

Japan-World Bank

Mainstreaming Disaster Risk Management in Developing Countries

2014-15 Annual Report





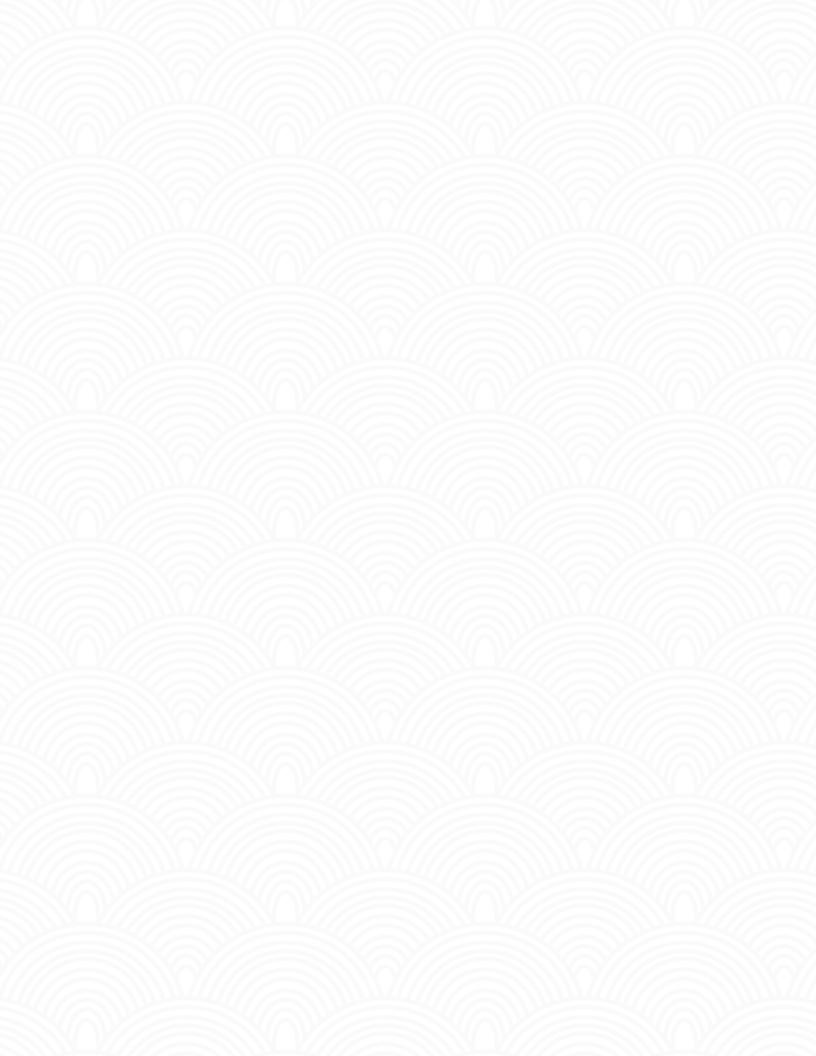




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Acronyms

CSOs Civil Society Organizations

DaLA Damage and Loss Assessment

DRFI Disaster Risk Financing and Insurance

DRM Disaster Risk Management

DRR Disaster Risk Reduction

ECRJP World Bank Group External and Corporate Relations, Japan

EWS Early Warning System

GCCVP Climate Change Cross Cutting Solutions Area (CCSA)

GEFVP Global Environment Facility

GFDRR Global Facility for Disaster Risk Reduction and Recovery

GOJ Government of Japan

GSURR Social, Urban, Rural and Resilience Global Practice

IDA International Development Association

IDB Inter-American Development Bank

JICA Japan International Cooperation Agency

MoD Ministry of Development

MoF Ministry of Finance of Japan

NGO Non-Governmental Organization

TTLs Task Team Leaders





Introduction

The Japan-World Bank Program for Mainstreaming Disaster Risk Management in Developing Countries (the Program) was established in February 2014 as a partnership between the Ministry of Finance of Japan (MoF) and the World Bank.

July 2014—(L-R) Mr. Hideaki Suzuki, Executive Director for Japan, Mr. Yasusuke Tsukagoshi, Special Representative, Japan, Dr. Jim Yong Kim, President of the World Bank Group, and Mr. Cyril Muller, Vice President, External and Corporate Relations at the DRM Hub, Tokyo.



Building on the 2012 Sendai Report's recommendations¹, the MoF financed the Program with a US\$100 million contribution through a World Bank administered Single-Donor Trust Fund (TF072129), to be disbursed in annual installments over five years.

The objective of the Program is to support developing countries in mainstreaming Disaster Risk Management (DRM) in national development planning and investment programs, including World Bank country strategies and operations. The Program also strives to connect Japanese and global expertise in DRM with developing countries.

The Program is managed by the Global Facility for Disaster Reduction and Recovery (GFDRR) under the oversight of a Steering Committee comprising representatives from the MoF and the World Bank. Day-to-day operations of the Program are conducted by the DRM Hub, Tokyo under the guidance of the World Bank's Special Representative, Japan.

The Steering Committee met on February 7, 2014 at the MoF in Tokyo to launch the Program and approve the work program for the period April 1, 2014 to March 31, 2015. Following the approval, GFDRR issued a Call of Funds to the MoF for the disbursement of an initial installment of US\$20 million, received on March 31, 2014. The World Bank Tokyo office undertook program launch events (see Annex 3) and initiated operations, and the DRM Hub, Tokyo team was in place in July 2014.

This annual report covers the period April 1, 2014 to March 31, 2015, and highlights progress and results achieved.

¹ See, www.gfdrr.org/sendaireport.

Program Overview

The Program supports technical assistance, pilot projects, thematic initiatives, knowledge mobilization, and capacity building along the four pillars of the DRM framework described in the Sendai Report, namely:

Risk Identification

■ Improved identification and understanding of risks

Risk Reduction

Avoided creation of new risks and reduced the existing risks

Preparedness

Improved warning and management of disasters

Financial Protection

Increased financial resilience of governments and the private sector

The Program is structured through two sub-programs: (i) the Country Program and (ii) the Program to Connect Knowledge, Expertise, and Technology (Hub Program).

The Country Program provides grants to assist with the preparation and implementation of operations financed through World Bank loans, credits and grants. Grant proposals under the Country Program are submitted by the DRM Hub, Tokyo to the MoF for approval, following an internal review and consultation between World Bank Task Teams and Japanese organizations in country². The MoF has approved US\$15.1 million to finance eleven projects.

The Program to Connect Knowledge, Expertise, and Technology (Hub Program) includes activities to link developing countries with Japanese knowledge, expertise and technology through: (i) knowledge management and analytical work, (ii) capacity building, (iii) preparation of solution products, and (iv) outreach and networking activities with internal World Bank audiences, Japanese public and private sectors, academics, and civil society. It also works to identify innovations from Japan not yet implemented in developing countries. The Hub Program is funded with an allocation of US\$11.0 million over five years.

The next two sections highlight the progress and achievements of each sub-program.

Japan International Cooperation Agency (JICA) and Embassies of Japan.

Country Program

he Country Program has demonstrated satisfactory progress during the first year of operations. Of the eleven approved proposals, the first three approved³ are under implementation and the remaining eight are in the project launch phase⁴. As of February 2015, disbursements from projects under implementation amount to US\$1.06 million.

Figure 1 shows the distribution, by region, of allocations from projects approved. The distribution follows projections, and reflects a global balance on which the Program will build.

The portfolio of projects also reflects the thematic and sector diversity that the Program is targeting. Nine out of eleven projects are leveraging large scale investment projects in risk reduction, the value of which is US\$5.6 billion⁵. Some examples include the São Paulo State Sustainable Transport Project in Brazil, and the Dhaka Water Supply and Sanitation Project in Bangladesh. The remaining two projects⁶ are creating an important enabling environment to facilitate future investment. Over 40 percent of approved grant activities are specifically targeting the reduction of risks, while about a third are aimed at improved identification of risks, and 14 percent of activities are focused on financial protection efforts (see figure 2).

The diversity of government counterparts is significant, and reflects the cross-sector reach and influence of the program. While a number of projects are specifically supporting disaster management agencies (often at a high level of government), the portfolio also builds partnerships with city authorities, public works departments, water authority and education ministry counterparts.

With regards to Japanese engagement in these projects—whether through the engagement of the services of expert consultants or the transfer of knowledge through other exchange modalities—the opportunities are many. The Japan International Cooperation Agency (JICA) has been engaged on many aspects of the portfolio, and increasingly World Bank Task Team Leaders (TTLs) are also taking their own initiative to reach Japanese experts, supported by the Hub. As the implementation of the projects gets underway during 2015, these ideas and opportunities will be consolidated in concrete collaborations and exchanges.

- ³ Projects in the Philippines, the Pacific Islands, and Peru.
- ⁴ The administrative processing time of grants for implementation, in accordance with the standard Bank processes and procedures, takes an average of two months from the time the proposal is approved by Japan to the release of funds to the TTL.
- ⁵ Value of total project cost of World Bank financed projects identified in grant proposals.
- ⁶ Egypt and Ghana.

Figure 1. Regional Distribution of Grant Financing

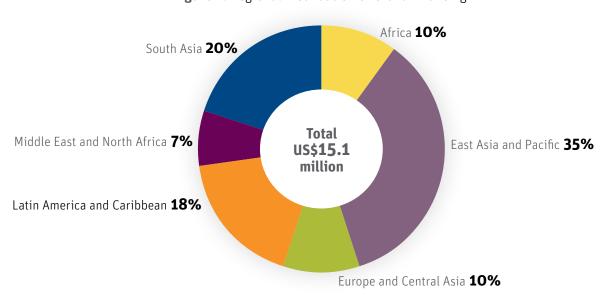


Figure 2. Distribution of Grant Activities by Pillar of Action

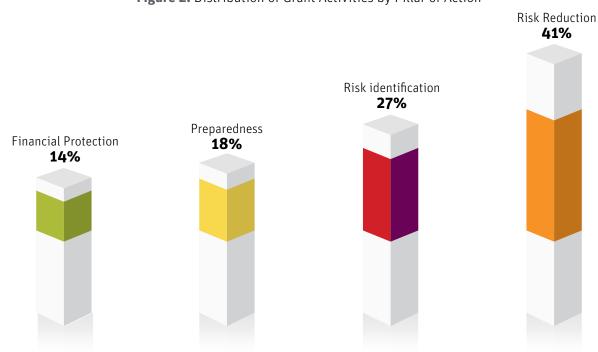


Table 1. List of Approved Country Projects

Title	Country	Activity Objective	Cost (US\$)	Project Status
Pacific Catastrophe Risk Insurance Pilot Project	The Pacific Islands (Marshall, Samoa, Solomon, Tonga and Vanuatu)	Support in regional risk pooling mechanism to provide coverage on insurance markets for earthquake, tsunami and tropical cyclone catastrophe.	1,000,000	The grant is fully disbursed to cover the third phase of the pilot. Additional Pacific Island Countries, such as Fiji, have expressed interest in joining the program.
Enabling Scaled Up Risk Reduction Investments	The Philippines	Strengthen DRM institutional systems and capacity to implement risk reduction programs for key public buildings and infrastructure.	1,850,000	Launch mission conducted in Oct 2014. JICA-WB Joint seminar conducted to present the result of Joint Field Structural Damage Assessment in Typhoon Yolanda and Bohol Earthquake affected areas.
Resilient Infrastructure - Targeted Reduction of Risks in Priority Infrastructure	South Asia Regional	Assist governments to target the reduction of disaster risks through priority infrastructure sectors with an initial focus on energy, transport and water.	1,000,000	Kick-off events are planned around April and onwards in Afghanistan, Bhutan, Bangladesh, Nepal and India.
Supporting the Design of Investment Program for DRM	Turkey	Support the development of a national DRM investment program.	1,500,000	A kick-off workshop planned early 2015. Preparatory discussions are underway with key stakeholders.
Mainstreaming DRM in Peru's Education Sector	Peru	Support mainstreaming of disaster risk reduction in Peru's national school infrastructure.	1,400,000	Actual implementation to commence in early 2015. Ministry of Education is keen to host Int'l Workshop in Peru and co-host safe school event in Japan, March 2015.
Innovations in DRM Decision Making	Brazil	Strengthen institutional capacity and mainstream DRM in urban planning, public investments and public finances.	1,265,000	A Disaster Risk Financing Study "Coping with Losses: Options for Disaster Risk Financing" launched to build analytical foundation.

Title	Country	Activity Objective	Cost (US\$)	Project Status
Strengthening Disaster Risk Management in Egypt	Egypt	Establish a framework for DRM and perform a multi-hazard risk assessment in large cities.	500,000	A kick-off workshop and delivery of training on Damage and Loss Assessment to government officials are planned in early 2015.
Disaster Risk Management Country Program, Phase II	Yemen	Improve understanding of hazard risk at state level.	600,000	The Bank's mission suspended due to increasing instabilities and insecurity. Full implementation begins within next 3-6 months.
Strengthening Flood Forecasting in the Oti River Basin	Ghana	Reduce vulnerability of flood affected communities and increase government's capacity to manage floods risk.	1,500,000	The oversight mission conducted and further activities discussed with key stakeholders. A kick-off workshop planned in Jan 2015.
Scaling up DRM in Road and Coastal iInvestments	India	Conduct risk assessment for landslide mitigation in Uttarakhand and cyclone mitigation in coastal states.	2,000,000	A study tour for Uttarakhand experts to Japan to learn slope stabilization was organized in May 2014.
Developing Strategic Plans for Financial Protection Mechanisms, Disaster Risk Management Investments and Hydro-Meteorological Services in South East Asia	South Asia	Develop strategic plans for reducing the vulnerability of people and assets to natural hazards in targeted disasterprone areas of Lao PDR, Cambodia and Myanmar.	2,500,000	This project was recently approved by the MoF and has begun preparations for implementation.





The Hub Program— Connecting Knowledge, Expertise, and Technology

number of indicative priority themes provide a broad framework to guide Hub activities. These themes were selected in consultation with World Bank and Government of Japan teams. They reflect initial needs and demands identified by the World Bank regions, availability of Japanese knowledge, expertise and technology; and existing thematic initiatives and priorities of the GFDRR program. They will remain under review as more understanding of both supply of solutions and demand of development challenges evolves. The indicative priority themes include the following sectors which are also closely linked with the priority programs of GFDRR:

- Resilient Infrastructure: Roads, landslides and DRM;
- Resilient Cities: Urban flooding;
- Hydromet: Modernization of hydro-meteorological services;
- Safer Schools: Multi-hazard safety of schools and other public buildings;
- **Community Resilience:** Social risk management and disaster risk management; and
- **Innovation Lab:** Data and risk assessment.

In each sector, a program of 'Connecting' activities will be developed over the next two to three years. These will include:

- knowledge-sharing events such as video-conferencing between developing countries and Japan, Brown Bag Lunches (BBLs) at the World Bank headquarters, and public seminars held at the World Bank Tokyo office;
- targeted exchange programs, study tours, and South-South Exchanges;
- provision of international and Japanese expertise and knowledge to operational task teams;
- analytical and advisory work on DRM practices, technology and expertise;
- development of toolkits, manuals, handbooks, online decision-making tools providing guidance on how to mainstream DRM into the various sectors; and
- development of e-learning, training programs and dissemination programs activities.

Progress of the Program to date

Since the staff of the DRM Hub arrived in Tokyo in July, 2014, the focus of the team activities for the first six months was to develop the Program to Connect Knowledge, Expertise and Technology (CKET). This included establishing a network with the centers of excellence in Japan and the private sector involved in disaster risk management. The Hub also worked closely with World Bank task teams to identify focus areas for knowledge development and mainstreaming DRM into operations.

The Hub has also initiated several activities to connect demand and supply from the Japanese government agencies, developing countries, research and academic institutions, private sector, civil society organizations (CSOs), practitioners, experts, and World Bank task teams. The Hub has been actively engaging with various stakeholders in the indicative priority sectors, including launching a Public Seminar Series in Tokyo on October 1, 2014 to provide practical information on mainstreaming DRM in each sector.

Further, the Hub not only organized activities in Japan but also sent Japanese experts to international conferences and organized Brown Bag Lunches at the World Bank office in Washington D.C. For example, the Hub brought government counterparts from India and World Bank task teams to Japan on a study tour to learn from Japanese experiences in landslides. In December, 2015, the Hub facilitated the launch of the Urban Flooding Community of Practice. The expected outcome of these outreach activities is to link the knowledge and expertise existing in Japan, and around the world, with World Bank operations in various priority sectors.

Key lessons and next steps for the coming year

During the implementing period 2015-16, the Program has identified a number of priorities based on the progress achieved to date. These priorities include:

- Acceleration of disbursement and implementation of active country program grants
- Timely and sufficiently diverse preparation of proposals
- Embedding of results monitoring, and increasing focus on qualitative and quantitative assessment of progress
- Increasing synergy between the work of the Hub's activities and operations on the ground, particularly in matching Japanese knowledge, technology and expertise to grant recipients and their clients

The Program will also seek to build on the excellent operational collaborations established through the DRM Hub, Tokyo, internally within the Bank (particularly with the Tokyo Development and Learning Center) and with key external stakeholders.



Annex 1 Country Program Updates

AFRICA REGION

GHANA: Strengthening Flood Management in Ghana

Total Grant Amount: US\$ 1,500,000

Amount Disbursed: us\$ o **Disbursement Rate:** 0%

Approval Date: October 07, 2014

Project Start Date: Est. Project End Date: N/A **Duration:** 2 years

Counterpart: Water Resources Commission of Ghana

- Key facts

 The project will improve preparedness and influence flood mitigation in the Oti River Basin (bordering Ghana and Togo) by extending an existing forecasting system and improving communication of alerts.
 - Engagement of Japanese hydrologists is sought, particularly to provide advisory support to the technical elaboration of the forecast system, and potentially on Information and Communication Technology (ICT) solutions for cell phone alerts.
 - A public launch event is planned for January, in coordination with JICA Ghana.

Project overview

Following the devastating floods that hit Northern Ghana in 2010, Ghana stepped up its efforts for better managing and forecasting flood events. Upon request of the Government of Ghana, the World Bank—with resources from GFDRR—financed the development of a flood forecasting system on more than 800km of the White Volta River from the border with Burkina Faso to Lake Volta. This forecasting system has been operational since 2012.

Ghana now aims to extend flood forecasting capacity to other parts of the Volta Basin, notably the Oti River, which is now possible with the financial support of the Japan-World Bank Program for Mainstreaming Disaster Risk Management. This grant will include support (i) sustaining and extending the Volta flood forecasting system to the Oti River, (ii) disseminating flood information and identifying new e.g. IT based applications for it, and (iii) university collaboration building the technical capacity of professionals, such as hydrologists, meteorologists and climate experts.

Component A: Strengthening flood forecasting in the Oti River Basin (US\$ 950,000)

This will be done through an assessment of the genesis of the floods of the Oti River; identifying the exposure of various assets and communities, and measuring the effectiveness of structural and non-structural intervention.

Component B: IT based applications for flood risk management (US\$ 100,000)

IT based applications will be developed as a means to bring flood forecasting, risk and weather information closer to the affected communities and interested citizens, notably through cell phone applications.



Component C: University collaboration (US\$ 300,000)

The university program will focus on reinforcing Ghana's own technical expertise in areas such as hydrology, flood forecasting and flood risk management. This activity would create synergies with the existing collaboration program of Japan (CECAR) and focus on delivering training in hydrology, meteorology and DRM.

Activities conducted

- In November 2014, the project team met with the steering committee in Ghana and the National Disaster Risk Reduction (DRR) Platform, General Directorate of Water Resources (DGRE) and National Directorate for Meteorology (DNM) in Togo to discuss planned activities.
- The Terms of Reference (TOR) for the flood forecasting in the Oti River Basin is currently being updated in preparation for procurement of the consulting firm.

Coordination partnership

The November mission met with JICA Ghana and discussed the current GFDRR support to flood management in Ghana and opportunities for collaboration upon the existing research network between Ghana and Japan, professional training and knowledge exchange on hydrology and flood management.

- **Next steps** Collaboration with Kobe University on professional training for hydrologists; weather and climate experts is under investigation.
 - In close collaboration with JICA, the next mission and kick-off workshop is planned for January 2015. Other activities expected in 2015 include: procurement of a consulting firm for Oti River Flood Hazard Assessment; a second mission and meetings with the Steering Committee; a knowledge exchange (study visit) and other capacity building events in Ghana, Japan and other relevant countries, and a third steering committee meeting focusing on reviewing the first results of the Oti River Flood Hazard Assessment.

EAST ASIA AND PACIFIC REGION

PACIFIC ISLANDS: Pacific Catastrophe Risk Insurance Pilot Project

Total Grant Amount: US\$ 1,000,000 Amount Disbursed: US\$ 1,000,000

Disbursement Rate: 100%

Approval Date: July 05, 2014 **Project Start Date:** October 01, 2014 Est. Project End Date: October 01, 2015

Duration: One year

Counterpart(s): Secretariat of the Pacific Community (SOPAC)

- Key facts

 The project will ascertain the viability of market-based sovereign catastrophe risk transfer instruments in the Pacific, by enabling the participation of five islands in the third season of a pilot insurance program.
 - The project covers these islands against earthquake and/or tropical cyclone events for the duration of the project.
 - The pilot will be followed by the establishment of a regional facility financed by IDA, providing a more sustainable solution for catastrophe risk financing in the Pacific.

Project Five Pacific Island Countries (PICs) are participating in the third season of the Pacific Catastrophe Risk overview Insurance Pilot Program, the payment of whose premiums were made possible with support of this grant: Republic of Marshall Islands, Independent State of Samoa, Solomon Islands, Kingdom of Tonga, and Republic of Vanuatu.

> Tonga received a payout (US\$1.27 million) from the scheme following Tropical Cyclone Ian in January 2014. Tonga is the first country to receive a payout, which was equivalent to more than the 2013 contingency budget or half of the current reserves of the Tonga National Reserve.

> The project is structured around the following two components: (a) Co-payment of annual Catastrophe risk insurance premium of five Pacific island countries; and (b) Preparation of Pacific catastrophe risk insurance pilot for the 2014-2015 seasons. The first component will assist the five PICs in continuing their annual insurance premium for the 2014-2015 pilot seasons, whilst the second component will support institutional capacity building for the participating countries on the selection of their catastrophe risk insurance coverage and placement of the portfolio of catastrophe risk insurance policies on the international reinsurance markets.

conducted

- Activities The third season of the pilot was launched on November 1 2014, with seamless coverage for the participating islands.
 - Five reinsurers are underwriting the program, including three from Japan, with Munich Re having joined the pool.
 - This amounts to an aggregate coverage of US\$43 million against tropical cyclones, earthquakes and tsunamis.



and

- **Coordination** The program was endorsed during the 2014 Forum Economic Ministers Meeting, where ministers requested the pilot be extended.
 - partnership

 The Cook Islands joined the pilot in November 2013 and additional PICs, such as Fiji, have expressed interest in joining the Program.
 - There is a need to agree upon a regional entity to manage the disaster risk financing and insurance program, building on the intermediary role the World Bank currently plays.

- **Next steps** The World Bank Group is developing a Pacific Resilience Program, financed by IDA, which includes a component on disaster risk financing and insurance.
 - This program will further enhance the existing disaster risk financing and insurance arrangements via the development of a product to complement the catastrophe risk insurance pilot.
 - The program will also provide limited financial support for the payment of insurance premiums of the participating PICs.

Expected outcomes

Indicator	Baseline	Target
Catastrophe risk insurance purchased by the Five	No catastrophe risk	Catastrophe Risk
Pacific Island Countries (Republic of Marshall	insurance coverage	insurance coverage
Islands, Independent State of Samoa, Solomon		purchased
Islands, Kingdom of Tonga, and Republic of		
Vanuatu)		

EAST ASIA AND PACIFIC REGION

PHILIPPINES: Enabling Scaled Up Risk Reduction Investments in the Philippines

Total Grant Amount: US\$ 1,850,000 Amount Disbursed: US\$ 12,076.54

Disbursement Rate: 0.7%

Approval Date: July 17, 2014 **Project Start Date:** August 01, 2014 Est. Project End Date: December 31, 2015

Duration: 18 months

Counterpart(s): National Economic Development Authority (NEDA), Department of Public

Works and Highways (DPWH), the Department of Education (DoE),

Department of Tourism (DoT)

- **Key facts** The project will target investment in resilient infrastructure in a number of key sectors (education, tourism) and support national institutions leading large scale investment programs, including on cost benefit analysis.
 - Coordination with JICA is a priority due to many shared objectives on investment in resilient infrastructure.

Project The project development objective is to strengthen DRM institutional systems and sectoral agency overview capacity to enable phased implementation of risk reduction programs for key public buildings and infrastructure in the Philippines. The project will achieve this by strengthening the DRM legal and institutional systems to scale up risk reduction investments in priority infrastructure sectors including through a planned Climate Adaptation and Disaster Resilience Fund (CADRF); and by building capacity for risk reduction through resilient reconstruction practices piloted in areas affected by Typhoon Haiyan.

Component A: Strengthening the institutional and legal framework for risk reduction (US\$ 150,000)

This component will support a review of the regulatory environment and provide recommendations to strengthen the government's capacity to scale up risk reduction programs, particularly on institutional roles and coordination for ex-ante risk reduction.

Component B: Assessment of the cost of strengthening public infrastructure for climate and disaster resilience (US\$ 450,000)

The aim of the activity is to leverage the exposure database and risk assessment outputs from the recently completed Catastrophe Risk Assessment and Modeling for the Philippines to develop a pragmatic approach for estimating resilience investment costs for public infrastructure.

Component C: Technical support for resilient investments in priority sectors (US\$ 1,250,000)

The aim of this component is to make public infrastructure safer through investments in risk reduction measures and resilient reconstruction in priority sectors. This will involve risk-informed investment planning and construction quality assurance in the education sector. Furthermore, activities will support a detailed vulnerability assessment of the country's cultural heritage structures in order to enable structural strengthening and resilient restoration.



Activities conducted

- In October, the oversight mission discussed a proposed review of the Philippine DRRM Act (Component A) with the Department of Finance (DOF) and NEDA; a draft TOR is currently under review by NEDA.
- The mission discussed with DoE on the need for assessments and recommendations for remedial actions for the existing school building stock located in multi-hazard high risk areas.
- A draft Concept Paper on the planned CADRF (Component B) has been submitted to the Government of Philippines for review. ToRs are under development.

partnership

- **Coordination** At the *JICA-World Bank Seminar on Building Resiliency* (October 2014), JICA experts and the World Bank team presented the results of the November 2013 Joint Field Structural Damage Assessment of Typhoon Haiyan and Bohol earthquake-affected areas.
 - JICA and the Bank agreed on recommendations on reducing risk in public buildings based on the types of damage sustained during these two disasters.

- **Next steps** Expected key outputs during 2015 include: (i) a review of the Legal and Institutional Framework for DRM; (ii) an assessment of cost of strengthening key public infrastructure in a selected sector; (iii) a vulnerability assessment of selected cultural heritage sites; and (iv) preliminary recommendations for remedial actions for the existing school building stock in priority multihazard areas.
 - A number of Japanese experts engaged through JICA will be engaged through a series of technical workshops and consultations, such as the Public Building Association of Japan.

Expected outcomes

Indicator	Baseline	Target
Government policy and strategy for risk reduction informed.	An Existing Philippine Disaster Risk Reduction and Management Act.	Legislative amendments determined, based on sunset review of the accomplishments and impact of the Act, as well as the effectiveness of organizational structures of its implementing agencies.
Development Financing for risk reduction informed.	Guidelines for allocation and utilization of the Local Disaster Risk Reduction and Management Fund.	Capital funding needs for Climate Adaptation and Disaster Resilience Fund established.

EUROPE AND CENTRAL ASIA REGION

TURKEY: Building Resilience in Turkey

Total Grant Amount: US\$ 1,500,000

Amount Disbursed: US\$ 0 Disbursement Rate: 0%

Approval Date: October 07, 2014

Project Start Date: N/A Est. Project End Date: N/A

Duration: 18 months

Counterpart: Disaster and Emergency Management Presidency (AFAD)

- **Key facts** The project will support Turkey in the finalization of its national 'strategy paper' on DRM, which serves as a road map for planning and action.
 - It will also lay the analytical groundwork for a 'National DRM Program', which is an investment plan that AFAD is putting in place to realize the Strategy Paper.
 - AFAD will likely establish a national fund to implement the Program to which the World Bank and other financiers and donors will likely contribute. In this way, the grant is highly strategic in its timing and content.

overview

Project The project aims to provide support to the Government of Turkey in the development of a National Disaster Risk Management Program (NDRMP). The project will build on the ongoing elaboration of the Turkey Disaster Risk Management Strategy (TDMSP) and finance pilot activities as well as fundamental preparation work to connect strategy with investment. In doing so, the project will help build momentum towards a larger World Bank lending program for the implementation of the NDRMP.

Component A: Strengthening participatory and multi-stakeholder structure for NDRMP (US\$ 300,000)

Activities under this component will help AFAD build consensus and commitment among key stakeholders in order to establish the institutional structure for the NDRMP.

Component B: Improving disaster risk information (US\$ 350,000)

This component will support a technical review of Turkey's disaster risk profile; which will include validating existing hazard, exposure and vulnerability assessments; supporting development of new tools for understanding risk; and supporting generation of risk information onto a geospatial platform.

Component C: Priority Action plan for risk reduction (US\$ 600,000)

The objective is to develop a prioritized investment program to increase disaster resilience, and proposed activities include establishing criteria for prioritization of sector specific structures and infrastructures in high-risk provinces.



Component D: Connecting with global DRM practices and innovative technologies (US\$ 250,000)

Activities will help strengthen knowledge, and facilitate best practices and technology exchanges at both the national and international level.

Activities conducted

- Discussions with key counterparts, namely the Presidency for Disaster and Emergency Management (AFAD) and the Ministry of Development (MOD), are ongoing.
- Preparation for technical meetings with AFAD in order to refine the details of the program are underway.

partnership

- **Coordination** Bilateral cooperation between AFAD and the Government of Japan has already mobilized experts for strategy and technical assistance. These experts will act as senior advisor to AFAD for the overall strategy process and provide an entry point for Japanese engagement in this grant.
 - A kick-off workshop and brainstorming session, with the participation of JICA and AFAD management, to discuss the Turkey Disaster Management Strategy Paper is planned for early 2015.

- **Next steps** Completion of the Turkey Disaster Management Strategy Paper as input to the official process of approving state level strategies to be implemented by AFAD.
 - Other planned deliverables include an analysis of the current status of DRM system in Turkey; analysis on risk identification, stakeholder mapping, risk reduction and prioritization; and a study on Financial Protection in Turkey.
 - In terms of technology transfer, preliminary fields such as ICT for emergency operation management equipment design, use and maintenance, and critical infrastructure design and construction are under consideration.

LATIN AMERICA AND CARIBBEAN REGION

BRAZIL: Innovation in DRM Decision Making in Brazil

Total Grant Amount: US\$ 1,265,000

Amount Disbursed: US\$ 0 Disbursement Rate: 0%

Approval Date: September 24, 2014 **Project Start Date:** December 15, 2014 **Project End Date:** December 15, 2016

Duration: Two years

Counterpart(s): National Center for Disaster Alert (CENAD), Ministry of National

Integration; Ministry of Cities; Ministry of Planning; Ministry of Finance

- **Key facts** The project will engage with two states and federal authorities to improve Brazil's analytical approach to investment planning for resilience, with a particular focus on flood risk.
 - This is a major new engagement for the World Bank in Brazil, building on a number of years of dialogue, but few activities.
 - Coordination with JICA has been extensive given their ongoing program of technical assistance, which particularly focusses on landslide risk.

Project overview

The development objective is to support the Federal Government of Brazil and authorities in two pilot states to assess disaster risks and develop adequate disaster risk financing strategies and instruments. This will be achieved by promoting the use of innovative advanced disaster risk assessment instruments to guide decision-making and promote future risk reduction investment at the Federal level and in two pilot States; upgrading of the Disaster Data Management and Damage and Loss Assessment Systems; and developing a National Financial Protection Framework and pilot innovative Disaster Risk Financing tools.

Component A: Improving disaster risk assessments and piloting catastrophic risk modelling (US\$ 700,000)

Under this component, a disaster risk profile for two priority states will be developed. Various capacity building activities in Disaster Risk Assessment are also planned; including organization of the 2nd Understanding Risk (UR) Forum in Brazil.

Component B: Enhancing Brazil's disaster data management systems and damage and loss assessment procedures (US\$ 280,000)

This component will support the design of a new damage and loss assessment system for CENADE, and will organize a series of Damage and Loss (DaLA) training workshops in selected States.

Component C: Implementing a disaster risk financing strategy (US\$ 170,000)

Through this component, the project will support the design of a disaster risk financing strategy for two pilot States and deliver an International Disaster Risk Financing (DRFI) Workshop. It will also include dissemination of the DRFI Study: "Coping with Losses: Options for Disaster Risk Financing in Brazil"



conducted

- Activities In November 2014, the project team met with the authorities of Santa Catarina State in Brazil to discuss the proposed risk profiling activities under this project.
 - A detailed proposal has been submitted to Santa Catarina Authorities (the second State is yet to be selected).
 - The World Bank—in partnership with the Ministry of Planning—launched the DRFI study "Coping with Losses: Options for Disaster Risk Financing in Brazil", which is an important analytical foundation for the activities to be conducted under this grant.

and

- **Coordination** During the November mission, meetings were held with JICA on how to coordinate with JICA's on-going technical assistance ('GIDES') Project.
 - partnership Given that JICA's project is focused on landslides, the mission agreed to focus future activities on flooding and to continue collaborating with JICA through joint workshops and technical events.

Next steps • Planned activities include a disaster risk assessment scoping exercise; a visit to Northern states to agree on the second pilot; data collection and set up of GeoNode software and initiation of the risk profiling for Santa Catarina state.

Expected outcomes

Indicator	Baseline	Target
Priority States with disaster risk profiles/catastrophic risk models, using improved probabilistic risk assessment methodologies and high-resolution remote sensing imagery and dataset.	0	2
States with disaster risk financing strategies developed by local governments.	0	2
Federal and State institutions trained in risk assessment, mapping, and harmonized Disaster Risk Assessment methodologies.	0	3
Brazil's disaster data management system, and damage and loss assessment system upgraded	Existing disaster data management system and damage loss assessment system	Upgraded disaster data management system and damage and loss assessment system

LATIN AMERICA AND CARIBBEAN REGION

PERU: Mainstreaming Disaster Risk Management in Peru's **Education Sector**

Total Grant Amount: US\$ 1,400,000 Amount Disbursed: US\$ 25,667

Disbursement Rate: 1.8%

Approval Date: July 17, 2014

Project Start Date: September 14, 2014

Est. Project End Date: April 30, 2016

Duration: Two years

Counterpart: Ministry of Education (MINEDU)

- Key facts

 The project will provide targeted analytical and capacity building inputs to the Ministry of Education, Peru, as it embarks on a major long term program of school facility retrofitting and replacement (99 schools in three years initially).
 - Opportunities for collaboration with Japan are to be facilitated through the DRM Hub, Tokyo and the World Bank Global Safer Schools Program.
 - The Annual Meetings in Lima in Peru in October 2015 offer a specific opportunity to promote engagement and visibility at a high level.

overview

Project The development objective of this project is to provide initial support the Government of Peru, specifically the Office for School Infrastructure (OINFE) and the Secretariat for Strategic Planning at the Ministry of Education (MINEDU) to integrate DRM throughout the lifecycle of Peru's national school infrastructure in alignment with their strategic activities to address the aforementioned challenges.

> The components of the project are: (i) the diagnosis of existing school infrastructure; (ii) design of national plan for school infrastructure; (iii) design of seismic retrofitting program; (iv) building capacity of MINEDU.

Activities conducted

- ToRs for the nationwide assessment of seismic risk for school infrastructure are under preparation, and the project team is evaluating whether to extend the study city-by-city or immediately nationwide.
- A partnership with the Urban Risk Lab at the Massachusetts Institute of Technology is under discussion; potential links to Japanese researchers and experts are currently being explored in this context.
- The program will support the analytical foundation MoE requires in order to submit structural plans to a national 'Seismic Norm Committee', for which the team is currently preparing a proposal.
- The team is providing advice for the technical component of a TOR for an open bid for temporary classrooms for Peru's rainforest region (temporary classrooms are used where high risk buildings require immediate replacement).



Coordination and partnership

- The project team is engaging with The Peru-Japan Center for Seismic and Disaster Mitigation Research (CISMID), in particular in relation to Component 3 (identification of suitable retrofitting alternatives).
- International Workshop on Safe Schools: The MoE is interested on organize an international meeting of experts to discuss issues about Safe School. As agreed with the MoE's Vice minister, the event will give principal role to Japan by inviting Japanese experts, JICA, Japanese embassy and ensuring visibility of the program (Feb. 2015).
- Participation on Peru in Sendai Conference and co-host safe school event Japan—Peru in Tokyo, March 2015.
- The MIT Urban Risk Lab has been a partner of the World Bank's program in Peru since 2013. The main objective of the partnership is to bring innovation to the Safe School Infrastructure Program at the intersection between school infrastructure planning, design, environment and context.

- **Next steps** A detailed review of the structural characteristics of the Peru's school infrastructure and the seismic model will commence by late-January, 2015 in collaboration with the University of Los Andes (Colombia).
 - The School Infrastructure Office at MoE has requested further consultation on updating the national seismic resistance standard in order to include an 'incremental retrofitting' approach.
 - Finalization of procurement of all consulting services will be finalized in early 2015.

Expected outcomes

	Indicator	Baseline	Target
_	Increased understanding of the education sector's infrastructure challenges, disaster risk, contributing factors, risk reduction measures and methods to integrate risk information into decision processes.	Seismic risk evaluation of the school infrastructure in Lima and Callao available.	MINEDU provided with a thorough analysis of the Census of School Infrastructure results and the assessment of seismic risk for school infrastructure nationwide.
	Risk reduction measures integrated into school infrastructure policy and intervention strategy.	PRONIED was created to develop the School Infrastructure National Plan including a retrofitting component.	The MINEDU has designed a Seismic Retrofitting Program (SRP) integrated into the School Infrastructure National Plan (SINP).
	Capacity enhanced and tools provided to plan for school infrastructure considering disaster risk.	No prior capacity building activities conducted.	The OINFE, PRONIED and Secretariat for Strategic Planning participate in capacity building activities on school infrastructure planning and disaster risk management.

MIDDLE EAST AND NORTH AFRICA REGION

EGYPT: Strengthening Disaster Risk Management (DRM) in Egypt

Total Grant Amount: US\$ 500,000

US\$ 0 Amount Disbursed: Disbursement Rate: 0%

Approval Date: October 07, 2014 **Project Start Date:** December 15, 2014 Est. Project End Date: December 15, 2015

Duration: 12 months

Counterpart(s): Information and Decision Support Center of the Egyptian Cabinet of

Ministers (IDSC)

- **Key facts** The project will help Egypt build capacity for DRM, and establish critical foundations for an improved Early Warning System (EWS).
 - The Government of Egypt made a specific request for the World Bank to work closely with Japanese institutions given their strong expertise particularly on tsunami and early warning systems.

Project As a coastal nation, Egypt is vulnerable to significant hydro-meteorological and climatic events, par-**OVERVIEW** ticularly flooding and drought. Though a flash flood warning system is currently in place, the project will support the strengthening of institutional frameworks, infrastructure, and the capacity of national agencies and communities to respond to hazards.

Component A: Review of Egypt's disaster risk reduction and management strategy (US\$ 60,000)

The component will support the review of Egypt's DRM strategy by providing analysis of policy frameworks, legal provisions, and institutional structures.

Component B: Development of a multi-hazard Early Warning System (EWS) (US\$ 72,000)

This component will support the design of a multi-hazard early warning system that will be used to provide timely alerts and help trigger effective emergency response in case of an emergency.

Component C: Provision of DRM training (US\$ 136,000)

The main task under this component is to provide training on Damage and Loss Assessment (DaLA) and early warning systems to national and local institutions. A national workshop on disaster risk financing will be convened to introduce the subject to the government as well.

Component D: Support on tsunami preparedness for the Egyptian Mediterranean coastal areas (US\$ 155,000)

Through this component, the project will develop a plan of action and basic framework for dealing with the hazards resulting from possible tsunamis in the Mediterranean.

Component E: Field visits (US\$ 18,000)

Field visits to central operations units to learn from Japan's experience in establishing and managing those units will be organized with counterparts from IDSC inorder to strengthen their DRM capacity.



Activities conducted

■ The oversight mission has held discussions with IDSC in order to refine the design of the project and to inform the planning of a kick-off workshop in January, 2015.

partnership

Coordination Identification of potential Japanese expertise on EWS, DRM Strategy and tsunami preparedness planning underway with the support of the DRM Hub, Tokyo. Consultations with JICA are also planned during the January next mission.

Next steps

- Preparations are underway for the first kick-off mission, planned for early 2015, that will also include delivery of damage and loss assessment training to government officials.
- Consultation workshops on EWS and DRFI are also planned for the following months of February and March in 2015.

Expected outcomes

Indicator	Baseline	Target
Final draft of National DRM Strategy developed.	Existing National DRM Strategy.	A Comprehensive National DRM Strategy that addresses the five pillars of the disaster risk management framework, ready for approval by the Government for implementation.
The design of the national multi- hazard EWS improved.	Fragmented early warning system exists, covering only two hazards (earthquakes and floods).	Complete design of a national multi-hazard EWS covering major hazards affecting Egypt (Earthquakes, Floods/Flashfloods, Extreme Weather Events, Desertification and Drought).
Technical capacity of national DRM agencies improved.	Lack of awareness and capacity in disaster risk management.	Enhanced capacity of government officials and stakeholders in disaster risk management.
Improved resilience of the Mediterranean coastal areas of Egypt to tsunami risks.	No existing Tsunami Preparedness Plan.	Tsunami Preparedness plan developed.

MIDDLE EAST AND NORTH AFRICA REGION

YEMEN: Strengthening DRM Education and Country Program in Yemen

Total Grant Amount: US\$ 600,000

Amount Disbursed: us\$ o **Disbursement Rate:** 0%

Approval Date: October 07, 2014

Project Start Date: Est. Project End Date: N/A

Duration: 18 months

Counterpart: Ministry of Public Work and Highways

- **Key facts** The project offers a critical opportunity to embed disaster risk management thinking in upstream planning in a fragile context.
 - In particular, the project will promote the integration of risk information obtained through three assessments conducted at the national, hadramout and capital levels in development planning.
 - Although the security situation remains serious, access for the project team is improving.

Project The project builds on completed activities of the Yemen DRM Country Program, developed in partner**overview** ship with the World Bank and completed in 2010, and will continue to assist Yemen improve understanding of hazard risk, strengthen the existing DRM coordination mechanisms to improve the limited inter-sectoral coordination, and increase Yemeni stakeholders awareness of risk management.

Component A: Establishment of a National Disaster Risk Management Fund under the Ministry of **Public Works and Highway (US\$ 170,000)**

The Fund will finance a host of activities that include providing funding for post-disaster recovery and re-construction and development of responsive national polices and strategies.

Component B: Creation of a DRM laboratory at the University of Sana'a (US\$ 140,000)

The activity will also establish a Masters and e-learning DRM program at the University of Sana'a.

Component C: Establishment of a capital-level early warning system (US\$ 80,000)

This component will conduct an assessment of existing early warning systems (EWS) and the institutional capacity and the linkage between different agencies in EWS to inform the design of the EWS.

Component D: Operationalization of the five Civil Defense operational rooms (US\$ 120,000)

This component will focus on providing implementation support to existing operational rooms within the Civil Defense General Directorate. This support will include the provision of systems, software updates and training.



Component E: Organization of a South-South exchange between Yemen and Turkey (US\$ 40,000)

This component will facilitate information exchange through workshops, study tours and visits, with the first exchange between the Yemen National Seismological Observatory Center and Turkey Seismological Center.

Component F: Dissemination of the three risk assessments studies completed in 2010 (US\$ 50,000)

The activities will include production of the publications and organization of consultations, information sessions and workshop.

conducted

- Activities Official World Bank missions were suspended for the past three months due to increasing instability and insecurity largely due to the Al-Houthi tribe takeover of the capital, Sana'a.
 - However, full implementation of the activities is planned to begin within the next 3-6 months as the operating environment continues to stabilize.

- Coordination A Yemen-based Technical Committee will be established in 2015, and will comprise of key stakeholders in the country, including representatives from the Japan Embassy and JICA.
 - **partnership** The Technical Committee will meet regularly to coordinate project's activities.

Next steps • The key planned activities in FY15 include dissemination of the Yemen DRM Case Study, organization of a Study tour for Yemen DRM Counterparts to Turkey and Italy; dissemination of risk assessments and other resource materials developed in the last 5 years to relevant stakeholders, and establishing a partnership with the University of Sana'a lay the foundation for a DRM Lab.

SOUTH ASIA REGION

INDIA: Improving Service Delivery of DRM in India

Total Grant Amount: US\$ 2,000,000

Amount Disbursed: us\$ o Disbursement Rate: 0%

Approval Date: December 08, 2014

Project Start Date: Est. Project End Date: N/A

Duration: 36 months

Counterpart: National Disaster Management Authority

- **Key facts** The project offers significant opportunity to add specific DRM 'value' to one of the largest country portfolios of investment, particularly in landslide and slope stabilization and in multi-hazard risk assessment.
 - In most cases, these aspects were not fully captured in the original project design, and Japanese expertise is sought to help ensure that national and state governments are able to integrate DRM into investment plans.

overview

Project The objective of this project is to enhance resilience and improve service delivery of DRM by building and expanding institutional capacities to assess and improve the quality of resilient infrastructure, enhance analytical understanding of risks, and to develop investment plans towards building long-term resilience. The project will accomplish this through the development of technical assistance programs and investment plans at state level; capacity building activities targeting national, state, and local officials and community leaders; and dissemination and knowledge exchanges with Japanese experts and counterparts.

Component A: Assessing infrastructure resilience (US\$ 845,000)

This component will undertake infrastructure design assessments in five critical areas in Uttarakhand where landslides are recurrent; and support development of a flood master plan for Kosi River embankment system.

Component B: Enhancing analytical understanding on multi-hazard risks (US\$ 885,000)

This component will enhance government official's understanding of disaster risk and planning options; and integrate multi-hazard risk assessment considerations into state development planning.

Component C: Raising awareness and building institutional capacities at national, state, and local levels. (US\$ 270,000)

Activities will strengthen government DRM systems to produce the necessary information, and improve the capacity of communities to respond effectively.



conducted

Activities • The project was recently approved and preparations will begin shortly.

and partnership

- **Coordination** Consultations with the JICA Delhi office were conducted during preparation of the proposal. A study tour of Uttarakhand experts to Japan to learn about slope stabilization was organized by the DRM Hub, Tokyo in collaboration with JICA in May 2014.
 - A delegation from the Government of Uttarakhand traveled to Japan in May 2014 for an exposure visit focusing on slope stabilization techniques.
 - This will provide an opportunity for Japanese experts to engage with government officials from other Indian states as well as from other South Asian countries on the issue of slope stabilization technologies.

Next steps • An international workshop on slope stabilization will be organized in Uttarakhand jointly with GoU, ADB, JICA and the Bank in early 2015 to launch the project.

SOUTH ASIA REGION

Promotion of Resilient Infrastructure

Total Grant Amount: US\$ 1,000,000

US\$ 0 Amount Disbursed: Disbursement Rate: 0%

Approval Date: October 07, 2014 **Project Start Date:** December 04, 2014

Est. Project End Date: June 30, 2016 Duration: 18 months

Counterparts: Bhutan Department of Road; Dhaka Wasa Water and Sanitation Authority;

Chittagong Wasa Water and Sewerage Authority, Afghanistan Ministry of

Agriculture, and Nepal Ministry of Energy.

- **Key facts** This 'platform' of engagements will serve as a technical assistance program to support World Bank project managers and their clients in priority sectors.
 - The project will demonstrate how natural hazards can and must be taken into account across the lifetime of an infrastructure investment, from design, to construction to maintenance to contingency planning.
 - The project has gained high profile internally within the World Bank as a demonstration of how multi-sector approaches can be realized, Japanese support is acknowledged in this regard.

overview

Project The development objective of the project is to assist governments in South Asia to reduce disaster risks in priority infrastructure sectors, with an initial focus on energy, agriculture, transport and water. The project will achieve this by undertaking a technical assistance program to support World Bank project managers and their clients in priority sectors to ensure that specific infrastructure investments incorporate measures to manage the impacts of natural hazard risk.

Component A: improvement in the locating and design of hydro power by better understanding climate change and disaster risks in Nepal and India (US\$ 200,000)

This component will improve the locating and design of new hydropower investments in Nepal and India through an assessment of vulnerability of the hydro power to natural hazard risks.

Component B: Integration of DRM into agriculture and irrigation in Afghanistan (US\$ 200,000)

This component will support the Ministry of Energy and Water (MEW) to improve their capacity to increase resilience to flood events by optimizing technical designs for irrigation facilities and addressing river bank erosion. In particular, this component will help carry out flood risk assessment for the irrigation sector in light of damage caused by May 2014 flood events, and identify the critical area of the river banks in significant water courses using a river basin approach.

Component C: Improving the resilience & affordability of roads and bridges in Bhutan (US\$ 200,000)

This engagement will support Bhutan's Department of Roads (DOR) to improve the resilience of the road and bridge network by improving planning for maintenance investments to better manage the vulnerability of transport infrastructure.



Component D: Improving the disaster resilience of water supply systems in Bangladesh (US\$ 200,000)

This component will incrementally improve business continuity planning for the Dhaka and Chittagong public water utilities, which are currently non-existent due to institutional weaknesses.

Component E: Training and technology transfer through the GFDRR DRM Hub, Tokyo to infrastructure teams in South Asia (US\$ 200,000)

Two workshops will be held in the region and/or Tokyo that convene Japanese and other experts from academia and line ministries and the private sector to share best practices for the integration of disaster risk into infrastructure development in sectors including hydropower, agriculture, water & sanitation, and transport.

Preparations

- Tenders for consultants for the work in Afghanistan and Nepal have been launched.
- Bhutan tender is closed and counterparts are engaged in preparatory activities.
- Consultants not yet identified for Dhaka.
- Preparations for a workshop in Kathmandu, Nepal in April are underway.

partnership

Coordination • Japanese experts in the hydropower sector have been contacted to support the project, initially in the context of the April workshop.

Next steps

A key output is the workshop in April, and finalization of procurement of consulting services will be completed by March.

Expected outcomes

Indicator	Baseline	Target
Improved generation and communication of disaster risk information.	Risk not properly understood / communicated in infrastructure projects.	A better understanding developed of how natural hazards can be taken into account across the lifetime of an infrastructure investment.
Increased application of risk information in public policy and investment planning.	Risk not incorporated into: i) hdyropower development in Nepal, ii) construction of irrigation infrastructure in Afghanistan; iii) access to transport in Bhutan; iv) water utility operation in Bangladesh.	Hydropower development in Kosi River Basin informed by landslide risk; improved construction of irrigation infrastructure in Afghanistan; effective asset management system in Bhutan; and business continuity plans developed for public water utility companies in Dhaka.



Annex 2 The Hub Program Updates

Networking

Ministries: Along with the Ministry of Finance, the DRM Hub is working closely with the Ministry with Japanese of Land, Infrastructure, Transport and Tourism (MLIT) on (i) roads and landslides, (ii) hydro-**Centers of** meteorological services and early warning, and (iii) urban flooding; MEXT on safer school facilities; **Excellence** Ministry of Internal Affairs and Communications (MIC) on ICT and early warning systems.

> Local governments: DRM Hub visited and also invited as speakers from the Tokyo Metropolitan Government, Yokohama city, Kyoto city, Hyogo Prefecture, Nishinomiya City, Miyagi Prefecture, Sendai City (Miyagi Prefecture), Iwanuma Town (Miyagi Prefecture), Fukushima Prefecture, Shinchi Town (Fukushima Prefecture).

> Academia: DRM Hub was invited for an international academic event hosted by International Research Institute of Disaster Science (IRIDeS), Tohoku University and gave presentation on "Global Program on Safer Schools" in November 2014. DRM Hub team also attended "INTERPRAEVENT International Symposium 2014" in December 2014. Close consultations have been held with professors from the University of Tokyo, Kyoto University, and Tohoku University.

> Private sector: DRM Hub has contacted various private companies through networks such as the "Bosai Platform" led by MLIT and MIC's network of private ICT companies that provide DRM services or products in Japan.

Summaries

Public Seminar "Open Data & Risk Assessment: Understanding Risk in An Evolving World: Emerging Best practic-Series es in Natural Disaster Risk Assessment," 1 October (~100 participants).

Based on newly launched report "Understanding Risk in An Evolving World: Emerging Best Practices in Natural Disaster Risk Assessment" and a Policy Note "Understanding Risk in An Evolving World", Dr. Alanna Simpson, Senior DRM Specialist, GFDRR, discussed the multi-hazard and multi-disciplinary perspectives aspects of the risk assessment and the use of data across institutions. Other presenters were: Mr. Iwan Gunawan, Senior DRM Specialist, Urban, Rural & Social Development, World Bank Indonesia, Mr. Kimio Takeya, Senior Advisor, Japan International Cooperation Agency (JICA) and Mr. Hisaya Sawano, Chief Researcher, International Center for Water Hazard and Risk Management (ICHARM).

"Social Risk Management for Mitigating Social and Economic Impacts from Natural Disasters," 6 November (~100 participants).

Dr. Arup Banerji, Senior Director, Social Protection & Labor, explained that DRM is an integral part of SRM in the context of "Human Security." He provided examples of SRM projects in Brazil and Ethiopia which expanded the conditional cash transfer and cash for work program in the time of disasters. Discussant Dr. Yasuyuki Sawada, Professor, Graduate School of Economics, University of Tokyo emphasized the need for cost-effective methods to integrate SRM and DRM. Mr. Gabriel Kazuo Tsurumi, Vice Chairperson, Japan NGO Center for International Cooperation, shared the experiences of Japanese CSOs during the Great East Japan Earthquake.

"Protecting Children and Their Families through Safe Schools-Japan and World Bank Experience," 10 December (~50 participants).

Mr. Niels Holm-Nielsen, Lead DRM Specialist, Social, Rural, Urban & Resilience, gave an overview of the World Bank's "Global Program for Safer Schools (GPSS)" which aims to create "safe learning facilities," in collaboration with several UN agencies and other development partners. Mr. Kazuhiro Kobayashi, Chief, Office for Disaster Prevention, Ministry of Education, Culture, Sports, Science and Technology (MEXT), shared Japan's experience on promoting disaster resilient school facilities and conducting school damage assessments after the Great East Japan Earthquake in 2011. Mr. Fernando Ramirez, Senior DRM Specialist, Social, Rural, Urban & Resilience, the effects of earthquakes on various structural typologies in Peru. Mr. Gogot Suharwoto, Head of Division for Program Planning and Budget, Ministry of Education and Culture, Indonesia, presented his program on building safe leaning facilities, school disaster management, and risk reduction and resilience education.

"Multilateral Cooperation for Disaster Resilience in Latin America and Caribbean" co-hosted with the Inter-American Development Bank (IDB), 11 December (~100 participants).

Mr. Tsuneki Hori, DRM Specialist, Environment, Rural Development and Disaster Management Division, Infrastructure and Environment Sector, IDB introduced the tools developed by IDB to monitor the progress made by countries in mainstreaming DRM such as the "Country Risk Profile" and indicators like the "Risk Management Index." Mr. Niels Holm-Nielsen, Lead DRM Specialist, and Mr. Fernando Ramirez, Senior DRM Specialist presented the Bank's structural and non-structural approach to disaster preparedness and resilient reconstruction.

Expert exchanges with Japan

In May 22-29, 2014, the Secretary of Public Works and Project Director of the Uttarakhand Disaster Recovery Project, Additional Secretary of Disaster Management, Deputy Inspector General of Police, Criminal Investigation Department, State Disaster Response Force, and a representative from the Asia Development Bank visited Japan on an exchange visit jointly organized by the Hub, International Sabo Association, Japan, and the MLIT. The team visited Sendai city and the Tohoku coastal area which was struck by a 9.0 M earthquake and an ensuing tsunami in 2011 and observed the reconstruction and recovery process. The team also visited the landslide and debris flow affected areas of Fujikawa Sabo Office which constructed 65 revetment and sediment control works along five rivers of the Fujikawa River basin; Fuji Sabo Office which implemented sediment flow management works for volcanic disasters, and Nikko Sabo Office which has been protecting the river banks and slopes of the Inari and Daiya rivers since 1662. Sessions were held with the local prefecture officials to understand the early warning system and awareness raising program that was being conducted with the communities.

One of the participants Mr. Amit Singh Negi, Secretary of PWD stated, "Most of the slopes in our state have become destabilized, the road network is badly destroyed, river morphology is completely changed, so we need to focus in these areas where we can learn from other countries which have done much good work..., and that is why we are hereto learn what the Japanese have done ... and take back those learnings and apply them to our state to overcome these difficulties." (In June 2013, the Himalayan State of Uttarakhand, India received heavy rainfall with the total rainfall reaching from 392.0 mm in Chamoli to 833.9 mm in Dehra Dun. The heavy rainfall coupled with the bursting of the Chorabari glacier moraine resulted in flash floods, extensive landslides and debris flow causing the loss of 580 human lives with 5,400 reported missing, affecting 4,200 villages, destroying 3,320 houses, and damaging 995 public buildings, 9000 km roads and 225 bridges.)

Lunch (BBL) sessions in

- **Brown Bag** BBL on "Disaster Information Management System in Japan and its application for developing countries" (24 October) by NTT Data was on the use of ICT for flood and weather monitoring and early-warning systems, and its possible application for developing countries.
- Washington, DC Expert's consultation on JICA's "Economic assessment of DRM investments "DR2AD" model (20 November) for analyzing the impacts of disaster risk reduction investment held with World Bank's economists.

Community of Practice (CoP)

- Race for Resilience Ideathon and Hackathon (February 2014) on developing innovative mobilephone applications for disaster risk management.
- Urban Flooding Community of Practice (9 December): Bangladesh, China, Indonesia, Mongolia, the Philippines, Sri Lanka and Vietnamese country offices were connected with Tokyo with participants from government counterparts and TTLs to discuss the institutional mechanisms necessary to ensure flood management and possible non-structural and structural measures for flood control.
- Breaking Silos Event with TTLs on Roads, Landslides and DRM (January 13, 2015): Representatives from MLIT, International Sabo Association and Sabo & Landslide Technical Center participated in a roundtable with TTLs in 13 countries to discuss the Japanese experience in integrating DRM principles in road sector.

International Conferences

World Reconstruction Conference 2 (WRC2), Washington DC (10-12 September) – Professor Yoshiaki Kawata, Kansai University, presented the history and institutional framework for disaster preparedness planning in Japan. Ms. Chikako Kobayashi, Tokyo Metropolitan Government, presented ex-ante disaster preparedness planning for mega-cities. Mr. Shingo Kochi, Hyogo Prefecture Government, shared their reconstruction experience after the Hanshin Earthquake in 1995.

World Conference on Disaster Risk Reduction 3 (March 14-18, 2015) – The DRM Hub, Tokyo was extensively involved in supporting the entire World Bank participation in WCDRR3. We also arranged five Public Forum Events and supported the entire World Bank participation in the Conference including the President Jim Yong Kim, Rachel Kyte (Vice President, GCCVP), Ede Jorge Ijjasz-Vasquez (Senior Director, GSURR), Naoko Ishii (CEO, Chairperson, GEFVP), and client Government representatives. A summary of the five Public Forum events are provided below:

Asia Disaster Resilience Forum 2015 – Building ICT-enabled Disaster Resilient Societies in Asia from the grassroots – This forum brought together technologists from the region engaged in developing civic apps for community based disaster resilience for three days. The participants brainstormed and held a hacking session for coding of new data.

Step Forward for Building Disaster Resilience in the Philippines: Emerging strategies for Disaster Risk Reduction and Financing – This seminar was jointly organized by the DRM Hub, Tokyo and JICA and brought together many actors working on DRR in the Philippines. The aim of the seminar was to identify greater synergy between ex-ante and ex-post approaches to financing and planning of DRR in the Philippines.

Building Urban Resilience in Bangladesh: an integrated approach to policy and investment – This seminar covered policy interventions and operational actions to reduce urban risks in Bangladesh, also in coordination with JICA.

Protecting Poor and Vulnerable Families from the Economic Shocks of Disasters: the Role of Social Protection – This seminar explored the synergies between social risk management systems and disaster risk management, particularly in protecting the poor and the most vulnerable people.

Annex 3

The Launching of the Japan-World Bank Program for Mainstreaming DRM in Developing Countries

The Program was officially launched on 3 February by a high-level international symposium with keynote speeches by Mr. Jiro Aichi, Japan's Senior Vice Minister of Finance and Senior Vice Minister for Re-construction, and Zoubida Allaoua, World Bank's then Acting Vice President for Sustainable Development. Having senior representatives from the Philippines, and prominent figures from academia, private sector, and civil society, the discussions dwelled upon the lessons from Japan, demand for DRM mainstreaming assistance in developing countries, and the positioning of DRM in the post-2015 development frameworks. The symposium marked the important first step in outreaching to the wider stakeholders to build consensus for the development imperative of DRM and support for the goal that Japan-World Bank Joint Program aims to achieve through the Hub activities.

The week of 3 February was designated as the Joint Program Launching Week by having the WB's DRM Regional Coordinators and other key staff present. During the week, a series of the outreach meetings were organized by the GFDRR Secretariat and the World Bank External and Corporate Relations, Japan (ECRJP) including a roundtable discussion with the Joint Program's key counterparts in the Government of Japan (GOJ) as well as JICA and other DRM related agencies, a study tour to Sendai, and a round table was held with the faculty members of Tohoku University to discuss possible future collaboration. A hackathon event "The Race for the Resilience" was also held during this week engaging a wider community.

Since the above kick-off week until the arrival of the DRM Hub Staff in Tokyo, ECRJP took the lead in briefing key officials in the GOJ and the private sector as well as the academics/key universities (i.e., Universities of Tohoku, Kyoto, Kobe, Tokyo), and CSOs about the Joint Program and the DRM Hub in order to generate an authorizing environment for the Program and build a list of the new potential partners as a base for the activities by the Hub staff.

February 2014—Round table with key counterparts from the Government of Japan, Japan International Cooperation Agency, and other partners at the World Bank, Tokyo office.





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