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High Level Coordination Meeting on Rehabilitation and Reconstruction to Tsunami Affected Countries A Review of ADB's Response to the Indian Ocean Tsunami

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Asian Development Bank

ABBREVIATIONS

ADB	Asian Development Bank
ADBI	Asian Development Bank Institute
ADF	Asian Development Fund
ADPC	Asian Disaster Preparedness Center
ATF	Asian Tsunami Fund
BAN	Bangladesh
BP	Bank Policy
BRR	Agency for the Reconstruction and Rehabilitation of Aceh-Nias (Badan Rehabilitasi dan Rekonstruksi)
CIDA	Canadian International Development Agency
CoP	community of practice
COSO	Central Operations Services Office
CPS	Country Partnership Strategy
CSO	civil society organization
DAD	Development Assistance Database
DEAP	Disaster and Emergency Assistance Policy
DER	Department of External Relations
DFID	UK Department for International Development
DMC	developing member country
DRM	disaster risk management
DRR	disaster risk reduction
EAL	emergency assistance loan
EIB	Economic Investment Bank
EMS	Extended Mission in Sumatra
ENSO	El Nino/Southern Oscillation
ESCAP	Economic Commission for Asia and the Pacific
ETESP	Earthquake and Tsunami Emergency Support Project
GDP	gross domestic product
GFIS	Grant Financial Information System
GoI	Government of Indonesia
GoSL	Government of Sri Lanka
HQ	Headquarters
IDB	Inter-American Development Bank
IFRC	International Federation of Red Cross and Red Crescent Societies
IOT	Indian Ocean Tsunami
IRM	Indonesia Resident Mission
ISDR	International Strategy for Disaster Reduction
JBIC	Japan Bank for International Cooperation
KGZ	Kyrgyz Republic
LRRD	links between relief, rehabilitation and development
MDB	multilateral development bank
MfDR	Management for Development Results

NGO	nongovernmental organization
OCR	ordinary capital resources
OECD	Organisation of Economic Coordination and Development
OED	Operations Evaluation Department
OM	Operations Manual
OP	Operational Procedures
PCR	Project Completion Report
PMO	Project Management Office
PPER	Project Performance Evaluation Report
RADA	Reconstruction and Development Agency
RETA	regional technical assistance
RM	Resident Mission
RRP	Report and Recommendation of the President
RSDD	Regional and Sustainable Development Department
SAPE	Sector assistance program evaluation
SARD	South Asia Department
SERD	Southeast Asia Development
SF	special fund
SIDA	Swedish International Development Cooperation Agency
SLRM	Sri Lanka Resident Mission
SPAR	Subproject appraisal report
SPD	Strategy and Policy Development
SPPR	Subproject preparation report
SWOTs	Strengths, weaknesses, opportunities, threats
TA	technical assistance
TAJ	Tajikistan
TEC	Tsunami Evaluation Coalition
TOR	terms of reference
UN	United Nations
UNDP	United Nations Development Programme
UN/OCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNORC	Office of the United Nations Recovery Coordinator for Aceh and Nias
USAID	United States Agency for International Development
WB	World Bank

GLOSSARY

kecamatan – sub-district

NOTE

In this report, "\$" refers to US dollars.

CONTENTS

	Page
EXECUTIVE SUMMARY	i
I. INTRODUCTION	1
A. Background	1
B. Scope and Limitations	2
C. Methodology	5
D. Literature Review of Lessons Learned on Disaster-Related Assistance Focusing on the Indian Ocean Tsunami (IOT)	6
E. Structure of the Report	8
II. THE INDIAN OCEAN TSUNAMI AS REGIONAL-LEVEL DISASTER	8
A. Context	8
1. How ADB Works: DEAP and Disaster-Related Activities	10
B. ADB's Involvement in the Indian Ocean Tsunami (IOT)	11
1. How and Why ADB Got Involved	11
2. ADB's Tsunami-Related Assistance; the Asian Tsunami Fund (ATF)	11
C. Organizational Demands: Regional-Level and Country-Specific Disasters	15
1. Time Component: Disaster Relief and Early Recovery Phase	15
2. The Funding Component	17
3. Regional Technical Assistance	19
4. Regional Departments	20
III. SWOTS, ISSUES, AND OPTIONS	21
A. Results of SWOT Analysis	21
B. ADB's Roles in the IOT Disaster Risk Management Process	21
1. Relief Phase	23
2. Early Recovery Phase	24
3. Rehabilitation and Reconstruction Phase	26
4. Synthesis	30
C. Developing Options	32
1. Funding Options	32
2. Regional Cooperation in Disaster Prevention and Preparedness	34
D. Mainstreaming Disaster Risk Reduction (DRR)	37
IV. CONCLUSION AND RECOMMENDATIONS	39
REFERENCES	63
APPENDIXES	
Appendix 1: Terms of Reference	46
Appendix 2: Semi-Structured Interview Schedules	47
Appendix 3: List of Interviewees	51
Appendix 4: SWOT Analysis of Mainstreaming Disaster Risk Reduction in ADB	53
Appendix 5: Classification of Actions	59
Appendix 6: Selected Knowledge Sharing Methods, Meetings, and Tools	61

EXECUTIVE SUMMARY

On 26 December 2004, a strong earthquake struck 150 km off Sumatra Island causing the Indian Ocean Tsunami (or IOT). The IOT was a regional disaster that affected 14 countries stretching westward from Southeast Asia to South Asia, and as far as Africa. Five among the worst-affected were ADB member countries (India, Indonesia, the Maldives, Sri Lanka, and Thailand) and were assisted through the Asian Tsunami Fund (ATF), the largest regional fund in ADB history.

Almost 2 years after the IOT, this study under ADB's regional technical assistance project TA 6233 entitled "High Level Coordination Meeting on Rehabilitation and Reconstruction Assistance to Tsunami Affected Countries" (approved 30 June 2005), was conducted between November 2006 and June 2007. Information obtained from this study was fed into the Small Group Workshop on Large-Scale Emergencies held 5–6 July 2007. For the study, IOT documents were reviewed and ADB staff and consultants involved in ADB's tsunami assistance were interviewed; it also included visits to ADB Resident Missions and partner institutions in Indonesia and Sri Lanka.

The four components of the study are (i) identifying similarities and differences between country-specific and regional-level disasters with respect to organizational demands; (ii) assessing ADB's operational capacity to meet prolonged regional-level demands; (iii) developing options for incorporating regional-level demands into ADB's operational manuals; and (iv) identifying resource options to meet regional-level disaster demands.

The report focuses on ADB's IOT involvement, from immediate response through rehabilitation and reconstruction, and consists of four parts:

- (i) Introduction, which provides the background, scope and limitations (concepts and definitions, perspectives from ADB strategies and practices), methodology, and information sources of this study;
- (ii) The Indian Ocean Tsunami as Regional-Level Disaster, which addresses the first component while providing context, and ADB's response (predominantly represented by the Asian Tsunami Fund);
- (iii) SWOTs, Issues and Options – which address the last three components that are dealt with through SWOT analysis (a strategic planning method that matches strengths [S] and weaknesses [W] with opportunities [O] and threats [T]) applied to ADB from the perspective of the disaster risk management cycle based on the interviews; and,
- (iv) Conclusion and Recommendations, which gives five main recommendations with specific actions elaborating each one.

ADB's IOT Assistance

ADB's 2004 Disaster and Emergency Assistance Policy (DEAP) had not been fully implemented when the IOT struck. For example, no staff members had been designated focal points in each Regional Department and Resident Mission, and the anchor position for disaster management had not been filled. Also, there was no pre-determined procedure to guide what ADB management should take in a regional disaster of this magnitude.

A committee of staff members from the Department of External Relations (DER) and the security headed by a vice-president was immediately set up. Within the first ten days, incumbent

ADB president Chino made at least three announcements regarding ADB's commitment to provide assistance to impacted countries. ADB's initial participation with other stakeholders was to organize with the World Bank and other donors into teams led by the country governments and eventually do joint damage and needs assessment 11 days after the hazard event. The interdepartmental Tsunami Task Force at Headquarters first met a month after the disaster occurred. Demand on staff at a regional level was highest at this time, exacerbated by rescheduling of loans and use of loan savings being considered as funding sources for the projects. With an initial contribution of \$600 million, ADB established in February 2005 a multidonor fund, the ATF, as a unique and dedicated source of grant financing to support priority rehabilitation and reconstruction needs. As of 30 June 2007, ADB's total approved assistance including cofinancing for IOT recovery was \$892.035 million. Additional sources came from the European Community and the governments of Canada, France, Japan, the Netherlands, Norway, Sweden, and the United Kingdom which had provided funds through cofinancing or contributions to special funds established in ADB.

The ATF is designed to run for five years or until it is expended, whichever comes first. As ATF projects are implemented, demands on the ADB are recognized, including those additional organizational demands related to rehabilitation and reconstruction requirements. It is recognized that some requirements partly result from the nature of grant funding, scale of the IOT, actions taken in the early post-disaster period, and scope of assistance. As projects are executed, there are on-going lessons which are identified to constitute among ADB's knowledge resources.

Organizational demands

For the purpose of this report, a regional-level disaster is defined as an impact or a series of impacts (in this case an earthquake and a tsunami) that affects two or more countries. In terms of organizational demands to the ADB, the significance of the regional aspect of the IOT is time-dependent, i.e., the regional character is most critical during the disaster relief and early recovery phases. Staff time, surge capacity, needed skill levels, communicating and knowing other actors or stakeholders with whom ADB might potentially cooperate, decision-making on funding and resource allocation especially during the early recovery phase, and pressure to deliver during rehabilitation and reconstruction—all contribute to the organizational demands that need to be responded to. A regional outlook is also important when country governments and donors consider the assistance modality and allocation of available funds. Furthermore, the level of preparedness of member countries as well as regional organizations plays a big role in the immediate post-disaster period. A regional-level disaster brings out the need, but also the opportunity, to deal with issues commonly faced by impacted countries. One such common issue is keeping track of the use of donor funds received by country governments as part of IOT assistance. Analyzing and understanding such common issues and other aspects of regional-level disasters through regional technical assistance projects can potentially help ADB and its partners identify what appropriate actions to take. Regional-level disasters may require more than one regional department to deal with post-disaster activities; protocols when responding to disaster need therefore to take this into account. The regional-level demand however diminishes with time, reinforcing the fundamental principle to strive for effective country-specific assistance.

From Regional-Level to Country-Specific Demand

The tracking mechanism for donor assistance was made through the Internet-based Tsunami Development Assistance Database (DAD). TA 6331 – Support for Strengthening of the

Tsunami Development Assistance Database (DAD) is another regional technical assistance project related to the IOT, which provides funds to the United Nations Development Programme to implement DAD in four of the five countries: Indonesia, Maldives, Sri Lanka, and Thailand. Conceived to help countries exercise leadership over external assistance by strengthening governance in the recovery programs, the current database is being adapted for the national budget and non-tsunami assistance in Indonesia and the Maldives. It is to be noted that the maintenance of DAD is largely a country-specific issue.

Parallel assistance is being undertaken in five countries—three covered by the South Asia Regional Department and two by the Southeast Asia Regional Department. In the beginning, to reflect the regional nature of the assistance, representatives from both departments worked in the Tsunami Task Force. However, during the transition from relief to recovery, and as projects per country were identified and dealt with, regional concerns have diminished and relevant issues have become more country-specific. Now that rehabilitation and reconstruction are proceeding, issues mostly pertain to aid effectiveness in each country. These late recovery issues are much related to early recovery, when ADB's regional intervention was most significant.

Conclusions and Recommendations

From an organization learning perspective, specific suggestions are collated under five main recommendations given below. It may be noted that the recommendations are equally applicable to country-specific disasters, except for the last, which seeks to focus on integrating the whole notion of “regional-level disasters” and their characteristic implications on organizational demands. In one sense, preparing for regional-level disasters imply preparing for a scenario that can be worse. The worse case scenario is implied by the disaster affecting a larger affected area and spanning across two or more countries. Actions derived from SWOT analysis are included under these recommendations.

Recommendation No. 1: Develop knowledge resources and tool up within. This addresses the need to transfer lessons learned and train staff designated to deal with ex ante and ex post measures.

Recommendation No. 2: Devise assistance modalities and mechanisms that enhance the mainstreaming of disaster risk management effectively into country development processes. This addresses the need for instruments that can provide appropriate assistance before and after repetitive disasters or rare events.

Recommendation No. 3: Strengthen preparedness and disaster risk reduction (DRR) in ADB projects and operations. As disaster planning enervates with time, ways to imbed preparedness into ADB's country processes are suggested.

Recommendation No. 4: Address regional-level disasters as opportunities for regional cooperation in pre-disaster mitigation and preparedness; this will also contribute to making countries more resilient to disasters. This suggests using opportunities presented by regional resources for better region-wide disaster preparedness.

The Terms of Reference require that “options for incorporating regional-level demands into ADB's operational manuals” be developed. In the context of the IOT experience, new provisions or statements to reinforce existing ones are suggested through Recommendation No. 5. Features of the modification are suggested in Part IV of the report. For example, knowledge

sharing and training activities shall explicitly include how to prepare for and respond to regional-level disasters based on state-of-the-art knowledge and current understanding.

Recommendation No. 5: Modify ADB's current Operations Manual to reflect the necessary changes consistent with recommendation nos. 1 to 4.

I. INTRODUCTION

A. Background

1. While ADB has a long and varied experience with natural disasters in specific settings of its developing member countries (DMCs), ADB's experience with regional-level disasters from natural hazards is limited to the Indian Ocean tsunami (IOT), where it simultaneously provided assistance to the five most affected countries. This report highlights the lessons, policy gaps, and implementation issues from ADB's IOT experience captured through documentation review and interviews.

2. The terms of reference (TOR) identifies the four components of the study as follows: (i) identifying similarities and differences between country-specific and regional-level disasters with respect to organizational demands; (ii) assessing ADB's operational capacity to meet prolonged regional-level demands; (iii) developing options for incorporating regional-level demands into ADB's operational manuals; and (iv) identifying resource options to meet regional-level disaster demands. The TOR's detailed tasks are listed in section C on methodology.

3. The current Disaster and Emergency Assistance Policy (DEAP) dealing with disasters and emergencies is the third version, with the first in 1987 and the second in 1989. It is "an integrated policy for managing its disaster and emergency assistance, which links the phases of the disaster management cycle, from prevention and mitigation through preparedness and recovery."

1. Principles of ADB's Disaster and Emergency Assistance Policy (DEAP)

4. Details of the DEAP and procedures for its effective implementation are articulated in the Operations Manual.¹ Relevant to DEAP are OM Sections D7/BP and OM D7/OP. The underlying principles of the DEAP include the following (ADB, 2004 Disaster and Emergency Assistance, OM section D7/BP, p. 20, paragraph 61):

- (i) Having a systematic approach to disaster management, including emergency prevention and post-conflict reconstruction;
- (ii) Mainstreaming disaster risk management in an integral part of the development process;
- (iii) Strengthening partnerships;
- (iv) Using resources for pre-disaster and post-disaster activities efficiently and effectively; and
- (v) Improving internal organization within the planning, implementation and communication of ADB's disaster and emergency-related assistance.

5. These five principles serve as criteria to review project development and implementation in the context of existing policy.

6. OM Section D7/BP states that ADB's disaster and emergency activities will be in the context of "a new approach that emphasizes preventive measures." Chapter IV of the DEAP provides the policy direction for the ADB.² The approved document recognizes the "detrimental impact on public finance" (paragraph 10), "major social risks among the poor and near-poor

¹ ADB. 2004a. *Disaster and Emergency Assistance, OM section D7/BP*. Manila.

² ADB. 2004b. *Disaster and Emergency Assistance Policy (R71-04)*. Manila.

people” (paragraph 11, citing ADB’s Social Protection Strategy of 2001), quantified economic losses (paragraph 14). This study thus situates the experience of ADB in dealing with post-IOT in the context of prevention and reduction of negative impacts so as not to jeopardize gains made by developing countries in socio-economic development.

B. Scope and Limitations

7. One of the thematic areas covered by the Regional and Sustainable Development Department (RSDD) is emergency preparedness. This study shall therefore provide input to RSDD on how to make DEAP operational in the context of the key result area of support to quality and compliance in ADB operations.³ Relevant policies that underpin operations such as governance, safeguards, and evaluation among others, are reviewed in reference to regional-level disaster demands. This study will help identify what should be included in the OM to deal with regional-level disaster demands.

1. Regional-Level Disasters

8. In this study, the IOT is referred to as a regional-level disaster. For the purpose of this report, a regional-level disaster is defined as an impact or a series of impacts (in this case an earthquake and a tsunami) that affects two or more countries. It is transnational in character; its impact goes beyond a single national boundary. Examples of regional-level disasters are Hurricane Mitch in Central America, the 1986 Chernobyl nuclear accident, and the El Nino/Southern Oscillation (ENSO). Like the IOT, these are all multicountry disasters.

9. Another term that comes to mind in describing the IOT and used in a few ADB publications⁴ is “large-scale disaster.” This is defined by a report of the Organisation for Economic Co-operation and Development (OECD)⁵ as “disaster that can overwhelm the response capacities of any country.” Thus, the IOT is both a large-scale and multicountry disaster.

10. The significance of the regional aspect of the IOT is time-dependent; the regional character is most critical during the disaster relief and early recovery phase, with the level of preparedness of DMCs, as well as the regional organizations, playing a big role in the immediate post-disaster period. Poor coordination leads to over- or under-response to the disaster.⁶ The regional outlook is also important to country governments and donors in considering the assistance modality or allocation of funds. The ADB’s response to the IOT has been to assist the five worst affected countries in Asia through the Asian Tsunami Fund (ATF), a regional fund, the largest grant in its history.

11. In terms of dealing with each country’s post-disaster fate, there appears to be no particular difference between country-specific disasters and regional-level disasters. As this

³ Lohani, B. 2006. Presentation on the Regional and Sustainable Development Department: Orientation Program for DMC Officials, ADB, Manila, 6 September.

⁴ “Large-scale disaster” or “large-scale emergency” has been used in the following: (i) ADB. 2005c. *Disaster Preparedness and Management Capacity Building* (Technical Assistance Completion Report). Manila. (ii) ADB. 2006a. *Indonesia: Country Strategy and Program 2006-2009*. Manila. (iii) ADB. 2006e. *Status Report on the Asian Tsunami Fund (Special Funds)*. Manila. (iv) ADB. 2005e. *The Continuity of Operations: ADB’s Business Continuity Strategy*. Manila. (v) ADB. 2004b. *Disaster and Emergency Assistance Policy (R71-04)*. Manila.

⁵ Organisation for Economic Co-operation and Development (OECD). 2004. *Large-Scale Disasters: Lessons Learned*. Paris: OECD.

⁶ Lahidji, Reza. 2004. *Lessons Learned*, in Organisation for Economic Co-operation and Development (OECD), *Large-Scale Disasters: Lessons Learned*. Paris: OECD. p. 22.

report illustrates, once country-specific projects are identified and implementation commences, the issues are mainly country specific. However, the fact remains that from ADB's perspective, a regional-level disaster presents increased demands on staff time and skills, and the organization's various departments. It means additional tasks such as negotiations, information gathering, analysis, and networking, on top of those that need to be done as part of 'normal development' projects. A disaster of the scale poses difficulties in terms of the 'right' type of assistance, human and financial resources, as the interview results shown in Part III. The IOT experience points to options that ADB may do within its operational and policy frameworks, as well as its possible role in knowledge development and cooperation in the region.

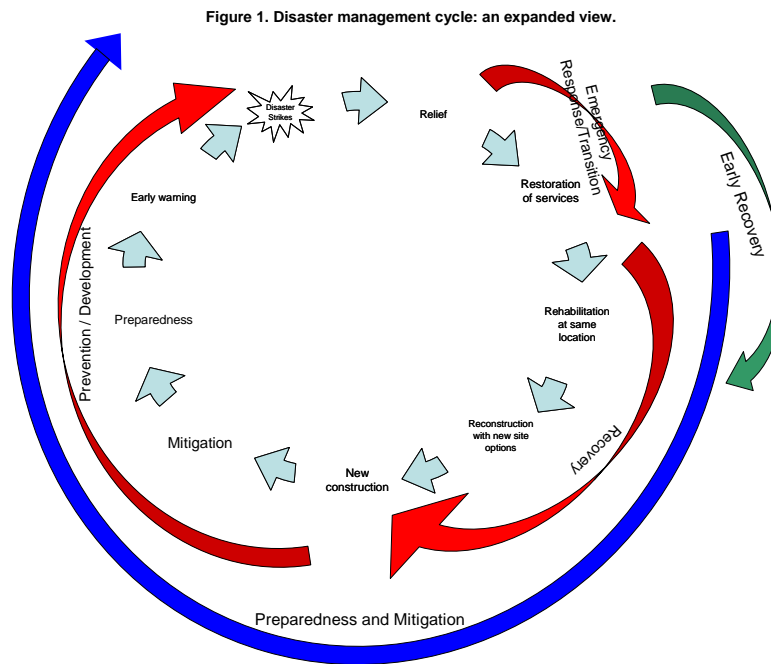
2. Concepts and Definitions

12. During the last several decades, state-of-the-art knowledge and practical experiences have further advanced the understanding on how to deal with disasters. Scientists and practitioners have been attempting to reach consensus on definitions. The United Nations-sponsored International Strategy for Disaster Reduction (ISDR) is facilitating communication among national disaster authorities and international organizations through a common set of definitions. However, definitions of key words like *disasters*, *emergency*, *emergency management*, in disaster management cycle in ADB's Bank Policies on disaster and emergency assistance (OM Section D7/BP) differ from the ISDR definitions. The use of the word "sudden" in the ADB definition of disaster ("a sudden, calamitous event...") gives an outdated view of disaster as an "act of God," and thus, not preventable.⁷

13. Based on insights gained from recent disaster events, disaster professionals have recognized the need to adjust certain conventional ideas. The "phases" of the disaster management cycle being among these are denoted as a three-layered partitioning of phases in Figure 1. Some details of the four phases found in the innermost circle are slightly simplified compared with the diagram of the disaster management cycle according to DEAP.⁸ The DEAP subscribes to the disaster management cycle as consisting of four phases: development or prevention phase, disaster, emergency response or transition phase, and recovery. The four phases are indicated in Figure 1 as the middle set of arrows. In recent years, that these phases ought to be planned and taken up as parallel rather than in sequence is increasingly being recognized. A period in which humanitarian agencies and development organizations often interface is the early recovery stage, which lasts for one to four months after a disaster. This suggests that early recovery, despite the difference in terminology, is related to the transition phase in ADB's disaster management cycle. Note that the outermost layer incorporates the idea of early recovery. In the innermost layer are activities identified "sequentially" to take place. A clear distinction wherein one stage finishes and another begins is not easy to make as experience shows.

⁷ To cite one definition, the United Nations/International Strategy for Disaster Reduction (UN/ISDR) defines disaster as "a serious disruption of a community or a society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources."

⁸ These simplifications are seen in the deletion of "Threat" from the Prevention/Development Phase, "Humanitarian Aid/Priority Rehabilitation" from the Emergency Response/Transition Phase, and "Prevention" from Development/Prevention Phase. Doing this removes redundancy; for example, prevention can be achieved through mitigation and thus its removal. On the other hand, stages in Recovery are qualified further to be descriptive of the actual work involved; "Rehabilitation at same location" and "Reconstruction with new site options" replaces "Rehabilitation" and "Reconstruction" respectively. Similarly, in the Development/Mitigation Phase, "Construction" is more accurately described by the addition of the word "new" and is renamed "New Construction," which distinguishes it from "Reconstruction" in a concrete way.



3. Perspectives from ADB Strategies and Practices: Towards a Contextual Framework

14. Following the IOT of December 2004, ADB as in past years responded rapidly to disasters and emergencies that caught worldwide attention like the Pakistan Earthquake of October 2005, Java earthquake of May 2006, and the undersea earthquake and tsunami that affected the Solomon Islands in April 2007 by investing and providing technical assistance. There is also evidence that shows a renewed interest to review and apply lessons learned.⁹ These actions reflect the spirit of the Medium-Term Strategies II or MTS II (2006–2008) that acknowledges three points for future action and also points to challenges that ADB needs to face squarely to be better prepared for emergencies:

- (i) Reviewing its “provisions for post-disaster rehabilitation and reconstruction”;
- (ii) Establishing a “standing facility” to deal with requests from country governments; and
- (iii) Sustaining development activities after humanitarian aid in the aftermath of disasters and conflicts particularly to weakly performing countries.¹⁰

15. It is useful to examine current strategies and practices within ADB to achieve the goal of poverty reduction including how disaster and emergency assistance may contribute to this goal. To achieve poverty reduction, ADB maintains safeguard policies for environment, involuntary resettlement, and indigenous peoples. How poverty is being reduced in terms of results and

⁹ The following examples can be cited: (i) Focusing on the Pakistan Earthquake, Jorgensen (2005) identified lessons learned and challenges for mainstreaming disaster risk management based on ADB’s experience. (ii) The Back-to-Office-Report of the ADB mission conducted April 22-May 9, 2007 following the disaster in Solomon Islands refers to focusing on “every disaster is a learning experience” being mindful of deficiencies in the country’s past overall post-disaster response in carrying out tasks (ADB. 2007d. *SOL ADB Disaster Emergency Response – Back-to-Office-Report (May 13)*. Manila.)

¹⁰ ADB. 2006b. *Medium-Term Strategy II 2006-2008*. Manila. pp. 14-15.

improvements is studied through evaluation of policies, programs, projects, practices, sectors, and thematic issues. ADB's strategy on regional cooperation and integration supports poverty reduction through regional collective actions that lead not only to greater physical connectivity; financial stability; expanded trade; but also improved environmental, health and social conditions.

16. The areas or aspects mentioned above comprise the policy underpinnings of ADB's IOT assistance. In addition, three recurring broad themes are significant in ADB's contribution to lessons on disaster recovery: aid effectiveness,¹¹ governance,¹² and disaster risk reduction.¹³ ADB has explained its role and policy concerning aid effectiveness (footnote 11) and governance (footnote 12), particularly in integrating elements at the policy and operation level. Disaster risk reduction (DRR) is being expounded through an implementation plan (footnote 13) for ADB's disaster policy. DRR is described by the ISDR as "the conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development. By promoting DRR, ADB participates as a key regional player in the implementation of the Hyogo Framework of Action while integrating disaster management as part of its development process.

C. Methodology

17. According to the TOR, detailed tasks relevant to this report include (i) review of DEAP statements and other policy documents current at the time of the IOT; (ii) review of all ADB documentation on the IOT, as well as other relevant non-ADB documents; (iii) interview of regional department focal points and task force members; (iv) interview of staff from ADB's Operations Evaluation Department (OED) regarding its March 2005 evaluation report and any follow intentions; (v) identify and report on differences and similarities between country-specific and regional-level disaster and emergency assistance issues with specific reference to whether DEAP and/or its associated Operations Manual (OM) required adjustment to accommodate regional-scale disaster events; and (vi) develop options for incorporating regional-level demands

¹¹ The Paris Declaration of Aid Effectiveness of 2005 affirms the relevance of disaster and emergency assistance to sustainable development and poverty reduction in paragraph 7 in the context of specific country situations with explicit reference to the Indian Ocean tsunami humanitarian and development assistance (Available: <http://www.AidHarmonization.org>). An ADB background paper (ADB. 2006c. *Paris Declaration on Aid Effectiveness: Highlights and Challenges – Board Seminar*, 24 March. Manila.) highlights its initiatives under the Declaration themes: ownership, alignment, harmonization, and managing for results. In the sphere of mutual accountability, limitations of country governments and ADB resident missions (RMs) were acknowledged. Between countries and donors, the Paris Declaration commits both to jointly assess mutual progress in implementing agreed commitments. According to the paper, "...there is no effective mechanism or clear scope for the mutual assessment reviews (paragraph 64, p. 13)." While country governments, for example have limited capacity to coordinate donor assistance, increase in coordination efforts by RMs on the other hand require additional resources.

¹² ADB's concept of governance adopted since 1997 has four elements: accountability, participation, predictability and transparency (ADB. 1999. *Governance: Sound Development Management*. Manila). All four elements interplay closely in the implementation of assistance projects, and measures can be taken to introduce and encourage good governance practices in public financial management, legal reform, civil society engagement, public administration and local governance. The IOT was a potential ground to practice good governance. Soon after pledges of assistance were made known by both official and private donors, the threat of corruption was recognized and ADB acted quickly to deal with it squarely.

¹³ ADB. 2007b. *Implementing the ADB's Disaster and Emergency Assistance Policy: Managing the Risks* (draft). Manila. Adapted from GTZ, 2005, *Linking Poverty Reduction and Disaster Risk Management* (Eschborn: Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ). "Disaster risk reduction (also referred to as prevention and mitigation) denotes activities that reduce (or prevent or mitigate) the adverse effects of extreme natural events, above all in the medium and long term."

into ADB's DEAP and/or OM, including identification and quantification of resources. This report therefore combines the results of document review and interviews; the information and insights obtained are then utilized for SWOT analysis of the ADB from the perspective of the IOT to systematically deal with tasks (v) and (vi). A complete list of detailed tasks for this assignment is tabulated together with relevant notes in Appendix 1; specific portions of the report relevant to the tasks are indicated. Appendix 2 provides the semi-structured questionnaire used for interviews conducted in Manila, Banda Aceh and Colombo between December 2006 and February 2007. The list of interviewees is provided in Appendix 3. SWOT analysis is used as the method allows the analyst to identify actions based on gaps identified. The interviews serve to reconstruct past activities following the IOT. Recollections can be limited by human error and so triangulation with information obtained from documents is employed. In the SWOT analysis, information from primary and secondary sources were appraised and classified as strengths, weaknesses, opportunities, and threats (SWOT). In a SWOT, questions asked include: "How can opportunities be exploited using the strengths of the organization? What measures are necessary to develop opportunities despite weaknesses? How can the organization counteract the influence of threats using strengths? What can be done to minimize situations where weaknesses match threats?"

18. As an additional step, to confirm suggested actions, ADB disaster-related activities are evaluated using mainstreaming of disaster risk reduction as criterion. An analogy is drawn between overcoming barriers to mainstreaming disaster reduction and solving environmental problems (after Trudgill, 1990).¹⁴ In this approach, six parameters—agreement, knowledge, technology, economic, social, and political—are used to determine barriers to mainstreaming disaster risk reduction. Through this process, a consistency check of the action points and solutions derived through SWOT analysis is made possible. The next section reviews relevant literature on lessons learned from IOT-related assistance.

D. Literature Review of Lessons Learned on Disaster-Related Assistance Focusing on the Indian Ocean Tsunami (IOT)

19. External and ADB-generated reports provide useful insights into aspects of organized response to the IOT, and which have a bearing on ADB's own response. The Tsunami Evaluation Coalition (TEC) provided an interpretation of lessons learned from the humanitarian perspective. This synthesis report categorized key messages in terms of (i) ownership and accountability to affected populations, (ii) quality of international response, (iii) international response capacity, and (iv) needs-based funding resource. It highlighted the negative effects of international organization proliferation. The negative effects were manifested in the additional work load and coordination time and transaction costs on local authorities that slowed down recovery and brought discontent to disaster victims; increased costs due to replicated offices and overheads; duplication and confusion of efforts; competition among agencies; and, increased risk of inappropriate aid.¹⁵

20. The World Bank Independent Evaluation Group's review document provides a comprehensive analysis of World Bank's disaster assistance.¹⁶ Released a few months after the IOT, it is too early to draw any lessons from World Bank's relevant IOT projects. Nevertheless, the study notes that the IOT assistance is among the World Bank's projects that took the

¹⁴ Trudgill, S.T. 1990. *Barriers to a Better Environment: What Stops Us Solving Environmental Problems?* London: Belhaven Press.

¹⁵ Telford, John and John Consgrave. 2006. *Joint Evaluation of the International Response to the Indian Ocean Tsunami Synthesis Report*. London: Tsunami Evaluation Coalition (TEC).

¹⁶ Independent Evaluation Group. 2005. *Hazards of Nature, Risks to Development*. Washington D.C.: World Bank.

quickest time to prepare. A significant finding of the study is that “lessons from disaster projects do not seem to have been learned – the same ones are recorded repeatedly (page 19).” Topping the list of a dozen lessons learned is the need to address disaster management, preparedness, and mitigation.

21. A report by the United Nations Secretary-General’s Special Envoy for Tsunami Recovery, William J. Clinton at the end of his appointment in 2006, contains 10 propositions based on the lessons learned.¹⁷ The general message of the propositions revolves around the notion of “building back better.” Four specific propositions address multilateral agencies and the United Nations (UN). Those addressed to multilateral development banks (MDBs), and therefore relevant to ADB, are “recognize that families, and communities drive their own recovery”; “devote greater resources to strengthen government recovery institutions, especially at the local level”; “clarify their roles and relationships, especially in addressing the early stage of a recovery process”; and, “create conditions for entrepreneurs to flourish.”

22. Another assessment of the IOT conducted by the Asian Disaster Preparedness Center (ADPC). It compared the impact of the IOT in five countries (all ADB member countries). It also analyzed the existing framework of disaster financial risk in the countries and formulation of schemes for regional financial risk transfer schemes. The study recommended that existing country strategies for disaster risk management should give consideration to high impact and low probability hazards such as the IOT. The strategies would include addressing institutional weaknesses, improving capacities for disaster impact assessment, linking hazard and environmental management, and addressing social protection systems.¹⁸

23. Studies on specific tsunami-affected countries have also been reviewed such as the 2006 Asian Regional Forum on Aid Effectiveness: Implementation, Monitoring and Evaluation, when the Indonesian experience of identifying effective methods for establishing country leadership of post-disaster relief and reconstruction was highlighted. The Regional Forum was sponsored by the ADB, the Government of Japan, United Kingdom’s Department for International Development (DFID), and the World Bank. The progress of recovery projects are well documented by focal agencies and donors.¹⁹ The Asian Development Bank Institute (ADBI) undertook studies on Sri Lanka,²⁰ Indonesia,²¹ and Thailand.²² Green (2005) deals with lessons from post-tsunami reconstruction particularly relevant for the international community.²³

24. As part of RETA 6233, two background papers—a review of emergency preparedness in Asia and the Pacific, and lessons learned from ADB’s IOT assistance—were written by this

¹⁷ Clinton, William J. 2006. *Key Propositions for Building Back Better*. New York: United Nations.

¹⁸ Jovel, J. Roberto. 2005. *Regional Analysis of Socio-Economic Impacts of the December 2004 Earthquake and Indian Ocean Tsunami*. Bangkok: Asian Disaster Preparedness Center.

¹⁹ (i) Agency for the Reconstruction and Rehabilitation of Aceh-Nias (BRR). 2006. *Aceh and Nias: Two Years After the Tsunami*, BRR: Banda Aceh (advance release version); (ii) Aceh-Nias Rehabilitation and Reconstruction Agency (BRR). 2005. *Aceh and Nias One Year After the Tsunami: The Recovery Effort and Way Forward*. BRR, Banda Aceh; (iii) United Nations/ World Bank/ Asian Development Bank. 2006. *Tsunami: India – Two Years After*.

²⁰ Jayasuriya, S., P. Steele and D. Weerakoon. 2005. *Post-Tsunami Recovery: Issues and Challenges in Sri Lanka*, Tokyo: Asian Development Bank Institute.

²¹ Nazara, Suahasil and Budy P. Resosudarmo. 2007. *Aceh-Nias Reconstruction and Rehabilitation: Progress and Challenges at the End of 2006*. Tokyo: Asian Development Bank Institute.

²² Nidhiprabha, Bhanupong. 2007. *Adjustment and Recovery in Thailand – Two Years After the Tsunami*. Tokyo: Asian Development Bank Institute.

²³ Green, David J. 2005. Asian Tsunami Crisis: Lessons for the International Community. Presented at the ASEAN Roundtable 2005 on The Asian Tsunami: Implications on Regional Development and Security, Institute of Southeast Asian Studies, Singapore, 17-18 November.

consultant.²⁴ The first reviewed principles and good practices of preparedness for environmental, health and natural disaster emergencies. The second paper organized crosscutting themes into five major issue headings or areas of concern and corresponding action points: (i) preparedness for the criticality early recovery period; (ii) preparing for a multicountry and multiactor setting in an emergency situation; (iii) appreciation of disaster risk management capabilities of countries; (iv) appropriateness of assistance instrument and implementation approach; and (v) increased demand on aid effectiveness.

25. Reports by funders and country governments' coordinating agencies released a year or two after the tsunami, communications, PowerPoint presentations and papers from relevant meetings, have also been used as references. These studies all recognize weaknesses in each of the main actors, from weak governance of impacted countries to the lack of preparedness of international and local donors. Issues pointed out in these reports indicate that building consensus in terms of roles in case a similar event occurs again is an important step. In this context, the results of SWOT analysis in the context of the IOT experience can assist in identifying ADB's roles.

E. Structure of the Report

26. The report is organized as follows:

- (i) The Indian Ocean Tsunami as Regional-Level Disaster, which addresses the first component of the study (identifying similarities and differences between country-specific and regional-level disasters with respect to organizational demands) while providing context, and ADB's response (predominantly represented by the Asian Tsunami Fund);
- (ii) SWOTs, Issues and Options – which addresses the last three study components focusing on regional-level demands (assessment of ADB's operational capacity to meet demands, options for incorporating demands into ADB's operational manuals, and resource options to meet the demands) that are dealt with through SWOT analysis applied to ADB from the perspective of the disaster risk management cycle based on the interviews; and,
- (iii) Conclusion and Recommendations, which gives five main recommendations with specific actions elaborating each one.

II. THE INDIAN OCEAN TSUNAMI AS REGIONAL-LEVEL DISASTER

27. Part II consists of the following: the disaster context, ADB's response, and organizational demands of country-specific and regional-level disasters.

A. Context

28. On 26 December 2004, a strong earthquake struck 150 km off the west coast of Nanggroe Aceh Darussalam, Sumatra Island in the Indian Ocean perimeter. The earthquake, known as the Sumatra-Andaman earthquake in the scientific community, caused the tsunami,

²⁴ (i) ADB. 2007a. Background Paper # 2 – A Review of Emergency Preparedness in Asia and the Pacific, and (ii) ADB. 2007c. Background Paper # 3 – Lessons from ADB's Indian Ocean Tsunami Experience. Written for the Small Group Workshop on Preparing for Large-Scale Emergencies, 5-6 July 2007. ADB, Manila. Available: <http://www.adb.org>

now called the Indian Ocean Tsunami (hereafter referred to as IOT) or the Asian Tsunami. It was the largest earthquake since 1964 when an earthquake off Alaska triggered a Pacific-wide tsunami. The IOT's geographic coverage was extensive, affecting 14 countries stretching westward from Southeast to South Asia, and as far as Africa. The earthquake was originally recorded as 9.0 on the Richter scale, but has been upgraded to between 9.1 and 9.3.

29. The IOT has been referred to as a "celebrity disaster" due to the global attention it received from the media as well as citizens from many parts of the world. It resulted in unprecedented immediacy of response and magnitude of relief and recovery assistance. The IOT's geographic scope in itself was the most devastating in recent times. Nearly a quarter of a million died or went missing—many of them children and the elderly, and over half a million were injured. About five million were displaced and became homeless. Loss to property was close to \$10 billion, and other impact include loss of information (land titles, other official records), and environmental damage (destroyed coastlines and disturbed marine ecosystem).

30. **Impact.** A summary of the demographic and economic impact to five developing member countries (India, Indonesia, Maldives, Sri Lanka, and Thailand) is shown in Table 1. The economic damage and losses to the Maldives is about 80% of its gross domestic product (GDP), while that of Aceh is equivalent to almost the entire GDP of the province. In the Asia-Pacific region, states of emergency were declared in Indonesia, Maldives, Sri Lanka, and the province of Phuket in Thailand.

31. A huge humanitarian relief effort was mobilized by the governments of the affected countries, the UN agencies, intergovernmental organizations, donor governments and their local

Table 1. Demographic and Economic Impact of the Tsunami

	India	Indonesia	Maldives	Sri Lanka	Thailand
Demographic impact					
Population loss (incl. missing)	16,269	167,540	108	16,269	8,212
Economic impact					
Total damage and losses from tsunami, % of GDP	0.2	2	83.6	7.6	1.4
Damage and losses					
Damage, US\$ m	575	2,920	450	1,144	508
Losses, US \$m	649	1,531	153	310	1,690
Sectoral % of total damage					
Housing	33.6	47.9	20.9	36	4.3
Physical infrastructure	13.6	21.8	27.3	23.9	5.3
Social sectors	1.9	9.5	7.3	7.2	1.8
Productive sectors	46.1	12.1	28.4	31.8	88.6
Other	4.9	8.8	16	1.1	0

Note: Excerpt from Table 2.2, (Telford, John and John Consgrave. 2006. *Joint Evaluation of the International Response to the Indian Ocean Tsunami: Synthesis Report*. London: Tsunami Evaluation Coalition Tsunami Evaluation Coalition.) "This table should be interpreted with caution as it presents initial estimates of loss and damage. Estimates of GDP growth were later revised and the figures for projected losses were probably pessimistic (pp. 37-38)."

representatives, international and national nongovernmental organization (NGO) representatives. Within the first 3 months, much relief work had been successfully carried out, with no outbreaks of epidemics or cases of malnutrition.

32. Total financial response was plentiful from official and private sources. Pledges went as high as \$14 billion, of which \$8.5 billion came from governments and international financial institutions.²⁵ The TEC reported that funding commitments of over \$5,500 per affected person was available if shared equally among two million directly affected people.²⁶ The TEC Needs Assessment Report summarized the impact as “Generous funding not only exceeded the absorption capacity of an overstretched humanitarian industry, and deprived it of its customary excuse for built-in systemic shortcomings, but also led to the proliferation of new actors with insufficient experience (and therefore competence, as well as actors venturing into activities outside their normal area of expertise).”²⁷

33. ADB’s charter bars it from engaging in humanitarian relief work, on one hand. On the other hand, ADB’s DEAP emphasizes partnering with “specialized (relief) agencies.” Thus, ADB staff saw their role as complementary to humanitarian relief efforts by easing the transition from relief to development. For example, ADB provided funds to remove materials washed from the sea onto roads in Sri Lanka to resume access for relief operations. This and similar activities respond to critical needs in early recovery and facilitate a faster transition to normal development.

34. ADB undertook recovery-oriented action²⁸ (such as by improving road access through material removal mentioned above, and by carrying out special surveys for rapid preparation of emergency activities) upon completion of damage and needs assessments done jointly with other donors and country governments. ADB had since been collaborating with various partners towards restoring the socio-economic development in the five countries. Since its first disaster policy 20 years ago, ADB would be constantly challenged as the Asia-Pacific region is highly vulnerable to natural disasters.

1. How ADB Works: DEAP and Disaster-Related Activities

35. During the last 15 years, about 26 million people have been affected annually by disasters in Asia. Asia’s mortality rate from natural disasters is 5,400 deaths and physical losses amount to \$39.53 billion per year.²⁹ Between 2000 and 2005, people killed by natural disasters in Asia comprised 83.70% of the total, followed by Europe’s 10.55%, the Americas’ 3.54%, Africa’s 2.16% and the Pacific countries’ 0.05%. To put disaster-affected countries back on the track of socio-economic development, the ADB has had three disaster policies. The first, established in 1987, was assistance in the form of repair activities to return the Pacific Island

²⁵ While this figure is high, it was exceeded by official pledges in response to the 1998 Hurricane Mitch affecting Central America countries that amounted to \$9 billion (International Federation of Red Cross and Red Crescent Societies (IFRC). 2006. *World Disaster Report: Focus on Neglected Crises*. Geneva: IFRC. pp. 167-168).

²⁶ These are indicative figures that include funds for long-term reconstruction (Flint, Michael and Hugh Goyder. 2006. *Funding the Tsunami Response: A Synthesis of Findings*. London: Tsunami Evaluation Coalition. p. 23-24).

²⁷ De Goyet, Claude de Ville and Lezlie C. Morinieire. 2006. *The Role of Needs Assessment in the Tsunami Response*. London: Tsunami Evaluation Coalition. p. 11.

²⁸ According to UN/ISDR: Recovery encompasses “decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk. Recovery (rehabilitation and reconstruction) affords an opportunity to develop and apply disaster risk reduction measures.

²⁹ Data was derived from the Disaster Events or (EM-DAT) database compiled by the WHO Collaborating Centre for Research on the Epidemiology of Disasters (CRED), Belgium.

countries and Maldives to their pre-disaster status. The 1989 policy extended coverage to all its member countries, focusing on post-disaster assistance, particularly ‘rehabilitation projects’ to reestablish key infrastructure sector, stressing simple repair-related design.

36. The 2004 DEAP³⁰ shifts emphasis from response (post-disaster actions) to anticipation and planning for disasters and emergencies (pre-hazard mitigation and preparedness). The objectives of DEAP are to enhance ADB’s capacity and to improve effectiveness to assist impacted member countries. It also establishes an emergency assistance loan (EAL) as an instrument or modality which allows for quick processing of lending. The current disaster policy precedes the IOT by two months and thus, the policy had not been ready for full implementation when the IOT struck. For instance, an anchor position had been created but was not filled until April 2006. Others left unimplemented are the secondment program of specialized staff from other partner institutions and designating focal points in each regional department and resident mission.

B. ADB’s Involvement in the Indian Ocean Tsunami (IOT)

1. How and Why ADB Got Involved

37. Since the worst affected countries were ADB developing member countries, various offices of ADB received queries about its IOT-related activities and the possibility of partnering with international organizations like the World Health Organization and the World Food Program. Two days after the tsunami impact incumbent ADB President T. Chino announced ADB would be offering assistance. He affirmed this at the ASEAN Leaders Special Meeting held in Jakarta on 6 January 2005. An interdepartmental Tsunami Task Force headed by the Director of the Agricultural, Natural Resources and Social Sector Division (RSAN) of ADB’s RSDD was constituted of representatives from relevant departments and offices. The task force operated in order to facilitate the work of the concerned regional departments; it also ensured that ADB delivered a consistent message to the public. The regional departments drove the activities of the task force, which then shouldered “work that would otherwise distract the regional departments from their operation mandate” (see Table 2 for a chronology of ADB’s response).³¹

2. ADB’s Tsunami-Related Assistance; the Asian Tsunami Fund (ATF)

38. As of 30 June 2007, ADB’s total approved assistance (inclusive of special funds) and co-financing for IOT recovery was \$892.035 million, of which about 80% was grant. Much of the grant was from the \$600 million multidonor ATF, ADB’s first to provide parallel assistance for reconstruction in several countries.³² The ATF was established in two months after the tsunami occurred “to pool and deliver emergency grant financing promptly and effectively to affected developing member countries for TAs and investment projects to support reconstruction, rehabilitation, and associated development activities following the tsunami disaster (paragraph

³⁰ ADB. 2004. Disaster and Emergency Assistance Policy. Manila.

³¹ This table is based on ADB. 2005d. *From Disaster to Reconstruction: A Report on ADB’s Response to the Asian Tsunami* (14 December). Manila, and ADB’s tsunami website (Available: <http://www.adb.org>). Details of the first few months following the IOT can be found in: ADB. 2005a. *Asian Development Bank Assistance for Tsunami-Affected Developing Member Countries*. Manila. Dates referring to onset of recovery are taken from: De Goyet, Claude de Ville and Lezlie C. Morinieire. 2006. *The Role of Needs Assessment in the Tsunami Response*. London: Tsunami Evaluation Coalition.

³² The ATF is grant assistance at a regional scale. ADB enhances regional cooperation through regional technical assistance (RETA) wherein regional studies are prepared and conferences, seminars, workshops, and training courses for participants from several Member countries are conducted. In so doing, ADB promotes its role as a development resource center.

Table 2. ADB's Indian Ocean Tsunami Assistance: A Chronology

Date (days elapsed)	Event
26 Dec 2004 (0)	Earthquake and tsunami occur
28 Dec 2004 (2)	ADB President T. Chino announces ADB is prepared to help affected countries.
31 Dec 2004 (5)	ADB announces \$325 M in relief assistance
5 Jan 2005 (9)	ADB and Government of Indonesia (GoI) sign memorandum of understanding (MOU) on ADB assistance for tsunami-affected areas
6 Jan 2005 (10)	ADB President T. Chino attends Jakarta conference, increases available funds to \$675 M
7 Jan 2005 (11)	ADB specialists participate in joint needs assessment in Indonesia, Maldives and Sri Lanka ADB needs assessment team starts work to determine the costs of reconstruction in Maldives ADB President T. Chino visits stricken areas in Indonesia
11 Jan 2005 (15)	Japan's Finance Minister announces \$20 M boost to its trust funds at ADB to support tsunami assistance ADB needs assessment mission starts in Sri Lanka ADB, World Bank and Japan Bank for International Cooperation (JBIC) prepare for reconstruction as relief reaches most people. ADB project contract clears vital road in Sri Lanka ADB and the World Bank joint needs assessment mission visits Kokhufushi and Naalaafushi islands in Meemu atoll, Maldives ADB issues statement at United Nations Meeting on Humanitarian Assistance
13 Jan 2005 (17)	ADB releases an initial assessment of the impact of the earthquake and tsunami on south and southeast Asia
15 Jan 2005 (19)	ADB's President T. Chino visits tsunami-affected areas in Sri Lanka
18 Jan 2005 (22)	A director of ADB's Regional and Sustainable Development Division is designated point person for disaster-related matters.
19-20 Jan 2005 (23-24)	ADB joins needs assessment team in India
20 Jan 2005 (24)	Preliminary damage and loss assessment in Indonesia released
21 Jan 2005 (25)	ADB pledges \$800 million for Indonesia assistance
28 Jan 2005 (33)	ADB sets up \$600 million Asian tsunami trust fund
Early February	Maldives president announces emergency phase over and issues first draft of the National Reconstruction and Recovery Plan
2 Feb 2005 (36)	Preliminary damage and loss assessment in Sri Lanka is released
3 Feb 2005 (37)	ADB convenes a roundtable discussion to discuss the impact of the tsunami on insurance industry
8 Feb 2005 (42)	Joint needs assessment by World Bank, ADB and UN System in the Maldives is released
17 Feb 2005 (51)	ADB approves \$600 million Asian Tsunami Fund
28 Feb 2005 (62)	ADB approves first emergency credit to Sri Lanka
2 March 2005 (66)	Sri Lanka government announces its three-year reconstruction master plan, Rebuilding Sri Lanka: Action Plan
8 March 2005 (72)	ADB President visits tsunami-affected areas in Indonesia
18 March 2005 (82)	High-Level Coordination Meeting on Rehabilitation and Reconstruction Assistance to Tsunami-Affected Countries
28 March 2005 (92)	A destructive earthquake of M8.7 occurs north of Nias island in the western part of Sumatra
7 April 2005 (71)	Expert meeting on corruption prevention in tsunami relief
11 April 2005 (75)	Jakarta expert meeting identifies measures to prevent corruption in tsunami assistance
14 April 2005 (79)	ADB approves \$300 million grant for Indonesia, \$200 million assistance package in India and two projects in the Maldives
28 April 2005 (93)	Indonesian government requests organizations wishing to continue activities in Aceh to submit their planned recovery plans and funding signaling onset of recovery
12 May 2005	World Bank, ADB sign agreements with India to support emergency reconstruction of tsunami-hit

(106)	areas
28 May 2005 (122)	Resident senior advisor is fielded to Joint ADB-World Bank Extended Mission in the Maldives
July 2005	Extended Mission in Tamil Nadu and Kerala, and Extended Mission in Sumatra become operational
7 July 2005 (191)	ADB approves \$1.7 million grant for Thailand's tsunami-affected Andaman Region
15 July 2005 (199)	Luxembourg and Australia make first bilateral contributions totaling \$5 million to Asian Tsunami Fund
5 Aug 2005 (219)	ADB supports coastal zone management in tsunami-affected areas of Thailand
18 Aug 2005 (232)	ADB to help boost environmental management of the Maldives in tsunami aftermath
9 Sep 2005 (253)	ADB to provide \$6 million in grants for tsunami-affected areas in Indonesia
21 Sep 2005 (265)	ADB's post-tsunami work to continue support for Maldives atoll development
Oct 2005	First Status Report on the Asian Tsunami Fund is released
17 Oct 2005 (291)	ADB grants to help tsunami-affected households in Sri Lanka afford utility connections
8 Dec 2005 (342)	ADB grant to help restore microenterprises in tsunami hit Aceh and Nias
20 Jan 2006 (384)	Grant to help boost health and nutrition in Aceh
24 May 2006 (508)	ADB Vice-President participates in government briefing on tsunami recovery in the Maldives
14 July 2006 (558)	\$5 million grant is approved for livelihood of tsunami-affected poor in India
26 July 2006 (570)	ADB approves funding support to the United Nations Development Programme towards further development of the development assistance databases (DAD)
Aug 2006	Second Status Report on the Asian Tsunami Fund released
4 Sep 2006 (608)	ADB Director General of South Asia Department reviews tsunami assistance to India to tie up with three-year Country Partnership Strategy
8 Sep 2006 (612)	Project to restore Sri Lankan tsunami-hit road is inaugurated
10 Jan 2007 (738)	ADB, United Nations Development Programme and World Bank issues joint progress report on tsunami reconstruction in India
Mar 2007	Third Status Report on the Asian Tsunami Fund is released
24 May 2007 (868)	ADB and Muslim Aid work together to rebuild houses in Aceh
5-6 July 2007 (909)	ADB hosts Small Group Workshop on Preparing for Large Scale Emergencies

Note: One month is equivalent to 30 days. Sources: (i) ADB. 2005d. *From Disaster to Reconstruction: A Report on ADB's Response to the Asian Tsunami* (14 December). Manila. (ii) ADB's tsunami website (Available: <http://www.adb.org>). (iii) ADB. 2005a. *Asian Development Bank Assistance for Tsunami-Affected Developing Member Countries*. Manila. (iv) De Goyet, Claude de Ville and Lezlie C. Morinieire. 2006. *The Role of Needs Assessment in the Tsunami Response*. London: Tsunami Evaluation Coalition (for dates referring to onset of recovery).

4).³³ Cofinancing came from the European Community and the governments of Canada, France, and the Netherlands. The special funds were (i) the Japan Fund for Poverty Reduction from Japan, (ii) the Poverty Reduction Cooperation Fund from U.K.'s Department of International Development, and (iii) the Poverty and Environment Fund from Norway and Sweden. Although the ATF was conceived to cover a region, each project focused on a specific country.³⁴

³³ ADB. 2005b. *Asian Tsunami Fund*. Manila.

³⁴ Government of Sweden. Undated. *Strategy for Swedish Development Cooperation with Central America and the Caribbean in 2001-2005*. Available: <http://www.sweden.gov.se>. A single event similar to the IOT that triggered discussion of a regional strategy is Hurricane Mitch while making a record peak of official development assistance (ODA) transfer in 1999-2001. Hurricane Mitch which hit Central America in October 1998, affected the orientation

39. The initial amount of \$600 million in grants were drawn from ADB's Ordinary Capital Resources.³⁵ From ongoing projects, \$175 million were redirected to IOT assistance. The rationale for providing grants (vs. loans) was so as not to increase debts in relation to gross domestic product and constrain their fiduciary position. Also, without such grants, loans could distort current government priorities and potentially exacerbate social and infrastructure programs.

40. After the IOT, large-scale disasters requiring ADB assistance happened one after another. The amount of \$40 million was later transferred and allocated for the Pakistan Earthquake Fund, while \$10 million made from interest earnings under the ATF was allocated for Indonesian projects in Yogyakarta and the Central Provinces, areas affected by an earthquake in Java, Indonesia in May 2006. The said transfers are "strictly not from the ATF itself" but from other cumulative sources such as interest and surplus contributions.³⁶ The ATF had already been allocated to IOT projects in the five countries. While the transfers transpired, implementation of ATF projects proceeded at a slow pace, as documented by the status reports.³⁷

41. The pace of disbursement of ATF has been slower than expected, caused mainly by delays in start-up activities. In Aceh and Nias, the extent and area of damage is complicated further by reduced local administrative capacity. Status reports of the ATF point to several contributing factors: the need for systematic and systemic coordination with a diverse group of helpers; political instability; security issues; prioritization of other sectors not funded by ADB; lack of suitable contractors; and scarcity of material.³⁸ The latest report expects more contracts to be awarded in 2007 and for full disbursement by June 2008. The causes of slow disbursement mentioned in the report suggest the range of issues that have arisen from the assistance provided and indicate some of the organizational demands on ADB, which are discussed in the next section.

42. The ATF is designed to run for five years or until it is expended, whichever comes first. As ATF projects are implemented, demands on the ADB are recognized, including those additional organizational demands related to rehabilitation and reconstruction requirements. It is recognized that some requirements partly result from the nature of grant funding, scale of the IOT, actions taken in the early post-disaster period, and scope of assistance. As projects are executed, there are on-going lessons (Action points are suggested also in Sections IIIB and C.) which are identified to constitute among ADB's knowledge resources. As a regional fund, the ATF supports projects in five countries that belong to two ADB regional departments.

of development and cooperation in the Central America and Caribbean region, "in terms of both scope and focus." Nevertheless, the regional strategy "must therefore be regarded as a framework within which each operative interpretation at country level can be the object of negotiations with the country concerned, as the next step in the process (p. 3)."

³⁵ ADB offers two kinds of loans—from the ordinary capital resources (OCR) and from the Asian Development Fund (ADF). OCR loans are provided to developing member countries with somewhat higher levels of economic development, and ADF loans on highly concessional terms are provided to developing member countries with low average per capita incomes and limited debt-repayment capacity.

³⁶ Telephone interview of ADB headquarters staff, 12 October 2007.

³⁷ As part of the administrative arrangements, ADB provides the contributors periodic reports on the use of the Fund and the activities using the Fund. Reports were issued in October 2005, December 2005, August 2006, and March 2007.

³⁸ ADB. 2006e. *Status Report on the Asian Tsunami Fund*. Manila.

C. Organizational Demands: Regional-Level and Country-Specific Disasters

43. ADB has provided assistance to specific single countries prone to particular types of natural disasters. While national and local governments, institutions, organizations and communities countries must take basic preparedness measures to cope with country-specific emergencies, a scenario involving regional-level disaster impact may be considered by some countries based on hazard vulnerability and therefore requires precautionary measures too. From ADB's perspective, issues that have come out of the IOT experience reveal relevant lessons for country-level interventions as well as regional-level assistance. An important issue for ADB is how to package the right mix of assistance modalities. With different donors and other actors also providing help, it is essential to take stock of the comparative advantage of each in order to conduct assistance activities that optimize organizational resources. ADB's dialogue with other assistance providers can be facilitated by an appropriate mechanism at the regional level.

44. In the Asia-Pacific region, there is no sustained mechanism³⁹ that encourages systematic analysis of capacities and gaps to address needs in regional cooperation concerning disaster risk management, regardless of whether a disaster is country specific or regional level. International instruments in the form of agreements among regional and international organizations may prove useful to structure regional cooperation. In the following paragraphs, an attempt is made to appreciate similarities and differences between country-level and regional-level disasters, as they influence demand on ADB's existing organization capacity.

45. Organizational demands caused by a regional-level disaster based on the IOT experience can be viewed in terms of four aspects, which are discussed below:

- (i) the disaster relief phase which normally extends until the early recovery phase (i.e., the time component),
- (ii) the assistance modality (i.e., the funding component),
- (iii) the type of regional assistance, and
- (iv) the engagement of regional departments.

1. Time Component: Disaster Relief and Early Recovery Phase⁴⁰

46. According to the current policy, ADB may render assistance early. This is gleaned from a description of the period following a hazard event—the emergency response or transition phase—in the DEAP.

“In the wake of the disaster, immediate assistance must address rehabilitating high-priority physical and social infrastructure, revitalizing basic services, particularly education and health care; and jump-starting economic productivity. After the emergency

³⁹ Past agreements among member countries of regional associations like the Association of Southeast Asian Nations (ASEAN) and the South Asia Association of Regional Cooperation (SAARC) tend to be activated only after a disaster. There are a few other bilateral and multilateral initiatives to cooperate in emergency preparedness, however their sustainability remains to be seen. (ADB. 2007a. A Review of Emergency Preparedness in Asia and the Pacific. Background Paper # 2 for the Small Group Workshop on Preparing for Large-Scale Emergencies, 5–6 July 2007, ADB. Manila. pp. 12-14.) The Consolidated Appeals Process (CAP) is an example of a working mechanism in the humanitarian sector (see footnote 51).

⁴⁰ Disaster relief and early recovery phases correspond to the ABD's emergency response or transition phase.

crisis period, however, efforts to shift to transitional social, institutional, and capacity requirement. These include social and economic integration of displaced people, demobilization and reintegration of former combatants, and restoration of basic administrative and governance services. During the transition phase, emphasis will be on partnering with specialized (relief) agencies” (OM Section D7/BP, paragraphs 12 and 13).

47. The above paragraph indicates that coverage of ADB’s disaster and emergency assistance is comprehensive, as the policy states. It implies that ADB needs has a whole range of preparedness measures, such as trained staff and support resources, in place. However, the policy has not been fully implemented and many of its features were not there when the IOT happened, as stated in para. 36. The period following the earthquake and tsunami event from relief and onwards to recovery magnifies this need to prepare, as the IOT experience shows.

48. ADB’s involvement with the IOT began from the relief phase. ADB’s immediate response to the multicountry disaster could have been fuelled by speedy reactions from leading donors; this could be further substantiated by the early conduct of damage and needs assessment and the widely-felt urgency which the “celebrity disaster” generated. There was a massive response worldwide for reasons that P. Walker described well.⁴¹ Thus, to paraphrase the reasons: (i) the tsunami provided the chance for a great media event; (ii) timing coincided with the Christmas holiday season, with many vacationers spending their holidays in affected areas that were popular tourist destinations; (iii) victims among vacationers who were personally known to the public, drew strong emotional reaction; (iv) human compassion that sprung naturally was devoid of moral dilemmas attributed to politics and violence; and (v) the Internet reaches far and wide. Another regional-level disaster could generate a similar response from the wide variety of ‘stakeholders.’ one might attribute to the role of media and Internet [reasons (i) and (v)] and human compassion [reason (iv)]. In one sense, the IOT could have set a trend in terms of how certain stakeholders could be influenced in case a regional-level disaster occurs. The urgency generated outside ADB thus created difficulties in the early emergency response phase as further explained below. At this time, interviews indicated that although ADB’s response was quick, there is room for improvement in the level of preparedness particularly in areas of staff capacity, funding assistance, strategic use of the RETA, and working arrangement/procedures

49. The demand on staff time was felt most acutely during this period until the early part of the recovery phase (or early recovery phase). Since five member countries were among the worst affected, the IOT gave rise to an extraordinary situation, disrupting work schedules of staff in two Regional Departments at the Headquarters and four resident missions,⁴² and requiring additional tasks never undertaken previously by the staff. During this period, several crucial decisions needed to be made based on the best available information that could be gathered. Damage and needs assessment that were undertaken less than a month after the tsunami was critical in determining the funding needed, and its allocation.

50. Conducting damage and needs assessment is an important step towards setting up a recovery program. In the case of the IOT, the assessment was led by the country government, with donors such as ADB and the World Bank (WB) joining the assessment team at a time when relief operations were ongoing (See Figure 2 for international financial institutions included among the international assistance agencies and their main activities. Activities undertaken

⁴¹ Walker, Peter. 2005. *Opportunities for Corruption in a Celebrity Disaster*, In *ADB, Curbing Corruption in Tsunami Relief Operations*. Manila. pp. 90-91.

⁴² Resident missions exist only in India, Indonesia, Sri Lanka, and Thailand.

during the different disaster phases of the IOT are discussed further in Part III). A prerequisite of early intervention is to keep communicating with many actors it is a period to map out activities.

Figure 2. Relevant Resource Organizations to Recovery Programs

Purpose/activity	International financial institutions	International humanitarian assistance agencies	Disaster management authorities	Government departments	Planning authorities	Statistical, information and media agencies	Local government	Nongovernmental organizations	Private contractors	Program specialists	Community groups	Media and information agencies	Other volunteers
Carry out damage, loss and needs assessment													
Provide data for, and assessment of recovery programs													
Decide on types and numbers of recovery programs and relevant priorities													
Direct and monitor recovery programs													
Implement recovery programs													
Provide support for implementation of recovery programs													

It alerted ADB for the need to have procedures in place and standing agreements with partners ready in the event of a similar disaster.

51. **Joint assessment.** Barely two weeks after the tsunami occurred, ADB participated in a joint damage and needs assessment in the Maldives. Similar joint assessments were begun in Indonesia, Sri Lanka and India within a span of two weeks. The assessment report became the basis of a recovery program and was therefore especially important. The remarkably early conduct of assessments by the international financial institutions was unprecedented. If this was to be the benchmark or the beginning of a trend. ADB staff members tasked to carry out post-disaster impact duties need to be trained in using accepted assessment tools. Assessment results indicated the scale of intervention and resource allocation required to bring about recovery in the affected areas.

2. The Funding Component

52. The funding component is directly related to variables which are likely to affect the amount of funding and its distribution. The variables include (i) damage caused by the disaster, (ii) risk, (iii) vulnerability, (iv) level of preparedness, and (iv) socio-economic status. Location or place has a bearing on physical vulnerability. Certain regions/countries are at higher risk from certain hazards by virtue of their location, demographics, and socio-economic conditions. Areas with the most damage are more likely to be allocated more funds. Political factors including how

disaster preparedness fit into the agenda of political leaders also need to be considered; these are reflected in the level of preparedness which in turn may depend on government funding for preparedness.

53. Largely ill prepared, the five member countries required external assistance. The IOT clearly overwhelmed their response capacity. ADB made its commitment to assist in the recovery process through the ATF. Less than a year after the ATF was put up, doubt was expressed that the ATF “may not be the most appropriate for future assistance (p. 16).”⁴³ A number of ADB staff members echoed the same doubt even after almost 2 years since the ATF was established. Among the reasons given for their reservations regarding the regional fund were the appropriateness of grants to Group B2 countries;⁴⁴ the large amount of the grant; and the limitation presented by use dedicated to a single disaster event.⁴⁵ Inevitably, the question that needed to be addressed was “What if another major disaster happens?” Actually, ADB assistance in the aftermath of the South Asia earthquake which affected Pakistan and northern India on 8 October 2005 followed a similar pattern of putting up a trust fund. According to the thematic study paper for the 2006 Regional Forum on Aid Effectiveness, experiences in Indonesia on one hand, and Pakistan on the other indicated that results of consultation process with impacted country government in regard to pooled funding through a multi-donor trust fund could vary from case to case.⁴⁶ The same study reported that the “MDF in Indonesia contributed to more effective assistance,” While this type of funding has merits, which institution leads the trust fund significantly depends on the dynamics among the stakeholders and the result of process.

54. Looking for financial resources immediately after the IOT disaster struck, ADB regional department staff at the headquarters reviewed ongoing loans that could be rescheduled and looked into the possibility of using loan savings. For example, the reprogramming of 11–12 loans was considered in the case of Indonesia. A memorandum of understanding had already been signed between ADB and the Government of Indonesia two weeks after the IOT struck. Grants became available two months later. The geographical coverage of some existing loan projects was extended to the tsunami-affected areas, but since the grants were already available, the loans were deemed unnecessary for the purpose. The reprogrammed amount decreased from \$120 m to about \$50 m.

55. ADB appears to be drawn to funding relief-related activities after the Hyogo Framework of Action. However, staff members consider ADB’s strengths to lie in rehabilitation and reconstruction, not in relief, and in infrastructure sectors like roads and transport, water and

⁴³ ADB. 2005d. *From Disaster to Reconstruction: A Report on ADB’s Response to the Asian Tsunami*. Manila, 14 December.

⁴⁴ According to OM Section A1/OP (issued on 28 March 2006), Group B2 are eligible to obtain loans from the ordinary capital resources (OCR) with limited amounts of Asian Development Fund. Indonesia and India are currently Group B2 countries. Group B2 countries have limited debt repayment capacity, and are not classified as least developed, and have per capita GNP above the cutoff (i.e., \$927 in 1997 prices as fixed by the International Development Agency).

⁴⁵ On 8 October 2005, the South Asia earthquake of magnitude 7.8 affected Pakistan and northern India. In Pakistan, 80,000 persons were killed. Just 10 months after the IOT, the ADB established the Pakistan Earthquake Fund with an initial contribution of \$80 million in grants for post-disaster rehabilitation. If more disaster of similar magnitude occur, the negative implications on bank operation can be great, according to a few who were interviewed.

⁴⁶ Anonymous, 2006. “What Methods Have Proved Most Effective for Establishing Country Leadership of Relief and Reconstruction Following Natural Disasters?” (Thematic Study no. 4). 2006 Asian Regional Forum on Aid Effectiveness: Implementation, Monitoring and Evaluation, 18-20 October 2006. ADB, Manila. Available: <http://www.adb.org/Documents/Events/2006/Aid-Effectiveness/thematic-papers/ts4.pdf>.

sanitation. Should there be any proposal for ADB to be involved in relief, it is perhaps best to consult experienced staff and include practitioners in any post-disaster activity. In this connection, paragraphs 32(g) and (h) of the Hyogo Framework of Action enjoins international organizations to (i) provide relief assistance to countries; and (ii) strengthen the international mechanisms with a view of supporting countries in the transition phase towards sustainable recovery and risk reduction. Humanitarian sector organizations typically get involved in certain types of regional and country assistance in response to a flash appeal. ADB may want to consider a role in augmenting aid provided by other donors. Providing basic resources needed after a disaster and response assistance that run in parallel with rehabilitation and recovery activities may be considered. This includes site clearance, purchase of water purification and sanitation systems, bulk purchase of aviation gas, and purchase of equipment necessary for the successful operation of some external agencies. ADB can further work towards knowledge development and regional cooperation towards improving ex ante or pre-disaster measures.

56. Apart from loans for investment projects and grants for technical assistance, ADB can help towards better understanding of risk management measures such as risk transfer mechanisms through insurance,⁴⁷ and provide impetus to regional cooperation towards investment in infrastructure for disaster prevention and preparedness.⁴⁸

3. Regional Technical Assistance

57. ADB deals with the IOT's regional perspective in two regional technical assistance projects: (i) RETA 6233 – High Level Coordination Meeting on Rehabilitation and Reconstruction to Tsunami-Affected Countries (approved 30 June 2005), and (ii) RETA 6331 – Support for Strengthening of the Tsunami Development Assistance Database (DAD) (approved 28 July 2006). As an outcome of the High-Level Coordination Meeting held in Manila on 18 March 2005, UNDP has cooperated with ADB to develop a proposal for common systems that will aggregate existing ones from national systems into a regional summary matrix. The initial year was funded by the United Nations System; after a year of operation, the countries requested additional support from ADB to further develop the web-based DAD⁴⁹ under RETA 6331. DAD is an 'Aid and Management Coordination System' to incorporate accountability and transparency in donor contributions to post-disaster reconstruction processes. UNDP implements DAD with an \$800,000 funding as a form of regional technical assistance to the four ADB-assisted countries (Indonesia, Maldives, Sri Lanka, and Thailand) that participates.

58. It is observed that regional-level demands diminish as country-level projects are implemented. The whole set of tsunami-related projects therefore only remains 'regional' in the sense that the Asian Tsunami Fund has been set aside for five tsunami-affected DMCs. The DAD tracking mechanism, in a sense, 'ties together' tsunami-related projects in the four participating countries under one RETA. As the next paragraph indicates, issues in the said project have become more and more country-specific.

⁴⁷ ADB approved a regional technical assistance project called Catastrophe Risk Insurance Mechanisms (RETA 6284) on 9 December 2005.

⁴⁸ United Nations/Economic and Social Commission for Asian and the Pacific (ESCAP). 2006. *Enhancing Regional Cooperation in Infrastructure Development Including that Related to Disaster Management*. Bangkok: United Nations (pp. 180-181).

⁴⁹ The Donor Assistance Database (DAD) which was developed by Synergy International Systems, has been implemented in 12 countries in partnership with the United Nations Development Programme (UNDP). The countries are Armenia, Georgia, Guatemala, Kazakhstan, Kyrgyz Republic, Macedonia, Russian Federation, Sierra Leone, Turkmenistan, Ukraine, and Uzbekistan.

59. According to this consultant's report in November 2006, over 2,100 projects have been entered into the three DADs in the Maldives, Sri Lanka, and Thailand and the Recovery Aceh-Nias Database (RAN) in Indonesia. The total volume of assistance tracked was \$6 billion. Actions to adapt the database to integrate budget and non-tsunami assistance are being done in Indonesia and the Maldives. The burden of providing data is felt strongly by donors and project implementers who follow the data and update requirements on a voluntary basis. The major challenges to the present systems are quality control of data, user orientation and capacity development (training). The institutional/organizational issue cannot be ignored as well. For example, Sri Lanka's DAD has been maintained by the donor coordination unit of the Reconstruction and Development Agency (RADA) which was set up under the Presidential Secretariat. RADA has been brought under the Ministry of Nation Building, and then finally closed, although a small project unit is maintained under the same ministry. The unit that has maintained DAD has been moved to the Ministry of Plan Implementation. Sri Lanka's DAD will be integrated into this ministry's Project Management Database system.⁵⁰ Here, it is noted that the maintenance of DAD is largely a country-specific issue. However, ADB and country partners can learn lessons by exchanging experiences among the participating countries.

60. An opportunity for cross-country learning came from another activity under RETA 6233 - the Small Group Workshop on Preparing for Large-Scale Emergencies held on 5–6 July 2007. Updates on the state of emergency preparedness in six countries—Bangladesh, India, Indonesia, People's Republic of China, the Philippines, and Viet Nam—were contributed. International perspectives from the ADPC, International Federation of Red Cross and Red Crescent Societies (IFRC), Risk Management Solutions India (RMSI), United Nations Development Programme (UNDP), United Nations Office for the Coordination of Humanitarian Affairs (UN/OCHA) provided important insights into regional partnerships that can be explored to prepare for regional-level disasters. The findings and recommendations from the workshop, (available in ADB's website) complement this report. While the country coverage extended beyond the IOT-impacted countries, the workshop was a preliminary undertaking that increased the level of understanding about national systems and partnership mechanisms to prepare better for multicountry disasters. The IOT was a multicountry disaster that provided a rare occasion for two regional departments at the ADB to deal with one disaster.

4. Regional Departments

61. Parallel assistance is being done in five countries which belong to two different regional departments. Two ADB regional departments—the South Asia Regional Department for India, Sri Lanka and the Maldives, on one hand, and the Southeast Asia Regional Department for Indonesia and Thailand, on the other—are involved. As the next part will show, the regional departments play a significant role immediately after ADB gets involved. Quick response requires ADB staff members from regional departments to immediately become part of a team.

62. The DEAP provides that each of the regional departments designate "a focal point for emergency operations" as part of an emergency network coordinated by the anchor of emergency assistance. Should a regional-level disaster affect two or more countries belonging to the same regional department, the focal points will help coordinate and assist the regional departments and resident missions to prioritize and develop relevant action plans. The IOT has necessitated that a link be established between two regional departments through the Tsunami Task Force but focal points had not been appointed at the time. Future similar disasters will then require focal points of the relevant regional departments to be actively engaged in the task force

⁵⁰ Perera, Rachel, 2007. Personal e-mail communication (13 July).

or in whatever ADB's internal working arrangement may be. At the time of the study, the working arrangement has not been worked out. This matter is one area needing improvement, as interviews with ADB staff reveal.

63. In the next part, the results of interviews of ADB staff about their reflections on the ADB response to the IOT are reported and analyzed to help assess ADB's operational capacity in meeting regional-level demands. The reflections are interspersed with corroborations from documentation available in print and on the Web, and also with interviews with a few non-ADB staff. From here, we develop options that ADB might consider to meet demands of regional-level disasters.

III. SWOTS, ISSUES, AND OPTIONS

64. Part III consists of the following:

- (i) Results of SWOT analysis – to derive actions from SWOT analysis.
- (ii) ADB roles in the IOT disaster risk management process – to review roles played by the headquarters (HQ) and resident mission, and issues during relief, early recovery, rehabilitation, and reconstruction.
- (iii) Developing options – to explore funding options and regional cooperation.
- (iv) Mainstreaming disaster risk reduction – to explore its use as criterion for evaluating ADB activities by understanding barriers to mainstreaming, and to confirm SWOT analysis results.

A. Results of SWOT Analysis

65. The strengths (S), weaknesses (W), threats (T) and opportunities (O) of ADB are listed in Table 3. Then actions by “matching” S and W with T and O are identified. The actions relevant to each phase (relief, early recovery, rehabilitation, and reconstruction) are enumerated in Appendix 4. In Appendix 4, the actions per phase are further classified under four headings: organizational system for preparedness, knowledge building, strategic planning and management, and assistance modality. This classification is based on the grouping of similar action ideas for dealing with organizational demands.

B. ADB's Roles in the IOT Disaster Risk Management Process

66. ADB has played different roles during the relief, early recovery, rehabilitation, and reconstruction phases and preparing for them, however while this has been institutionally acknowledged through the Disaster and Emergency Assistance Policy, a systematic implementation mechanism about how ADB will contribute to DRM/DRR in DMCs has not been devised. In implementing the projects, ADB also potentially contributes to preventing future disasters and preparing for them. In this section, we deal with (i) ADB's response at each phase, (ii) relevant issues to ADB, and (iii) in light of these experiences, what still needs to be done. This section deals with reflections on actions taken by ADB after the IOT. Key observations, perceived lessons and desirable actions (called 'action points') by the respondents are highlighted.

Table 3. SWOT Analysis: ADB's Strengths, Weaknesses, Opportunities, and Threats vis-à-vis the Indian Ocean Tsunami Response

<p style="text-align: center;"><i>Strengths</i></p> <ul style="list-style-type: none"> • ADB has a resident mission (RM) in each of the affected countries; the RM operates closer to the ground. • Experienced former ADB staff and consultants who are in the affected countries can provide advice. • Lessons learned from projects are recorded in reports. • ADB has done several rehabilitation and reconstruction projects to date. • ADB has expertise in some infrastructure sectors like transport and power (engineering knowledge, sectoral work) • Project management is the forte of regional department staff. • ADB applies flexibility in the design and implementation of projects. • ADB is committed to results-based management, a philosophy that helps aid operational effectiveness in development organizations. • Regional department staff members have developed a working relationship with certain line agencies of the DMCs to implement ADB projects. 	<p style="text-align: center;"><i>Weaknesses</i></p> <ul style="list-style-type: none"> • ADB staff members are not sure of their roles in the immediate disaster response and relief phase. • "Leave it to the pros" acknowledges the work of humanitarian organizations but also shows an attitude which may show an unwillingness to understand what happens during the relief and early recovery phases. • ADB does not have the right assistance modality. • Disaster-related projects take more time than intended (project delays). • ADB RM staff members are over-tasked. • The level of preparation of ADB RM staff to handle disaster/emergency assistance is low.
<p style="text-align: center;"><i>Opportunities</i></p> <ul style="list-style-type: none"> • "ADB can do more to prepare" indicates a positive disposition to improve. • Other donors are rendering assistance; this opens opportunities for partnerships. • "Recruit experts experienced in the countries" acknowledges the need to get expert help. • ADB has participated in joint damage and needs assessment together with other donors and country government. • A mix of assistance instruments can be utilized. • Resident missions can collect local information and collaborate to get it. • There are other donors which render assistance to complement ADB's response. • UN Special Envoy (former US president) Bill Clinton's "Build back better" message increases prospects of making communities more resilient and increases stakeholders' awareness to mitigate risks. • ADB has partnerships (e.g., ProVention Consortium) that can be tapped for more effective and sustainable interventions. • At the global level, the Hyogo Framework of Action (HFA), International Panel for Climate Change, and other mechanisms provide key guideposts from which commitments from country governments can be sought. 	<p style="text-align: center;"><i>Threats</i></p> <ul style="list-style-type: none"> • "ADB is not a relief organization." (The statement could indicate the risk of precluding actions that promote a developmental transition from relief to recovery.) • Restricted choice of modalities (Putting an appropriate assistance instrument together runs the risk of being restricted by the currently available instruments.) • Tendency for project implementation period to be short and thus, mitigating aspects are overlooked or disregarded. • Difficulties in release of funds by Headquarters due to lack of understanding of the field-level situation. • New organizational set-ups may upset project management. • Gaps in practice and implementation in countries and the international community.

Note: ProVention Consortium which ADB joined in 2000 functions as a network to share knowledge, connect and leverage resources aimed at reducing disaster risk in developing countries. ProVention Consortium, which was created by the World Bank as a dedicated trust fund to address increasing disaster losses, counts both development and humanitarian organizations among its members.

1. Relief Phase

67. **Getting ready.** Staff interviews revealed that the first three days after the IOT were critical and chaotic. There was no procedure to guide ADB staff on steps to take after information reached the ADB. The immediate steps taken afterwards very well depended on who was around to answer the call. The Resident Mission did not have the expertise and training needed. A committee consisting of three to five staff members at Headquarters, comprised of members from the Department of External Relations (DER), the security and headed by a vice-president was set up. Within the first ten days, incumbent ADB president T. Chino made at least three announcements regarding its commitment to provide assistance to impacted countries. Incorrectly referred to as “relief assistance” in the press release, the amount of increased from the initial amount of \$325 million to \$675 million. Within one month after the IOT, the interdepartmental Tsunami Task Force met for the first time. There was a need for constant contact between Headquarters, resident missions, and governments, but no protocols for this existed.

Action point: The Headquarters needs to prepare a protocol or procedure for responding to regional-level disasters; a staff member should be delegated to take charge of disaster-related matters in the Departments. Likewise, the resident mission also needs a protocol including organizing assessment teams. Also, the country director needs to be trained to deal with disasters as ADB’s link with the country government.

68. **Immediate post-disaster communication.** ADB’s constitution did not allow it to pursue humanitarian aid. Thus, ADB could not offer relief assistance per se. However, because it may get involved in later assistance, being part of the information loop should be considered an imperative. Through dialogue with the UNDP, the Red Cross and other key players, the Resident Mission in Thailand contributed to recovery framework and later participated in a consultative forum. The Resident Mission in Sri Lanka participated actively in a steering committee comprising of donors that met weekly where problems were discussed and bottlenecks resolved quickly.

Action point: ADB needs to be part of the information and communication process at this early stage so that it is able to respond effectively and responsibly. It is necessary to find out how to improve its procedures in the early period after a disaster and after a flash appeal is released.

69. **Working with the humanitarian sector.** ADB staff members were unfamiliar with working with the staff of humanitarian agencies such as the International Federation of Red Cross and Red Crescent Societies (IFRC), the United Nations Office for Coordination of Humanitarian Affairs (UN/OCHA), and others that undertook immediate post-disaster activities after the release of the flash appeal.⁵¹ Some acknowledged the military as another important player in the IOT relief and early recovery was as it provided security and logistic support.

⁵¹ A flash appeal is developed by humanitarian partners and issued whenever crises break or natural disasters occur to address emergencies in a timely manner. A flash appeal is therefore “a tool for structuring a coordinated humanitarian response for the first three to six months of an emergency.” The UN Humanitarian Coordinator triggers it in consultation with all stakeholders. Issued within one week of an emergency, a flash appeal provides a concise overview of urgent life saving needs, and may include recovery projects that can be implemented within the timeframe of the Appeal.” When several agencies appeal together for funds for the same crisis, the appeal is called a “consolidated appeal.” The consolidated appeal (CA) is “a snapshot of a situation and identifies who does what and where.” CA is part of the coordination mechanism called coordinated appeal process (CAP) “to foster closer cooperation between host governments, donors, aid agencies, and in particular, between NGOs, the Red

Action point: *It is best to know what ADB and the other MDBs are supposed to do during the relief stage. Setting up a working group to address the regional problem is necessary. Talks towards standing agreements with humanitarian agencies in anticipation of large-scale disasters should be undertaken. Opportunities for partnerships in assistance may be explored.*

70. **Communication with country government.** With the focal point at ADB headquarters, videoconferencing was a very useful communication tool with designated country government representatives. During the one-hour videoconference, ideas were exchanged and agreement on the respective task of each participant was reached.

Action point: *The intention to organize a videoconference should be announced to government representatives ahead of time so they have the opportunity to discuss issues they need to bring up with their seniors.*

71. **High-level field visits.** Handling field visits of the ADB president to the disaster sites was a huge logistic and coordination job for the resident mission and the local counterpart.

Action point: *The decision for such visits requires judiciousness in terms of timing and if consultations indicate so, such visits should be postponed to a later date.*

72. **Official announcements from ADB.** The DER was a member of the small committee formed immediately after news of the IOT came out. It was also part of the Tsunami Task Force established later. No concrete suggestions were given on how to handle media enquiries but its importance cannot be overemphasized. It was suggested that the RMs should have an external relations system that is capable of providing a general hazard profile (or hazardscape) of the country and updates as needed. Additionally, in the later phases, transparency was demanded regarding releases of information. (A good example of transparency in disaster information is Reuter International's AlertNet (<http://www.alertnet.org/>) which gives updates on emergencies all over the world.)

Action point: *As the purveyor of information from ADB to the rest of the world, the DER relies on accurate information which it receives since it is also expected to handle enquiries from the media. It is essential that the source of information can be checked and verified especially when reports pertain to the impacted country. For example, DER expects that it can access damage assessment results through the resident mission. Regarding international financial institutions that conduct joint assessments, issuing joint press releases is preferred. By doing so, work done jointly is recognized and transparency is enhanced. With respect to news releases, timeliness is important so a delay of two to three days should be avoided.*

2. Early Recovery Phase

73. **Damage and needs assessment capacity.** The joint damage and needs assessment worked well for the IOT but there were "no additional people" who could be relied upon to do an assessment if required elsewhere. Staff members with assessment skills were few with no surge capacity to speak of. An ADB staff member went so far as to say that there was no one

working in the Pacific who had the skills to do the assessment. Staff from the Resident Mission in Indonesia had to undergo a crash course on damage and needs assessment.

Action point: ADB should organize courses on needs assessment for staff members to be assured of enough people with these skills after a disaster.

74. **Working jointly with other donors.** General comments like “the assessment went well” were heard. ADB staff, particularly in Indonesia, met situations wherein other donors were upstaging others’ efforts. Most donor staff and consultants learned the damage and needs assessment methodology in rapidly organized training sessions organized by Indonesia’s National Development Planning Board (BAPPENAS) with the World Bank resource persons. Donor-based subworking groups then accomplished parts of the assessment separately. Such an arrangement did not encourage teamwork but competition. One manifestation of this type of behavior was that a donor would make a separate announcement about the assessment. ADB staff, particularly in Indonesia, met situations wherein “donors were upstaging each others’ efforts.”

Action point: More ADB staff members should be trained to be able to do damage and needs assessment. Results of the assessment should also be announced jointly by the concerned team members to instill the spirit of collaboration in assessment among donor staff, avoid one-upmanship, and project teamwork positively to citizens of affected countries especially.

75. **Human resources.** Putting together assessment and project teams presented challenges. There was a frantic search for ADB staff and external professionals/consultants who had expertise in reconstruction and other matters pertaining to disaster response in the specific countries that needed assistance. In some instances, people working with communities and were identified with nongovernmental organizations were also needed. It was believed that NGOs could help prepare communities for recovery projects. However, ADB’s familiarity with them was not enough to allow it to readily harness local expertise and skills needed.

Action point: It is useful to be in touch with NGOs during the relief stage to prepare for later stages. ADB must put together a roster of people who can be hired for specific tasks. People with country expertise and knowledge should be recruited, including engineers in key sectors such as power, water and sanitation, transportation and telecommunications.

76. **Price increases.** While the assessment resulted in fairly accurate damage estimates (including losses accruing to tourism), increases in price of commodities such as oil (specifically in Maldives) were not factored in well enough. Reconstruction spending increased construction cost by as much as 40–60%, according to ADBI study.⁵² Thus, this gave rise to a funding gap in construction of houses and public infrastructure, so that project beneficiaries had to stay longer in temporary shelters and experience inconveniences due to construction delays.

Action point: It is important to adequately factor in inflation when making reconstruction estimates as part of damage and loss assessments.

⁵² Jayasuriya, S., P. Steele and D. Weerakoon. 2005. *Post-Tsunami Recovery: Lessons from Case Study 1. Sri Lanka* (Discussion Paper No. 39), ADBI, Tokyo.

77. **Assistance in the context of cash grants.** Cash grants were a most effective way to assist Sri Lanka tsunami survivors in the same ADBI study. Country governments actively gave cash grants for rebuilding and repairing houses and for livelihood, easing the difficulties of households. Examples from international donors were cash for work projects mainly to clear debris from beaches (by Mercy Corps in Indonesia) and cash provided for people hosting displaced families (by Sewalanka Foundation in Sri Lanka).⁵³ In the relief and early recovery phase, such direct assistance to households could mean giving affected families a real chance for living beyond just survival. ADB's livelihood assistance projects for IOT countries met difficulties in terms of establishing who the recipients would be. These difficulties could therefore be met by other sources of information.

Action point: Ways for providing cash grants and direct assistance to survivors might be considered in terms of how this might affect ADB assistance. Should these be among the forms of assistance offered by other donors, it could be factored into the assistance that ADB would offer. This aspect is relevant in the context of livelihood assistance which ADB is requested to provide.

The next section deals with the rehabilitation and reconstruction phase.

3. Rehabilitation and Reconstruction Phase

78. **Building back better.** Main activities undertaken during the rehabilitation and reconstruction phase were project preparation and commencement of project; participation in regular meetings with donors and focal point agencies, including stock-taking exercises; and project implementation. During this phase, opportunities for avoiding risk through safer construction and making communities more resilient were given attention. "Build back better" was the message of Special United Nations Envoy for Tsunami Recovery Bill Clinton to the people of the tsunami-stricken countries. There were mixed reactions and misinterpretations among those interviewed on this fundamental mitigation principle. A reason for negative reaction stemmed from the fact that project implementors encounter difficulties in the field among which is the higher cost. Two examples are given here.

79. Example 1. In the Maldives, water and sanitation systems far better than pre-disaster ones were demanded by government officials following Special Envoy Clinton's Build Back Better message. An upgraded system cost higher than initially estimated; besides, prices of commodities had increased as a result of high demand (see para. 76). With a pre-determined project allocation, this meant a reduction in the area of coverage. Without understanding technology options in the socio-economic and cultural context of the locality, inappropriate choices could be made.

80. Example 2. The housing sector is an essential component in most assistance offered by donors. Houses are among the most visible achievements and manifestations of recovery as tents give way to new permanent structures. However, issues related to land use, equity, and standards⁵⁴ make housing a complex area of assistance that ADB has had few opportunities to handle.

⁵³ Humanitarian Policy Group. 2007. *Cash-based Responses in Emergencies*. London: Overseas Development Institute. (p. 7).

⁵⁴ Green, David J. 2005. Asian Tsunami Crisis: Lessons for the International Community. Presented at the ASEAN Roundtable 2005 on The Asian Tsunami: Implications on Regional Development and Security, Institute of Southeast Asian Studies, Singapore, 17-18 November.

Action point: *Structures and houses should be built following the building code; and implementation of the code should be supported. In general, pre-disaster risk reduction measures need to be undertaken. Local capacity for risk management with assistance from bilateral and multilateral institutions need to be developed; locals must be equipped with tools such as vulnerability assessment, hazard mapping, and natural hazard impact assessment. The tools help identify necessary mitigation measures. A mitigation measure concerning location-specific requirements for buildings may be spelled out and thus help build safe structures. Builders, designers and property owners can then be better informed on how to prevent potential damage from different hazards. Land issues may also be dealt with through other mitigation measures, including laws, land use regulations, and planning guidelines.*

81. **People participation.** While one sector might require a minimal or even no citizen-level participation, others do need the targeted beneficiaries to be actively engaged in the design of projects. For example, a power project in the Maldives only requires that power generators be installed in a number of islands.⁵⁵ In this project, the negative social and environmental impacts are practically nil since there are no high-voltage transformers involved, as stated in the referenced project document. On the other hand, irrigation projects in Banda Aceh require the organization of users, and design options can be an issue among the beneficiaries.

Action point: *In putting the idea that ‘reconstruction is development and not relief’ to practice, ensure the following: have stakeholders participate; determine the role of government in specific projects; deal with equity issues across villages, administrative units and geographic areas; and undertake projects within the context of a regional (sub-national) development strategy.*

82. **Working in the field.** The Extended Mission in Sumatra (EMS) in Medan and the Project Management Office in Banda Aceh were manned by a single ADB staff and the rest were consultants and temporary staff. Unfamiliar with ADB procedures and rules, consultants met difficulties in their tasks which meant lost time and higher transaction costs in relating to both ADB and project beneficiaries. In the interest of harmonizing ADB procedures with those of Gol without jeopardizing ADB’s safeguards, the EMS saw a need to develop a mechanism to ensure subprojects are properly identified and approved on justifiable grounds. Projects in Tamil Nadu and Kerala, India also had slow start also because executing agencies were unfamiliar with ADB requirements and guidelines. This was “compounded by a reluctance to recruit consultants and preference to use in-house resources.”⁵⁶

Action point: *Prepare a suitable working environment for consultants and additional staff employed on a temporary basis for carrying out activities related to reconstruction. Ways and means to overcome initial difficulties such as training sessions, familiarization seminars and other such activities to help them understand ADB procedures (such as those for procurement) helps to reduce time loss and transaction costs.*

83. **Flexibility.** Interviewees agreed that ADB was flexible in its response to the IOT. Asked what flexibility meant to them, the responses ranged from subproject identification and selection to procurement procedures. Among them were

⁵⁵ ADB, 2005f. *Tsunami Emergency Assistance Project (TEAP)*. Manila.

⁵⁶ ADB, 2007e. *Status Report on the Asian Tsunami Fund*. Manila (p. 4).

- (i) The process to approve the RRP was not as rigid and its approval by the Board was quick;
- (ii) The subprojects were not articulated in the approved project. Only after approval did teams start finding out what the sub-projects were going to be. The Government decided what should be done by each team so that duplication of sub-project activities was avoided. Assistance was redirected to where it was needed. Responding to the needs for a mechanism as stated in the previous paragraph, the EMS made use of one which had been used in other ADB projects. The mechanisms consisted of the subproject appraisal report (SPAR) and subproject preparation report (SPRR) for as tools for project implementation. One useful outcome was the development of local capacity for donor coordination and local administration;
- (iii) Fast technical assistance projects to support the reconstruction efforts through a 'soft' product, a kecamatan (sub-district) action plan, was included in the assistance package for Indonesia; and
- (iv) The option to go on-budget or off-budget was open; a donor's funds could be channeled through the Indonesian government (on-budget) or not (off-budget).

84. The above observations have implications on aid effectiveness and governance as well. They are, in general, positive indications that promote national ownership of the development process, alignment with country systems, donor harmonization, and building capacity in line with ADB's commitment to the Paris Declaration on Aid Effectiveness. Operating administrative systems of country governments and ADB are governed by different sets of procedures and practices. With respect to ADB practices, its Central Operations Services Office (COSO) is involved in this sphere of activity. Country governments and ADB are aligning processes and procedures based on consultation and mutual agreement. This is proceeding not without downturns and struggles.

Action point: Field experience shows that improvements are needed in (i) procurement, (ii) reporting procedures, (iii) environmental safeguards, (iv) financial management, (v) project preparation practices and procedures, and (vi) portfolio management. (At the time the interviews were made, some staff members have mentioned procurement of goods and services, despite the revision of procurement guidelines that incorporate greater flexibility in April 2006 citing implementation bottlenecks as an issue.)

85. Specific related issues relevant to aid effectiveness and governance (within the managing for development results framework) are further discussed in Table 4. In the said table, what ADB did, what lessons might be learned, and what tools might be applied to resolve issues are given.

Table 4. Issues Relevant to Alignment and Managing for Development Results, ADB Action and Lessons Learned

Issue	ADB action	Lesson learned	Suggested tool(s)
Procedures and practices for preparing and implementing donor-assisted projects in the recipient countries and that of ADB are not the same and thus made project implementation difficult causing delay.	ADB through the Resident Mission and/or Extended Mission consulted the project implementing unit through dialogues; consequently, agreements were reached on harmonized procedures.	There is a need to align procedures between recipient countries and ADB so that a set of agreed steps can guide project implementation.	Negotiation/ consultation regarding procurement, reporting procedures, environmental and social safeguards, financial management, project preparation practices and procedures, and portfolio management.
The administrative capacity that handles procurement and financial management in the affected country decreased at a critical level to affect project preparation and implementation.	ADB dealt directly with the agency that was designated by the country government.	Constant efforts from both sides to address issues together are necessary. In doing so, local capacity is also enhanced through learning by doing.	Other alternatives may be considered such as outsourcing administrative services which was done by some bilateral agencies.
The financial management of grants have not been monitored sufficiently thus creating concerns about transparency and accountability.	ADB established the Grant Financial Information System (GFIS) patterned after its existing system for loans.	A separate internal control system for grants should be enhanced further in cooperation with all ADB offices concerned.	Grants Financial Information System (GFIS) consisting of grant accounts, including procurement, contract and disbursement information; where applicable, designate responsibility to resident mission for reporting.
No appropriate assistance modality is available.	Setting up the Asian Tsunami Fund.	Funds like ATF may not be a sustainable scheme, as it draws funds away from other future disasters for a single event.	Review of assistance modalities and study new forms of assistance, including standing facility.
The risk of corruption increases when large sums of aid from various sources are available.	The resident mission and/or extended missions established measures and coordinated closely with other donors.	Guidelines on fiduciary control in good agreement or consistent with the actions of other donors give a clear message to discourage forms of corruption.	Financial control and consultation
The capacity of local project implementers is built into the project but their reluctance to handle all responsibilities has been observed.	Flexibility to have projects either on-budget projects (donor funds channeled through the Government) or off-budget (funded and implemented external to the Government).	Guard against reluctance of government staff through capacity development activities and information exchange.	Close communication between ADB and the local implementers, harmonization of procedures and processes, and other such measures to facilitate project implementation.
Friction between implementing agencies and implementation difficulties; slow implementation such as disbursement of funds.	ADB adjustment and closer interaction with the local agencies by the Extended Mission.	Provide institutional support to the implementing and executing agencies; constant dialogue with the agencies concerned.	Mechanisms and fora which involved donors and the local agencies.
None of the assistance instruments then was appropriate to deal with multicountry assistance.	Memorandum of agreement with the Government of Indonesia; later, establishment of the Asian Tsunami Fund.	Formulate an assistance modality suitable for countries based on vulnerability and economic conditions.	Guidelines for funding; vulnerability and risk assessment

4. Synthesis

86. Table 5 provides a summary of the suggested roles for ADB in the event of a regional-level disaster. The items on the left column are suggested activities for ADB Headquarters, while the right column is for the Resident Mission.

Table 5. Suggested Post-Disaster Activities for the ADB Headquarters and Resident Mission

Headquarters	Resident Mission
<p><i>Relief</i></p> <ul style="list-style-type: none"> • Set up a committee consisting of 3-5 staff at Headquarters, comprised of members from the DER, the security and headed by a vice-president. • Set up a Quick Response Team that will assist country teams engage with country clients and other stakeholders early on after a disaster. 	<p><i>Relief</i></p> <ul style="list-style-type: none"> • Gather information and conduct reconnaissance survey. • Consult intermittently with government, headquarters and other donors. • Participate in joint damage and needs assessment. • Support organization of a steering committee comprised of donors and government as a mechanism to resolve problems jointly.
<p><i>Early Recovery</i></p> <ul style="list-style-type: none"> • Consult with Resident Mission and country government. • Prepare and design project. • Determine funding sources. 	<p><i>Early Recovery</i></p> <ul style="list-style-type: none"> • Coordinate by Country Director at the Resident Mission with other donors and national focal agencies. • Meet and consult regularly with other donors, government and other stakeholders to identify projects. • Assess need to establish Extended Mission.
<p><i>Rehabilitation/ Reconstruction</i></p> <ul style="list-style-type: none"> • Establish Extended Mission if warranted. • Commence project. • Implement project. 	<p><i>Rehabilitation/Reconstruction</i></p> <ul style="list-style-type: none"> • Participate in regular meetings with donors and focal point agencies, including stock taking exercises. • Assemble country hazard information. • Coordinate with humanitarian organizations, donors and the Government. • Utilize understanding of country's disaster risk management framework for the Country Partnership Strategy and country-level activities.

87. In Table 6 are shown suggested pre-disaster actions or measures that the ADB Headquarters and Resident Mission may take in order to better respond to regional-level disasters.

Table 6. Suggested Pre-Disaster Measures to Improve Preparedness for Regional-Level Disasters

ADB Headquarters	Resident Mission
<ul style="list-style-type: none"> • Designate a focal point in the regional departments to take charge of disaster-related matters. • Establish a procedure to deal with multicountry disaster including organizing working teams. • Forge partnerships with regional and international organizations. 	<ul style="list-style-type: none"> • Adopt a set of operational procedures relevant for the country and for the multicountry (regional) situation. • Upgrade capacity in damage and needs assessment • Appoint focal point person to deal with country's disaster risk management issues.

88. Table 7 provides a summary of the roles/activities for the Extended Mission, the COSO and the DER. The items on the left column are those that ADB did as part of the IOT response. The right column identifies activities which need to be continued, with suggestions to improve ADB's response.

Table 7. Suggested Roles for the Extended Mission and Specific Units at ADB Headquarters

Actual/Current	Suggested/Additional
Extended Mission	
<ul style="list-style-type: none"> • Get as good a grasp of the actual situation on the ground as possible. • Prepare periodic administrative reports, and assist in fulfilling the grant (procurement, tendering, etc.) • Coordinate with country government offices. • Provide guidance on ADB procedures. 	<ul style="list-style-type: none"> • Continue SPAR/SPPR mechanism (which the EMS developed) for future projects "to ensure that sub-projects are properly identified and technically justified, and the beneficiaries consulted." • Conduct seminars and provide advice and guidance for the component consultants and the implementing units. • Collate information that will sharpen understanding of hazards, risks and vulnerability and provide accurate information through official channels.
Central Operations Services Office (COSO)	
<ul style="list-style-type: none"> • Carry out procedures according to set guidelines; review and adjust guidelines as needed. 	<ul style="list-style-type: none"> • Review and adjust guidelines based on feedback from the field. Conduct field mission in order to check if system works. • Adopt a system of pre-identifying projects requiring expedited procedure regarding financial management of project, procurement so that the staff members appreciate the circumstances in which the projects are operating, avoiding unnecessary delay.
Department of External Relations (DER)	
<ul style="list-style-type: none"> • Issue statement from the ADB president. • Announce ADB assistance through media. • Create a tsunami response website. 	<ul style="list-style-type: none"> • Handle enquiries from the media in close coordination with other relevant ADB units. • Encourage joint press releases for activities done jointly by ADB, other international financial institutions, and partners.

Note: SPAR = Subproject appraisal report, SPPR = Subproject preparation report.

89. While ADB has roles and activities to fulfill, there is consensus among interviewees that country-level pre-disaster measures are needed. However, a few ADB staff members have expressed skepticism over whether political decision makers in DMCs are truly interested to obtain assistance on long-term mitigation and preparedness. Some recognize the immediate need for this in hazard-prone countries, which by experience and in fact are at relatively higher risk than others. It is suggested that ADB may require or encourage countries highly exposed to risks to take measures that will reduce harm. Thus, it may commit to provide emergency

assistance on a concessional basis to countries that are equally committed to undertake mitigation and preparedness measures.

C. Developing Options

90. In this section, options on funding and regional cooperation are explored. An aspect taken into account in the later part of the section is the principle of mainstreaming disaster risk management as an integral part of the development process.

1. Funding Options

91. **Bridging preparation and reconstruction activities.** As part of the 2004 DEAP policy document (R-paper), ADB reviews the approaches, policies and experiences of four other MDBs in rendering disaster and post-conflict assistance.⁵⁷ One of these, the Inter-American Development Bank (IDB) has been proactive in its approach and has issued an action plan for improving disaster risk management in March 2005.⁵⁸ Its Immediate Response Facility (IRF), which supersedes the Emergency Reconstruction Facility, continues to fill a void by funding an impacted country's needs during and immediately following the emergency.⁵⁹ The DEAP working paper (W-paper) has recommended the emergency grant assistance facility (EGAF), which was not accepted in the final policy document. It would have allowed immediate, flexible and responsive financing during the relief transition phase. Both target the same disaster phase; the IRF is a loan while EGAF is a grant. Providing such assistance can run in parallel with early recovery and rehabilitation activities. Both facilities create a bridge between preparation and reconstruction activities. Experience with the IRF appears to be successful, making IDB adopt it "as a permanent Bank instrument (footnote 58, p. 9)." Such arrangement allows planning and programming activities in parallel rather than in a sequence, which is often not realistic in terms of moving on towards 'normal development' (see para. 13).

92. **Quick disbursement and concessions.** A quick disbursing facility for reopening of access of physical infrastructure such as roads and bridges, establishment of vital basic utilities such as water, power, healthcare and communications, and augmenting aid provided by other donors can be made available to ADB's member countries. In the context of a regional-level disaster, this type of assistance essentially relieves affected communities prior to longer term recovery projects. The proposed fund for ADB makes it possible to complement short-term TA or longer-term reconstruction. The assistance can be availed of either as loan or grant depending on the affected country's socio-economic status, risk and vulnerability profile; concessional terms may also be explored.

93. Assistance can thus be allocated according to the time period and classified into three types of funding options: (i) for relief or transition phase, (ii) for recovery (rehabilitation and

⁵⁷ See Appendix 5, pp. 56-62 of footnote 2.

⁵⁸ Inter-American Development Bank. 2005a. *Bank Action Plan for Improving Disaster Risk Management 2005-2008*. Available: <http://www.iadb.org>.

⁵⁹ Inter-American Development Bank. 2005b. *Companion Paper to the Advanced Profile of the Disaster Risk Management Policy*. Available: http://www.donorplatform.org/component/option,com_docman/task,d0c_view/gid,123/ IDB also provides grants, capped at \$200,000, that perform the same function as the IRF. The amount can be used to cover emergency expenditures immediately after a natural disaster. IDB seeks the cooperation of specialized agencies and organizations for humanitarian sector activities.

reconstruction), and (iii) for prevention (mitigation and preparedness). The last two periods are covered by existing assistance instruments for disasters and emergencies.

94. Other funding options are the following:

- (i) **Refining assessment findings.** One ADB staff member suggests a pool of funds that can be mobilized for technical assistance (TA) which will provide input for refining the findings of needs assessment. For example, ADB has provided technical assistance to the Government of Sri Lanka (GoSL) to refine the joint damage assessment which it prepared earlier together with ADB, Japan Bank for International Cooperation (JBIC), the World Bank, and the UNDP. The TA, with an approved amount of \$0.5 million, has supported GoSL's efforts to mobilize large-scale medium-term rehabilitation programs in the tsunami-affected areas and to help crystallize needs assessment to be undertaken over several months. Processing time is done in two weeks and hiring can be done quickly. Also, quick disbursement is possible so that reconstruction can begin in a month. Competitive or bidding procedures will be waived.
- (ii) **Pre-agreed country terms.** A standing facility can be established to deal with requests from country governments with pre-agreed terms and arrangements. The terms may include conditionalities based on the ADB classification of countries. The scheme shall also take into account the risk profile and vulnerability of the country. This option is consistent with one of the three points for future action related to disaster assistance in the Mid-Term Strategies II or MTS II (2006-2008) (paragraph 16).
- (iii) **Multidonor fund.** The multidonor fund is a special mechanism established as need arises or upon an impacted country's request. The IOT has provided a test case for a multidonor fund in the ATF, entered into by a few governments with cofinancing arrangements. Responding to the Indonesian government's request for another multidonor fund, the World Bank has set up the Multi-Donor Fund for Aceh and Nias, to ensure that monetary assistance received are managed effectively and in a coordinated and transparent way. Whether a similar amount of fund will be replicated is hard to predict. Nevertheless, the mechanism is effective in helping impacted countries where administrative capacity is seriously impaired and the threat of corruption is high. With a coordinating institution, the chance for reconstruction efforts to adopt measures that reduce future risks through sound construction practices is enhanced.
- (iv) **Facility for disaster prevention innovation.** A facility for innovation in disaster prevention that supports pilot programs in the comprehensive approach to disaster risk management will finance key investments leading to enhancing national disaster prevention and risk management systems. The areas can include financing instruments (risk transfer or insurance schemes), policy and institutional development, information systems for risk reduction investments, mitigation strategies and investments, education, and training. Gaining experience can raise institutional capacity before expanding into a full-scale program. It may be useful to consider IDB's two alternative instruments: (i) grant funding for low-income countries, and (ii) reimbursable financing or repayment of its financing within larger follow-on loans.

- (v) **Ex ante disaster fund.** For systematic prevention and risk management, a dedicated fund is also an option. Based on the principle that appropriate long-term measures are the best way to prepare for extremely rare disasters, such an instrument should be useful. ADB's comparative advantage in rehabilitation and reconstruction can be further enhanced through a comprehensive approach while dealing with causes, apart from the effects, of natural events. In other words, a balance of ex ante and ex post assistance can be made available to countries based on assessed risks and vulnerabilities. The fund resource can be used for ex ante country assistance but may also be utilized to strengthen regional disaster prevention. A limit to an individual proposal may be set. The concept is similar to IDB's Disaster Prevention Fund.⁶⁰

95. It is suggested that funding options cover all time periods (relief or transition, recovery, and prevention) and that their application be anchored on strategic use of funds on a country to country basis. Funds that can be quickly mobilized for the transition period can augment priority requirements or undertake critical actions such as repairing access roads, and carrying out special studies and surveys for rapid preparation of emergency activities. These are small-scale projects that may include building national and regional capacity for emergency surveillance as originally cited in the W-paper of DEAP.⁶¹

2. Regional Cooperation in Disaster Prevention and Preparedness

96. **Regional concerns.** The geographical scope of a regional-level disaster underlines the fact that disasters do not respect national boundaries. In this regard, regional cooperation as tool for safer communities provides a range of opportunities. Some of these are (i) joint financing of development projects such as investment in power and transportation infrastructure, (ii) river basin and coastal management programs, (iii) establishment of forecasting capabilities, (iv) supporting information exchanges, and (v) a regional program to assist national disaster risk management systems to conduct risk and vulnerability assessment.

97. In the long term, at-risk DMCs need medium to long-term measures to develop disaster resilience. The types of mitigation projects needed, particularly for the infrastructure sector at a regional scale, consist of creating a multihazard early warning and monitoring system, promoting exchanges among countries about best practices, and developing mechanisms for effective investment in disaster-related infrastructure. Table 10 indicates selected regional and sub-regional priority areas on "disaster infrastructure development" identified in a study made by the United Nations/Economic and Social Commission for Asia and the Pacific (ESCAP).⁶² The study also identifies funding options for regional cooperation, and stresses the "need to formulate a mechanism to make use of the region's savings for the development of its infrastructure."

98. **Funding estimates.** Estimates of the magnitude of funds to provide assistance to countries in rehabilitating and reconstructing infrastructure have been made recently. The following paragraphs provide calculations of ESCAP and the WB pertaining to infrastructure. The ESCAP study also proposes a regional scheme for cooperation that includes funding

⁶⁰ Inter-American Development Bank (IADB). 2006. *Disaster Prevention Fund – Operational Guidelines*. Available: <http://www.proventionconsortium.org>.

⁶¹ ADB. 2003. *Disaster and Emergency Assistance Policy*. Working Paper 3-03. Manila.

⁶² ESCAP. 2006. *Enhancing Regional Cooperation in Infrastructure Development Including that Related to Disaster Management*. Bangkok: United Nations.

Table 10. Priority Areas in Enhancing Regional Cooperation on Disaster Infrastructure Development

Scale	Type of infrastructure	Scope	Goals
Regional	Mechanism for effective investment	Investment in infrastructure for disaster prevention and recovery	<ul style="list-style-type: none"> • Promoting risk transfer (insurance) • Assisting the private sector of developing countries in reconstruction and rehabilitation • Mobilizing resources for investment in disaster prevention
Regional	Networks for information sharing on best practices	Disaster risk management	<ul style="list-style-type: none"> • Monitoring hazards • Community-based disaster risk management • Building resilience to communities and nations to natural disasters
Subregional	Multihazard early warning system	Monitoring and forecasting tsunami and tropical cyclones	<ul style="list-style-type: none"> • Reducing the number of deaths • Minimizing socio-economic impacts • Providing a framework for economic development; tourism development

Note: Excerpt from United Nations/Economic and Social Commission for Asia and the Pacific, 2006 *Enhancing Regional Cooperation in Infrastructure Development Including that Related to Disaster Management*, United Nations, Bangkok, p. 134.

options. It must be noted that the ADB over the 19-year period of its disaster policy, has historically provided most assistance in the multisector category, followed by the agriculture, environment and natural resources sector. A distant third is the transportation and communication sector.⁶³

99. Large financing requirements for infrastructure are forecast in the Asia-Pacific region. Two estimates compared by ESCAP (2006)—that of ADB, JBIC, and World Bank—and another of ESCAP calculate a huge financial gap in total infrastructure investment requirements from 2006 to 2010 ranging from \$180 billion to \$220 billion per year (at 2004 prices).⁶⁴

100. The ESCAP report (2006) states: “During the past 15 years, the annual damage caused by natural disasters to developing countries in Asia and the Pacific has increased \$21.3 billion from \$6.9 billion during the past five decades. This trend appears to have accelerated in recent years, especially with regard to infrastructure damage, which was estimated at 70% of all economic damage. On the basis of the average annual economic damage over the past 15 years, it is estimated that developing countries would need to invest \$15 billion annually for rehabilitation and recovery.” Also, the current level of investment in infrastructure for disaster prevention and preparedness is only 0.05% of GDP, which is much less compared with ESCAP’s recommended level of one percent of GDP.

⁶³ This is based on a technical assistance consultant’s report prepared by this writer for the ADB entitled “Review of Disaster-Related Projects Under ADB’s Three Disaster Policies” submitted on January 2007.

⁶⁴ Collated from different sources listed here, energy comprises 47.1%; transportation, 26.6%, telecommunications, 15.8%; and water and sanitation, 10.6%. Sources: Fay, Marianne and Tito Yepes, 2003 “Investing in infrastructure: what is needed from 2000 to 2010?” World Bank Policy Research Working Paper 3102, World Bank, Washington D.C.; Yepes, Tito, 2004 “Expenditure on infrastructure in East Asia region, 2006-2010,” Background paper for Asia Development Bank, Japan Bank for International Cooperation and World Bank, East Asia Pacific Infrastructure Flagship Study, World Bank, Washington D.C. In ESCAP, 2006, pp. 138-139.

101. **Two-track approach.** At the subregional and regional scale, the same study identifies priority areas in enhancing regional cooperation on disaster infrastructure development as follows. ESCAP proposes a two-track approach in regional cooperation in infrastructure development and financing: (1) building physical infrastructure that cross borders and exploit shared resources, and harmonizing cross-border rules and regulations; and (2) financing infrastructure development.

102. The 2006 ESCAP study (p. 152) notes that it would be more efficient for Asia and the Pacific countries to use regional pools of funds from the region's surplus savings for infrastructure investment, particularly with cross-border infrastructure projects. Among the options is expanding ADB's involvement in infrastructure financing, using private markets, but this can mean ADB focusing on infrastructure development rather than development in general. Due to the lack of relevant know-how in the context of disaster prevention, there is need to further understand the options and other instruments

103. **International instruments.** The OECD has also recognized the "global spread of a threat" (e.g., a disease, an environmental impact) which national risk management strategies alone will not contain without international cooperation. Global tracking of hazards, as demonstrated by experience on the SARS epidemic, can succeed by having surveillance capacity and/or willingness to cooperate. Just as ESCAP recognizes the need to promote information exchanges, the OECD likewise stresses technology and knowledge transfers. The 'global disaster containment strategy'⁶⁵ puts these together with coordination of national initiatives, design of tools for disaster risk management, international risk-sharing mechanisms, binding agreements, and international cooperative platforms to provide financial support for enhancing coordination of information, logistics, and resources. These "international instruments" all contribute to reducing disaster losses. ADB may do its share to promote exchanges about international instruments at the regional and global level via a regional technical assistance project.

104. **Regional Organizations.** An existing ADB instrument, the regional technical assistance, can be utilized to benefit target countries and vulnerable regions. Regional cooperation and knowledge sharing on areas of priority concerns with developing member countries can be undertaken under this type of assistance. This has already been demonstrated in the past through ADB's support towards creating solutions to transboundary haze, a recurring regional environmental emergency problem in Southeast Asia. Together with the Association for Southeast Asian Nations (ASEAN), ADB's regional technical assistance produced the ASEAN Regional Strategy for Haze Prevention and Mitigation as an output and website.⁶⁶ The potential in the different phases of disaster risk management is present. Technical assistance to clarify institutional frameworks and tasking among regional organizations such as the ASEAN, Asia-Pacific Economic Cooperation (APEC), Central Asia Regional Economic Cooperation (CAREC), South Asian Association of Regional Cooperation (SAARC), and South Pacific Applied Geosciences Commission (SOPAC) is an important step to prepare all developing member countries which belong to ADB's regional departments [footnote 24, (ii)]. Regional organizations can potentially promote and develop solidarity among the member countries to address disaster mitigation and preparedness.

⁶⁵ Lahidji, Reza. 2004. *Lessons Learned*, in Organisation for Economic Co-operation and Development, *Large-Scale Disasters: Lessons Learned*, OECD, Paris, pp. 9-23.

⁶⁶ Available: <http://www.haze-online.or.id>.

105. In the following section, mainstreaming disaster risk reduction is taken as a criterion in assessing ADB's IOT experience. Identified constraints to mainstreaming are used to add insights towards the conclusion and recommendations.

D. Mainstreaming Disaster Risk Reduction (DRR)

106. **Evaluation.** The challenge for ADB is mainstreaming DRR into bank operations for both country programming and project level planning. ADB's Operations Evaluation Department (OED) performs the essential role of evaluating completed projects; however, how well DRR is mainstreamed is not a criterion.⁶⁷ Neither has the OED programmed evaluation studies dealing explicitly with disaster and emergency assistance such as emergency rehabilitation and reconstruction projects.

107. The OED conducts evaluation based on a biannual work program. Under current practice, OED's studies include special evaluation studies under two sub-themes (thematic, and policies and procedures), public sector project performance evaluation reports (PPERs), and validation of project completion reports (PCRs). A PPER is prepared around three years after project completion to evaluate the design, implementation and performance of loan projects and programs. On the average, 10 PPERs and 60 PCRs validations are completed annually. A sector in a specific country is evaluated through the sector assistance program evaluation (SAPE).

108. Over the last 19 years, the OED reviewed eight disaster-related projects, four of which were evaluated after DEAP was adopted in 2004⁶⁸ (Table 11). Since the DEAP took effect, only two natural disaster projects and one post-conflict project have so far been evaluated. Recently

Table 11. Disaster-Related Projects Evaluated by the Operations Evaluation Department Prior to DEAP

Project title	Type of evaluation	Sector	Month/ year completed
Flores Emergency Reconstruction Project (Indonesia)	Project Performance Audit Report	Multisector	October 2000
Flood Damage Restoration Project (Pakistan)	Special Evaluation Study	Multisector	December 1996
Flood Rehabilitation Project (Bangladesh)	Special Evaluation Study	Agriculture, environment & natural resources	October 1996
Flood Damage Restoration Project (Bangladesh)	Technical Assistance Performance Audit Report	Transport and communication	August 1995

Note: The types of evaluation for projects have since been replaced by project performance evaluation and validation of project completion reports.

⁶⁷ In conformity with evaluation practices of multilateral development banks, ADB's evaluation criteria for development assistance are relevance, efficacy, efficiency, effectiveness and sustainability.

⁶⁸ According to the ADB website, OED prepared: (i) a Program Performance Audit Report on Flood Damage Rehabilitation Project in Bangladesh Loan 1666-BAN[Sf] (completed June 2006), (ii) Sector Assistance Program Evaluation on Postconflict Infrastructure Program in Tajikistan (Loan 1651-TAJ[Sf]) (completed December 2004). The author thanks P. Safran for bringing to his attention two drafts completed during the study period: (i) Performance Evaluation Report on Emergency Flood Rehabilitation Project, Loan 1714-TAJ[Sf], and (ii) Performance Evaluation Report on Emergency Flood Rehabilitation Project, Loan 1714-TAJ[Sf].

concluded PPERs include Loan 1666-BAN (SF) Flood Damage Rehabilitation Project (\$104 million approved on 18 December 1998)⁶⁹ and Loan 1633-KGZ(SF): Flood Emergency Rehabilitation Project (\$5 million, approved on 24 September 1998). The former was completed in 34 months in 2001, 13 months behind schedule. However, the biennial work plan of OED (2007–2009) did not explicitly identify any disaster-related project for evaluation. The likelihood that a disaster-related project would be evaluated increases when projects in high-risk countries are selected. In order to systematically work out the ramifications of disaster-related projects, it is necessary to put evaluation of such projects in the agenda of OED. When put as a separate category, disaster-related projects can then be periodically evaluated.

109. **Mainstreaming disaster risk reduction as criterion.** Mainstreaming disaster risk reduction into operations of international development organizations meets several constraints. Drawing from environmental policy literature, Trudgill's barriers to implementation approach (footnote 14) provides an analytical framework against which a useful analogy is made between the result of the Tearfund and this study.

110. This study recognizes all six barriers that Trudgill uses in his barrier analysis—agreement, knowledge, technology, economic, social, and political. The barriers which prevent active mainstreaming of DRR into ADB's operations are explained in column 4 of Table 12. The few evaluation studies made of disaster-related projects translate to a low level of transfer of lessons in handling disaster and emergencies at the ADB. This is a knowledge barrier that must be overcome. As suggested above, periodic evaluation of disaster-related projects should

Table 12. Barriers to Mainstreaming Disaster Risk Reduction

Barrier	Trudgill (1990)	Tearfund study (MDBs)	This study (ADB)
Agreement	Lack of consensus over most effective course of action	Competition: Differing priorities expressed by communities and high-level decision makers Ownership: cultural divide between relief and development communities and sectors; assumption that development reduces risk	Widening gap due to lack of interaction with humanitarian agencies
Knowledge	Insufficient models or datasets on which to base decisions	Knowledge: awareness and understanding, scope, terminology	Insufficient knowledge sharing
Technology	Limited technical expertise to mitigate environmental impacts	-	Low level of participatory, institutional interventions or 'soft' methods
Economic	Financially unattractive options	-	Inappropriate assistance modalities
Social	Communities lack capacity to manage environment sustainably	-	State of preparedness of tsunami-affected countries
Political	Short-term solutions and popular expedient decisions	-	Relationship of DMCs with ADB

⁶⁹ ADB. 2006. *Performance Evaluation Report – Bangladesh: Flood Damage Rehabilitation Project (June)*. Operations Evaluation Department. Manila.

address this situation. We gain further insight into the knowledge and agreement barriers through the problem tree analysis of the Tearfund⁷⁰ study. It identifies three root problems which prevent donors from ‘carrying out sustainable development’—knowledge, competition, and ownership (see column 3).⁷¹ The knowledge barrier is shown by dimensions such as awareness, understanding, scope and terminology. Competition and ownership comprise the agreement barrier. Both indicate divergence (or disagreement) in terms of what communities versus decision makers want, and in the ‘cultural divide’ between relief and development communities.

111. The results of the Tearfund study thus confirmed these knowledge and agreement barriers. Limited interaction with humanitarian agencies potentially widens the agreement barrier. Sharing of lessons learned has not taken place well enough so this manifests knowledge barrier, and so on. Measures to overcome these barriers at ADB were identified through SWOT analysis (shown in Appendix 4) using ideas and opinions culled from the interviews and information obtained from documents. The rest of the barriers are consistent with the earlier discussion. These are taken into account in making recommendations especially from the perspective of mainstreaming DRR. The results are consolidated into conclusions and recommendations found below.

IV. CONCLUSION AND RECOMMENDATIONS

112. The IOT presented a challenge to ADB to contribute to the efforts of many others to ensure successful recovery in several countries at the same time. This is far simpler said than done, especially when there are not only thousands of victims and millions of dollars in damage and losses, but also survivors who need to cope with the aftermath of the disaster, a multiplicity of donors, and a host of other factors attributable to regional-level or large-scale disasters.

113. The significance of the regional aspect of the IOT is time-dependent and thus critical during the disaster relief and early recovery phases. Poor coordination during this period leads to over- or under-response to the disaster.⁷² A regional outlook is also important when country governments and donors consider assistance modality and the allocation of available funds. Furthermore, the level of preparedness of member countries plays affects response during and immediately after the disaster occurs. Other factors include community solidarity and values; a sense of community can be further harnessed for mitigation and preparedness measures.

114. Specific suggestions are collated under five major recommendations. Actions derived from SWOT analysis are included under these recommendations.

Recommendation No. 1: Develop knowledge resources and tool up within.

Recommendation No. 2: Devise assistance modalities and mechanisms that enhance the mainstreaming of disaster risk management effectively into country development processes.

⁷⁰ The donors represented in the study were the Canadian International Development Agency (CIDA), Swedish International Development Cooperation Agency (SIDA), United States Aid for International Development (USAID), and the World Bank.

⁷¹ La Trobe, Sarah and Paul Venton. 2003. *Natural Disaster Risk Reduction: The Policy and Practice of Selected Institutional Donors* (A Tearfund Research Project). Tearfund.

⁷² Footnote 65, p. 22.

Recommendation No. 3: Strengthen preparedness and disaster risk reduction (DRR) in ADB projects and operations.

Recommendation No. 4: Address regional-level disasters as opportunities for regional cooperation in pre-disaster mitigation and preparedness; this will also contribute to making countries more resilient to disasters.

In order to carry out the above, a final recommendation is:

Recommendation No. 5: Modify the ADB's current Operations Manual to reflect the necessary changes consistent with recommendations nos. 1 to 4.

The recommendations are elaborated below.

115. Recommendation No. 1: Develop knowledge resources and tool up within.

- Create and maintain a roster of resource persons within ADB.
- Create knowledge products and services for the staff.
- Assess disaster-related projects periodically through the OED.
- Codify knowledge and support the establishment of knowledge sharing programs.
- Provide in-house staff training for country directors and regional departments.
- Design and hold training modules on disasters and emergencies to be integrated into existing training programs, with focus on lessons learned.
- Document case studies for use in in-house training activities.

116. Knowledge resources abound but need to be translated in forms and transmitted in ways that will have a lasting impact on the staff and units. Lessons learned are in the project documents or remain only as PowerPoint presentations made at conferences. These need to be more systematically codified as knowledge resource for the staff and the development community. Output from the work done on the IOT at the ADBI could find their way into training modules and knowledge sharing programs to build in-house capacity in the resident missions and headquarters; expertise of former ADB staff experienced in dealing with disaster-related projects could be utilized for the purpose. Target groups include the country directors of resident missions, middle-level headquarters staff, and those who handle approval and disbursements. The roster of resource persons can, of course, be utilized in times of emergency or when ADB requires experts for projects.⁷³ Examples of knowledge sharing methods, meetings, and tools are described in Appendix 6. An aid for knowledge sharing is the web-based Evaluation Information System (EVIS) launched by the OED in April 2007. It which allows users to access information about evaluation studies through search by keywords. Evaluation results and lessons learned by project, country and sector can also be printed. Search for evaluated disaster-related projects could be made, however lack of standardized keywords can deter users. It is suggested that in future, disaster-related projects are regularly evaluated by OED.

117. As shown by the IOT experience, ADB was in reactive mode when it happened. To prepare for any large-scale disaster—country-specific or multicountry—it is recommended that the ADB organize its available expertise into a well-trained team of disaster and emergency practitioners and specialists. The team should be prepared for possible mobilization in case

⁷³ Users can source specific skills and expertise from the ADB's Skills Knowledgebase System, an internet-based knowledge management supporting mechanism started in April 2007. Required expertise in disaster and emergency assistance need to be reflected in staff profiles found in the system.

disaster response expertise is required. Sharing knowledge between headquarters and the field is not easy to accomplish without structured learning. If HQ staff do not keep abreast with the resident mission (and vice versa) without linking mechanisms being put in place, activities may become too compartmentalized and institutional memory is further lost. To prepare the members of the team, training and learning options should be designed in consultation with resident missions and regional departments. These activities should be synchronized with knowledge sharing.

118. Recommendation No. 2: Devise assistance modalities and mechanisms that enhance the mainstreaming of disaster risk management effectively into country development processes.

- Study a new funding instrument or assistance modality that will sufficiently cover appropriate response.
- Devise an action plan if a new assistance modality is being proposed, particularly if the plan includes actions supporting the transition phase.
- Consider other forms of assistance involving financial transfers that can promote self-reliance and jump-start the economy.
- Consider the private sector in assisting overburdened public administration of disaster-affected countries.

119. As some interviewees have observed, the ADB does not have the right assistance modality for regional-level disasters or a disaster as large as the IOT—in terms of geographical coverage and extent of damage. The search is not confined to ADB.⁷⁴ There are other options being used by other international financial institutions such as support for hazard management and disaster risk reduction activities, immediate disaster recovery help, and longer term reconstruction and rehabilitation, some of which were discussed in the DEAP implementation plan (footnote 13). Pooling funds from different sources with an appointed coordinator is another alternative; ADB can contribute to something like the Multi-Donor Trust Fund for Aceh and Nias, which is coordinated by the World Bank. It is important to separate the funding scheme for relief and for that of rehabilitation and reconstruction.

120. Some donors (many of which are international NGOs) and Country Governments provide cash grants for livelihood and house rebuilding and repairs. Through the Japan Fund for Poverty Reduction, cash grants have also been given for housing in Indonesia. These types of projects are important during the immediate or early recovery phase. Social development can also be supported through microcredit finance, which was mentioned in section 6.2. Local NGOs and civil society organizations (CSOs) can be drawn into the project to provide support in participatory techniques, thus increasing the chance of sustainability and rate of success.

121. Carrying out rehabilitation and reconstruction successfully may well depend on requisite conditions (and thus the use of safeguards). Laying the groundwork for recovery assistance activities with appropriate instruments and implementing procedures will further boost their effectiveness. ADB's DEAP policy has identified "emergency response or transition phase" activities which deserve to be reexamined more carefully, viewing them through the lens of

⁷⁴ (i) Free, Paul K., Michael Keen, and Muthukumara Mani. 2003. *Dealing with Increased Risk of Natural Disasters: Challenges and Options*. IMF Working Paper WP/03/197. International Monetary Fund, Washington D.C. (ii) Miller, Stuart and Kari Keipi. 2005. *Strategies and Financial Instruments for Disaster Risk Management in Latin America and the Caribbean*. Inter-American Development Bank. Washington D.C. (iii) Picciotto, Robert. 2006. Disaster Recovery and Reconstruction – Evaluation Lessons and Policy Implications. Presented at the Council of Europe Development Bank – World Bank Workshop, Paris, 20-21 November 2006.

“early recovery.” The enumerated activities include: rehabilitating high-priority physical and social infrastructure such as water, sanitation, power, communications and transport; revitalizing basic services, particularly education and health care; jump-starting economic productivity (which can include livelihood and micro-credit); emphasis on partnering with specialized (relief) agencies and/or bilateral agencies from ADB member countries. These activities that can potentially create a more stable environment for recovery have not yet been explored fully. A funding mechanism which enables such activities to be undertaken can be studied. An option is for ADB to forge partnerships with regional organizations by supporting and/or complementing disaster-related assistance rendered by them. Related research to be carried out through a RETA may also be undertaken to build the knowledge base.

122. Recommendation No. 3: Strengthen preparedness and disaster risk reduction (DRR) in ADB projects and operations.

- Prepare guidelines through collaborative arrangements between RSDD and relevant departments.
- Introduce tools such as risk and vulnerability assessment into projects, especially in countries where disaster risks and vulnerabilities are high.
- Prepare and maintain roster of former ADB staff with relevant experience, and external subject and country experts/specialists who can be tapped for disaster and emergency assistance.
- Enhance the risk reduction features of existing policies such as environmental safeguards.
- Strengthen institutional arrangements (capacity development) in the country governments.
- Reinforce risk reduction in the Country Partnership Strategies (CPS).
- Negotiate agreements with partners regarding roles during disasters.
- Devise general protocols to handle large-scale disasters.

123. Country-driven programs and projects to reduce disaster risk through disaster mitigation and preparedness are desirable. Interest in disaster preparedness tends to wane after a country recovers from a disaster unless a strong culture of safety prevails. Therefore, existing procedures in the normal operations of ADB, such as the Country Partnership Strategy and steps in the project cycle, need to be exploited to deal with disaster risk reduction concerns most relevant to each country. For example, a more detailed conflict analysis can be made in the case of a post-conflict country or a country where civil strife is in progress. Similarly, hazard assessment pertaining to the hazards an at-risk country is exposed to should be integrated within the Country Partnership Strategy.

124. Recommendation No. 4: Address regional-level disasters as opportunities for regional cooperation in pre-disaster mitigation and preparedness; this will also contribute to making countries more resilient to disasters.

- Take stock of disaster-related mandates, programs, activities, and agreements of regional and international organizations.
- Recognize strengths and weaknesses of regional stakeholders in disaster risk management.
- Establish linkages with potential regional partners and enter into agreements that will help strengthen emergency preparedness in the Asia-Pacific.

- Promote the consolidation of country partnership strategy programs into similar programs of regional partners.
- Adopt an organizational approach that allows technical capacity of ADB staff to be brought across departments and borrowing countries.
- Cooperate with the humanitarian response sector through the cluster approach.
- Explore ways and means to manage risks from natural hazards collective regional action in support of ADB's Regional Cooperation and Integration strategy.⁷⁵

125. Disasters of geographic scale and impact like the IOT are rare; they do suggest that country-level pre-hazard preparedness is necessary. Premised on the conduct of hazard assessment (see Recommendation No. 3), the possibility that more than one country will be impacted may be established. There are repetitive hazard events that cause high consequences often reported as annual losses and damage.

126. Climate-related disasters such as cyclones and floods are expected to increase due to global climate change. Some cyclones affect countries along their paths. Floods in river basins shared by two or more countries, like the Mekong and Indus Rivers are not rare events. Fault lines that cut across national boundaries in the Himalayas indicate earthquake risks, so at-risk countries need to prepare. Therefore, joint action by countries and regional collaboration is a sound measure to take. However, little information is known about what exists and what might be taking place in the next few years for the ADB to chart a regional strategy in disaster risk management.

127. Whether surge capacities of assistance givers are able to handle a disaster or not is difficult to predict. Therefore, liaising with the United Nations Office for Coordinating Humanitarian Affairs, and the Regional Disaster Reduction and Recovery Advisor for Asia and the Pacific of the UNDP can help identify disaster response needs when such disasters come. These needs may pertain to individual countries that may require ADB's assistance.

128. The goal is to be able to prepare for and respond to disasters in a coordinated fashion, in terms of sharing and complementation of resources, with clearly delineated roles and responsibilities. Resources refer to physical, organizational, communications, financial and human resources that need to be mobilized in the initial response, early recovery and late recovery phases.

129. As signatory to international instruments such as the Hyogo Framework of Action and the Paris Declaration for Aid Effectiveness, ADB is assimilating "new" elements into how it might assist developing countries together with regional partners in making communities safer. Pooling resources and complementing efforts can be achieved through partnership agreements and protocols. For example, clusters⁷⁶ can be led by a particular organization such as what happens in the humanitarian sector.

130. **Recommendation No. 5:** Modify ADB's current Operations Manual to reflect the necessary changes consistent with recommendations nos. 1 to 4.

⁷⁵ ADB. 2007f. *Supporting Provision of Regional Public Goods in the Asia and Pacific Region*. Manila.

⁷⁶ Inter-Agency Standing Committee (IASC). 2006. *Implementing Early Recovery*. Available: <http://www.humanitarianinfo.org>. The cluster approach has nine areas of activity, namely: nutrition, health, water/sanitation, emergency shelter, camp coordination, protection, early recovery, logistics, and emergency telecommunications. The early recovery cluster is led by the UNDP.

131. It may be noted that the first four recommendations are equally applicable to country-specific disasters. The fifth recommendation seeks to focus on integrating the whole notion of “regional-level disasters” and their characteristic implications on organizational demands. In one sense, preparing for regional-level disasters imply preparing for a scenario that can be worse. The worse case scenario is implied by the disaster affecting a larger affected geographical area and spanning across two or more countries.

132. The Terms of Reference require that “options for incorporating regional-level demands into ADB’s operational manuals” be developed. Thus, in the context of the IOT experience, new provisions, or otherwise items that reinforce existing ones and current good practices are identified. Features of the proposed modifications on the Operations Manual and further considerations in the implementation of DEAP are

- (i) drawing up a general protocol to set up or initiate emergency response;
- (ii) forming quick response teams;
- (iii) adopting appropriate partnership arrangements with UN agencies and other partners for implementation of start-up activities;
- (iv) establishing an extended mission in an affected country and guidelines suitable for autonomous operation;
- (v) training interdepartmental staff that focuses on disaster-related assistance for staff who may be mobilized to join quick response teams for large-scale emergencies;
- (vi) supporting start-up of pre-qualified procurement agents/contracting firms;
- (vii) designating projects requiring streamlined procedures;
- (viii) defining terms using UN/ISDR as guide; and
- (ix) adopting new assistance modalities including grants and multidonor funds.

133. The protocol or procedure shall include the formation of a quick response team, comprised of pre-designated staff such as focal point persons from the regional departments, and staff from the COSO and DER. It shall clarify the roles of relevant ADB units; suggested roles and activities are given in Tables 5 to 7. The protocol shall also indicate the activities, such as damage and needs assessment, that need to be undertaken jointly with country governments and other partner organizations. Existing standing agreements with partners may be described. It may also explicitly state existing arrangements with partners which are engaged in the humanitarian aid sector. Staff training shall be pursued in order to build competence of members of quick response teams, to develop surge capacity and to strengthen organizational learning in the field of disaster risk management and related assistance.

134. It is suggested that procurement arrangements are listed along with each corresponding assistance modality in order to broaden understanding of how assistance proceeds. Among the possible measures to support start-up of pre-qualified procurement are (i) to apply simplified procedures during early stages of implementation; and (ii) to subcontract aid funding to specialist agencies that have the necessary expertise. Projects that require streamlined procedures are therefore clearly designated, providing a clear signal to all concerned at the ADB and country governments.

135. Learning lessons from the IOT experience from the perspective of assistance givers such as the ADB is incomplete without attempting to understand country perspectives. Meeting partner country officers in Indonesia and Sri Lanka drove home field-level reality such as the limited absorption capacity of governments to render donor coordination. This can be mitigated through a more strategic approach among assistance givers, with roles better defined. The IOT

has shown two extreme situations illustrated by Indonesia, where a peace agreement succeeded on one hand, and Sri Lanka where conflict continued. In light of ADB's Disaster and Emergency Assistance Policy, these divergent tendencies can be factored in both disaster assistance through assistance modalities and Country Partnership Strategies. There are useful avenues to investigate the conflict-disaster interface further in countries affected by both threats. The challenge lies in attacking different angles of hazard vulnerability as they relate to poverty reduction and sustainable development.

Appendix 1: Terms of Reference

The table below contains the detailed tasks of the Terms of Reference for Contract S10717 under Project TA-6233 (REG): High Level Coordination Meeting on Rehabilitation and Reconstruction Assistance to Tsunami Affected Countries. The table indicates the main sections in which each term of reference is addressed in this report, and provides relevant notes, whichever is applicable.

Terms of Reference - Detailed tasks	Sections/Notes
1. Review Disaster and Emergency Assistance Policy statements and other policy documents current at the time of the IOT	I.B; IIA-C
2. Review all ADB documentation on the IOT and other relevant non-ADB documents	II.A-C
3. Interview regional department focal points and task force members ¹	III.A-C
4. Interview staff from ADB's Operations Evaluation Department (OED) regarding its March 2005 evaluation report and any follow-up intentions	III.D
5. Produce an interim report covering points 1-4 highlighting main issues (lessons, policy gaps, implementation issues)	Submitted Dec. 2006
6. Identify and report on differences and similarities between country-specific and regional-level disasters and emergency issues with specific reference to whether DEAP and/or its associated Operations Manual (OM) requires adjustment to accommodate regional-scale disaster events	II.C
7. Develop options for incorporating regional-level demands into ADB's DEAP and/or OM, including identification and quantification of resources	III.B (specifically, the action points); III.C
8. Produce a final report encompassing the above	This report
9. Make a presentation of the above at an ADB brown-bag seminar	Accomplished 31 Aug. 2007

¹ The TOR's original statement is: "interview the RSDD director, regional department focal points and taskforce members." The list of interviewees was based on the suggestion of Robert J. Dobias, who headed the secretariat of the core team organized to deal with the Indian Ocean Tsunami.

Appendix 2: Semi-Structured Interview Schedules

Semi-Structured Interview Schedule 1

TA6233 (REG): High Level Coordination Meeting on Rehabilitation and Reconstruction Assistance to Tsunami Affected Countries

Premises:

1. Operationalizing DEAP in view of regional-level disasters
2. Viewing country-specific, regional-level and organizational demands
3. Assessing capacities – SWOTs
4. Operation manual and regional-level demands
5. Resource options to meet regional demands

Personal reflections (insights, thoughts) on the experience:

Some initial questions:

1. On where to begin - What are your thoughts about joint damage assessment – how teams are put together, how the team operates, how results are generated and implemented?
2. Regarding accountability and transparency - What are your thoughts concerning the Tsunami Development Assistance Database?

3. On what could be the next task - What deserves the most attention concerning ADB response to regional-level disasters?
4. What flexibility is possible? What kind of flexibility should be pursued?
5. On recommendation to do better quality control of operations - What are your thoughts on accreditation?

Respondents: Who should be interviewed?

Further suggestions on what to look into:

Semi-Structured Interview Schedule 2

For resident mission, extended mission, project management office

1. Please share your personal reflections (insights, thoughts) on the experience from the initial joint damage assessment to the present.

2. With respect to organizational demands, what are the differences and similarities between:
 - Country-specific disasters and
 - Regional-level disasters?

3. What are the advantages and disadvantages of having an extended mission and project management office?
 - How is ADB's operational capacity to meet prolonged regional-level demands?
 - What are those prolonged regional-level demands?
 - Are these 'special' types of demand created by the situation?
 - How different are they from the 'normal demand'?
 - Should this be an element in the DEAP?

4. Is there a need for standards of conduct concerning emergency assistance for development aid workers? What capacity (in what areas) should be built for ADB staff? For locals?

5. What do you think about the 2-3 year implementation period of emergency loans? How do you interpret flexibility?

6. What mechanisms support donor-assisted projects so that results are achieved? At what level do the mechanisms take place?

7. Have you heard of the Tsunami Evaluation Coalition? One of the TEC's recommendations is accreditation of operation agencies pertaining to professional standards in a particular sector. What is your opinion of such accreditation or certification?

8. What are the lessons from the IOT?

- Things that are already being attended to? Nothing has been done? Already being applied (In progress) but constrained?

9. What are the policy gaps?

10. What are the implementation issues?

11. What are your thoughts about accountability and transparency? About the Tsunami Development Assistance Database?

12. On the next task to bring ADB response/performance to a higher level – What deserves the most attention concerning ADB response to regional-level disasters?

13. Further suggestions on what to look into:

14. Any recommendation on who to talk with or which documents to consult:

Appendix 3: List of Interviewees

3-1. ADB Staff Interviewed

Date of meeting	Sector	Position	Contact	Meeting location
21/11/2006	RSDD	Director, Gender, Social Development & Civil Society Division/RSDD	Robert J. Dobias*	Manila
23/11/2006	(OED)	Consultant	Stephen Banta	Manila
01/12/2006	SARD	Economist/Country Programs Specialist	Tadateru Hayashi*	Manila
	SPD	Director, Management Support Division	Alessandro Pio*	Manila
	DER	Media Relations Specialist	Graham Dwyer*	Manila
	SERD	Natural Resources Management Specialist	Axel Hebel	Manila
04/12/2006	SERD	Principal Project Economist, Agriculture, Environment & Natural Resources Div.	Masahiro Otsuka*	Manila
05/12/2006	RSSD	Head, NGO and Civil Society Center	Bart Edes*	Manila
	SARD	Senior Economist	Abid Hussain	Manila
07/12/2006	EMS	Consultant	Wolfgang	Banda Aceh
08/12/2006	EMS	Principal Project Specialist	Pieter Smidt*	Banda Aceh
	EMS	Consultant	Aminul Huq	Banda Aceh
	EMS	Environmental Safeguards Advisor, ETESP	Ashley J. Banskrope	Banda Aceh
	EMS		Rizal Matondang	Banda Aceh
12/12/2006	SLRM	Country Director	Richard W.A. Vokes*	Colombo
	SLRM	Head, Project Administration Unit	Laurence M. Pochard	Colombo
	SLRM	Project Implementation Specialist	M. Tiruchelvam	Colombo
	SLRM	Senior Project Specialist	Munawar Alam	Colombo
	SLRM	Economist/Country Programs Specialist	Johanna Boestel	Colombo
14/12/2006	IRM	Country Director	Edgar Cua	Manila
	SERD	Principal Agricultural Economist	M. Jamilur Rahman*	Manila
15/12/2006	IRM	Principal Economist	Ramesh Subramaniam	Manila
	SERD	Housing & Urban Development Specialist	Florian Steinberg	Manila
18/12/2006	SERD	Advisor (Regional Cooperation and Integration)	David Jay Green	Manila
	SARD	Energy Specialist	L. Boenawan Sundjaja	Manila
	SARD	Transport Specialist (Regional Cooperation)	Meriaty Subroto	Manila
19/12/2006	SPD	Planning and Policy Specialist	Patrick Safran	Manila
	OED	Evaluation Specialist	Narendra Singru	Manila
27/02/2007	RSSD	Senior Social Development Specialist	Sri Wening Handayani	Manila

Note: * Tsunami Task Force member; * Reviewer of the ADB's A report on ADB's response to the Asian tsunami (14 December 2005).

3-2. Interviewees from Non-ADB Organizations

Date of meeting	Org.	Position	Contact	Meeting location
07/12/2006	BRR	Chief of Operation	Edy Purwanto	Banda Aceh
		Director, Roads	Haryanto C. Pranowo	Banda Aceh
		Deputy for Infrastructure	Bastian S. Sihombing	Banda Aceh
		Funding (PMO)	Roy Rahendra	Banda Aceh
		Education	Taufiq Saidi	Banda Aceh
		Health	Siti Nur Anisah	Banda Aceh
		Housing	Tomen Bukit	Banda Aceh
08/12/2006	UNORC	UN Recovery Coordinator for Aceh	Eric Morris	Banda Aceh
11/12/2006	WB	Assistant Resident Representative (Environment and Energy)	Vic Bottini	Banda Aceh
	UNDP		Ananda Mallawatantri	Colombo
11/12/2006	RADA	Director, Donor Coordination	Rachel C. Perera	Colombo
		Chief Operating Officer	Shanti Fernando	Colombo

Appendix 4: SWOT Analysis of Mainstreaming Disaster Risk Reduction in ADB

A - Disaster relief

		Strengths	Weaknesses
		<p>* ADB has resident mission in the affected countries.</p> <p>* Former ADB staff & consultants experienced in the affected countries can give advice.</p>	<p>*ADB staff members are unsure about their role.</p> <p>* "Leave it to the pros."</p> <p>* ADB does not have the right assistance modality</p>
Opportunities	<p>* "ADB should be prepared."</p> <p>* Other donors are rendering assistance.</p>	<p>(1) Prepare the resident mission for disasters and emergencies.</p> <p>(2) Strengthen disaster risk management as a link between HQ and RMs.</p> <p>(3) Do a roster of former ADB staff and consultants who are willing and able to be involved in ex ante and ex post-disaster-related activities.</p> <p>(4) Codify lessons learned in a knowledge database (e.g., case studies).</p>	<p>(9) Strategize on how to deal with disaster relief in consultation with former staff.</p> <p>(10) Make an action plan on what ADB can and shall do during disaster relief and other phases.</p> <p>(11) Formulate guidelines.</p> <p>(12) Devise appropriate assistance modalities.</p>
Threats	<p>* "ADB is not a relief organization."</p>	<p>(5) Clarify role of RM in relief.</p> <p>(6) Seek advice from former ADB staff</p> <p>(7) Have mentoring program to help present and new staff.</p> <p>(8) Utilize knowledge management resources and knowledge sharing tools such as storytelling and oral histories.</p>	<p>(13) Depending on the result of consultations regarding strategy formulation and action planning, take steps to prepare for relief, to develop understanding among staff about ramifications of relief, or completely focus on post-relief or recovery-oriented activities.</p> <p>(14) Explore/ find out what assistance modalities ADB should offer.</p>

B - Early recovery

		Strengths	Weaknesses
		* Former ADB staff & consultants experienced in the affected countries are able to take ADB jobs. * Lessons learned are recorded in reports.	*ADB does not have the right assistance modality
Opportunities	* Recruit experts experienced in the countries. * ADB has joined damage and impact assessment * Modalities can be mixed. * RM can collect local information and collaborate to get it. * Other donors render assistance.	(1) Prepare and distribute a roster of professionals and experts with experience in disaster-related projects, current and corner ADB employees and project consultants who have country-specific knowledge and know-how. (2) Utilize such human resources for disaster-related projects, as needed. (3) Strengthen know-how within the ADB through formal and informal means in knowledge sharing. (4) Train relevant ADB staff on disaster and impact assessment.	(6) Get advice from former ADB staff and consultants with field experience on disaster-related projects. (7) Monitor and evaluate assistance modalities. (8) Develop the suite of assistance modalities. (9) Create feedback mechanism between RM and HQ. (10) Devise a step-by-step action plan to build capacity within RMs such as familiarization with global trends in disaster risk reduction, and integrating disaster risk reduction (DRR) in Country Partnership (11) Formulate strategies, particularly for high-risk, hazard-prone countries.
Threats	* Restricted choice of modalities	(5) Acquire feedback from ADB staff and consultants involved in disaster-related projects to help in formulating assistance modalities.	(12) Study the synergy of combining and synchronizing technical assistance, grants and loans.

C - Rehabilitation

		Strengths	Weaknesses
		<ul style="list-style-type: none"> * ADB has done several rehabilitation and reconstruction projects to date. * ADB has expertise in some sectors like transportation, power etc. * Lessons learned are recorded in reports. 	<ul style="list-style-type: none"> * Delays; projects take more than the project period intended.
Opportunities	<p>"Build back better" message from Mr. Clinton</p> <ul style="list-style-type: none"> * Other donors render assistance. 	<ul style="list-style-type: none"> (1) Organize cases illustrating good practices for dissemination to ADB staff and for training materials. (2) Reinforce mitigation in future projects; include risk and vulnerability reduction as criteria for project appraisal and evaluation. 	<ul style="list-style-type: none"> (5) Review the impact of emergency loans and associated current practice in terms of increasing or decreasing vulnerability.
Threats	<ul style="list-style-type: none"> * Tendency for project implementation period to be short and thus mitigating aspects are overlooked or disregarded. * Difficulties in release of funds by Headquarters due to lack of understanding of field-level situation. 	<ul style="list-style-type: none"> (3) Readjust assistance modality. (4) Treat rehabilitation project as a development project. 	<ul style="list-style-type: none"> (6) Take steps to replace or modify design of loan project. (7) Sensitize Headquarters staff on field conditions.

D - Reconstruction

		Strengths	Weaknesses
		<ul style="list-style-type: none"> * Flexibility * Engineering knowledge; sectoral work * Lessons learned are recorded in reports. 	<ul style="list-style-type: none"> * Delays; projects take more than the project period intended.
Opportunities	<ul style="list-style-type: none"> * "Build back better" message from Mr. Clinton * Other donors render assistance. 	(1) Ensure flexibility does not result in greater vulnerability. See Rehabilitation.	(3) Set up project monitoring schemes for RM and department with appropriate division of responsibilities.
Threats	<ul style="list-style-type: none"> * Tendency for project implementation period to be short and thus mitigating aspects are overlooked or disregarded. 	(2) Establish dialogue and feedback among ADB procurement, regional department and RM staff. See Rehabilitation.	See Rehabilitation

E - Overall ADB capacity building

		Strengths	Weaknesses
		Engineering knowledge; sectoral work, project management are the forte of the regional department staff. RM operates closer to the ground.	Overtasked ADB RM staff. Level of preparation is low.
Opportunities	Focal points/sectors; Learning by doing Results-based management ADB belongs to the ProVention Consortium	(1) Knowledge sharing through in-house seminars (e.g., brown bag seminars), community of practice, and informal mechanisms	(4) Train staff who are designated as focal points. Adjust work load as necessary, and/or create new position for particularly high-risk, hazard-prone DMCs. (5) Mentoring.
Threats	Work to date has had little to do with disaster management organizations	(2) Establish opportunities for networking. (3) Develop dialogue among staff members through a communities of practice (e.g., ADB's Managing for Development Results or MfDR CoP can be an entry point for disaster issues)	

F - Overall DMC capacity building

		Strengths	Weaknesses
		Learn from past experiences of disasters. Appropriate legal and institutional framework. Use local knowledge	Weak plans/ no plans. Inappropriate legal and institutional framework. Inexperience in international disaster assistance.
Opportunities	Hyogo Framework of Action (FHA) Global Facility for Disaster Risk Reduction (GFDRR) and other organizations' assistance modalities. "Build back better" message. Media attention to the IOT. Internet access to IOT information. Some groups shifting to mitigation and preparedness.	(1) Conduct awareness building activities for politicians and decision makers (2) Assist in the review of national disaster risk management framework of high risk countries (3) Distill lessons from the IOT experience and apply lessons learned	(7) Fund mitigation and preparedness projects (8) Develop mechanisms for getting lessons into ADB-funded projects, plans and frameworks and integrate disaster risk reduction parameters into the project management cycles as well as the Country Partnership Strategies
Threats	No requests for assistance regarding mitigation and preparedness. Gaps between relief and development communities. State of relationship between government authorities and NGOs. Focus on response of some stakeholders.	(4) Improve transfer of learning experiences about IOT and other disasters (5) Develop training courses and modules built around the IOT case. (6) Encourage, participate, and/or organize dialogues among stakeholders (inclusiveness)	(9) Do more mitigation and preparedness projects. (10) Define roles and institutional arrangements.

Appendix 5: Classification of Actions

A Classification of Actions Derived from SWOT analysis			
Relief	Early recovery	Rehabilitation	Reconstruction
A. Organizational system for preparedness			
<ul style="list-style-type: none"> • Prepare the resident mission for disasters and emergencies. • Strengthen disaster risk management as a link between HQ and RMs. • Do a roster of former ADB staff and consultants who are willing and able to be involved in ex ante and ex post-disaster-related activities. • Make an action plan concerning what ADB can and shall do during disaster relief and other phases. • Formulate guidelines regarding ADB' response procedures. 	<ul style="list-style-type: none"> • Prepare and distribute roster of professionals and experts with experience in disaster-related projects, current and former ADB employees and project consultants who have country-specific knowledge and know-how. • Utilize such human resources for disaster-related projects, as needed. 	<ul style="list-style-type: none"> • Organize cases from Regional Departments and Resident Missions illustrating good practices for dissemination to ADB staff and for training materials. 	
B. Knowledge building			
<ul style="list-style-type: none"> • Codify lessons learned in a knowledge database (e.g., case studies). • Seek advise from former ADB staff • Have mentoring program to help present and new staff. • Utilize knowledge management resources and knowledge sharing tools such as storytelling and oral histories. • Strategize on how to deal with 	<ul style="list-style-type: none"> • Strengthen know-how within the ADB through formal and informal means in knowledge sharing. • Train relevant ADB staff on disaster and impact assessment. • Acquire feedback from ADB staff and consultants who were involved in disaster-related projects to help in formulating assistance modalities. • Get advice from former ADB 	<ul style="list-style-type: none"> • Review impact of emergency loan and associated current practice in terms of increasing or decreasing vulnerability. • Codify lessons learned in a knowledge database (e.g., case studies). 	

<p>disaster relief in consultation with former staff.</p> <ul style="list-style-type: none"> Depending on the result of consultations regarding strategy formulation and action planning, take steps to prepare for relief, to develop understanding among staff about ramifications of relief, or completely focus on post-relief or recovery-oriented activities. 	<p>staff and consultants with field experience on disaster-related projects.</p> <ul style="list-style-type: none"> Devise a step-by-step action plan to build capacity within Resident Missions such as familiarization with the global trends in disaster risk reduction, and integrating DRR in Country Partnership Strategy. 		
C. Strategic planning and management			
<ul style="list-style-type: none"> Clarify role of RM in relief. 	<ul style="list-style-type: none"> Implement disaster risk management (DRM) strategies, particularly for high-risk, hazard-prone countries. 	<ul style="list-style-type: none"> Enhance feedback mechanism between Resident Mission and Headquarters. Reinforce mitigation in future projects; include risk and vulnerability reduction as criteria for project appraisal and evaluation. Treat rehabilitation project as development project Identify DRM strategies, particularly for high-risk, hazard-prone countries. 	<ul style="list-style-type: none"> Sensitize Headquarters staff on field conditions. Ensure flexibility does not result in greater vulnerability. Dialogue and feedback among ADB procurement, regional department and RM staff. Set up project monitoring schemes for RM and department with appropriate division of responsibilities.
D. Assistance modality			
<ul style="list-style-type: none"> Devise appropriate assistance modalities. Explore/ find out what assistance modalities ADB should offer. 	<ul style="list-style-type: none"> Monitor and evaluate assistance modalities. Develop the suite of assistance modalities. Study the synergy of combining and synchronizing technical assistance, grants and loans. 	<ul style="list-style-type: none"> Readjust assistance modality Take steps to replace or modify design of loan project. 	

Appendix 6: Selected Knowledge Sharing Methods, Meetings, and Tools

Method	Description	Benefits and strengths
Tools		
Peer assist	A method of cooperation, based on dialogue and mutual respect among peers. Involves a meeting organized by a work team whose members are starting up a new project (the hosts). The hosts call on another group who already has experience with a similar project.	<ul style="list-style-type: none"> • Benefits both parties. Hosts gain important knowledge. Those consulted think and learn more about their experience. • Provides a highly focused environment for knowledge sharing • Concentrates on a specific task. Can be applied immediately. • Allows you to seek knowledge outside your working group. • Promotes cooperation between teams. Develops strong networks. • Saves time. Is easy and low-cost. • Helps you make informed decisions.
After action review or AAR	Main purpose is learning by talking and thinking about a completed activity or project. Its goal is simply to state lessons learned, rather than to solve problems or criticize.	<ul style="list-style-type: none"> • Applies to any activity with a preset goal. It does not matter how long the activity took nor how many people were involved. • Used as part of a long process; it can be applied as soon as each phase is completed. • Gives all participants the chance to share their ideas and to be heard. • Allows people to realize what they have learned. • Creates a climate of confidence in a team. • Can be applied at any point in a project cycle.
Storytelling	Storytelling as a way to transfer knowledge, communicating complex ideas, key messages and lessons learned. Allows describing employee relations or activities in a formal or informal way. The aims are to transmit tacit knowledge that an organization can use.	<ul style="list-style-type: none"> • Stories are funny, interesting and memorable. • Their language is real and personal. • Stories simplify complex things. Stories are concrete and accessible. • The audience easily identifies with the story. • Stories inspire us to take action. • Stories foster a sense of community.
Mentoring	A learning relationship between two employees. Mentors are experienced employees who share their knowledge, experience and ideas with the less experienced. Associates are people who have shown what they can do. Associates really want to acquire new knowledge and skills. Mentoring occurs outside any formal employer-employee relationship.	<ul style="list-style-type: none"> • Less experienced employees become better equipped to meet future challenges. • Mentoring gives mentors the chance to share their experience and expertise in a rewarding relationship. Mentors are also exposed to new ways of thinking and doing things. • It can improve internal communication. It makes the work environment more stimulating and productive.

Method	Description	Benefits and strengths
Coaching	Aims to develop new qualifications and skills in an employee and to improve that person's learning and job performance so that he/she can then reach organizational goals.	<ul style="list-style-type: none"> • Makes the employee feel more confident. • Gives the employee the support and follow-up • Gives the employee the chance to learn from the coach's experience. • Improves the employee's chances of success.
Meetings		
Communities of practice or CoP (networks)	Knowledge is both social and individual. Forming a group thus promotes learning and innovation. Creating a CoP is a way to share your knowledge with others who are passionate about the same topic. CoP members freely discuss the various situations they face. They manage their tacit and explicit knowledge in a given field as effectively as they can.	<ul style="list-style-type: none"> • Allows crosscutting discussion. CoPs transcend silos. • Link the organization's formal and informal mechanisms. • A vital component of a learning organization. • Allow you to test new ideas and to develop context-specific common practice. • Generate new knowledge in response to specific problems and issues. • Lead to sharing specialized knowledge. CoPs make it easy to identify people in a field. • An effective way to manage thematic and sectoral knowledge.
Knowledge fairs	Designed to present lots of information on a chosen theme to be shared with a lot of people. Use several technical means – showcases, panels, scale models, kiosks – to present information to the target group.	<ul style="list-style-type: none"> • You can present a lot of information. • People focus on what interests them. • There is immediate interaction with the presenter. • Excellent for networking. Establishes contacts for the future. • Organizers strengthen their team spirit and ability to work together. • Recognizes best practices and people's achievements.
Entre Nous (within CIDA)		
Expertise locator system	Also known as expertise directory/ skill catalogue/ white pages or yellow pages. Lets you reach your colleagues who have acquired significant knowledge and experience in specific fields. Helps identify hidden expertise in an organization.	<ul style="list-style-type: none"> • Lets people know each other's areas of knowledge: priorities, sectors, countries and specific areas of knowledge and skills. • Lets you find specific expertise, or a specific person, quickly and easily. • Helps to hook up employees of an organization whose offices are at a distance.

Note: Based on Canadian International Development Agency (CIDA), 2003 Knowledge Sharing: Methods, Meetings and Tools (<http://www.km4dev.org/index.php/articles/c172>).

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