



Technical Assistance Report

Project Number: 48259-001
Regional—Research and Development Technical Assistance (R-RDTA)
December 2015

Strengthening the Enabling Environment for Disaster Risk Financing (Phase 1)

This document is being disclosed to the public in accordance with ADB's Public Communications Policy 2011.

Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
DMC	–	developing member country
DRF	–	disaster risk financing
OECD	–	Organisation for Economic Co-operation and Development
TA	–	technical assistance

NOTE

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

Vice-President	B. Susantono, Knowledge Management and Sustainable Development
Director General	M.C. Locsin, Sustainable Development and Climate Change Department (SDCC)
Directors	P. Bhandari, Climate Change and Disaster Risk Management, SDCC G.H. Kim, Sector Advisory Service, SDCC
Team leaders	C. Benson, Senior Disaster Risk Specialist, SDCC A. Chatterjee, Principal Financial Sector Specialist, SDCC
Team member	R. Borres, Economics Officer, SDCC
Peer Reviewer	M. Varkay, Principal Private Sector Development Specialist, SERD

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

CONTENTS

	Page
RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE	
I. INTRODUCTION	1
II. ISSUES	1
III. THE RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE	2
A. Impact and Outcome	2
B. Methodology and Key Activities	2
C. Cost and Financing	3
D. Implementation Arrangements	3
IV. THE PRESIDENT'S DECISION	4
APPENDIXES	
1. Design and Monitoring Framework	5
2. Cost Estimates and Financing Plan	7
3. Outline Terms of Reference for Consultants	8

RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 48259-001	
Project Name	Strengthening the Enabling Environment for Disaster Risk Financing (Phase 1)	Department /Division	SDCC/SDAS
Country	REG	Executing Agency	Asian Development Bank
2. Sector		ADB Financing (\$ million)	
✓ Finance	Insurance and contractual savings		0.70
		Total	0.70
3. Strategic Agenda		Climate Change Information	
Inclusive economic growth (IEG)	Pillar 3: Extreme deprivation prevented and effects of shocks reduced (Social Protection)	Climate Change impact on the Project	Low
Environmentally sustainable growth (ESG)	Disaster risk management		
Regional integration (RCI)	Pillar 3: Money and finance		
4. Drivers of Change		Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Institutional development	No gender elements (NGE)	✓
Knowledge solutions (KNS)	Knowledge sharing activities		
Partnerships (PAR)	Pilot-testing innovation and learning Implementation		
Private sector development (PSD)	International finance institutions (IFI) Conducive policy and institutional environment		
5. Poverty Targeting		Location Impact	
Project directly targets poverty	No	Regional	High
6. TA Category:		A	
7. Safeguard Categorization Not Applicable			
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		0.70	
Research and development technical assistance: Technical Assistance Special Fund		0.70	
Cofinancing		0.00	
None		0.00	
Counterpart		0.00	
None		0.00	
Total		0.70	
9. Effective Development Cooperation			
Use of country procurement systems		No	
Use of country public financial management systems		No	

I. INTRODUCTION

1. Disasters triggered by natural hazards slow long-term development and hamper efforts to reduce poverty in the developing member countries (DMCs) of the Asian Development Bank (ADB). Government officials, policymakers, and insurance regulators from Asian DMCs who were consulted during knowledge-sharing events on disaster risk financing (DRF) conveyed that inadequate financial arrangements delay early recovery and reconstruction efforts, exacerbating the indirect and secondary consequences of direct physical losses.¹ Tools to assess and strengthen the enabling environment for DRF would assist them in enhancing current practice.

2. The regional research and development technical assistance (TA) has been prepared in close consultation with the Finance Sector Group and the Climate Change and Disaster Risk Management Thematic Group.² In selecting the countries for diagnostic assessment, the consistency of the proposed TA with the relevant country partnership strategies will be ensured. The TA is consistent with ADB's Operational Plan for Integrated Disaster Risk Management, 2014–2020, which supports “the development of DRF instruments and wider DRF strategies for households, businesses, and governments, enhancing the public and private financial management of residual disaster risk.”³

II. ISSUES

3. Asia and the Pacific is extremely vulnerable to natural hazards. From 2005 to 2014, disasters have killed 427,000 people, affected 1.4 billion people, and caused direct physical losses totaling \$716 billion—half of the global total.⁴ Disasters have had a devastating economic and social impact, not only resulting in damage to infrastructure, crops, and housing but also leading to the loss of government revenue, disruptions in trade and commerce, and market destabilization. Immediately affected poor and near-poor households can continue to suffer adverse effects for decades as livelihoods are disrupted, limited savings eliminated, debt accumulated, and children sometimes permanently withdrawn from education to boost earnings.

4. Confronted with the fiscal challenges that disasters present, policy makers are seeking to strengthen their financial management to ensure that populations, businesses, and governments have adequate resources to facilitate timely post-disaster response and to build back better, strengthening resilience to future hazard events. DRF instruments applied prior to a disaster include disaster reserve funds; lines of contingent credit; and various risk transfer products involving insurance, reinsurance, and capital market solutions. DRF instruments turned to after a disaster include recurrent and capital budget reallocations, post-disaster borrowing, tax increases, and development partner assistance.

¹ ADB in partnership with the Organisation for Economic Co-operation and Development (OECD) organized (i) ADB-OECD Forum on Disaster Risk Financing for Inclusive Development on 15–16 September 2015 in Manila, Philippines; and (ii) Global Seminar on Disaster Risk Financing: Developing Effective Approaches to the Financial Management of Disaster Risks on 17–18 September 2015 in Kuala Lumpur, Malaysia to exchange knowledge and practices on financial protection against disaster risks among officials and experts from ADB, Asia-Pacific Economic Cooperation, Association of Southeast Asian Nations, OECD, invited economies in Asia and elsewhere, and the insurance industry.

² The TA first appeared in the business opportunities section of ADB's website on 9 October 2015. The title of the TA was renamed from Developing a Decision Making Tool for Introducing Disaster Risk Financing Products (Phase 1) for a more accurate reflection of the focus of the TA.

³ ADB. 2014. *Operational Plan for Integrated Disaster Risk Management, 2014–2020*. Manila. p. 15.

⁴ Centre for Research on the Epidemiology of Disasters. International Disaster Database. <http://www.emdat.be> (accessed 8 June 2015).

5. The selection of DRF instruments should be based on a rigorous disaster risk assessment, establishing expected levels of loss for hazards of varying types, intensities, and return periods. The most appropriate set of DRF instruments will depend on a range of factors, including the scale of funding required for each layer of loss, the speed with which disbursement of funding is required, and the relative cost-effectiveness of alternative instruments for specific layers of loss. DRF instruments can also provide price signals to help guide decisions on specific disaster risk reduction investments and on the balance of resource allocation between disaster risk reduction and response. Via the application of risk-based pricing methodologies, DRF instruments can be used to incentivize investments in risk reduction as well.

6. However, few, if any, countries in Asia and the Pacific have a comprehensive DRF strategy in place. Insured disaster losses typically account for only a few percentage points of total disaster losses each year in ADB's DMCs. This reflects a series of demand and supply constraints. Demand constraints include issues around limited awareness of DRF products, weak financial literacy, lack of trust in risk transfer products, and budgetary constraints. Supply constraints include legal and regulatory gaps, disaster risk, loss and financial data limitations, and insurance industry capital requirement deficiencies. Consequently, in the aftermath of a disaster, many countries have insufficient access to financing to facilitate timely recovery and reconstruction efforts. Implied funding delays exacerbate the indirect and secondary consequences of disasters significantly.

III. THE RESEARCH AND DEVELOPMENT TECHNICAL ASSISTANCE

A. Impact and Outcome

7. The impact will be a contribution toward strengthening the fiscal resilience of ADB's DMCs to disaster risk by enhancing financing arrangements for post disaster relief. The outcome will be increased commitment of DMCs to strengthen the enabling environment for DRF instruments.

B. Methodology and Key Activities

8. The TA will develop tools to assess and strengthen the enabling environment for DRF and will strengthen the DRF capacity of DMC stakeholders. The tools will include a diagnostics methodology to assess the current DRF landscape and enabling environment in ADB's DMCs; and a tool kit of actions to strengthen the enabling environment for DRF, supporting the establishment of comprehensive DRF strategies linked to solvent risk transfer markets. The diagnostics methodology and enabling environment tool kit will be based on the findings of diagnostic assessments of two DMCs—one in South Asia and one in Central and West Asia.⁵

9. The assessments will explore the current application of DRF solutions in the selected DMCs, related demand and supply constraints, and opportunities to strengthen the DRF enabling environment—leading to the enhanced financial management of disaster risk. The assessments will include a review of sovereign and subsovereign DRF solutions available and utilized in recent disaster events, government contingent liability, public funding gaps (drawing on available risk assessment data), and the short- and long-term fiscal consequences of past disasters. They will also review private sector disaster insurance markets, covering home,

⁵ Country selection will be in consultation with ADB operations departments and confirmed following government clearance, subsequent to TA approval.

business, agricultural, and micro-insurance cover. The assessments will examine DRF institutional arrangements (including formal and informal mechanisms between federal and provincial government ministries, departments, and authorities) and regulatory, legislative, and tax regimes. They will review levels of disaster insurance penetration; the types of coverage available; premium rates and underlying pricing methodologies; distribution channels and attendant costs; underwriting and claims administration practices; and prevailing reinsurance practices and local reinsurance capacity. The availability and quality of historical loss, hazard, and exposure data and the extent and scope of existing disaster risk models data will be examined. Country initiatives will be examined to promote micro-insurance, *Takaful* (Islamic) insurance, financial literacy, and risk awareness to incentivize the take up of DRF products.

10. On completion of each country diagnostic assessment, the findings and recommendations will be disseminated to stakeholders. In close coordination with the respective regional departments, a dialogue will be initiated with the two DMCs—focusing on DRF gaps, policy options to strengthen fiscal resilience, potential new DRF instruments (including opportunities for both strengthened public and private management of disaster risk), and the measures required to enhance the DRF enabling environment, including possible legislative and regulatory adjustments and capacity-building initiatives. DRF training sessions will also be conducted to facilitate each DMC's understanding of DRF concepts, principles, and instruments; to disseminate study findings and recommendations; and to promote ownership of action plans for their implementation.

11. Outputs from the study will be compiled into a how-to guide for strengthening the DRF enabling environment, which will include the diagnostics methodology, the enabling environment tool kit. The diagnostic methodology will include identifying options for risk modeling and actuarial analysis to derive risk-based premiums, and case study examples of the guide's application to the two country studies, including resulting action plans. The guide will also include a broad overview of the case for strengthening the enabling environment for DRF in ADB's DMCs.

12. The TA will include a program of training and knowledge events for government officials and stakeholders at country and regional levels to raise understanding of DRF and support ongoing efforts to augment ADB's program of work in DRF, including possible partnerships with the private sector.

13. The TA outputs are expected to spur other ADB projects supporting DMCs to strengthen their DRF enabling environments and capacity, including via the introduction of new DRF instruments. Building on lessons learned from the TA, a second phase will be considered subject to resource availability, to apply the diagnostic methodology in other interested DMCs and assist them in developing suitable DRF instruments.

C. Cost and Financing

14. The TA is estimated to cost \$700,000, of which \$600,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-V) and \$100,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other sources).

D. Implementation Arrangements

15. The TA is expected to be completed in 24 months from January 2016 to December 2017. ADB will be the executing agency. The Sector Advisory Service Division and the Climate

Change and Disaster Risk Management Division of ADB's Sustainable Development and Climate Change Department will share the role of implementing agency. TA administration and supervision, implementation oversight, accountability for the outputs, and communication with consultants and stakeholders will be carried out jointly by these two divisions, in close coordination with the Finance Sector Group and the Climate Change and Disaster Risk Management Thematic Group. Team members from the Central and West Asia Department and the South Asia Department will also be involved in TA implementation. A focal agency will be identified in each of the two selected DMCs to provide advice to the consultants and to serve as the primary point of contact with stakeholders. The focal agencies will be kept fully informed of progress under the TA.

16. The TA will require 18 person-months of individual international consultant services and 26 person-months of individual national consultant services, comprising (i) 6 person-months for one lead disaster risk financing specialist, (ii) 4 person-months for one disaster risk insurance specialist, (iii) 4 person-months for one agricultural insurance specialist, (iv) 4 person-months for one insurance and capital markets regulatory specialist, (v) 8 person-months for two national disaster risk financing specialists, (vi) 8 person-months for two national insurance industry specialists, and (vii) 10 person-months for one national project coordinator.

17. Recruitment of consultants will be undertaken on an individual basis in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). The outline terms of reference for the consultants are in Appendix 3. Disbursement under the TA project will be done in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). An ADB staff team from the Sustainable Development and Climate Change Department will regularly monitor and administer the individual contracts and manage the combined outputs to achieve the TA objectives. In the event that ADB staff act as project resource persons, travel costs will be charged to the TA but their salaries and benefits will be absorbed by the internal administrative expense budget.⁶

18. ADB will disseminate outputs of the study to DMCs and within ADB, and carry out other follow-up activities for preparing relevant ADB's project proposals as required. Strong collaboration with regional departments—particularly from Central and West Asia and South Asia—together with private sector operations, will be essential to facilitate access to key DMC stakeholders and information and to ensure strong understanding of financial and capital markets in the case study countries.

IV. THE PRESIDENT'S DECISION

19. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$700,000 on a grant basis for Strengthening the Enabling Environment for Disaster Risk Financing (Phase 1), and hereby reports this action to the Board.

⁶ A memo from the Budget, Personnel, and Management Systems Department and the Strategy and Policy Department (26 June 2013) provides guidance on charging costs to TA and internal administrative expense budgets. It states that for preparatory works, implementation, and administrative support, ADB staff is not eligible to charge corresponding salaries and benefits to the TA. However, if the TA paper clearly specifies and includes provision in its cost estimates to provide support services, such as travel and administrative expenses, then such costs should be charged to the TA.

Key Activities with Milestones
Inputs ADB: \$700,000 ADB staff inputs
Assumptions for Partner Financing Not applicable

ADB = Asian Development Bank, DMC = developing member country, DRF = disaster risk financing, NA = not applicable, Q = quarter.

^a ADB. 2014. *Operational Plan for Integrated Disaster Risk Management*. Manila.

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN

(\$'000)

Item	Amount
Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	373.0
ii. National consultants	103.0
b. International and local travel	94.0
c. Reports and communications	10.0
2. Training, seminars, and conferences	
a. Regional forum	50.0
b. Training program	16.0
3. Miscellaneous administration and support costs	22.0
4. Contingencies	32.0
Total	700.0

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-V [\$600,000] and TASF-other sources [\$100,000]).

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

A. International Consultants

1. **Lead disaster risk financing specialist** (6 person-months). The expert should have a master's degree in finance, economics, statistics, actuarial sciences, or equivalent, preferably with 12 years of international experience in areas such as disaster risk financing (DRF), probabilistic risk assessment, the assessment of disaster-related fiscal risk, contingent liabilities and funding gaps, and insurance and reinsurance. The expert must have sound experience in scoping, designing, and/or implementing similar projects in developing countries, preferably in Asia, and strong writing and communication skills. In particular, with support from the international and national consultants, and in consultation with the Asian Development Bank (ADB) team leaders, the expert will lead the following activities:

- (i) Develop a diagnostics methodology to assess the current DRF landscape and enabling environment in ADB's developing member countries (DMCs) and subsequent refinement, following its application to the two country diagnostics assessments.
- (ii) Prepare the country diagnostics assessments in the two countries of focus using the draft diagnostics methodology to identify and discuss the effectiveness of existing DRF mechanisms and funding gaps; existing technical, financial, operational, and institutional challenges; and possible solutions for enhancing the DRF enabling environment. Responsibilities will include an assessment of current DRF arrangements for various stakeholders (e.g., central government, local government, homeowners, businesses, and farmers), especially with respect to the effectiveness and applicability of existing arrangements; assessment of the adequacy of historical loss data, hazard and exposure data, and existing disaster risk models; in consultation with relevant government agencies, assessment of the scale of the government contingent liability and funding gap under different disaster scenarios based on available risk assessment data; review of the short and long-term fiscal consequences of past disasters; and preparation of a section of each of the two country diagnostics assessment reports based on the findings of the above.
- (iii) Prepare two linked country action plans to strengthen the DRF enabling environment in the two countries. Responsibilities will include the preparation of a section on enhancing the application of DRF instruments.
- (iv) Undertake a broad-brush desk review of the DRF landscape in selected DMCs from different subregions in Asia and the Pacific.
- (v) Develop a tool kit of potential actions to strengthen the enabling environment for DRF for use in ADB's DMCs. Responsibilities will include the preparation of a section on the existing financial management of disaster risk and opportunities for enhanced application of DRF instruments.
- (vi) Disseminate country findings to national stakeholders and finalize country action plans.
- (vii) Prepare the final country reports, and how-to guide for strengthening the DRF enabling environment, including the diagnostics methodology, the enabling environment tool kit, and case study examples of their application to the two country studies, including the resulting action plans. The guide will also include a broad overview of the case for strengthening the enabling environment for DRF in ADB's DMCs. Responsibilities will include the preparation of sections focusing on the enhanced application of DRF instruments to strengthen the financial management of disaster risk.

- (viii) Organize and deliver training and knowledge events for government officials and stakeholders at country and regional levels.
- (ix) Support the ADB team leaders in coordinating team activities and consolidating individual outputs as requested.

2. **Disaster risk insurance specialist** (4 person-months). The expert should have a master's degree in finance, economics, statistics, actuarial sciences, or equivalent, preferably with 8 years of international experience in insurance and reinsurance. The expert must have sound experience in scoping, designing, and/or implementing similar projects in developing countries, preferably in Asia. In particular, under the supervision of the team leader, the expert will do the following:

- (i) Contribute to the development of a diagnostics methodology to assess the current DRF landscape and enabling environment in ADB's DMCs, focusing on the insurance industry and insurance-linked securities products and practices.
- (ii) Contribute to the preparation of two country diagnostics assessments by reviewing existing disaster risk transfer products, pricing underwriting, reserving, and claims administration practices; exploring the potential appetite for and technical feasibility of introducing innovative DRF products, such as parametric products and insurance-linked securities, examining the merits and pre-requirements for their establishment, ongoing administration, claims management, and liquidation cycles; reviewing and understanding the terms of reinsurance contracts and program structures; holding discussions with industry and government officials on the potential for introducing DRF solutions through public-private partnerships; commenting on pooling and captive arrangements; and preparing a section of each of the two country diagnostics assessment reports based on the findings.
- (iii) Contribute to the preparation of two linked country action plans to strengthen the DRF enabling environment in the two countries, focusing on measures to strengthen the insurance industry and insurance-linked securities products, practices, and penetration.
- (iv) Contribute to the development of a tool kit of potential actions to strengthen the enabling environment for DRF for use in ADB's DMCs, focusing on measures to strengthen the insurance industry and insurance-linked securities products and practices.
- (v) Contribute to the presentation of country findings to national stakeholders and finalization of the country action plans.
- (vi) Contribute to the preparation of the final country reports and how-to guide for strengthening the DRF enabling environment, preparing sections focusing on measures to strengthen the insurance industry and insurance-linked securities products and practice.
- (vii) Contribute to the dissemination of technical assistance (TA) outputs at national and regional knowledge events.
- (viii) Assist the ADB team leaders as requested.

3. **Agricultural insurance specialist** (4 person-months). The expert should have a master's degree in finance, economics, statistics, actuarial sciences, or equivalent, preferably with 8 years of international experience in agricultural insurance, including in the development and implementation of parametric solutions. The expert must have sound experience in scoping, designing, and/or implementing similar projects in developing countries, preferably in Asia. In particular, under the supervision of the team leader, the expert will do the following:

- (i) Contribute to the development of a diagnostics methodology to assess the current DRF landscape and enabling environment in ADB's DMCs, focusing on the scope for strengthening agricultural insurance products, including parametric instruments.
- (ii) Contribute to the preparation of two country diagnostics assessments by reviewing existing agricultural insurance products; reviewing their pricing underwriting, reserving, and claims administration practices; identifying barriers to access and constraints on developing new product lines such as parametric insurance; holding discussions with industry and government officials on the potential for introducing DRF solutions through public-private partnerships; and preparing a section of each of the two country diagnostics assessment reports based on the findings.
- (iii) Contribute to the preparation of two linked country action plans to strengthen the DRF enabling environment in the two countries, focusing on measures to strengthen agricultural insurance products, practices, and penetration.
- (iv) Contribute to the development of a tool kit of potential actions to strengthen the enabling environment for DRF for use in ADB's DMCs, focusing on measures to strengthen agricultural insurance products and practices.
- (v) Contribute to the presentation of country findings to national stakeholders and finalization of the country action plans.
- (vi) Contribute to the preparation of the final country reports, and how-to guide for strengthening the DRF enabling environment, preparing sections focusing on measures to strengthen agricultural insurance products and practice.
- (vii) Contribute to the dissemination of TA outputs at national and regional knowledge events.
- (viii) Assist the ADB team leaders as requested.

4. **Insurance and capital markets regulatory specialist** (4 person-months). The expert should have a master's degree in finance, economics, statistics, actuarial sciences, law, or equivalent, preferably with 8 years of international experience in insurance and capital markets regulation and supervision. In particular, under the supervision of the team leader, the expert will do the following:

- (i) Contribute to the development of a diagnostics methodology to assess the current DRF landscape and enabling environment in ADB's DMCs, focusing on the insurance and capital markets policy, regulatory, and supervisory framework and arrangements.
- (ii) Contribute to the preparation of two country diagnostics assessments by conducting an assessment of existing insurance and capital markets policy, regulatory, and supervisory framework and arrangements; examining existing policy, regulatory, and supervisory barriers to the development of DRF instruments; assessing outstanding gaps and needs, including capacity development requirements; and preparing a section of each of the two country diagnostics assessment reports based on the findings.
- (iii) Contribute to the preparation of two linked country action plans to strengthen the DRF enabling environment in the two countries, focusing on measures to strengthen the insurance and capital markets policy, regulatory, and supervisory framework and arrangements, including regulatory safeguards and enhanced risk management techniques with a solid foundation of solvency and consumer protection.
- (iv) Contribute to the development of a tool kit of potential actions to strengthen the enabling environment for DRF for use in ADB's DMCs, focusing on measures to

- strengthen the insurance and capital markets policy, regulatory, and supervisory framework and arrangements.
- (v) Contribute to the presentation of country findings to national stakeholders and finalization of the country action plans.
 - (vi) Contribute to the preparation of the final country reports, and how-to guide for strengthening the DRF enabling environment, preparing sections focusing on measures to strengthen the insurance and capital markets policy, regulatory, and supervisory framework and arrangements.
 - (vii) Contribute to the dissemination of TA outputs at national and regional knowledge events.
 - (viii) Assist the ADB team leaders as requested.

B. National Consultants

5. **Disaster risk financing specialists** (2 consultants, 4 person-months each). Each country where the study is being carried out will have a national disaster risk management specialist. Each specialist should preferably have a master's degree in disaster risk management or a related discipline, and 7 years of professional experience in disaster risk management. The specialist should have extensive working knowledge of disaster risk in their country and disaster risk management policy and practice, including pertaining to the financial management of disaster risk. The specialist should have good organizational and networking skills. Each specialist will assist the project team in carrying out the country assessments. In particular, under the supervision of the team leader, the expert will do the following:

- (i) Contribute to the preparation of the country diagnostics assessments, working closely with the international consultants.
- (ii) Review the short- and long-term fiscal consequences of past disasters.
- (iii) Based on a review of relevant budget, policy, strategy, legislative, regulatory, and other documents and discussions with government, provide local context to the project, in particular providing information on the availability of disaster loss databases, hazard maps, exposure databases, and disaster risk assessments and on the extent and scope of existing disaster risk modeling on explicit and implicit public disaster contingent liability; on the current financial management of residual disaster risk, including existing DRF arrangements for post-disaster relief, early recovery, and reconstruction; and on the division of fiscal roles and responsibilities for disaster relief, early recovery, and reconstruction between central and local governments.
- (iv) Collect other data and information and undertake research as required.
- (v) Manage meeting schedules for country visits.
- (vi) Assist in organizing dissemination, training, and other events, including the regional forum.
- (vii) Participate in team discussions and contribute to recommendations.
- (viii) Provide inputs to reports and other materials prepared under the TA, as requested.

6. **Insurance industry specialists** (2 consultants, 4 person-months each). Each country where the study is being carried out will have a national insurance industry specialist. Each specialist should preferably have a master's degree in economics, finance, or a related discipline, and 7 years of professional experience in the respective field of expertise. The specialist should have extensive working experience in the local insurance and reinsurance market and sufficient knowledge of relevant stakeholders in the market. Each specialist should have good organizational and networking skills. The specialist will assist the project team in

carrying out the country assessments. In particular, under the supervision of the team leader, the expert will do the following:

- (i) Contribute to the preparation of the country diagnostics assessments, working closely with the international consultants.
- (ii) Provide local context to the project, in particular for the insurance and reinsurance industry assessment, including agricultural insurance; and identify initiatives adopted by the respective country to promote financial literacy and risk awareness and create incentives for take-up of DRF products.
- (iii) Collect data and information, and undertake research as required.
- (iv) Manage meeting schedules for country visits.
- (v) Assist in organizing dissemination, training, and other events, including the regional forum.
- (vi) Participate in team discussions and contribute to recommendations.
- (vii) Provide inputs to reports and other materials prepared under the TA, as requested.

7. **Project coordinator** (10 person-months). The project coordinator will be engaged to work with ADB staff and other TA consultants to assist in TA implementation. A Filipino national with 5 years of relevant experience in project coordination and with excellent oral and written communication skills in English is an advantage. In particular, under the supervision of the ADB team leaders, the consultant will do the following:

- (i) Monitor and coordinate the schedule of activities of the TA.
- (ii) Assist with the administrative tasks under the TA.
- (iii) Coordinate logistical arrangements for meetings, dissemination, training, and other events.
- (iv) Help ADB staff ensure that TA activities are administered and implemented in accordance with ADB policies and guidelines.
- (v) Help review the TA reports to ensure they meet ADB standards.
- (vi) Perform other tasks as reasonably requested.