> The most recent available year for which the RMI was calculated prior to the launch of the reform is 2008.

#### 4. Recent government advances in the sector and pending challenges

- 1.6 As a result of its dialogue with the Bank, the Peruvian government designed a Strategy to Reduce the Vulnerability of the State to Disasters, based on two fundamental pillars: (i) regulatory and institutional reform of disaster risk management, recognizing that in 2010 its weakness was the country's main challenge; and (ii) implementation of a financial strategy that incorporated disaster risk management into all areas of public and private economic activity. The focus of the Peruvian government's strategy is consistent with the Bank's Operational Policy OP-704 (Disaster Risk Management Policy) in that it takes an integrated approach to the main components of disaster risk management: (i) governance; (ii) identification of risks; (iii) risk reduction; (iv) disaster management; and (v) financial management of disaster risk. The problems encountered at the start of the series, progress made on each component through Bank support, and pending challenges are as follows:
- 1.7 Governance. The legal framework for disaster risk management was established by Law 29664, of 8 February 2011, creating SINAGERD, which takes a modern prevention approach that considers risk a problem of poorly planned development and assigns responsibilities for its management to development stakeholders at all levels of government. Prior to the launch of this programmatic series in 2010, the main obstacle was obsolete legislation on disaster risk management that covered only civil defense for emergency response. No effort had been made to decentralize disaster risk management or have it cut across sectors and subnational governments-key stakeholders in a modern management framework. Moreover, there were no budgetary incentives allowing line ministries and regional and local governments to assume and prioritize disaster risk management in their development plans and be accountable for their results. This situation is reflected in Peru's Index of Governance and Public Policy for disaster risk management (iGOPP), which was 31.12/100, reflecting unsatisfactory governance conditions stemming from, among other things, the lack of an institutional framework and an integrated disaster risk management policy that looked beyond emergency response alone and took a forward-looking and corrective approach. Moreover, there were no budgetary instruments for disaster risk management.
- 1.8 Under the first (loan 2413/OC-PE) and second operations (loan 2554/OC-PE), Peru took important steps, with Bank support, with regard to the regulatory, institutional, and budgetary framework for disaster risk management, notably: (1) the enactment of Law 29664, creating the National Disaster Risk Management System, as well as the regulations thereto. That law includes: (i) the policy foundations for disaster risk management, addressing risk as a development problem; (ii) national policy guidelines and instruments for the estimation, prevention, and reduction of risk, and preparedness, response, rehabilitation, and reconstruction; (iii) the proposed structure for the national system where disaster risk management responsibilities are assigned to development stakeholders at all levels of government; (iv) the financial management of disaster risks as a policy instrument; and (v) the processes

and mechanisms required to ensure adequate response capacity at all levels of government; and (2) the creation of the <u>Budgetary Program for Vulnerability</u> <u>Reduction and Disaster Response within the Framework of the Results-based</u> <u>Budget (PP-068)</u>, under which the annual budgetary allocation for disaster risk management was increased from US\$23 million to over approximately US\$310 million in the execution period of the programmatic series.

- 1.9 Although Peru has moved forward through the enactment of the Law creating SINAGERD and resources mobilized to finance disaster risk management actions in priority sectors and regions, it is essential promote the institutionalization of SINAGERD, implement the primary policy instruments included in Law 29664, and channel additional resources through PP-068 to finance actions for the management of disaster risk in new and vulnerable regions and sectors. To that end, it is essential to establish the Secretariat for Disaster Risk Management in the Office of the President of the Council of Ministers (PCM), and to adjust the Regulations on Organization and Functions of the PCM, the National Civil Defense Institute (INDECI), and the National Center for Disaster Risk Estimation, Prevention, and Reduction (CENEPRED), pursuant to Law 29664, to disseminate it in sectors and territories, develop the national disaster risk management plan and the national multisector policy for disaster risk management, complete the design of PP-068 for additional sectors, such as education, housing, and agriculture, and mobilize additional resources for that program.
- 1.10 **Identification of risks.** Prior to the launch of the programmatic series, the RMI associated with risk identification for 2008 was 17.21/100 (poor). Although Peru had several institutions devoted to generating information on climatology, hydrology, volcanology, and oceanography, disparate information was generated since the country still lacked a national platform and well-established protocols for exchanging, systematizing, and integrating this basic information as input for risk assessment and for use in promoting early warning systems. Another concern was the lack of information on seismic and tsunami risk in Lima and El Callao, which was hampering appropriate public and private investment decision-making in a risk scenario that is among the most potentially catastrophic in the Hemisphere.
- 1.11 With support from the Bank through the first and second operation, Peru has prepared consensus-based draft legislation for the standardization, use, and exchange of spatial information and administrative records among sectors that use disaster risk management information and areas that generate it. A draft protocol was also prepared to regulate procedures for the installation and operation of hydrometerological stations and instruments, as well as another draft protocol for the creation of a volcanological observatory in southern Peru, and draft project profiles were prepared for further monitoring of these two types of natural phenomena. Studies were also conducted on seismic microzoning and the physical vulnerability of homes and essential buildings in four highly vulnerable Lima districts, as well as a study on tsunami risk along the Lima and El Callao coastlines.

- 1.12 The pending challenges for the country with regard to risk identification are: (i) enactment of the legislation for the standardization, use, and exchange of risk information; (ii) design and creation of an interagency and multidisciplinary platform for the use and exchange of and access to geospatial information for disaster risk analysis; (iii) improvement and expansion of the hydrometerological, volcanological, and oceanographic monitoring systems; and (iv) the preparation of seismic microzoning studies in additional vulnerable Lima districts as input in preparing their Land Use Plans and Urban Development Plans.
- 1.13 **Risk reduction.** Prior to the launch of the programmatic series, the RMI associated with risk reduction for 2008 was 30.79/100, suggesting that progress made in risk reduction at the sector and subnational levels was still very limited. In particular, it was found that disaster risk reduction criteria had still not been developed and incorporated in the early stages of the urban and land use planning processes. Moreover, there were no technical instruments to regulate and incorporate disaster risk management in public investment planning and in strategic productive sectors, such as agriculture.
- 1.14 Under the first and second operation, at the sector level, Peru prepared a draft National Land Use Guide that incorporates disaster risk management as a determinant of land use. It also prepared the regulations to the Law on Land Use Planning and Urban Development and to the Law on Physical and Legal Rehabilitation of Blighted Properties for Urban Renewal Purposes, both of which incorporate disaster risk management. As for including risk analysis in formulating National Public Investment System (SNIP) projects, a new general SNIP guide was prepared and published for the identification, formulation, and social evaluation, at the project profile level, of public investment projects that incorporate disaster risk management.
- 1.15 The pending challenges as regards risk reduction are: (i) in incorporating disaster risk management in the coordinated formulation of policies for land use planning and management of informal neighborhoods, the dissemination and implementation of the new regulatory and operational instruments developed under the first two PBPs to achieve safe land use and occupancy is needed; (ii) at the agricultural sector level, development of new technical instruments for the reduction of agroclimatic risks; and (iii) in incorporating disaster risk management in the SNIP, updating of the SNIP methodological guidelines to include integrated disaster risk management in public investment projects.
- 1.16 **Disaster management.** Prior to the launch of the programmatic series, the RMI associated with disaster management for 2008 was 38.39/100 (unsatisfactory). Although historically emergency and disaster response had been the focus of the country's disaster risk management agenda, through the mandate to INDECI, its incursions into the spheres of other development stakeholders, stemming from of the lack of definition of responsibilities under the obsolete legal framework, had contributed to diverting and dispersing its attention towards areas beyond its mandate. It was therefore essential to adjust INDECI's legal framework and

functional and operating structure to direct its efforts towards matters corresponding to it (preparedness and response), as was discussed in the governance component (paragraph 1.8) above. Improving State preparedness to adequately address to the main natural hazards was also fundamental.

- 1.17 With support from the Bank under the first and second operations, Peru formulated and approved the National Earthquake Prevention Plan, carrying out drills and simulations for its validation. It also prepared and approved the Emergency Operations Plans for the housing and agriculture sectors.
- 1.18 The pending challenges of this policy are: (i) planning the continuity of State operations in disasters; and (ii) preparation of emergency plans to address the main natural hazards and refining them through drills.
- 1.19 **Financial management of disaster risks.** The RMI associated with financial protection for 2008 was 27.30/100 (insufficient), owing to: the lack of an adequate legal framework that set priorities and assigned competencies for ex ante financial management of risks associated with natural phenomena; limited public sector institutional capacity for financial management of these risks; lack of strategic planning; and the lack of minimum preventive financial coverage to finance these risks.
- 1.20 Under the first and second operations, the Bank provided support to Peru in strengthening its legal and institutional framework, incorporating financial management of risks as a priority policy focus in the new Law creating SINAGERD. From the financial protection standpoint, this legislation facilitates the development and use of (i) budgetary mechanisms for disaster response (contingency reserve funds) and the Fiscal Stabilization Fund (FEF); (ii) contingent credit lines; and (iii) risk transfer instruments for coverage of emergencies and public service infrastructure. Another fundamental milestone achieved was the creation of the Risk Management Office (DGR), which enables the Ministry of Economy and Finance (MEF) to assume the competencies assigned under the new law and obtain earmarked specialized allocations to finance the management of these risks. Additionally, the process was launched for the development of a financial management strategy, structuring coverage by making substantial additional allocations to the FEF<sup>5</sup> for use in the event of disaster-related emergencies, and contracting contingent loans.<sup>6</sup> Lastly, the DGR initiated analysis of the possibility of future transfer to the international markets of catastrophic risks to public infrastructure.
- 1.21 The challenges of this policy are: (i) to have in place a national strategy for financial management of disaster risks that would make Peru better prepared and

<sup>&</sup>lt;sup>5</sup> From 2009 to 2012, the Fiscal Stabilization Fund's resources rose from US\$1.813 billion to US\$7.169 billion, substantially increasing the country's available resources for coping with disasters.

<sup>&</sup>lt;sup>6</sup> Peru has contracted two contingent loans, for US\$400 million (US\$300 million with the Andean Development Corporation and US\$100 million with the World Bank).

have sufficient available financial resources to cushion the impact of disasters on public finances and respond adequately to the population; (ii) institutional consolidation of the DGR; and (iii) to increase the financial coverage the State should have in view of the country's high level of vulnerability, especially to earthquakes, and the estimated losses and expenditure that such disasters would generate.

## 5. Operation design and strategic alignment

- 1.22 The proposed program is designed to support and promote the reform processes initiated by the Peruvian government under the first and second operations. The main lessons learned from those operations are: (i) the importance of a key stakeholder such as the MEF lending its political support to the reform process and assisting in building consensus regarding viable solutions; (ii) technical support from the Bank during formulation is essential in substantiating appropriate policy decisions; (iii) gradual ownership of the reform process by the institutions involved, consolidated through horizontal dialogue among them, and with the ministry responsible for the national budget; and (iv) the need for integrated approaches to effective reduction of vulnerability to disasters that assist in resource optimization and impact maximization.
- In particular, the programmatic series seeks to promote regulatory and institutional 1.23 reforms to address, in an integrated manner, the three basic components of disaster risk management, namely: (i) forward-looking management that seeks to avoid the creation of future risk; (ii) corrective management aimed at reducing existing risk; and (iii) reactive management aimed at responding to emergencies, whether an imminent hazard or one that has materialized. The first operation laid the foundation for policy commitments based on the new draft legal framework prepared and the creation of PP-068. Under the second PBP, through the enactment of Law 29664, the new National Disaster Risk Management System was created, benefiting the population most vulnerable to natural hazards, and different sector disaster risk management instruments were developed and strengthened. Enactment of Law 29664 called for the leadership of a government ministry with great political weight (MEF). Without that strong political will, the reform would not have achieved its current comprehensiveness, or swift implementation. The new law has facilitated the proposal of reform commitments for this third operation not included in the initial policy matrix prepared at the outset of the series. It has also assisted in more precise drafting of some generally worded commitments. Of particular note are the new commitments related to the implementation of the new lead institutions of the national disaster risk management system (PCM, CENEPRED, and INDECI), and those involved in integrating the disaster risk management approach in MEF's institutional structure and in developing its main operational instruments. Therefore, this third operation proposes to implement the SINAGERD through (i) the operation of its governing institutional structure in the PCM; (ii) the development of the PP-068 results monitoring system and expansion of its beneficiary sectors and regions; (iii) the development and provision of training on

the use of management instruments that improve the country's basic RMI components: identification of risks, risk reduction; disaster management, and financial management; and (iv) the expansion of the state's financial coverage for emergency response.

- 1.24 This third operation constitutes integrated implementation of the principles of the Bank's Disaster Risk Management Policy (OP-704) and, to that end, its components and actions, described below, are consistent with the best practices and recommendations emanating from that policy. The empirical evidence provided by similar reforms in <u>Nicaragua</u> and <u>Colombia</u> shows the effectiveness of these types of interventions in similar contexts.
- 1.25 Consistency with the objectives of the Ninth General Increase in the Resources of the Bank and the Bank's strategy in the sector. The program will contribute to the lending target to support climate change, sustainable energy, and environmental sustainability initiatives established in the Report on the Ninth General Increase in the Resources of the Inter-American Development Bank (document AB-2764). This program will also contribute to achieving the regional development targets: (i) countries with planning capacity in mitigation and adaptation to climate change; and (ii) reduction of economic damages from natural disasters. The program is aligned with the IDB country strategy with Peru 2012-2016 (document GN-2668) as it contributes to the strategic objective of reducing the country's vulnerability to disasters and climate change.

#### **B. Objectives and description**

- 1.26 The program objective is to strengthen and modernize the regulatory, institutional, and public policy framework for integrated disaster risk management. Specifically, it will support a series of reforms aimed at strengthening the legal and institutional framework at the level of institutions with governing authority in the sectors, including financial management of disaster risk, and implementation of the Budgetary Program for Vulnerability Reduction and Disaster Response in the Framework of the Results-based Budget, established in the General Law on the National Budgetary System of Peru. The program will benefit the Peruvian population as a whole, especially the groups most vulnerable to natural hazards. The <u>Policy Matrix</u> (Annex II) establishes the sequence of program commitments, broken down into the following components:
- 1.27 **Component 1. Macroeconomic stability.** A macroeconomic context consistent with program objectives and the sector Policy Letter.
- 1.28 **Component 2. Governance and development of the legal framework** The **objectives** of this component are to: (i) develop the legal, regulatory, and institutional framework for integrated disaster risk management in the country; and (ii) promote disaster risk management by introducing it in the national budget through the PPE. The main **policy commitments** of this component are to: (i) create the Secretariat for Disaster Risk Management within the PCM; (ii) adjust the Regulations on Organization and Functions of the PCM, INDECI, and

CENEPRED in accordance with Law 29664; (iii) disseminate that law in sectors and territories; (iv) develop the National Disaster Risk Management Plan and the National Multisector Policy on Disaster Risk Management; and (v) develop the performance indicators and complete the design of PP-068 for additional sectors and mobilize additional resources for that program.

- 1.29 **Component 3. Development of instruments and capacity-building for sectorbased and territorial management.** This component complements the governance-related reforms based on implementation of the following focus areas:
  - a. Identification of risks. The objectives here are to: (i) facilitate exchange between generators and users of information on risks; (ii) strengthen and modernize the natural phenomena observation and early warning systems; and (iii) strengthen research and knowledge generation on risk to facilitate the identification of risk reduction measures in the different sectors. Its **policy commitments** include: (i) approval of a law for the standardization, use, and exchange of spatial information and administrative records among users and generators of information related to disaster risk management; (ii) creation and initial implementation of a disaster risk information system; (iii) improvement and expansion of the hydrometerological, volcanological, and oceanographic monitoring systems; and (iv) preparation of seismic microzoning studies in additional vulnerable Lima districts as input in preparing their Land Use Plans and Urban Development Plans.
  - b. **Risk reduction.** The **objectives** here are to: (i) promote the incorporation of disaster risk management in policies on land use planning and territorial and urban development, whose formulation is coordinated among the different government levels; (ii) dissemination and strengthening of the new legislation and technical instruments incorporating risk reduction criteria for the management of informal neighborhoods and in the agricultural sector; and (iii) development and expansion of the coverage of methodological instruments for the inclusion of risk management in public investment policy **commitments** include: (i) dissemination projects. Its and implementation of the new regulatory and operational instruments for land management, and urban development and land use planning that include disaster risk management, developed under the first two PBPs, to contribute to safe land use and occupancy; (ii) development and dissemination of new technical instruments for the reduction of agroclimatic risks; and (iii) update of the SNIP methodological guidelines on including disaster risk management in public investment projects.
  - c. **Disaster management.** The **objective** of this area is to improve emergency and contingency plans and systems at the national, sector, and subnational levels. Its main **commitments** are: (i) incorporation in government planning of the concept of the continuity of State operations in disasters; (ii) planning and establishment of the management of the continuity of MEF operations in the event of a disaster; (iii) implementation of a national program of day-time

and night-time earthquake and tsunami drills; and (iv) design and approval of a national plan for response to a natural event, taking a system-based approach and with participation by at least two sectors (e.g., agriculture, transportation, or housing, among others).

d. **Financial management.** The **objective** of this area is to support Peru in its efforts to improve its preventive financial planning for adequate management of disaster risks, cushioning their impact on public finance. In particular, the interventions will seek to build technical, financial, and institutional capacities. Its **policy commitments** include: (i) finalizing the design of the Natural Disaster Risk Management Strategy; (ii) consolidating the institutional capacity of the MEF by defining functions and assigning human resources to the recently created DGR, and creating and bringing into operation the MEF's Risk Committee; and (iii) increasing the financial coverage available for the special fiscal spending occasioned by natural disasters.

## II. FINANCIAL STRUCTURE, RESULTS, AND RISKS

## A. Financing instrument

- 21 This operation is the third in a series of three programmatic policy-based loans (PBPs) and will provide financing of up to US\$25 million. Release of the funds will be contingent on fulfillment by the borrower of the general and special (policy reform) conditions stipulated in the respective loan contract. A programmatic approach was selected because it will strengthen the policy dialogue with the government in a reform and structural change process, and benefit from the lessons learned during the preparation and negotiation of the first two operations. A Comparative Matrix shows the commitments of the third PBP, adjusted taking account of the new Law 29664 creating SINAGERD. Additional reform commitments have been included that give greater impetus to the reforms begun under the first two operations in the series, and minimum adjustments have been made that do not change the original objectives (paragraph 1.23). In view of the country's progress since the approval of the second PBP, all commitments in this third PBP are expected to be fulfilled prior to submitting it to the Board of Executive Directors for consideration.
- 2.2 The financing of the proposed program will draw on the Bank's Ordinary Capital resources, under the Flexible Financing Facility. Implementation of the policy commitments and the design of this loan were also supported with a technical-cooperation operation (ATN/OC-12295-PE), which was approved in August 2010 for US\$1 million from the Disaster Prevention Fund.

#### **B.** Expected outcomes

2.3 The primary impact sought through the programmatic series is its contribution to improving disaster risk management performance at the national level, to be

measured utilizing Peru's Risk Management Index (RMI) as an indicator with respect to the 2008 baseline (RMI>28.42). Another aim is to improve conditions for the governance of disaster risk management, to be measured utilizing as an indicator the Index of Governance and Public Policy for disaster risk management (iGOPP) with respect to the baseline prior to the programmatic series (iGOPP>31.12). The program will also assist in closing the gap in disaster response financing.

2.4 Program actions will produce a substantially improved regulatory, institutional, and budgetary framework, consistent with international best practices and resulting in decentralized, interagency, and multisector disaster risk management. This new regulatory and institutional framework and the implementation of PP-068 ensure the sustainability of the operation's results. Specifically, the program is designed to have a direct impact on some of the indicators measuring the country's disaster risk management performance, as reflected in the RMI and its components of Identification of Risks (IR), Risk Reduction (RR), Disaster Management (DM), and Financial Protection and Governance (FP). The following table identifies the indicators for these components on which the program is expected to have a direct impact, improving the levels observed in the recently updated 2008 baseline.

Description of indicator	Baseline	Target
Monitoring of hazards and forecasts (IR2)	2	3
Evaluation and mapping of hazards (IR3)	2	3
Vulnerability and risk assessments (IR4)	2	3
Integration of risk in the definition of uses and planning (RR1)	2	3
Intervention in watersheds and environmental protection (RR2)	1	2
Housing improvement and relocation of settlements (RR4)	2	2*
Emergency response planning and early warning system (MD2)	2	2*
Simulation, update, and evidence of interagency response (MD4)	2	4
Interagency, multisector, and decentralized organization (FP1)	1	3
Reserve funds for institutional strengthening (FP2)	1	2
Location and mobilization of budgetary resources (FP3)	3	4
Insurance coverage and strategies for transferring losses of public assets (FP5)	2	2*

Table II.1 – Indicators

\*For these indicators, the expected target is consolidation of the baseline value.

2.5 The <u>Results Matrix</u> describes the program's impact and outcome indicators and its baseline and target levels. Details of the development and implementation of the RMI, and its methodology and components are provided in the <u>Monitoring and Impact Evaluation Plan</u>.

### C. Economic rationale

2.6 The <u>economic evaluation</u> of this operation provides a comprehensive costeffectiveness analysis of the main policy commitments of the programmatic series associated with the governance and financial management components. This study compares the costs that the country would incur in different disaster scenarios utilizing the financial instruments developed as part of the country's policy commitments under the PBP compared to a situation without a PBP (discount rate: 12%). The results show that through the implementation of the new financial instruments promoted by the PBP, the country has new sources of financing that it could use to replace debt and reduce interest costs. Specifically, the country would incur less cost by contracting debt ex post for financing disaster response, rehabilitation, and reconstruction processes. The simulations show that the cost of financing disaster-related losses decline in the range of US\$282 million to US\$338 million for events, respectively, with 18% to 2% probabilities of occurrence within 10 years.

2.7 This analysis is conservative since it does not take account of losses avoided through the new regulatory framework for urban development, land use planning, or the SNIP, or the increased investment in risk reduction as a result of PP-068, milestones of the reform undertaken through this programmatic series, which will reduce the country's financing needs to cope with disasters over the long term.

#### D. Social and environmental risks

2.8 This operation does not involve adverse environmental impacts and incorporates environmental sustainability as an inherent program requirement. According to the IDB's Operational Policy OP-703, Environment and Safeguard Compliance Policy (Directive B.13), this operation does not need to be classified since it is a PBP.

#### E. Other risks and special issues

29 The National Council on Disaster Risk Management, created by Law 29664 as SINAGERD's highest policy decision-making and strategic coordination organ, is composed of the ministries that participated in the reform process. It institutionalizes and ensures the sustainability of the consensus-building system established by the programmatic series that were key in mitigating the risk identified under the first two operations that was related to the linkage of the numerous participating stakeholders. Within the National Council on Disaster Risk Management, the reform process is currently spearheaded by the Office of the President of the Council of Ministers (PCM) and the Ministry of Economy and Finance (MEF), in coordination with key entities like the National Center for Disaster Risk Estimation, Prevention, and Reduction (CENEPRED), the National Civil Defense Institute (INDECI), the Ministry of Environment (MINAM), the Ministry of Agriculture and Irrigation (MINAGRI), and the Ministry of Housing, Construction, and Sanitation (MVCS). This third PBP entails only administrative risk, associated with possible delays in the final stage of negotiating the National Disaster Risk Management Plan, stemming from changes in personnel in the Office of the President of the Council of Ministers (PCM). This has been classified as a medium risk, with low probability. To mitigate this risk, a system for weekly monitoring of those negotiations has been agreed on with the executing agency.

## **III. MANAGEMENT AND IMPLEMENTATION PLAN**

#### A. Program execution and administration

3.1 The Republic of Peru will be the borrower for the program. The executing agency will be the Ministry of Economy and Finance (MEF), acting through the Dirección General de Endeudamiento y Tesoro Público [National Debt and Public Revenue Office] (DGETP). The DGETP will be responsible for monitoring the commitments set out in the Policy Matrix (Annex II). As executing agency, the DGETP will have the following responsibilities: (i) maintaining official communications with the Bank and submitting evidence of fulfillment of the operation's conditions, and such other reports as the IDB may request under the agreed terms and conditions; (ii) promoting actions in furtherance of the policy objectives set, in particular the conditions included as triggers for this program; and (iii) collecting and delivering to the IDB all information and indicators contributing to the monitoring, measurement, and evaluation of the program outcomes by the Peruvian government and the Bank. The DGETP will coordinate receipt of evidence of the commitments assumed by various government institutions, as specified in the Means of Verification Matrix. The matrix includes a list of those institutions. The most notable of these are those comprising the National Council on Disaster Risk Management (paragraph 2.9).

#### **B.** Monitoring and evaluation of results

- 3.2 The programmatic commitments defined in the Policy Matrix, as well as the <u>Means</u> of <u>Verification Matrix</u> and the <u>Results Matrix</u> establish the parameters for oversight and evaluation of program outcomes. Within the MEF, responsibility for monitoring and evaluating results falls to the DGETP.
- 3.3 For evaluating program outcomes, a reflexive methodology will be used to measure the impact indicators and outcome indicators before and after program execution. The indicators correspond to the <u>methodology of the System of Indicators for</u> <u>Disaster Risk Management</u>, developed by the Bank. A 2008 baseline is available for all indicators. Technical-cooperation operation ATN/OC-12295-PE includes resources for the impact evaluation (paragraph 2.2). Details of the budget and the schedule of activities for that evaluation are included in the <u>Monitoring and Impact</u> <u>Evaluation Plan</u>.

#### C. Policy letter

3.4 The Bank has agreed with the Peruvian government on the macroeconomic and sector policies included in the <u>Policy Letter</u> of the Ministry of Economy and Finance (MEF), describing the main components of the country's strategy with respect to the program and reaffirming its commitment to implement the activities agreed upon in the Policy Matrix.

Development Effectiveness Matrix					
Sur	Summary				
I. Strategic Alignment					
1. IDB Strategic Development Objectives		Aligned			
Lending Program	i) Lending to support climate change initiatives, renewable energy and environmental sustainability.				
Regional Development Goals	<ul> <li>i) Countries with planning capacity in mitigation and adaptation of climate change; and ii) Annual reported economic damages from natural disasters.</li> </ul>				
Bank Output Contribution (as defined in Results Framework of IDB-9)	i) National frameworks for clima	ate change mitigation supported.			
2. Country Strategy Development Objectives		Aligned			
Country Strategy Results Matrix	GN-2646	The project contributes to the o country's vulnerability to natura			
Country Program Results Matrix	GN-2756	The intervention is not included Document for 2014.	in the Country Program		
Relevance of this project to country development challenges (If not aligned to country strategy or country program)					
II. Development Outcomes - Evaluability	Evaluable	Weight	Maximum Score		
	8.7		10		
3. Evidence-based Assessment & Solution	9.6	33.33%	10		
3.1 Program Diagnosis	3.0				
3.2 Proposed Interventions or Solutions	3.6				
3.3 Results Matrix Quality	3.0	22.224			
4. Ex ante Economic Analysis 4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis	10.0 2.5	33.33%	10		
4.2 Identified and Quantified Benefits	2.0				
4.3 Identified and Quantified Costs	2.0				
4.4 Reasonable Assumptions	2.0				
4.5 Sensitivity Analysis	1.5				
5. Monitoring and Evaluation	6.5	33.33%	10		
5.1 Monitoring Mechanisms	2.5				
5.2 Evaluation Plan	4.0				
III. Risks & Mitigation Monitoring Matrix					
Overall risks rate = magnitude of risks*likelihood		Medium			
Identified risks have been rated for magnitude and likelihood		Yes			
Mitigation measures have been identified for major risks		Yes Yes			
Mitigation measures have indicators for tracking their implementation Environmental & social risk classification		B.13			
IV. IDB's Role - Additionality		0.13			
The project relies on the use of country systems					
Fiduciary (VPC/PDP Criteria)					
Non-Fiduciary					
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:					
Gender Equality					
Labor					
Environment					
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	Technical Cooperation PE-T1228 project design.	was approved to support		
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan					

The project is clearly aligned with IDB's institutional priorities. It contributes to the lending priority "to support climate change initiatives, renewable energy and environmental sustainability", to regional development goal "Protecting the environment, responding to climate change, promoting renewable energy, and enhancing food security", and to the output "National frameworks for climate change mitigation supported".

The project contributes to the country strategy's objective to reduce the country vulnerability to natural disasters and climate change. The project document and its annexes provide a clear and complete justification for the project. Problems and their causes are identified and discussed. The project's potential beneficiaries are also identified. The project's metric is well defined and the result matrix includes valid indicators with baseline and targets.

The project document includes a complete cost/benefit analysis. It also includes a monitoring and evaluation plan (MEP) that is complete and follows the DEM outline. The risks identified in the risk matrix are rated for magnitude, include mitigation measures and related metric to track their implementation.

## POLICY MATRIX

# Negotiated on 23 May 2014

General objective	To strengthen and modernize the regulatory, institutional, and public policy framework for integrated disaster risk management. Specifically, the program will support a series of reforms aimed at strengthening the legal and institutional framework at the level of institutions with governing and sector authority, including the financial management of risk and the results-based budget mechanism promoted by the Ministry of Economy and Finance (MEF).
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## COMPONENT 1. MACROECONOMIC STABILITY

Specific objective	Programmatic commitments I (2010)	Programmatic triggers II (2011)	Policy commitments PE-L1138 (2014)
To maintain a stable macroeconomic framework.	Macroeconomic framework consistent	Macroeconomic framework consistent	Macroeconomic framework consistent
	with program objectives and with the	with program objectives and with the	with program objectives and with the
	guidelines established in the sector	guidelines established in the sector	guidelines established in the sector
	Policy Letter.	Policy Letter	Policy Letter.

#### COMPONENT 2. GOVERNANCE AND DEVELOPMENT OF THE LEGAL FRAMEWORK

Specific objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
To develop and strengthen the legal and regulatory framework for integrated disaster risk management.	<ul> <li>a. Generation of draft legislation for integrated disaster risk management in the country, containing at a minimum:</li> <li>(i) Policy foundations for integrated disaster risk management, considering risk as a development problem.</li> <li>(ii) National policy guidelines and instruments incorporating integrated risk management processes: risk estimation, prevention, reduction, and preparedness, response, rehabilitation, and reconstruction.</li> <li>(iii) The proposed structure of a national system for integrated disaster risk management that assigns risk management responsibilities based on the competencies of development stakeholders at all levels of government.</li> <li>(iv) Determination of the need for mechanisms and instruments for adequate financial management of disaster risk.</li> <li>(v) The processes and mechanisms required to ensure adequate response capacity at all levels of government.</li> </ul>	<ul> <li>a. Creation of the National Disaster Risk Management System (SINAGERD) to: (i) identify and reduce hazard-related risks or minimize their effects; (ii) avoid the creation of new risks; and (iii) prepare for and address disasters by establishing principles and policy guidelines, components, processes, and instruments for disaster risk management</li> <li>b. Regulations to the law creating the SINAGERD.</li> </ul>	<ul> <li>a. Dissemination and promotion at all levels of government of SINAGERD and its regulations.</li> <li>b. Formulation and adoption of SINAGERD's policy instruments, including the National Disaster Risk Management Plan.</li> <li><b>Responsible party:</b> Secretariat for Disaster Risk Management of the Office of the President of the Council of Ministers (PCM)</li> </ul>

Specific objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
To develop and strengthen the institutional framework for integrated disaster risk management	No commitments in 2010.		<ul> <li>(2014)</li> <li>a. Approval of the updated ROF of the PCM incorporating among its functions the governing authority of SINAGERD.</li> <li>b. Establishment of the Secretariat on Disaster Risk Management within the PCM, in implementation of the Law on SINAGERD and the regulations thereto.</li> <li>c. Approval of the ROF of CENEPRED.</li> <li>d. Approval of a CENAPRED Strategic Plan that includes, among</li> </ul>
(implementation of the SINAGERD structure).		<ul> <li>Estimation, Prevention, and Reduction (CENEPRED), as a national technical entity responsible for forward-looking and corrective disaster risk management processes.</li> <li>c. Presentation to the General Secretariat of the PCM of the draft ROF of CENEPRED.</li> </ul>	<ul> <li>other aspects, rapid identification of the country's processes and instruments (existing or being developed) on forward-looking and corrective management.</li> <li>e. Preparation and approval of the new Regulations on Organization and Functions of the National Civil Defense Institute (INDECI), based on the Law and its regulations.</li> <li><b>Responsible parties:</b> <ul> <li>a., b., c., and e.: PCM</li> <li>d.: CENEPRED</li> </ul> </li> </ul>

## Annex II Page 4 of 16

Specific objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
To promote integrated disaster risk management by introducing it in the national budget through the Strategic Budgetary Program (PPE) in the Framework of the Results-based Budget.	<ul> <li>a. Enactment of legislation that accords priority to the inclusion of integrated risk management in the PPE in the framework of the results-based budget.</li> <li>b. Design of the specific PPE in the framework of the results-based budget for integrated disaster risk management that has a conceptual, explanatory, prescriptive, and logical model.</li> </ul>	<ul> <li>a. Design of a strategy to implement the PPE specifically for disaster risk management.</li> <li>b. Allocation of government budgetary resources for implementation of the PPE, specifically for disaster risk management, in priority interventions at the level of sectors and regions selected for 2011.</li> </ul>	<ul> <li>a. Development of the operational models and cost structure of the budgetary program and design of indicators at the output level with participation by the sectors involved.</li> <li>b. Development of the performance indicators for the Budgetary Program for Vulnerability Reduction and Disaster Response.</li> <li>c. Allocation of national budgetary resources for implementation of the specific PPE for integrated disaster risk management in priority interventions at the level of sectors and regions selected for 2013.</li> <li><b>Responsible party:</b> MEF, Public Budget Office (DGPP).</li> </ul>

## COMPONENT 3. DEVELOPMENT OF INSTRUMENTS AND CAPACITY-BUILDING FOR SECTOR-BASED AND TERRITORIAL MANAGEMENT

## Focus Area 1: IDENTIFICATION OF RISKS

Specific objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
To facilitate exchange and improve channels of communication among generators and users of information systems through the implementation of standards and an integration platform for information related to disaster risk management.	a. Preparation of draft legislation that includes standards on the use and exchange of and access to spatial information and administrative records related to the identification and analysis of disaster risks, and dissemination to the sectors (ministries) for feedback and analysis.	<ul> <li>Building consensus among user sectors and/or generators of disaster risk management-related information regarding the draft legislation on the standardization, use, and exchange of spatial information and administrative records.</li> </ul>	<ul> <li>a. Enactment of the legislation for standardization, use, and exchange of spatial information and administrative records on identification and analysis of disaster risks.</li> <li>b. Adjustment of the ROF of the PCM to develop SINAGERD, in fulfillment of the law creating the system.</li> <li>c. Include as a specific objective of the National Disaster Risk Management Plan the development of SINAGERD, in implementation of the law creating the system.</li> <li>d. Creation and implementation of SINAGERD, emphasizing the estimation, prevention, risk reduction, and reconstruction processes.</li> <li><b>Responsible parties:</b></li> <li>a. Office of E-Government and Information Technology (ONGEI) of the PCM</li> <li>b. and c. Secretariat for Disaster Risk Management of the PCM;</li> <li>d. CENAPRED</li> </ul>

## Annex II Page 6 of 16

Specific objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
To strengthen and modernize systems for observing and monitoring climatic and hydrometeorological phenomena.	<ul> <li>a. Preparation of a proposed technical standard to regulate procedures for the installation and operation of hydrometeorological stations and instruments in accordance with the technical standards of the World Meteorological Organization, for public and private entities, and submittal to the national standardization agency, the National Institute on Competition and Intellectual Property Protection (INDECOPI).</li> <li>b. Preparation of a project profile for strengthening of the National System for Climate Observation in Peru, including a diagnostic assessment of its current status.</li> </ul>	<ul> <li>a. Adjustments to and referral to the Ministry of Environment for its approval of the proposed protocol to regulate procedures for the installation and operation of hydrometerological stations and instruments.</li> <li>b. Approval by the General Planning and Budget Office of the PCM of a project profile to implement a climate information system in a priority area that assists in preventing hydrometerological risks and is part of the National System for Climate Observation.</li> </ul>	<ul> <li>a. Approval and dissemination of the protocol for meteorological, agrometeorological, and hydrological surveillance and monitoring that includes the regulation of procedures for the installation and operation of hydrometeorological stations and instruments.</li> <li>b. Expansion of the coverage of hydrometerological stations of the climate information system.</li> <li><b>Responsible party:</b> National Metrology and Hydrology Service (SENAMHI).</li> </ul>
To strengthen and modernize systems for observing and monitoring phenomena of geological origin and early warning systems.	a. Preparation of a technical proposal for the creation of a volcanological observatory in Southern Peru, capable of monitoring and generating information to support decision-making for preparedness for, mitigation of, and response to volcanic eruptions.	<ul> <li>a. Preparation of a draft law to create a volcanological observatory in Southern Peru.</li> <li>b. Preparation of a project profile to improve and expand the coverage of the country's volcano monitoring systems.</li> </ul>	<ul> <li>a. Creation of a volcanological observatory in Southern Peru.</li> <li>b. Preparation of final studies and presentation to the National Public Investment System (SNIP) of the project to improve and expand the coverage of the country's volcano monitoring systems.</li> <li>c. Implementation of joint activities by the Geological, Mining, and Metallurgical Institute (INGEMMET) and the Geophysical Institute of Peru (IGP) in the area of studies, projects, and research related to the implementation of the volcanological observatory in southern Peru.</li> </ul>

Specific objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
			<b>Responsible parties:</b> INGEMMET and IGP.
To strengthen research and the generation of knowledge of oceanographic information for monitoring the El Niño / La Niña phenomenon.	a. Identification of the main processes of the Peruvian Institute of the Sea (IMARPE), including the scientific processes required to monitor the El Niño / La Niña phenomenon and year-to-year and seasonal climate variability.	<ul> <li>a. Establishment of guidelines for evaluation of the main internal management processes of the Peruvian Institute of the Sea (IMARPE), including the entity's performance in monitoring the El Niño / La Niña phenomenon and year-to-year and seasonal climate variability.</li> <li>b. Preparation of guidelines for analysis and evaluation of the presence of the El Niño / La Niña phenomenon and year-to-year and seasonal climate variability as part of the Scientific Information System (IMARSIS).</li> </ul>	<ul> <li>a. Evaluation of the main internal management processes (strengths, weaknesses) of IMARPE and the Multisector Committee to Study the El Niño Phenomenon (ENFEN) and identification of options to improve its performance in monitoring the El Niño / La Niña phenomenon and year-to-year and seasonal climate variability, in coordination with CENEPRED.</li> <li>b. Design of the processes, routines, and/or protocols required for analysis and evaluation of the presence of the El Niño / La Niña phenomenon and year-to-year and seasonal climate variability, as part of IMARSIS.</li> <li><b>Responsible party:</b> IMARPE.</li> </ul>

## Annex II Page 8 of 16

Specific objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
To strengthen research and the generation of knowledge of risk, the development of methodologies for risk analysis, and the identification of risk reduction measures in the various sectors.	a. Preparation of the study on seismic microzoning and analysis of the physical vulnerability of homes and essential buildings, including a preliminary diagnostic assessment of the vulnerability of the sanitation system for a district of metropolitan Lima.	<ul> <li>a. Preparation of seismic microzoning studies and analysis of the physical vulnerability of homes and essential buildings, including preliminary diagnostic assessments of the vulnerability of the sanitation systems for three additional districts of metropolitan Lima.</li> <li>b. Preparation of a tsunami hazard analysis for the Lima and Callao coastlines.</li> </ul>	<ul> <li>a. Update of the study on seismic microzoning for metropolitan Lima.</li> <li>b. Generation of risk scenarios and indicators as an input for the housing, construction, and sanitation sector, making it available to local governments for the preparation of land use and urban development plans and to CENEPRED for development of the corresponding guidelines.</li> <li><b>Responsible party:</b> Ministry of Housing, Construction, and Sanitation (MVCS), Territorial Management Program</li> </ul>

#### COMPONENT 3. DEVELOPMENT OF INSTRUMENTS AND CAPACITY-BUILDING FOR SECTOR-BASED AND TERRITORIAL MANAGEMENT

#### Focus Area 2: RISK REDUCTION

Specific objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
To promote the incorporation of integrated disaster risk management in preparing land use planning policies, coordinated among the various levels of government.	<ul> <li>a. Preparation of policy guidelines for land use planning, incorporating disaster risk management.</li> <li>b. Preparation of the proposed National Land Use Planning Guide that incorporates disaster risk management.</li> </ul>	<ul> <li>a. Preparation of a preliminary draft law on land use planning that incorporates disaster risk management, agreed upon by the Technical Land Use Planning Advisory Committee.</li> <li>b. Dissemination of and adjustments to the National Land Use Planning Guide that incorporates disaster risk management as a determinant of land use, based on the results of the macroregional workshops.</li> <li>c. Development of the National Environmental Action Plan (PLANAA) that includes land use planning and disaster risk management, and referral to the PCM for approval.</li> </ul>	<ul> <li>a. Approval of a State Policy on Land Use Planning and Territorial Management that incorporates disaster risk management.</li> <li>b. Preparation and approval of methodological guidelines for the preparation of technical instruments to support land use planning that include assessment of disaster risk and climate change.</li> <li>c. Implementation of a technical assistance program in subnational governments on application of the Land Use Planning Guide that incorporates disaster risk management.</li> <li><b>Responsible party:</b> Ministry of the Environment (MINAM), Office of the Deputy Minister of Strategic Natural Resource Development, General Land Use Planning Office.</li> </ul>
	<ul> <li>a. Preparation of a draft urban development law that incorporates the issue of risk management.</li> <li>b. Preparation of a manual for the preparation of urban development plans.</li> <li>c. Proposed amendments to the Land Use</li> </ul>	<ul> <li>a. Preparation of the proposed structure for the regulations to the General Urban Development Act based on the preliminary draft law that incorporates disaster risk management.</li> <li>b. Approval of the regulations to the Land Use and Urban Development Act that</li> </ul>	a. Presentation of the draft General Urban Development Act to the Deputy Minister of Housing and Urban Development, updated based on the new Law 29664 creating SINAGRED.

## Annex II Page 10 of 16

Specific objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
	and Urban Development Regulations	incorporates disaster risk management.	<ul> <li>b. Dissemination of the new Land Use and Urban Development Regulations.</li> <li>c. Design and implementation of a technical assistance program for selected municipalities for the preparation of their urban development and land use plans.</li> <li>d. Preparation of a guide for identification of disaster risk conditions at the diagnostic assessment stage of land use and urban development plans.</li> <li><b>Responsible party:</b> MVCS, National Urban Development Office.</li> </ul>
To strengthen strategic planning and sector coordination at the various levels of government.	<ul> <li>a. Preparation of a technical proposal to update the Sector Plan for Disaster Prevention and Response (2010-2021) that defines the duties of each agency with respect to risk prevention and reduction processes.</li> <li>b. Preparation of and building consensus regarding a sector agenda for integrated disaster risk management in urban development, housing, construction, and sanitation (through 2012), which defines specific actions for implementation of the plan, time periods for its execution, and responsible parties.</li> </ul>	a. Final revision and presentation of the sector agenda for integrated disaster risk management in urban planning, housing, construction, and sanitation, for consideration by the sector Minister.	<ul> <li>a. Implementation and monitoring of the sector agenda for disaster risk management in urban planning, housing, construction, and sanitation.</li> <li>b. Formation in the MVCS of the working group on disaster risk management, composed of senior management officials, in implementation of Law 29664 (Article 19).</li> <li><b>Responsible party:</b> MVCS, Territorial Management Program.</li> </ul>
	No commitments in 2010.	a. Preparation of proposed specific agreements between the Ministry of Agriculture and Irrigation (MINAGRI) and regional governments for the design, preparation, and application of instruments for disaster risk management and adaptation of agriculture to climate change.	<ul> <li>a. Signing of at least five specific agreements between MINAGRI and regional and local governments for the design, preparation, and application of disaster risk management instruments and adaptation of agriculture to climate change.</li> <li>b. Drafting, dissemination, and approval of the Agriculture Sector Development and</li> </ul>

Specific objective		Programmatic commitments I (2010)		Programmatic commitments II (September 2010 to June 2011)		Policy commitments PE-L1138 (2014)	
			b.	Assignment of disaster risk management responsibilities to the Food Security and Climate Change Technical Working Group (GTTSACC) in implementation of the provisions of the law creating SINAGERD.	d.	Capacity-building Plan with emphasis on Management of Climate Risk and Climate Change in the planning, design, and execution of projects. Preparation and approval of a guide for risk analysis in the preparation of public investment projects in the agriculture sector. Preparation and approval of an agroecological zoning guide that incorporates risk management and adaptation to climate change.	
					MI	<b>sponsible party:</b> NAGRI, GTTSACC, and Planning and dget Office (OPP).	
To disseminate and strengthen					a.	Update of the study on marginal urban neighborhoods for the preparation of intervention plans by the Comprehensive Neighborhood Improvement Program (PMIB)	
technical standards and	a.	Drafting of proposed regulations to the	a.	Generation of housing development mechanisms that incorporate disaster risk management.	b.	Development of the institutional operating plan to guide actions of the PMIB, based on the updated study.	
instruments incorporating safety and risk reduction criteria		Law on Physical and Legal Rehabilitation of Blighted Properties for Urban Renewal Purposes that incorporate risk	b.	Approval of the regulations to the Law on Physical and Legal Rehabilitation of Blighted Properties for Urban Renewal	c.	Preparation of a study on resettlement of population in areas of very high unmitigable risk.	
for managing informal neighborhoods.		management.	I	Purp	Purposes that incorporate risk management.	d.	Updating of an integrated disaster risk management instrument based on the results of the project "Support for Integrated Natural Disaster Risk Management in Urban Areas."
						<b>sponsible party:</b> VCS, National Urban Development Office	

## Annex II Page 12 of 16

Specific objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
To disseminate and strengthen technical standards and instruments incorporating safety and risk reduction criteria in the agriculture livestock sector.	No commitments in 2010.	<ul> <li>a. Preparation of proposed structure and basic content of the guide for the preparation of waterway treatment and flood control plans.</li> <li>b. Definition of the scope of a study for formulating policies and instruments for climate risk management regarding frost, in the framework of the law creating SINAGERD.</li> </ul>	<ul> <li>a. Dissemination, evaluation and adjustments to the guide for the execution of waterway treatment plans for flood control.</li> <li>b. Preparation, validation, and dissemination of guidelines developed in coordination with regional and local governments, other sectors, and NGOs for frost management (protection of cattle, sheep, and camelids).</li> <li><b>Responsible party:</b> <ul> <li>a. National Water Authority (ANA)–MINAGRI.</li> <li>b. Rural-Agriculture Production Development Program (AGRORURAL)-MINAGRI.</li> </ul> </li> </ul>
To develop and expand the coverage of methodological instruments to include risk management in public investment projects.	No commitments in 2010.	a. Preparation and publication of new general SNIP guidelines incorporating disaster risk management, for identifying, formulating, and societal evaluation of public investment projects at the profile level.	<ul> <li>a. Preparation and validation of a proposed technical update of the <i>methodological guidelines</i> for incorporating integrated disaster risk management into public investment projects, adjusting the disaster risk component, and including climate change aspects in relation to water resources.</li> <li><b>Responsible party:</b> MEF, Investment Policies Office.</li> </ul>

#### COMPONENT 3. DEVELOPMENT OF INSTRUMENTS AND CAPACITY-BUILDING FOR SECTOR-BASED AND TERRITORIAL MANAGEMENT

## Focus Area 3. DISASTER MANAGEMENT

Specific Objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
			<ul> <li>a. Approval of the National Disaster Risk Management Plan, including preparedness, response, and rehabilitation processes, and taking account of the strengthening of emergency operation procedures.</li> <li>b. Incorporation in government planning of the concept of State operational continuity in disasters.</li> </ul>
	a. Preparation of the 2010 National Earthquake Prevention Plan.	a. Formal execution of simulated decision-making exercises, and drills in implementation of the 2010 National Earthquake	c. Planning and establishment of the MEF's operational continuity in disasters.
		Prevention Plan approved by Supreme Decree 037-2010.	d. Implementation of a drills program involving the national impact of day-time and night-time earthquakes and tsunami and international mutual assistance scenarios.
			e. Design and approval of a National Plan for Response Linkage in the case of at least one priority natural phenomenon, based on a system approach and with participation by at least two sectors.

## Annex II Page 14 of 16

Specific Objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
			<b>Responsible parties:</b> a. and b.: Secretariat for Disaster Risk Management of the PCM c: Risk Management Office of the MEF d. and e. National Emergency Operations Office of INDECI.
	b. Approval of the MVCS' Emergency Operations Plan for the housing, construction, and sanitation sector.	a. Preparation and approval of the Agriculture Sector Emergency Operations Plan.	<ul> <li>a. Preparation and approval of a guide for standardizing criteria, indicators, and protocols for damage assessment and emergency response in the agricultural sector (3 levels of government).</li> <li><b>Responsible party:</b> MINAGRI, National Defense Unit (UDN).</li> </ul>

#### COMPONENT 3. DEVELOPMENT OF INSTRUMENTS AND CAPACITY-BUILDING FOR SECTOR-BASED AND TERRITORIAL MANAGEMENT

Specific objective	Programmatic commitments I (2010)	Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
To establish a National Strategy for Financial Management of Disaster Risks.	<ul> <li>a. Incorporation of the financial management of risk component as a policy instrument in the proposed new regulatory framework for integrated disaster risk management in the country.</li> <li>b. Exploratory analysis for the future determination of the financial coverage the country should have to cover special emergency spending for disasters associated with natural phenomena.</li> </ul>	<ul> <li>a. Incorporation of the components of the Financial Management Strategy for all disaster risk management processes in the regulations to the law creating SINAGERD. At a minimum, the strategy will include:</li> <li>(i) Financial, budgetary, and incentive mechanisms to promote the development of risk estimation, prevention, and reduction processes and preparedness;</li> <li>(ii) Mechanisms for response to disaster impact based on budgetary allocations to public entities, the contingency reserve fund, the fiscal stabilization fund, and contingent credit lines; and</li> <li>(iii) Financial protection and risk transfer instruments for public goods and services.</li> <li>b. Establishment in the MEF of the Risk Management Office, to have responsibility for, among other things, fiscal contingency plans for disasters associated with natural phenomena.</li> </ul>	<ul> <li>a. Design and approval of a National Strategy for Financial Management of Disaster Risks that includes, among other aspects: <ul> <li>(i) Clear definition of the level of financial coverage required and the most appropriate financial instruments to provide this coverage; and</li> <li>(ii) Definition of guidelines to establish a policy to insure public service infrastructure and other strategic fixed assets.</li> </ul> </li> <li>b. Approval of the Organization and Functions Manual of the Risk Management Office.</li> <li>c. Creation, staffing, and bringing into operation of the Risk Committee of the MEF of Peru.</li> <li>d. Strengthening of financial coverage to include special emergency spending for disasters associated with natural phenomena.</li> </ul>

## Focus Area 4. FINANCIAL MANAGEMENT OF RISKS

## Annex II Page 16 of 16

Specific objective	Programmatic commitments I (2010)		Programmatic commitments II (September 2010 to June 2011)	Policy commitments PE-L1138 (2014)
		c.	Expansion of financial coverage to include special emergency spending for disasters associated	<b>Responsible parties:</b> MEF, National Public Debt and Public Revenue Office (DGETP) - Risk
			with natural phenomena.	Management Office (DGR)