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March 2017

## Asia Pacific Disaster Response Fund: Review of Performance

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**Asian Development Bank**

## ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
APDRF	–	Asia Pacific Disaster Response Fund
CWRD	–	Central and West Asia Department
DEAP	–	Disaster and Emergency Assistance Policy
DMC	–	developing member country
EARD	–	East Asia Department
OCR	–	ordinary capital resources
PARD	–	Pacific Department
SARD	–	South Asia Department
SDCC	–	Sustainable Development and Climate Change Department
SERD	–	Southeast Asia Department
UN	–	United Nations

## NOTE

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

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## CONTENTS

	<b>Page</b>
I. INTRODUCTION	1
II. BACKGROUND	1
A. Establishment of the Fund	1
B. Implementation Arrangements	2
III. FUND PERFORMANCE	3
A. Resources	3
B. Allocations	6
C. Timeliness of Grant Approval, Effectiveness, and Implementation	9
D. Use of Funds	12
E. Grant Liquidation	14
F. Auditing	16
IV. ASSESSMENT OF IMPLEMENTATION ARRANGEMENTS AND GRANT EFFECTIVENESS	16
A. Appropriateness of Implementation Arrangements	16
B. Satisfaction of Eligibility Criteria	17
C. Performance of Eligibility Criteria in Targeting Resources	18
D. Value-Added Contribution	21
E. Project Impact	23
F. Overall Assessment and Ratings	24
G. Follow-On ADB Assistance	24
V. CONCLUSIONS	25
APPENDIXES	
1. Project Summaries	28
2. Tables	36

## I. INTRODUCTION

1. The provisions set forth in the Board paper establishing the Asia Pacific Disaster Response Fund (APDRF) require a review before replenishment may be sought. Any request for replenishment must be based on such a review, including an assessment of the fund's effectiveness and the appropriateness of its implementation arrangements.<sup>1</sup>

2. The review covers the period from January 2015 to December 2016 in particular detail while also reporting on overall fund performance since its establishment in 2009. An earlier review covering the period April 2009 to December 2014 was circulated to the Asian Development Bank (ADB) Board of Directors in February 2015.<sup>2</sup> As of January 2015, a total of eight grants were under implementation or awaiting submission of the audit report. A further eight new grants were approved by the President between January 2015 and December 2016. This review covers fund performance, including fund resources; fund allocations; timeliness; use of funds; liquidation; and auditing. It also assesses the implementation arrangements and grant effectiveness, including the appropriateness of arrangements, the satisfaction of eligibility criteria, the performance of eligibility criteria in targeting resources, the value-added contribution of the grants, and project impact. It concludes with a summary of fund performance and a discussion of opportunities for improvement.

3. The Climate Change and Disaster Risk Management Division of the Sustainable Development and Climate Change Department (SDCC) conducted the review. It is based on (i) a desk-based review of APDRF documentation, including files held by the Controller's Department; and (ii) correspondence and discussions with project officers for approved grants.

## II. BACKGROUND

### A. Establishment of the Fund

4. Strategy 2020 identifies disaster and emergency assistance as one of the areas of operations for ADB, reflecting the considerable challenges that natural hazards pose to development in Asia and the Pacific. The strategy states that ADB will continue to mainstream disaster risk management and provide early and medium-term disaster response and assistance in partnership with specialized aid agencies.<sup>3</sup> The 2004 Disaster and Emergency Assistance Policy (DEAP) also stresses the importance of disaster risk reduction, preparedness, and post-disaster response.<sup>4</sup> It seeks to address disaster and emergency assistance in an integrated fashion, covering all aspects of disaster risk management. A companion DEAP Action Plan was approved in April 2008 and remained in effect for 6 years.<sup>5</sup> This action plan recommended exploring the provision of a quick-disbursing fund for developing member countries (DMCs) affected by a major disaster.

5. In line with these directives, the ADB Board of Directors approved the establishment of the APDRF on 1 April 2009 as a special fund to provide timely, incremental grant resources to

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<sup>1</sup> ADB. 2009. *Establishment of the Asia Pacific Disaster Response Fund*. Manila.

<sup>2</sup> ADB. 2015. *Asia Pacific Disaster Response Fund: Review of Performance*. IN.44-15. Manila.

<sup>3</sup> ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila.

<sup>4</sup> ADB. 2004. *Disaster and Emergency Assistance Policy*. Manila.

<sup>5</sup> The 2008 DEAP Action Plan was succeeded by the Operational Plan for Integrated Disaster Risk Management, 2014–2020 in April 2014.

DMCs in order to help them cover the initial costs of responding to a major disaster. The APDRF was designed to provide quick-disbursing grants of up to \$3 million per event to assist DMCs in meeting immediate expenses to restore life-saving services to affected populations, augmenting aid provided by other donors in times of national crisis. The fund was intended to bridge the gap between existing ADB loan and grant arrangements to reduce disaster risk and longer-term lending for post-disaster reconstruction. It would only apply to disasters triggered by natural hazard events.

6. An initial tranche of \$40 million was transferred to the APDRF from uncommitted resources of the Asian Tsunami Fund. In May 2015, the fund received a replenishment of \$20.0 million from ADB's 2014 net income. The APDRF paper indicated that ADB would also accept contributions to the fund from bilateral, multilateral, and individual sources, including companies and foundations, on an untied grant basis. To ensure cost-effective processing and reporting, a minimum contribution of \$500,000 equivalent was set. However, to date no such contributions have been received.

## **B. Implementation Arrangements**

7. ADB approved the implementation guidelines governing the provision of APDRF grants on 17 April 2009.<sup>6</sup> The authority to approve APDRF grants was delegated to the ADB President. SDCC was given the responsibility for managing the APDRF, in close consultation with regional departments and resident mission disaster focal points. Revised implementation guidelines were approved in July 2015.<sup>7</sup>

8. Any DMC can access the APDRF in the event of a disaster that satisfies the fund's eligibility criteria. The fund paper set three eligibility criteria: (i) a natural disaster has occurred in the DMC, (ii) a statement of national emergency has been officially declared by the affected DMC, and (iii) the United Nations (UN) humanitarian/resident coordinator has confirmed the scale and implications of the disaster and has indicated a general amount of funding required to assist in alleviating the situation. The second criterion was revised in 2010 to require the declaration of a state of emergency beyond the capacity of the country and its own agencies to meet the immediate expenses necessary to restore life-saving services to the affected populations.<sup>8</sup> The revised 2015 APDRF implementation guidelines provided further guidance, indicating that it could be deemed to have been met if a national government has approved the allocation of resources in support of the disaster response efforts and indicated that external assistance is welcome (para. 10).

9. Central governments are the recipients of the grants. They in turn can allocate funds to local governments, government agencies, and other suitable national or international entities, including nongovernment organizations. Unless otherwise agreed by ADB, the grant closing date is set at 6 months after the signing of the grant agreement.

10. APDRF grants can be used to procure goods, works, and services related to disaster response, such as emergency rescue and communication equipment; medical kits; personal hygiene kits; food and bottled drinking water; transitional shelter; water purification and sanitation systems; aviation fuel; and debris sifting, site clearance, and safe disposal of rubble.

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<sup>6</sup> ADB. 2009. *Asia Pacific Disaster Response Fund: Implementation Guidelines*. Manila.

<sup>7</sup> ADB. 2015. *Asia Pacific Disaster Response Fund: Implementation Guidelines*. Manila.

<sup>8</sup> ADB. 2010. *Amendment to Condition for Assistance of the Asian Pacific Disaster Response Fund*. Manila.

Disbursements are allowed for up to 100% of eligible costs (including applicable taxes and duties). Retroactive financing of disaster relief costs totaling up to 30% of grant proceeds has been permitted since the revised APDRF implementation guidelines were approved in July 2015. This option applies to expenditure incurred after the declaration of a state of emergency or the approval of national government resources in support of the disaster response efforts and brings the APDRF in line with retroactive financing policy for emergency assistance financing under the DEAP.<sup>9</sup> APDRF resources can be used following procurement procedures suitable for emergency response. ADB's Procurement Guidelines (2015, as amended from time to time) and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) do not apply.

11. Recipient governments are required to confirm the use of the grant through a statement of expenditure to be submitted promptly after the grant closing date. Since July 2015, the ADB project officer has also been required to submit a grant closing report to SDCC. Within 6 months of receipt of the statement of expenditure by ADB, the recipient's supreme audit institution or another audit firm acceptable to ADB is required to provide an audit report on the use of the grant, including the imprest account and the statement of expenditure.

### III. FUND PERFORMANCE

#### A. Resources

12. **Contributions to the fund.** An initial tranche of \$40 million was transferred to the APDRF from uncommitted resources of the Asian Tsunami Fund. In May 2015, the fund received a replenishment of \$20.0 million from ADB's 2014 net income. Total resources as of 31 December 2016 amounted to \$60.3 million, comprising \$60.0 million in contributions and \$0.3 million in interest and investment income.

13. The fund can receive resources from bilateral, multilateral, and individual sources. Although ADB has sought to mobilize funds from such sources in a number of meetings and other forums, the APDRF has not received any external contributions. Bilateral donors channel significant multilateral humanitarian relief resources through specialized UN agencies with dedicated humanitarian relief expertise, particularly the UN Central Emergency Response Fund.<sup>10</sup> However, because ADB does not have humanitarian assistance technical capabilities and expertise, it is not well positioned to attract humanitarian relief resources earmarked for disbursement through multilateral channels. Bilateral donors are also typically keen to retain some portion of their humanitarian budget for direct support to affected countries. This direct support provides strong donor visibility in the immediate aftermath of major disasters, contributing to positive political relationships with affected governments.

14. **Fund approvals.** From April 2009 to December 2016, 27 APDRF grants totaling \$51.3 million were approved (net of cancellations), providing assistance to 16 DMCs. For the more recent period January 2015 to December 2016, eight APDRF grants totaling \$16.2 million were approved for eight DMCs. The May 2015 replenishment for an amount of \$20.0 million was intended to provide sufficient resources for 2 years. As of 31 December 2016, APDRF

<sup>9</sup> Retroactive financing up to 30% is permitted for emergency assistance financing under ADB's Disaster and Emergency Assistance Policy. ADB. 2004. *Disaster and Emergency Assistance Policy*. Manila.

<sup>10</sup> This UN fund provides rapid initial funding for life-saving assistance at the onset of humanitarian crises and critical support for poorly funded, essential humanitarian response operations. It was launched in March 2006 and allocates about \$400 million annually.

resources totaling \$16.2 million had been approved for this period, indicating that this scale of replenishment was adequate.

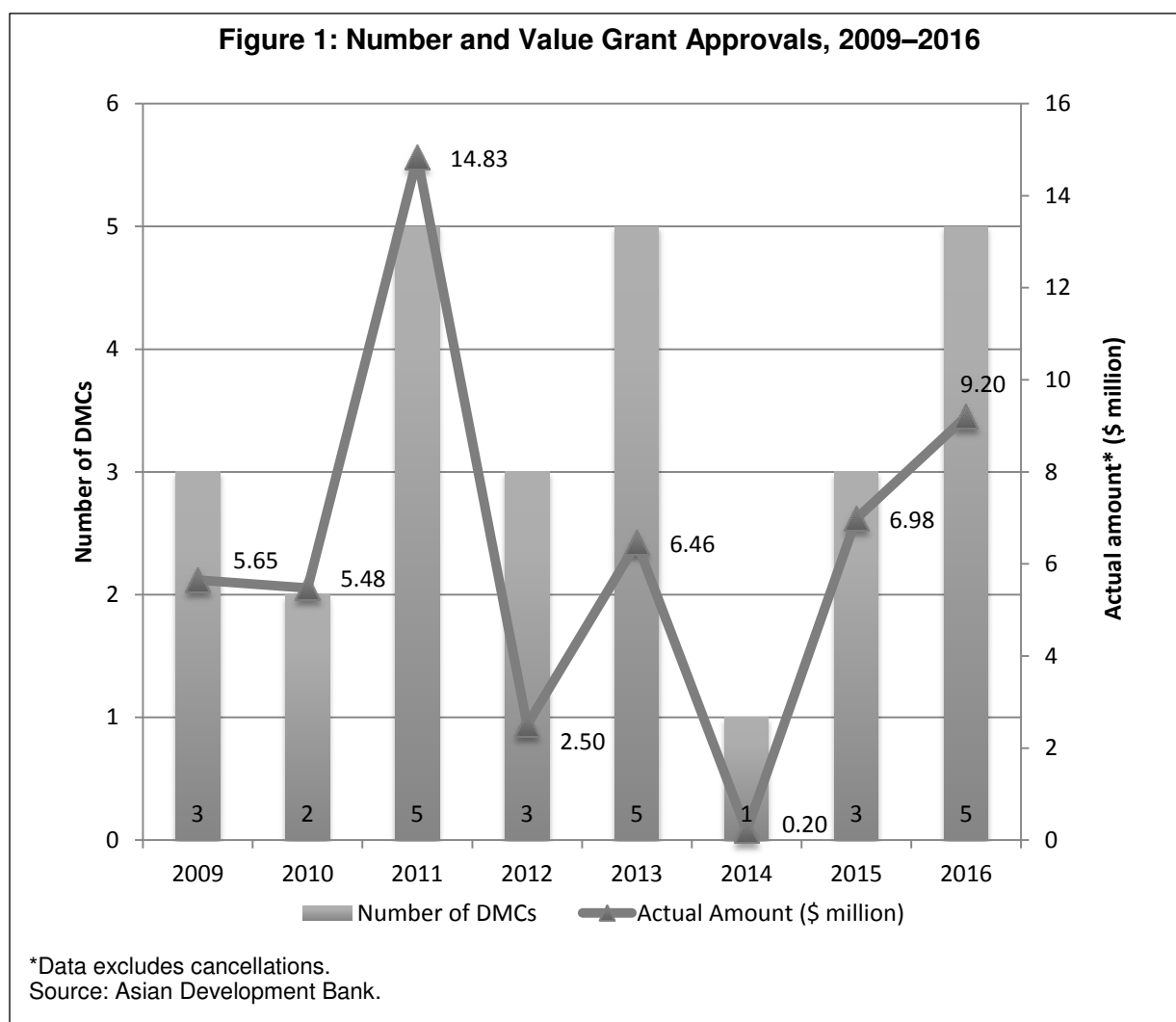
15. Undisbursed balances of \$1.6 million have been returned to the fund since its establishment in 2009, leaving \$8 million remaining in the APDRF as of 31 December 2016 (Table 1). All government requests for support from the APDRF have been met.

**Table 1: Asia Pacific Disaster Response Fund Grant Approvals, 2009–2016 (\$)**

Approval Year	Country	Grant Title	Grant Number	Approved Amount	Disbursed Amount	Undisbursed Balance
2009	Philippines	Typhoon Ketsana	162	3,000,000	1,650,000	1,350,000
2009	Samoa	Earthquake and Tsunami Disaster Response	165	1,000,000	1,000,000	0
2009	Indonesia	West Sumatera Earthquake Disaster	168	3,000,000	2,999,460	540
2010	Mongolia	Dzud Disaster Response	200	2,500,000	2,500,000	0
2010	Pakistan	National Flood Emergency Response	214	3,000,000	2,976,972	23,028
2010	Indonesia	Mount Merapi Disaster Response	237	-----Cancelled-----		
2011	Sri Lanka	Flood Disaster Response	247	3,000,000	3,000,000	0
2011	Pakistan	Sindh and Balochistan Flood Disaster Response	266	3,000,000	2,999,380	620
2011	Cambodia	Cambodia Flooding 2011: Humanitarian Assistance	268	3,000,000	2,830,291	169,709
2011	Thailand	Thailand Flooding 2011	269	3,000,000	3,000,000	0
2011	Philippines	Tropical Storm Washi	279	3,000,000	3,000,000	0
2012	Fiji	Fiji Flood Emergency Response	283	1,000,000	1,000,000	0
2012	Fiji	Fiji Flood Rehabilitation	286	1,000,000	1,000,000	0
2012	Samoa	Cyclone Emergency Response	333	500,000	500,000	0
2013	Marshall Islands	Drought Disaster Response	344	100,000	100,000	0
2013	Marshall Islands	Second Drought Disaster Response	351	200,000	185,228	14,772
2013	Philippines	Typhoon Haiyan (Yolanda)	369	3,000,000	3,000,000	0
2013	Cambodia	Cambodia Flooding 2011: Humanitarian Assistance	372	3,000,000	2,975,066	24,934
2013	Palau	Super Typhoon Haiyan Response	381	200,000	199,956	44
2014	Solomon Islands	Flood Disaster Response	385	200,000	200,000	0
2015	Vanuatu	Vanuatu Cyclone Pam Disaster Response	428	1,000,000	980,436	19,564
2015	Nepal	Nepal Earthquake Disaster Response	430	3,000,000	3,000,000	0
2015	Myanmar	Flood Emergency Response	436	3,000,000	3,000,000	0
2016	Fiji	Fiji Cyclone Emergency	466	2,000,000	2,000,000	0
2016	Mongolia	Dzud Disaster Response	475	2,000,000	1,999,990	10
2016	Marshall Islands	Third Drought Disaster Response	476	200,000	200,000	0
2016	Viet Nam	El-Nino Disaster Response (Drought and Saltwater Intrusion)	480	3,000,000	3,000,000	0
2016	Sri Lanka	Sri Lanka Flood and Landslide Disaster Response	481	2,000,000	2,000,000	0
<b>TOTAL</b>				<b>52,900,000</b>	<b>51,296,778</b>	<b>1,603,222</b>

Source: Grant Financial Information System.

16. The number and value of grant approvals have fluctuated from year to year, reflecting the timing of disaster events. From 2009 to 2016, two to five grants were approved each year (net of cancellations) (Figure 1). Only one grant was approved in 2014. Annual total grant approvals in value terms have varied between \$0.2 million in 2014 and \$15.0 million in 2011, averaging \$6.8 million annually over the life of the APDRF from April 2009–December 2016 and slightly higher at \$8.1 million for 2015 and 2016 alone. Four of the five grants approved in 2011 were made in response to floods linked to La Niña conditions, which resulted in a higher incidence of extreme rainfall events in Asia.<sup>11</sup> Higher than average approvals in 2016 in part reflected the aftermath of El Niño conditions.



17. **Canceled funds.** A total of \$1.6 million has been returned to the fund. These resources largely pertained to a 2009 grant to the Philippines in response to Typhoon Ketsana (locally named Ondoy). The government was unable to liquidate the \$3 million grant in full, resulting in its partial cancellation and the return of \$1.35 million. A 2010 \$3 million grant for Indonesia was also subsequently canceled because the executing agency failed to (i) submit a detailed work

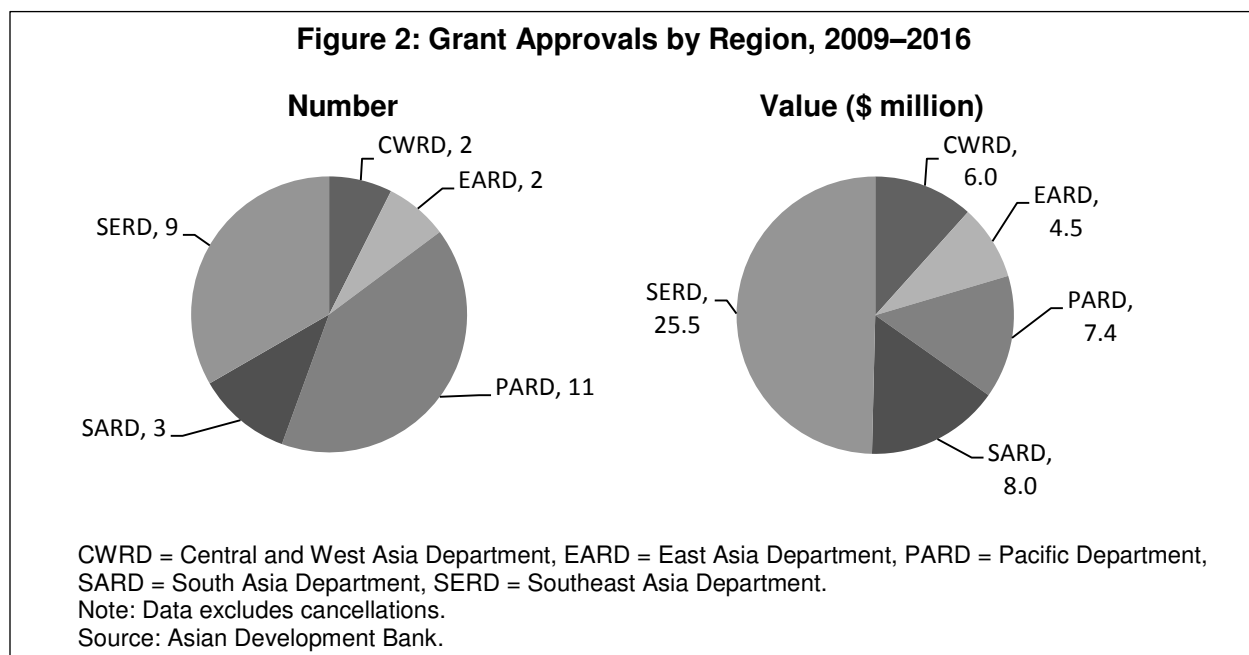
<sup>11</sup> La Niña conditions, which involve a cooling of the sea surface temperature in the equatorial Pacific, occur at irregular intervals and are associated with heavier rainfall in Asia.



plan or procurement plan in compliance with the provisions of the grant agreement, and (ii) justify its request to extend the grant closing date for 18 months.

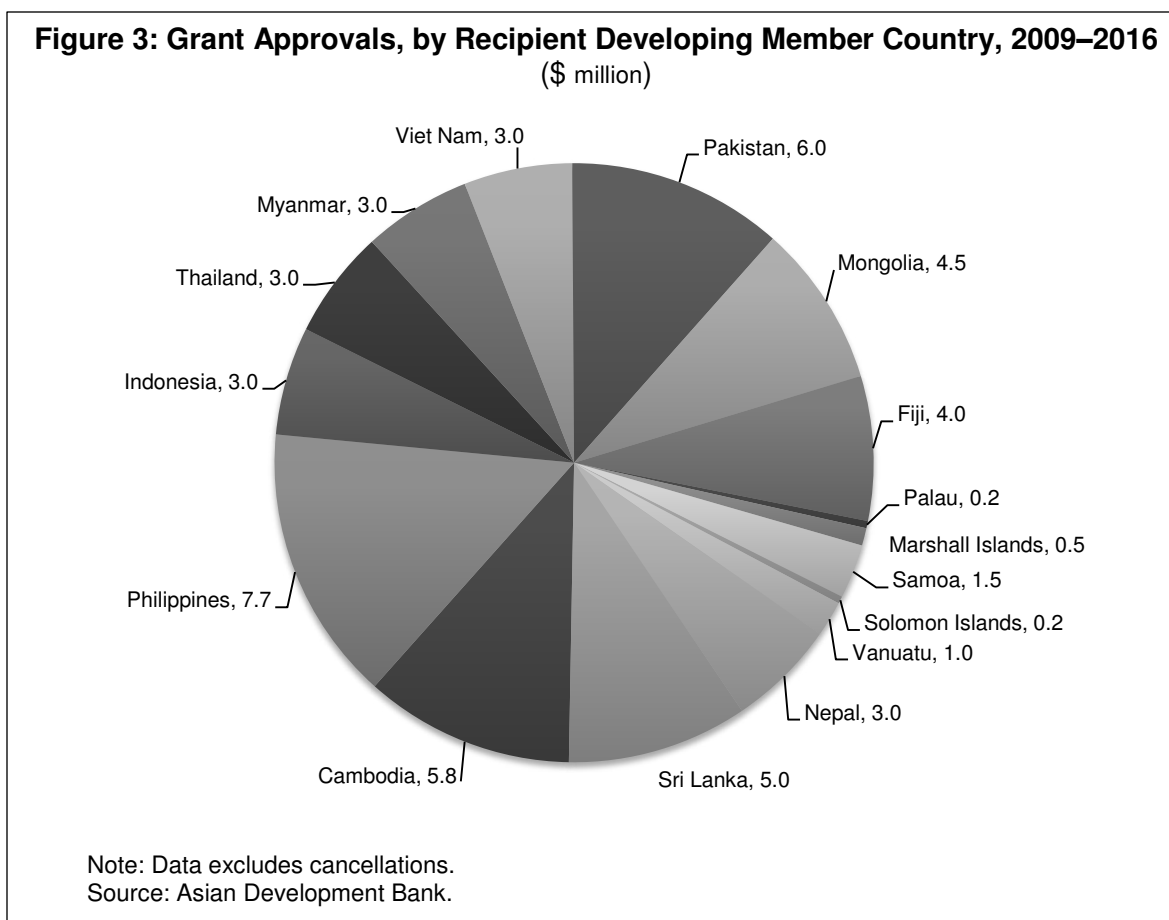
## B. Allocations

18. **Grant recipients.** All five regional departments have tapped the APDRF. Since the APDRF's establishment in 2009, DMCs covered by the Southeast Asia Department (SERD) have received the largest number of grants in value terms (Figure 2). The region has accounted for 9 of the 27 grants approved (net of cancellations), amounting to \$27 million or 51% of the total approved. Pacific Department (PARD) DMCs have received the largest number of grants, totaling eleven grants. However, reflecting the much smaller scale of disasters in Pacific island economies—both in terms of the number of people affected and the scale of physical damage—these grants have totaled \$7.4 million, equivalent to 14% of the approved resources. DMCs of the South Asia Department (SARD) have received the second highest allocation of grants in value terms, receiving three grants totaling \$8 million. Central and West Asia Department (CWRD) DMCs have received two grants for \$6.0 million, while East Asia Department (EARD) DMCs have received two grants for \$4.5 million. For the two most recent years, 2015 and 2016, alone, SERD DMCs have also received the largest number of grants in value terms while PARD DMCs have received the largest number of grants, following the pattern for the longer period. EARD and SARD DMCs have received APDRF grants while CWRD countries have received none.



19. The Philippines has been the largest single recipient of APDRF grants in value (Figure 3). The country has received three grants, each for the maximum amount of \$3 million. The Philippines has received 17% of total approved grants in value terms. Fiji and the Marshall Islands have also received three grants each, totaling \$4.0 million and \$0.5 million respectively. Five DMCs have each received two grants (Cambodia, Mongolia, Pakistan, Samoa and Sri Lanka); eight DMCs (Indonesia, Myanmar, Nepal, Palau, Solomon Islands, Thailand, Vanuatu and Viet Nam) have each received one grant. The Marshall Islands is the only country to have received two APDRF grants in response to the same disaster. An extended drought resulted in

a continuing need for humanitarian support over a prolonged period, justifying two successive grants. Between 2015 and 2016 alone, four countries received their first APRDF grant (Myanmar, Nepal, Vanuatu and Viet Nam). Fiji, Mongolia, the Marshall Islands and Sri Lanka also received grants.

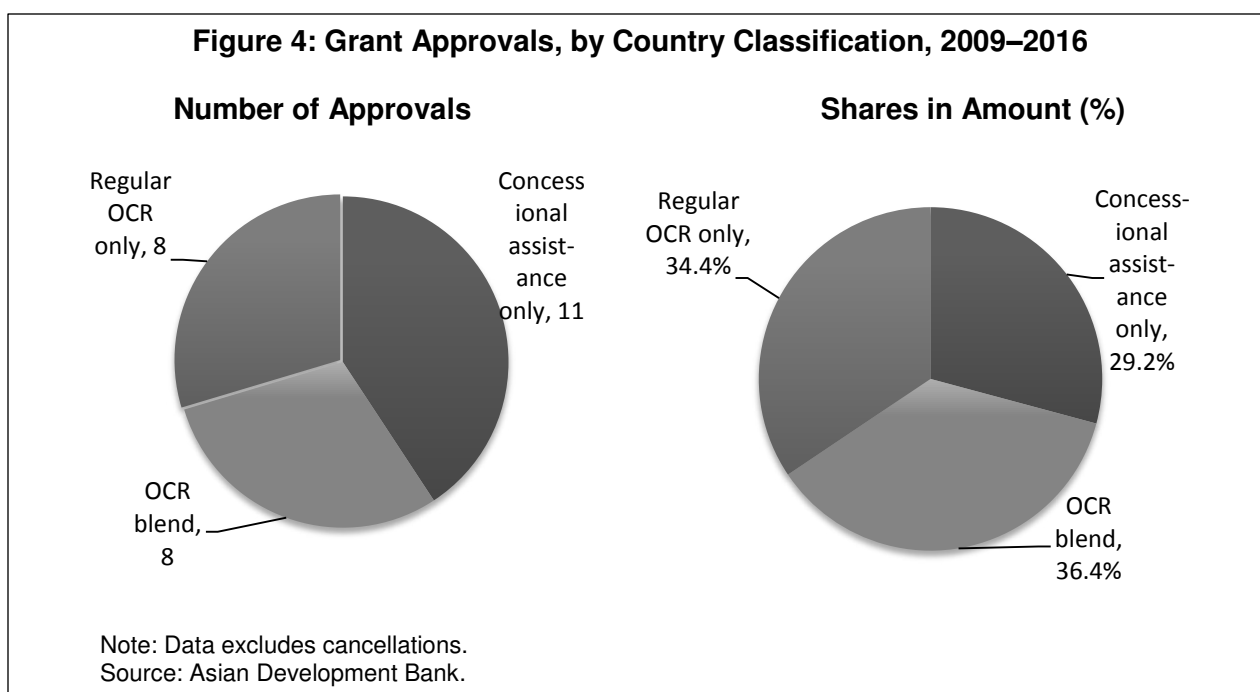


20. Concessional assistance only DMCs have accounted for 11 of the 27 grants approved to date, ordinary capital resource (OCR) blend countries for eight of the grants, and regular OCR only countries for the remaining eight grants.<sup>12</sup> However, concessional-assistance only countries have accounted for only 29% of total approved grants in value terms because seven of these 11 grants were extended to Pacific countries and were relatively small (Figure 4). OCR blend countries have accounted for 35% of total grants in value terms and regular OCR only countries for the remaining 36%. For the two most recent years, 2015 and 2016, alone, concessional assistance only countries have received four grants, OCR blend countries have received three grants, and regular OCR only countries have received 1 grant, in value terms accounting for 44%, 43% and 12% respectively of the total grants approved.

21. **Types of disaster.** About 85% of grants have been approved in response to climate-related disasters. Floods alone have accounted for 11 grants totaling \$25.2 million, equivalent to 48% of total grant approvals (Figure 5). Seven grants have been approved in response to

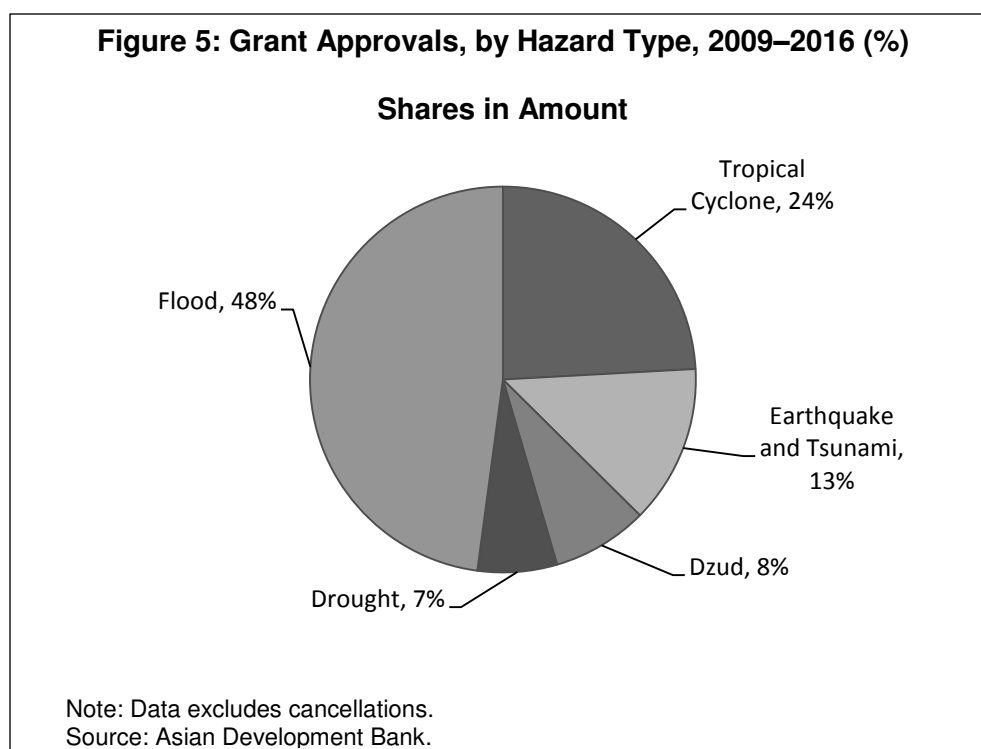
<sup>12</sup> OCR blend countries receive both concessional and regular OCR loans.

tropical cyclones,<sup>13</sup> including the three grants approved for the Philippines. Grants have also been provided in response to droughts, dzud,<sup>14</sup> earthquakes, and tsunamis (and for volcanic eruptions under the 2010 grant for Indonesia that was subsequently cancelled). In 2015 and 2016 alone, two grants were approved in response to each of droughts, floods, and tropical cyclones with one grant approved in response to each of dzuds and earthquakes. In value terms, floods accounted for 31% (\$5.0 million) of total approvals, droughts for 20% (\$3.2 million), earthquakes and tropical cyclones each for 19% (\$3.0 million), and dzuds for 12% (\$2.0 million).



<sup>13</sup> Tropical cyclone is the generic term for cyclones, hurricanes, and typhoons. All three of the latter terms describe the same type of natural hazard. The term applied depends on the location of origin of a particular event.

<sup>14</sup> A dzud is a Mongolian term relating to winter climatic extremes associated with snowfall and temperature. Dzud pose a particular threat to livestock populations.



### C. Timeliness of Grant Approval, Effectiveness, and Implementation

22. APDRF grants have typically been approved promptly in response to government requests, supporting the timely and effective use of grant resources.

23. **Request for support.** Government requests for APDRF assistance have generally been received promptly following a disaster. Since the establishment of the APDRF in April 2009, ten of the grants have been provided in response to tropical cyclones, earthquakes, and tsunamis. These types of hazard have a brief duration and the scale of damage is quickly apparent. ADB received official requests for assistance within a week of occurrence of nine of the ten tropical cyclones, earthquakes, and tsunamis supported through the APDRF (Table A2.2). Since January 2015 alone, three grants have been approved for these quick onset events. Official requests for assistance were received within four days of the disaster in all three cases (Table 2).

24. The remaining 17 grants (net of cancellations) have entailed responses to situations of flood, drought, and dzud, where it is often less clear-cut at what point an event escalates to the point of a major disaster. However, the date on which a disaster is declared provides a useful proxy. Disasters were declared in 13 of these cases. Requests for ADB support were received within 1 week of the declaration of a disaster in four cases, within 3 weeks in six cases, within 4 weeks in one case, and the day before the declaration of a disaster in one case. In contrast, the request for ADB support in response to the 2009–2010 dzud in Mongolia was received 58 days following the declaration of a disaster. This lag reflected the time required to consider and approve a change to one of the three APDRF eligibility criteria to accommodate a potential request for support in response to this event (para. 52). Since 2015, two grants have been approved in response to slow-onset events in the absence of a declaration of a state of emergency. In both cases, the approval of an APDRF grant was relatively timely, in one case occurring well within the period of occurrence of the related slow onset disaster (a dzud in

Mongolia) and in the other case 10 days after floods and landslides struck as a consequence of a tropical cyclone.

**Table 2: Timeline for Request for Fund Support, 2015–2016 <sup>a</sup>**

Approval Year	Country	Disaster	Disaster Date	Declaration of Disaster/ Emergency	Request to ADB
2015	Vanuatu	Tropical cyclone	13-Mar-15	15-Mar-15	17-Mar-15
2015	Nepal	Earthquake	25-Apr-15	25-Apr-15	26-Apr-15
2015	Myanmar	Flood	30-Jul-15	31-Jul-15	18-Aug-15
2016	Fiji	Tropical cyclone	20-21 Feb-16	20-Feb-16	23-Feb-16
2016	Mongolia	Dzud	Nov 2015 - May 2016		29-Mar-16
2016	Marshall Islands	Drought	Jan - June 2016	3-Feb-16	3-Mar-16
2016	Viet Nam	Drought	Feb - June 2016	20-Apr-16	20-Apr-16
2016	Sri Lanka	Flood	15-May-16		25-May-16

<sup>a</sup> Excluding the cancelled 2010 grant for Indonesia  
Source: Asian Development Bank.

25. **ADB confirmation of eligibility.** Following the receipt of an official request for APDRF support, ADB's first step is to confirm satisfaction of the three eligibility criteria. This step has taken 7.3 days on average and just 1.7 days excluding six grants for which some delays were encountered (Table A2.2). These six grants included two approved since January 2015: (i) the 2016 Marshall Islands drought disaster grant where delays were encountered awaiting UN corroboration of the drought assessment figures prepared by the government; and (ii) the 2016 Viet Nam drought response grant, where delays were encountered confirming the satisfaction of the second eligibility criterion as the government issued an emergency response plan but did not issue a specific declaration of an emergency due to the long-onset nature of the drought and related saltwater intrusion. For the most recent two-year period, 2015 to 2016, alone, the time from receipt of an official request for APDRF support to ADB endorsement of satisfaction of the three eligibility criteria has averaged 8.6 days, falling to just 1.8 days if the 2016 grants to the Marshall Islands and Viet Nam are excluded (Table 3).

**Table 3: Time Line for Grant Endorsement and Approval, 2015–2016 <sup>a</sup>**

Approval Year	Country	Disaster	Request to ADB	SDCC Endorsement	Approval Date
2015	Vanuatu	Tropical cyclone	17-Mar-15	19-Mar-15	20-Mar-15
2015	Nepal	Earthquake	26-Apr-15	27-Apr-15	27-Apr-15
2015	Myanmar	Flood	18-Aug-15	19-Aug-15	21-Aug-15
2016	Fiji	Tropical cyclone	23-Feb-16	23-Feb-16	24-Feb-16
2016	Mongolia	Dzud	29-Mar-16	30-Mar-16	06-Apr-16
2016	Marshall Islands	Drought	3-Mar-16	28-Mar-16	06-Apr-16
2016	Viet Nam	Drought	20-Apr-16	23-May-16	01-Jun-16
2016	Sri Lanka	Flood	25-May-16	31-May-16	09-Jun-16

<sup>a</sup> Excluding the cancelled 2010 grant for Indonesia  
ADB = Asian Development Bank, SDCC = Sustainable Development and Climate Change Department.  
Source: Asian Development Bank.

26. **Grant approval.** The APDRF implementation guidelines specify that, where conditions permit, the relevant operations vice-president will convey his or her recommendation to the President for grant approval within 72 hours of confirmation that the eligibility criteria have been met. Information on the date of submission to the President is not readily available. However, 18 of the 27 APDRF grants were approved within 3 working days from the date of SDCC confirmation that the eligibility criteria were satisfied (Table A2.2). Four other grants were approved within 5 days; three were approved in 7 days; of the remaining two, one was approved in 8 days, the other in 9 days. For the eight grants approved over the period January 2015 to December 2016 alone, the time between satisfaction of eligibility criteria and grant approval averaged 4 working days and took 3 working days or less for six of the grants (Table 3).

27. Strong internal coordination, collaboration, and communication within ADB between the relevant resident mission, regional department, Controller's Department, Office of Administrative Services, Office of General Counsel, Operations Services and Financial Management Department, SDCC, Treasury Department, and the relevant vice-president's office have been widely cited as key in securing both rapid grant approval and rapid effectiveness and disbursement of funds. All ADB departments have consistently recognized the urgency in approving and disbursing APDRF grants and have prioritized associated duties and responsibilities as and when required. The One ADB spirit was exemplified in the processing of a grant for Nepal in response to the 25 April 2015 earthquake. The earthquake occurred on a Saturday, the request for APDRF assistance was received the following day, and the grant approved by the Monday. It became effective just 3 days later, on 30 April.

28. In its capacity as the fund manager, SDCC maintains a step-by-step checklist on the business process for accessing and implementing APDRF grants for use by project teams. This checklist has been widely applied and has proved useful in contributing to smooth processing, as most project officers have no experience in processing APDRF grants. An enhanced version of this checklist was included as an annex to the 2015 revised implementation guidelines.

29. Project officers have also cited strong external working relationships and close dialogue and coordination with relevant government agencies, the UN humanitarian or resident coordinator, and other development partners as essential elements in ensuring timely APDRF approval and effective grant use.

30. **Grant effectiveness.** Grant effectiveness has typically promptly followed grant approval. The time between grant approval and effectiveness has averaged 13.6 days overall, falling to just 5.8 days if four grants for which severe delays were encountered are excluded, and 5.0 days if weekends are not counted (Table A2.2). In 14 cases, the time between grant approval and effectiveness was 3 days or less. For the period 2015 to 2016, grant effectiveness has averaged 19.9 days overall and 8 days if a particularly delayed grant is excluded (Table 4). Effectiveness of the 2016 grant for Viet Nam was delayed by 103 days because the government lacked any procedures to deal with such emergency assistance.

**Table 4: Time Line for Grant Agreement and Effectiveness, 2015–2016**

Approval Year	Country	Disaster	Approval Date	Agreement Date	Effectivity Date
2015	Vanuatu	Tropical cyclone	20-Mar-15	25-Mar-15	25-Mar-15
2015	Nepal	Earthquake	27-Apr-15	29-Apr-15	30-Apr-15
2015	Myanmar	Flood	21-Aug-15	2-Sep-15	2-Sep-15
2016	Fiji	Tropical cyclone	24-Feb-16	28-Feb-16	28-Feb-16

Approval Year	Country	Disaster	Approval Date	Agreement Date	Effectivity Date
2016	Mongolia	Dzud	6-Apr-16	11-Apr-16	13-Apr-16
2016	Marshall Islands	Drought	6-Apr-16	26-Apr-16	26-Apr-16
2016	Viet Nam	Drought	1-Jun-16	12-Sep-16	12-Sep-16
2016	Sri Lanka	Flood	9-Jun-16	13-Jun-16	14-Jun-16

Source: Asian Development Bank.

31. **Grant implementation.** Unless otherwise agreed by ADB, the APDRF Board paper and implementation guidelines specify that the grant closing date should occur within 6 months after signing of the grant agreement. The grant closing date is defined in the grant agreement as the date after which “ADB may terminate the right of the Recipient to make any withdrawals from the Grant Account, or such other date as may be agreed between ADB and the Recipient for such purpose.”<sup>15</sup> Only expenditures incurred on or before the grant closing date are eligible for financing.

32. In total, an extension of the closing date was secured for seven grants: the 2011 and 2013 grants for Cambodia, the 2011 grant for the Philippines, the 2011 grant for Thailand, the second 2012 grant for Fiji, the 2013 grant for Marshall Islands, and the 2016 grant for Sri Lanka. Only one extension of the grant closing date has been required for grants approved since January 2015, entailing a six-month extension for the 2016 Sri Lanka grant. This grant is being utilized primarily for minor works pertaining to the construction of transitional shelters, rural road canal, culvert and drainage rehabilitation reservoir renovation, toilets, and wells. Grant signing occurred in June 2016 but the executing agency did not submit the request to identify sub-projects until three months later in most affected districts. Reasons for grant closing date extensions of earlier grants were discussed in the 2015 performance review.

#### D. Use of Funds

33. The APDRF implementation guidelines permit considerable flexibility in the use of funds. Grant agreements can state broad indicative uses or be more specific. However, decisions regarding the use of funds can subsequently be amended without any prior agreement with ADB, provided the use of resources remains in accordance with the stated intent of the fund to restore life-saving services to affected populations. Governments have appreciated this flexibility, which has enabled adjustments in the use of APDRF resources following the refinement of information on the scale and nature of humanitarian needs and the receipt of additional pledges of in-kind (and thus inflexible) humanitarian assistance from elsewhere.

34. Grant agreements for eight of the 27 approved grants indicated that the funds would be used for general relief purposes (Table 5 and Appendix Table A2.1). The remainder were more specific, detailing a range of proposed uses. Seventeen of these indicated that the funds would be used at least in part to procure relief supplies, such as food, water, medical supplies and personal hygiene kits; eight for the restoration of community infrastructure and public services, including the repair of irrigation canals; seven for shelter; five for some form of livelihoods restoration; four for debris clearance; three for agricultural inputs, including seeds; two for water purification and sanitation systems; two for the restoration of roads; two for transport and logistical costs; one for disease control; one for nutrition interventions; and one for search and

<sup>15</sup> ADB. 2009. *Establishment of the Asia Pacific Disaster Response*. Manila. Appendix 2: Asia Pacific Disaster Response Fund Grant Regulations. Section 2.01, item 9.

rescue.

35. Actual use has varied from these original intentions in a number of cases. The purchase of relief goods has been the single most supported activity; 13 of the 27 APDRF grants involved some use of grant proceeds for this purpose. The restoration of community infrastructure, roads and bridges, temporary shelter, and livelihoods restoration have been significant, as also anticipated. However, a number of additional uses to those originally envisaged have also been supported, involving cash transfers, emergency response equipment, (including vehicles), school teaching materials and equipment, power and electricity supply restoration, communications vehicles and equipment, social services support and government staff overtime.

**Table 5: Intended Purpose versus Actual Use of Grants, 2009–2016 <sup>a</sup>**

<b>Intended purpose of grants</b>	<b>Number of grants indicating this intended purpose</b>	<b>Number of grants supporting this actual use</b>
General relief purposes	8	N/A
Relief goods	17	13
Restoration of community infrastructure and public services, including irrigation systems	8	7
Livelihoods restoration	5	6
Temporary shelter	4	7
Debris clearance	4	4
Logistics and transportation	3	4
Seed and agricultural inputs	3	1
Disease control and medical/health assistance	3	2
Restoration of roads and bridges	2	5
Water purification and sanitation systems	2	4
Search and rescue operations	1	1
Nutrition interventions	1	
Cash transfers		4
Emergency response equipment (including vehicles)		4
School teaching materials and equipment		2
Communications vehicles and equipment		2
Social services support		2
Power and electricity restoration		1
Government staff overtime		1

NA = not applicable.

<sup>a</sup> The table is based on provisional information for grants that are still pending liquidation.

<sup>b</sup> Some grants were used for more than one purposes.

Source: Asian Development Bank.

36. Some variation between intended and actual use is unsurprising given the fluidity of an immediate post-disaster situation, with assistance from a range of sources rapidly pouring in to meet particular needs. Options should be reconsidered where needed to support effective grant use. Indeed, APDRF operational guidelines are designed deliberately to facilitate this. Some other changes in use simply reflect an elaboration of use during implementation.

37. In 11 cases, APDRF grants were used to support activities straddling humanitarian relief



and early recovery purposes.<sup>16</sup> A crossover between humanitarian relief and early recovery operations is inevitable, and some activities can serve both purposes, such as cash-for-work programs and certain infrastructure repairs. Three of these cases have involved grants for the Pacific, entailing a particularly significant shift in the use of these grants relative to original intentions. However, the three most recent APDRF grants approved for the Pacific, all approved since 2015, have been used broadly in accordance with original intended use and for largely humanitarian rather than early recovery needs, possibly reflecting changes in APDRF implementation guidelines in 2015 to permit 30% retroactive financing. More generally, only one of the eight grants approved since 2016 has been used in part for early recovery purposes. The remainder have been more narrowly focused on support for immediate life-saving purposes.

## E. Grant Liquidation

38. Clarity on the timeline for liquidation was provided in the July 2015 revised APDRF implementation guidelines. Recipient governments are now required to confirm the use of the grant through a statement of expenditure within four months of the grant closing date.

39. To date, 23 grants have been fully liquidated (Table 6). Three of these grants, all approved since 2013, have been liquidated well ahead of schedule. Two have been liquidated within the six-month period allowed for grant implementation and the third within an extended eight-month grant implementation period for the fourth. Of the remaining 19 grants, final liquidation occurred on average 49 weeks after grant closing, indicating substantial delay in liquidation. However, there has been a marked improvement over the past two years. Four of the grants approved since 2015 were due for liquidation before 31 December 2016. Three of these grants met their liquidation deadline, averaging just 5 weeks between grant closing and final liquidation. The Nepal grant took longer, taking 28 weeks due to difficulties discussed below.

**Table 6: Timeline for Grant Liquidation and Submission of Audit Report, 2009–2016**

Approval Year	Country	Disaster	Grant Closing Date <sup>a</sup>	Final Liquidation Date	(Partial) Cancellation Date	Submission of Audit Report
2009	Philippines	Tropical cyclone	31-Mar-10	08-Feb-13	26-Apr-13	23-Nov-15
2009	Samoa	Earthquake and tsunami	02-Apr-10	01-Sep-10		14-Dec-10
2009	Indonesia	Earthquake	21-Apr-10	31-Dec-10		31-Dec-10
2010	Mongolia	Dzud	14-Oct-10	15-Dec-10		30-Jun-14
2010	Pakistan	Flood	22-Apr-11	02-Feb-12		30-Sep-13
2011	Sri Lanka	Flood	17-Aug-11	13-Feb-12		04-Jul-13
2011	Pakistan	Flood	27-Apr-12	19-Jun-13		30-Sep-13
2011	Cambodia	Flood	04-Dec-12	25-Jul-13		15-Aug-13
2011	Thailand	Flood	30-Sep-12	29-Apr-14		27-May-14
2011	Philippines	Tropical cyclone	23-Dec-12	15-Jan-13		16-Oct-14
2012	Fiji	Flood	06-Sep-12	05-Nov-13		1-Oct-15
2012	Fiji	Flood	30-Nov-12	18-Oct-13		28-Jul-14
2012	Samoa	Tropical cyclone	02-Jul-13	28-Oct-14		23-Dec-14
2013	Marshall	Drought	24-Nov-13	19-Oct-15		4-Feb-16

<sup>16</sup> Post-disaster response is divided into three overlapping phases: (i) humanitarian assistance, involving aid to the affected population to meet their basic needs (food, water, medical services, temporary shelter, and search and rescue); (ii) early recovery, involving the restoration of essential services and temporary repairs to support the reestablishment of economic and social activities; and (iii) reconstruction, involving the comprehensive, full restoration of infrastructure.

Approval Year	Country	Disaster	Grant Closing Date <sup>a</sup>	Final Liquidation Date	(Partial) Cancellation Date	Submission of Audit Report
2013	Marshall Islands	Drought	18-Apr-14	19-Oct-15		26-Apr-16
2013	Philippines	Tropical cyclone	14-May-14	29-Apr-14		28-Oct-16
2013	Cambodia	Flood	22-Jul-14	03-Jun-14		23-Feb-15
2013	Palau	Tropical cyclone	20-Jun-14	20-Oct-15		29-Jan-16
2014	Solomon Islands	Flood	22-Oct-14	16-Oct-14		3-Sep-15
2015	Vanuatu	Tropical cyclone	25-Sep-15	21-Oct-15		31-May-16
2015	Nepal	Earthquake	29-Oct-15	11-May-16		23-May-16
2015	Myanmar	Flood	02-Mar-16	6-May-16		
2016	Fiji	Tropical cyclone	28-Aug-16	13-Sep-16		
2016	Mongolia	Dzud	11-Oct-16			
2016	Marshall Islands	Drought	26-Oct-16			
2016	Viet Nam	Drought	12-Mar-17			
2016	Sri Lanka	Flood	13-June-17			

<sup>a</sup> The scheduled grant closing date is indicated for grants that had not closed as of 31 December 2016.  
Source: Asian Development Bank.

40. Nevertheless, project officers have continued to report some challenges in liquidation, in the case of the 2015 Vanuatu grant leading to the part return of grant proceeds to ADB. Difficulties have been encountered in the last two years pertaining to:

- (i) poor communications and coordination between executing and implementing agencies regarding their respective liquidation responsibilities, with difficulties further compounded in cases where local government agencies were involved;
- (ii) expenditure of grant proceeds by multiple government agencies, including several that were not originally identified as implementing agencies;
- (iii) insufficient capacity on the part of implementing agencies to absorb the funds provided; and
- (iv) the transfer and merging of APDRF resources into broader disaster response relief funds with unclear reporting on the fund movement, posing challenges in obtaining adequate supporting documents on the use of the grant proceeds.

41. The last point pertains specifically to the 2015 grant for Nepal, under which APDRF resources were placed directly into the Prime Minister's Disaster Relief Fund (PMDRF), a consolidated fund established in 2006 to coordinate disaster relief activities. Funds from the PMDRF were further channeled to District Natural Disaster Relief Funds, from which transfers to affected persons were provided as lump-sum cash grants for the construction of temporary shelters. Liquidation took almost a year in this case. The Government of Nepal latterly suggested that a program modality would have been more appropriate.

42. Conversely, ADB briefings with implementing and executing agencies and mentoring of government counterparts on the preparation of the statement of expenditure have facilitated both enhanced grant implementation and liquidation of several grants. In the case of the 2015 grant for Myanmar, the extension of briefings to relevant representatives from the participating states and regions further expedited delivery and liquidation.

43. As experience in APDRF grant implementation has grown within individual countries, there is also evidence of lesson learning. For instance, the Marshall Islands received its third

grant in 2016, following two earlier grants in quick succession in 2013. The most recent grant only closed in late October 2016 so the four-month period for liquidation is still ongoing. However, it is expected to be significantly faster than the 23 and 18 months required for liquidation of the first two grants as, based on past experience, the government chose to spend the third grant on just one eligible item, food, to facilitate more timely liquidation. On the other hand, while there is a strong case for keeping utilization of APDRF grants simple to ensure smooth implementation and liquidation, it is also important to recognize the additional potential benefits that more complex grant utilization can have, in particular pertaining to civil works activities that also incorporate food-for-work elements.

44. APDRF guidelines were amended in July 2015 to permit use of retroactive financing to help ensure that APDRF resources were liquidated against eligible life-saving costs incurred in the immediate aftermath of disasters (para 10).<sup>17</sup> Grants approved since that date are still being liquidated so it is too soon to determine if this has addressed situations leading to the return of unused balances to ADB.

## **F. Auditing**

45. An audit on the use of the grant, including the imprest account and the statement of expenditures should be submitted to ADB within six months of ADB's receipt of the statement of expenditure. Audits have generally indicated that accounting records have been maintained in accordance with generally accepted accounting principles; that disbursements shown in the financial statements were implemented in accordance with the grant agreement; and that the project was in compliance with grant covenants.

46. Timelines for auditing of APDRF grants have improved over the past two years. Audit reports had been received for 21 of the 27 approved APDRF grants by 31 December 2016, taking an average of 50 weeks or 11.5 months between final liquidation and submission of the audit report. Audit reports had been received within six months of final liquidation for just eleven grants. However, there has been notable improvement over the past few years. Eight grants achieved full liquidation between July 2014 and June 2016 and so were due to complete auditing requirements between January 2015 and December 2016. Of these, as of 31 December 2016 the auditing report was slightly overdue for the Myanmar grant, which was fully liquidated on 6 May 2016. For the remaining seven, submission of the audit report took an average of 20.7 weeks following final liquidation, well within the specified 26-week or six-month period. Moreover, the auditing report was delivered within the required period for six of those grants, although taking 46 weeks in the case of the seventh. Efforts should continue to ensure that there is sufficient understanding of APDRF auditing requirements by executing and implementing agencies.

## **IV. ASSESSMENT OF IMPLEMENTATION ARRANGEMENTS AND GRANT EFFECTIVENESS**

### **A. Appropriateness of Implementation Arrangements**

47. APDRF implementation arrangements have been broadly appropriate, supporting timely

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<sup>17</sup> The stipulation that APDRF grants should not be used for retroactive financing of expenditure was only contained in the original APDRF implementation guidelines and not in the fund paper, so could be waived with the approval of SDCC's director general.

approval and effectiveness of grant resources and allowing room for adjustment in the use of resources in line with identified gaps in humanitarian support. Certain limitations in access to the fund relating to the eligibility criteria have been resolved (paras. 52–53) and a retroactive financing feature has been in place since July 2015, in likelihood contributing to increased utilization of grant resources for solely immediate humanitarian rather than early recovery purposes as well. Internal ADB reporting arrangements have also been improved with the introduction of a grant closing report in July 2015 (para. 11).

48. Grant implementation, liquidation, and auditing performance could be further strengthened through enhanced capacity building of government counterparts, monitoring arrangements and closer coordination with ADB. ADB project officers should continue to seek periodic meetings with implementing and executing agencies to help encourage strong monitoring and to help identify and address any potential issues in grant administration. Project officers should also coordinate with the auditor to ensure that APDRF requirements and ADB disbursement policies and procedures are understood.

49. Several project officers have indicated that implementation issues regarding both the speed of implementation and use of grant resources could potentially be significantly advanced in some cases if grants were implemented either by local governments, where capacity remains intact, or by nongovernment or UN organizations. The APDRF guidelines state that, although the recipients are central governments, they can allocate funds to local governments, government agencies, and other suitable national or international entities, including nongovernment organizations. Use of nongovernment or UN organizations can be advantageous in countries where governments lack emergency procurement procedures and so where government procurement can take significant time. In practice, however, while APDRF grants have been channeled through local government on some occasions, no use has been made of international entities. ADB staff involved in the 2015 APDRF grant for Nepal, for instance, noted that use of alternative disbursement channels, such as reputable relief agencies and the UN system, should be explored in the future, to overcome absorptive capacity issues on the part of government agencies and challenges relating to limited government access to relief materials.

50. ADB project officers should ensure that governments are aware of these alternative implementing arrangement options. However, where APDRF grants are allocated onwards by government agencies, project officers should also ensure that all parties concerned are clearly aware of implementation and reporting requirements and that there is clear assignment of responsibilities. They should also monitor grant implementation, liquidation, and auditing carefully. This would help avoid difficulties such as those experienced under the 2009 grant for the Philippines where auditing challenges were encountered linked to the channeling of funds through local government.

## **B. Satisfaction of Eligibility Criteria**

51. Meeting the three criteria for accessing the APDRF has been straightforward in most cases, as reflected in the short period between receipt of the official request for APDRF support and grant approval. However, several changes have been made to the second eligibility criterion, pertaining to the declaration of a natural hazard, to achieve this. According to the original terms and conditions of the APDRF, a state of national emergency had to be declared by the affected DMC to access the fund. This was amended in October 2010 to require the declaration of a state of emergency beyond the capacity of the country and its own agencies to meet the immediate expenses necessary to restore life-saving services to the affected

populations, reflecting the fact that a declaration of a national emergency is not required in some countries to release national funding or to precipitate a request for external assistance. Instead, national government resources can be released and international assistance requested following the declaration of a provincial disaster, the declaration of an emergency without reference to affected administrative levels, or no declaration at all. A government may also choose not to announce a state of emergency because of strategic considerations.

52. The 2015 APDRF implementation guidelines provided further revised guidance on the second criterion, indicating that it could be interpreted flexibly and broadly and not narrowly and could be deemed to have been met if a national government has approved the allocation of resources in support of the disaster response efforts and indicated that external assistance is welcome. This would be the case in particular (i) for DMCs which do not have legislation requiring the declaration of a state of emergency before national government resources can be approved to support the response efforts and international assistance can be requested, or (ii) in situations where a government chooses not to declare a state of emergency following a major disaster because of valid strategic considerations, such as concerns for the country's tourism industry or business confidence.

53. Governments have not declared a disaster with reference to five of the 27 disasters for which APDRF support has been provided, including for two over the period 2015 to 2016. The Government of Sri Lanka was initially reluctant to declare a state of disaster with reference to the 2016 floods because of concerns that this might have an adverse impact on its economic development programs in the country including tourism, although a disaster was subsequently declared several months later at the sub-national level. The Government of Mongolia was reluctant to indicate that the 2015/2016 dzud was beyond its response capacity for similar reasons. Circumstances pertaining to the waivers for the three earlier grants are discussed in the 2015 APDRF review.

### **C. Performance of Eligibility Criteria in Targeting Resources**

54. Overall, the eligibility criteria have proved extremely effective in targeting APDRF resources to countries most in need of external humanitarian assistance. APDRF grants have been provided in response to some of the most significant disasters in ADB's DMCs relative to country coping capacity, as measured by the number affected relative to total population and the disasters for which UN appeals have been launched.

55. From January 2009 to December 2016, 1,068 disasters triggered by natural hazards in ADB's DMCs were recorded in the Emergency Events Database, a global disaster database.<sup>18</sup> According to this measure of disaster severity, APDRF grants were approved in response to 18 of the top 40 most severe events<sup>19</sup> (Table 7). Over the most recent two years, 2015 and 2016, alone, six of the eight APDRF grants approved were provided in response to the top ten events over that period.

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<sup>18</sup> D. Guha-Sapir, R. Below, Ph. Hoyois. 2017. - *EM-DAT: The CRED/OFDA International Disaster Database* – [www.emdat.be](http://www.emdat.be) – Université Catholique de Louvain – Brussels – Belgium.

<sup>19</sup> These seven events accounted for 8 of the 20 APDRF grants, reflecting the approval of 2 grants in response to the 2013 drought in the Marshall Islands.

**Table 7: Disasters in Asia and the Pacific, 2009–2014**  
(People Affected Relative to Total Population)

Rank	Year	Disaster	Country	Number of People Affected	People Affected as % of Population
1	2016	Drought	Micronesia	100,000	95.77
2	2015	Tropical cyclone	Vanuatu	188,000	71.82
3	2016	Tropical cyclone	Fiji	350,000	39.07
4	2016	Drought	Marshalls	21,000	38.90
5	2009	Drought	Kyrgyzstan	2,000,000	37.00
6	2015	Tropical cyclone	Micronesia	35,000	33.52
7	2015	Drought	Papua New Guinea	2,520,000	33.42
8	2016	Dzud	Mongolia	965,000	32.32
9	2009	Dzud	Mongolia	769,113	28.60
10	2016	Drought	India	330,000,000	25.01
11	2015	Earthquake	Nepal	5,639,722	19.90
12	2013	Tropical cyclone	Philippines	17,944,508	18.40
13	2015	Flood	Myanmar	9,000,000	16.77
14	2016	Drought	Cambodia	2,500,000	16.58
15	2011	Flood	Thailand	9,500,000	14.80
16	2010	Flood	Thailand	8,970,653	14.10
17	2009	Tropical cyclone	Philippines	12,221,563	13.40
18	2013	Drought	Marshall Islands	6,384	11.80
19	2010	Flood	Pakistan	20,363,496	11.70
20	2011	Flood	Cambodia	1,640,023	11.30
21	2010	Flood	PRC	140,194,000	10.50
22	2010	Drought	Thailand	6,482,602	10.20
23	2011	Typhoon Washi	Philippines	9,468,676	10.10
24	2016	Drought	Timor Leste	120,000	10.02
25	2013	Flood	Cambodia	1,500,000	10.00
26	2010	Tropical cyclone	Cook Islands	2,202	9.30
27	2012	Drought	Sri Lanka	1,800,000	8.90
28	2014	Flood	Solomon Islands	50,000	8.70
29	2013	Flood	Lao PDR	574,253	8.60
30	2012	Tropical cyclone	Philippines	7,560,480	7.90
31	2015	Tropical cyclone	Solomon Islands	44,096	7.63
32	2015	Drought	Fiji	67,000	7.53
33	2014	Tropical cyclone	Vanuatu	20,000	7.40
34	2011	Flood	PRC	93,360,000	6.90
35	2016	Flood	Thailand	582,313	6.79
36	2012	Tropical cyclone	Samoa	12,703	6.70
37	2011	Flood	Lao PDR	430,000	6.70
38	2011	Drought	Afghanistan	1,750,000	6.60
39	2011	Flood	Sri Lanka	1,293,924	6.20
40	2013	Flood	Thailand	3,515,254	5.30

Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Note: Disasters supported by grants from the Asia Pacific Disaster Relief Fund are highlighted in grey.

Source: Asian Development Bank.

56. Since the establishment of the APDRF on 1 April 2009, the UN has launched 16 appeals relating to natural hazard events in Asia and the Pacific. APDRF grants were provided in response to 12 of these events, although not directly in response to the related UN appeals (Table 8). This is further evidence that APDRF grants have been provided in response to some of the most significant disasters in the region since the fund's establishment. Moreover, APDRF

grants have been approved for all disasters that have triggered a UN appeal since January 2015, in likelihood partly reflecting increasing knowledge of the APDRF's existence both within ADB and externally.

**Table 8: United Nations Disaster-Related Appeals, 2009–2016**

Year	Country	Disaster	Type of appeal <sup>a</sup>	APDRF grant
2009	Indonesia	Earthquake	Flash	X
2009	Lao PDR	Tropical cyclone	Flash	
2009	Philippines	Tropical cyclone	Flash	X
2009	Tajikistan	Mudflow	Other	
2010	Pakistan	Floods	Flash	X
2010	Mongolia	Dzud	Consolidated	X
2011	Pakistan	Floods	Flash	X
2011	Sri Lanka	Floods	Flash	X
2012	Pakistan	Floods	Other	
2012	Philippines	Tropical cyclone	Consolidated (humanitarian action plan)	X
2013	Philippines	Earthquake	Flash	
2013	Philippines	Tropical cyclone	Strategic response plan	X
2015	Vanuatu	Tropical cyclone	Flash, latterly superseded by a consolidated appeal (humanitarian action plan)	X
2015	Myanmar	Floods	Consolidated (humanitarian response plan - flood sub-component)	X
2015	Nepal	Earthquake	Flash	X
2016	Fiji	Tropical cyclone	Flash	X

Lao PDR = Lao People's Democratic Republic.

<sup>a</sup> Flash appeals are launched within 5–7 days of the occurrence of a sudden onset emergency and focus on urgent humanitarian needs over the next 3–6 months. Consolidated appeals include projected activities for the following year. A strategic response plan may be prepared for a protracted or sudden onset emergency that requires international humanitarian assistance. A (common) humanitarian action plan is a strategic plan for humanitarian response in a country or region as part of the consolidated appeal process.

Source: Data drawn from the online Financial Tracking Service at <http://fts.unocha.org/> on 31 November 2014 and 4 December 2016.<sup>20</sup>

57. APDRF grants were provided in response to eight of the 10 UN flash appeals launched over that period, relating to a 2009 earthquake in Indonesia, a 2009 tropical cyclone in the Philippines, the 2010 and 2011 floods in Pakistan, the 2011 floods in Sri Lanka, a 2015 tropical cyclone in Vanuatu, a 2015 Nepal earthquake, and a 2016 tropical cyclone in Fiji.<sup>21</sup> Over the same period, the UN launched one consolidated appeal for Asia and the Pacific, relating to the 2009–2010 dzud in Mongolia; a humanitarian action plan in response to a 2012 tropical cyclone in the Philippines; a strategic response plan in response to a 2013 tropical cyclone in the Philippines; and a humanitarian response plan incorporating a disaster response sub-component in part in response to the 2015 floods in Myanmar. APDRF grants were provided in response to all three of these events. The UN launched two “other” appeals—one pertaining to mud flows in Tajikistan (2009), the other for additional floods in Pakistan (2012). No APDRF

<sup>20</sup> The Financial Tracking Service is a global, real-time database that records all reported international humanitarian aid (including that for nongovernment organizations, the Red Cross and Red Crescent Movement, bilateral aid, in-kind aid, and private donations). Financial Tracking Service data is based on reports from donors and recipient organizations.

<sup>21</sup> The other three flash appeals were issued in response to a tropical cyclone in Lao PDR (2009), a further flood in Pakistan (2011), and an earthquake in the Philippines (2013).

grants were provided in response to these disasters.

#### **D. Value-Added Contribution**

58. Humanitarian assistance needs in the aftermath of a major disaster are substantial, typically amounting to about 16% of direct physical damage in the event of an earthquake and 23% in the event of a tropical cyclone or flood.<sup>22</sup> This humanitarian assistance is required urgently, together with some initial flows of resources to support the early recovery process. Most governments in the region make an annual budget appropriation for contingency purposes including disaster response—sometimes through a line item for a range of unforeseen circumstances, sometimes specifically for response to natural hazard events. However, these resources are typically limited.

59. As a consequence, governments often struggle to address immediate humanitarian needs in the aftermath of a major disaster, let alone start early recovery efforts. Funding shortages can exacerbate the length and scale of human suffering and delay the recovery efforts, prolonging the humanitarian relief phase and increasing the indirect economic losses incurred as a consequence of damage to physical assets. Governments turn to the international community for additional support for humanitarian response, early recovery, and longer-term reconstruction. The scale of the international response is unpredictable, however, in part reflecting geopolitical considerations, the extent of media coverage of a disaster, and the number and scale of other recent disasters. International appeals often do not meet their targets, and a considerable amount of the humanitarian assistance provided is in kind, such as food, tents, and medical supplies. APDRF grants help meet the funding gap and provide some additional flexibility by taking the form of financial support. Therefore, APDRF grants potentially provide significant value-added.

60. Data limitations prevent precise quantification of the funding gap for humanitarian assistance. However, APDRF grants were compared with total reported international humanitarian assistance provided in response to each of the disasters supported through the APDRF to gauge their relative significance (Table 9). The reported assistance includes some support for early recovery, as well as humanitarian assistance, inflating the figures in some instances. Conversely, humanitarian assistance is sometimes underreported. Nevertheless, the data provide a reasonable indicator of total support and some insight on the APDRF's contribution.

61. The data indicate that APDRF grants have provided a significant portion of total reported international humanitarian assistance in a number of cases, exceeding 10% of the total provided in response to nine events. The APDRF provided particularly significant resources relative to other contributions in response to the two 2012 floods in Fiji, the 2016 dzud in Mongolia and the 2016 floods in Sri Lanka. No UN appeal was launched in response to these events, limiting flows from other sources. The APDRF's significant contribution to both the 2010 dzud (for which there was an appeal) and the 2016 dzud responses in Mongolia also reflected challenges in attracting international support from elsewhere because human lives were not in any immediate danger.

62. In contrast, APDRF support was typically lowest relative to total humanitarian assistance

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<sup>22</sup> D.Bitran. 2004. *Importancia Relativa De Los Gastos De Emergencia Y Los Correspondientes A La Remoción De Escombros En Desastres Naturales*. Report prepared for AIR Worldwide. Boston.



for major disasters with appeals for assistance in excess of \$100 million. This in part reflects the \$3 million ceiling on APDRF grants and thus the inevitably smaller share in total assistance flows in such circumstances. In such situations, ADB needs to ensure that governments understand the nature and purpose of the APDRF, including the grant ceiling, and are aware of potential additional ADB loan, grant, and technical assistance support for recovery and reconstruction. This understanding may be important in avoiding direct comparisons of APDRF grants with full programs of support from other development partners and resulting impressions that ADB support is unduly modest.

63. Reporting of aid flows is an important aspect of efforts to ensure high value-added of individual contributions. Comprehensive reporting of aid flows supports strong coordination of relief efforts and the identification of any major funding gaps, whether or not particular pledges of assistance are made in direct response to a UN appeal. Reporting mechanisms typically rely on self-reporting by development partners and other contributors. However, an examination of the Financial Tracking Service indicated that APDRF grants are poorly reported. They are only listed in aid commitments for four of the disasters supported through the APDRF. ADB staff should be encouraged to report the approval of APDRF grants in the Financial Tracking Service, as well as to the UN country humanitarian or resident coordinator. Coordination on the ground is essential too.

**Table 9: Asia Pacific Disaster Relief Fund Grants Relative to Total Humanitarian Assistance for Supported Disaster Events, 2009–2016<sup>a</sup>**

Country	Approval year	Disaster	APDRF grant \$ million	Total humanitarian assistance received <sup>b</sup>		UN appeal amount	
				Total \$ million	APDRF support as % total	Total \$ million	APDRF support as % total
Fiji	2012	Flood	1.0	2.6	37.9		
Mongolia	2016	Dzud <sup>d</sup>	2.0	5.6	35.5	14.3	14.0
Fiji	2012	Flood	1.0	4.7	21.4		
Sri Lanka	2016	Flood	2.0	9.6	20.9		
Mongolia	2010	Dzud	2.5	17.4	14.3	18.2	13.8
Cambodia	2011	Flood	3.0	23.5	12.8		
Samoa	2012	Tropical cyclone	0.5	4.0	12.6		
Thailand	2011	Flood	3.0	27.0	11.1		
Viet Nam	2016	Drought <sup>e</sup>	3.0	29.4	10.2	48.5	6.2
Fiji	2016	Tropical cyclone	2.0	23.5	8.5	38.6	5.2
Samoa	2009	Earthquake and tsunami	1.0	12.2	8.2		
Sri Lanka	2011	Flood	3.0	38.9	7.7	46.4	6.5
Myanmar	2015	Flood	3.0	43.6	6.9	67.5	4.4
Marshall Islands	2016	Drought	0.2	3.0	6.7		
Marshall Islands	2013	Drought <sup>c</sup>	0.3	6.5	4.6		
Indonesia	2009	Earthquake	3.0	80.7	3.7	38.0	7.9
Philippines	2009	Tropical cyclone	3.0	108.5	2.8	143.8	2.1
Solomon Islands	2014	Flood	0.2	7.0	2.8		
Vanuatu	2015	Tropical cyclone	1.0	39.1	2.6	29.9	3.3
Solomon Islands	2014	Flood	0.2	8.0	2.5		
Pakistan	2011	Flood	3.0	266.5	1.1	356.8	0.8
Nepal	2015	Earthquake	3.0	284.3	1.1	422.0	0.7
Philippines	2013	Tropical cyclone	3.0	844.8	0.4	775.7	0.4
Pakistan	2010	Flood	3.0	2653.2	0.1	1963.5	0.2

Country	Approval year	Disaster	Total humanitarian assistance received <sup>b</sup>			UN appeal amount	
			APDRF grant \$ million	Total \$ million	APDRF support as % total	Total \$ million	APDRF support as % total
Philippines	2011	Tropical cyclone	3.0	...	...		
Cambodia	2013	Flood	3.0	...	...		
Palau	2013	Tropical cyclone	0.2	...	...		

APDRF = Asia Pacific Disaster Response Fund, UN = United Nations, ... = not available.

<sup>a</sup> Excluding the cancelled 2010 grant for Indonesia.

<sup>b</sup> Adjusted from the figure reported in the Financial Tracking Service in cases where the APDRF grant was not included in total humanitarian assistance.

<sup>b</sup> Contribution from two successive APDRF grants for the same event.

<sup>d</sup> No formal appeal was launched. Figures indicated here relate to \$14.3 million sought by the UN Humanitarian Country Team for Mongolia for food security, nutrition, protection, health, agriculture, livelihoods and early recovery, encompassing investment in both immediate response and medium to longer term preparedness interventions.<sup>23</sup>

<sup>e</sup> No formal appeal was launched. Figures reported here relate to \$48.5 million sought under a joint Government of Viet Nam and UN emergency recovery plan

Source: Data drawn from the online Financial Tracking Service at <http://fts.unocha.org/> on 30 November 2014, and 4 December 2016.

## E. Project Impact

64. Limited evidence is available on the impact of APDRF grants, with the exception of some cash-for-work components for projects approved prior to 2015. These projects were discussed at length in the 2015 APDRF performance review and strong impacts indicated, linked to the temporary employment they provided to some of the most vulnerable segments of disaster-affected populations. None of the APDRF grants approved since 2015 have included cash-for-work components.

65. Many other APDRF grants have been used in significant part for humanitarian relief supplies, particularly in the case of grants approved since 2015. Their impact has depended in part on government targeting mechanisms and adequate needs and gap assessments. This information is typically not readily available. However, five grants, including two approved since 2015, have included cash transfer components. Cash and voucher programs are increasingly used in humanitarian response programs because they offer wide choices to beneficiaries, in addition to many of the benefits associated with cash-for-work programs. Available information indicates careful targeting of resources in at least the two most recent of these grants. They include the 2016 Mongolia dzud grant, under which the cash transfer component was targeted at the poorest herders with highest relative livestock loss, excluding herders who had been identified for cash assistance from other sources. This targeting mechanism was notably better than the mechanism used for the allocation of cash transfers under the 2010 APDRF grant for Mongolia, also in response to a dzud. Under the earlier grant, cash transfers were provided to all herders within selected geographical areas, regardless of poverty status or level of losses. However, there was five-month delay in transmitting the 2016 grant cash transfers while target beneficiaries were identified and verified. The proceeds of the 2015 Nepal earthquake grant were also used for cash transfers, in this case involving the merger of APDRF resources with government resources to provide cash grants for temporary shelters. Cash grants were disbursed to over 340,000 targeted households. However there was a delay in disbursement in

<sup>23</sup> See <http://reliefweb.int/report/mongolia/mongolia-dzud-response-plan-25-april-2016>.

this case too, reflecting challenges in identifying beneficiaries and the difficulty of getting cash to households scattered across the mountainous region of Nepal.

66. Mechanisms for ensuring careful targeting of humanitarian assistance lay well beyond the scope of the APDRF. However, they are important both for the success of APDRF grants and more broadly. Government disaster relief budget execution capabilities and systems could be examined and, as appropriate, strengthened as part of relevant ADB projects, for instance in areas of disaster risk management and public financial management. Opportunities to rapidly channel support through social protection schemes should also be examined.

## F. Overall Assessment and Ratings

67. Grant closing reports have been required for APDRF grants approved since July 2015, in accordance with the revised implementation guidelines in effect since that date. Between July 2015 and December 2016, six grants reached grant closing date and all six respective grant closing reports have been received. These reports have provided useful feedback on lessons learned which have been incorporated into this performance review. They have also provided project ratings (Table 10). Grant performance of five of the six grants was rated as either successful or highly successful. The Mongolia grant was rated as partially successful due to a five-month delay in providing cash transfers supported through the grant (see para 64). The performance of both ADB and the executing agency was rated satisfactory across the board, with one exception. The performance of the recipient agency was rated partially successful in the case of the Mongolia grant because of the aforementioned delays in the provision of cash transfers. The grant closing reports have been required to include project information on grant beneficiaries as well, including sex-disaggregated data where available. Four of the reports included information on the number of beneficiaries, in one case including sex-disaggregated data.

**Table 10: APDRF Grant Performance Ratings**

Year	Country	Disaster	Rating		
			Performance of ADB	Performance of recipient agency	Overall grant performance
2015	Vanuatu	Tropical cyclone	Satisfactory	Satisfactory	Highly successful
2015	Nepal	Earthquake	Satisfactory	Satisfactory	Successful
2015	Myanmar	Flood	Satisfactory	Satisfactory	Successful
2016	Fiji	Tropical cyclone	Satisfactory	Satisfactory	Successful
2016	Mongolia	Dzud	Satisfactory	Partially satisfactory	Partially successful
2016	Marshall Islands	Drought	Satisfactory	Satisfactory	Successful

Source: Asian Development Bank.

## G. Follow-On ADB Assistance

68. APDRF grants have been succeeded by further ADB assistance for the post-disaster recovery and reconstruction efforts on 11 occasions and on four occasions since 2015 (Table A2.3). This subsequent assistance has totaled \$2.0 billion, including \$894 million to the Philippines following Typhoon Haiyan in November 2013.

69. APDRF experience has also drawn ADB into discussions with government on disaster risk management more broadly, helping to forge relationships with disaster risk management agencies, increasing government recognition of ADB as a potential partner in this area, building

awareness within ADB of the need to strengthen both underlying disaster resilience and disaster response capabilities, and in several cases probably contributing to subsequent requests from government for further assistance beyond response efforts for the supported disaster. For instance, the APDRF has proved a significant source of resources for dzud response in Mongolia, triggering broader ADB engagement in this area. ADB approved a grant to strengthen community resilience to dzud and forest and steppe fires in 2016 and has two further disaster risk management grants and one loan included in its firm 2018 and 2019 pipeline for the country.<sup>24 25</sup> ADB is processing a contingent disaster loan for approval in 2017 at the request of the Government of Sri Lanka, following two APDRF grants for that country. Experience during the implementation of other APDRF grants has highlighted gaps and challenges pertaining to post-disaster budget execution capacity in a number of countries too. For instance, the Nepal experience highlighted weaknesses in the country's preparedness and disaster response mechanisms and capacity to absorb post-disaster assistance.

## V. CONCLUSIONS

70. The APDRF remains firmly in line with ADB's policies and plans in the areas of disaster risk management, particularly in strengthening support for governments in the aftermath of disasters and supporting better financial management of disaster risk more broadly. The APDRF was established in 2009 in accordance with Strategy 2020, the 2004 DEAP, and the 2008 DEAP Action Plan. The Midterm Review of Strategy 2020, which was completed in 2014, reaffirmed ADB's commitment to integrated disaster risk management and indicated that ADB would strengthen its support in this area. In 2014, ADB also approved the Operational Plan for Integrated Disaster Risk Management, 2014–2020, elaborating on ADB's plans to reduce disaster risk and strengthen its post-disaster support in line with the 2004 DEAP.<sup>26</sup> The operational plan includes actions to enhance the quality and scope of ADB's post-disaster assistance, supporting more timely and cost-effective government-led responses, reducing the need for reprogramming of resources, and including specific measures to address the immediate and long-term needs of women and girls. More broadly, the operational plan lays out plans to strengthen government financial management of disasters, ensuring that adequate financing arrangements in place to reduce disaster risk and to manage and transfer residual disaster risk.

71. Looking forward, post-disaster assistance is expected to remain an important area of operation for ADB, reflecting the trend of rising disaster losses in Asia and the Pacific. The region experiences a disproportionately large share of global disaster impacts relative to its economic and demographic size. Direct physical losses are increasing as economic development occurs with little regard to disaster risks. The latest reports by the Intergovernmental Panel on Climate Change indicate that the intensity and, in some areas, frequency of extreme climatic events is also expected to increase with climate change.<sup>27</sup> Even if substantial action is taken immediately to strengthen resilience, average disaster losses look set to continue to rise over the next few decades in view of the sizeable levels of accumulated disaster risk and the increasing occurrence of extreme climatic events. Actual levels of

<sup>24</sup> ADB. 2016. Mongolia: Strengthening Community Resilience to Dzud and Forest and Steppe Fires Project. 48236-001. Manila.

<sup>25</sup> ADB. 2017. *Mongolia 2017-2019: Country Operations Business Plan*. Manila.

<sup>26</sup> ADB. 2014. *Operational Plan for Integrated Disaster Risk Management: 2014–2020*. Manila.

<sup>27</sup> IPCC. 2014. Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. [Geneva: International Panel on Climate Change].

assistance provided in any year will depend on the timing, intensity, and location of individual natural hazard events. However, continuing support is expected to be required from ADB both to directly assist governments in their post-disaster relief, early recovery, and reconstruction efforts, as well as to strengthen their wider financial management of disaster risk through risk transfer mechanisms, such as insurance. The aims and intentions of the APDRF therefore remain highly relevant.

72. On the part of recipient governments, the APDRF is recognized as a timely, flexible, and quick-disbursing source of stopgap financing in the immediate aftermath of disasters. Its use of country systems in channeling and utilizing grant funds is also appreciated, contributing to alignment with government response priorities and engendering an efficient response to the extent that government systems themselves function well. The APDRF has also played a public relations role, demonstrating ADB's sympathy and concern at times of national crisis and providing direct support to governments for the response efforts.

73. All government requests for support from the APDRF have been met and APDRF grants have generally performed well. Current eligibility criteria remain relevant and the \$3 million grant ceiling remains appropriate. Higher grants for large-scale disasters would take ADB more significantly into the realm of humanitarian assistance, which is not a traditional area of work either for ADB or other multilateral development banks. Grant performance of five of the six grants was rated as either successful or highly successful. The performance of both ADB and the executing agency was rated satisfactory, with one exception. Grant approval, effectiveness and closing more generally has been timely overall. APDRF implementation arrangements have also been broadly appropriate, supporting timely approval and effectiveness of grant resources and providing room for adjustment in the use of resources in line with identified gaps in humanitarian support. The retroactive financing feature introduced in July 2015 is likely to have been a major factor contributing to increased utilization of grant resources for solely immediate humanitarian, rather than early recovery purposes as well. Liquidation has been significantly faster over the past two years. Audit reports have also been submitted far more promptly.

74. Despite these overall favorable findings, there are some opportunities for further improvement:

- (i) During grant processing and immediately following grant approval, project officers should pro-actively explore the scope for improving the speed of use of grant proceeds by engaging local governments, nongovernment or UN organizations.
- (ii) Inception missions should be undertaken to train executing and implementing agencies on APDRF grant administration processes and requirements, including liquidation procedures and eligible uses of funding. Further ongoing support should be provided if country disaster response systems are weak.
- (iii) ADB could provide technical assistance to strengthen government post-disaster budget execution procedures and capabilities, including tracking systems to monitor the allocation and use of post-disaster relief, early recovery and reconstruction funding and streamlined procurement procedures, facilitating rapid procurement while upholding internal controls to ensure appropriate use of funds.
- (iv) ADB should encourage governments to establish prior contracts with firms for disaster response supplies and building materials, enhancing their speed of response.
- (v) The disadvantages of greater project complexity should be carefully weighed

against potential benefits, particularly in the context of support for cash-for-work programs. While there is a strong case for keeping utilization of APDRF grants simple to ensure smooth implementation and liquidation, it is important to recognize the potential added benefit that grants supporting civil works could have if they incorporate food-for-work elements.

- (vi) Project officers should provide greater clarity on APDRF auditing responsibilities and requirements during grant inception and immediately following liquidation. Project officers should also coordinate with executing and implementing agencies to ensure that APDRF requirements, disbursement policies and procedures, including retroactive financing allowances, are clearly explained to auditors.
- (vii) ADB should monitor innovative new practices being applied elsewhere to provide forecast-based emergency assistance ahead of extreme weather events. Such practices are being trialed by, for instance, nongovernment organizations through the Start Fund Crisis Anticipation Window and by the World Food Program through its FoodSECuRE initiative.<sup>28</sup> They could potentially enhance the benefits of APDRF support, for instance facilitating pre-positioning of relief supplies ahead of an imminent disaster.

75. Finally, although all official requests for APDRF support have been met, ADB is receiving a growing number of additional preliminary enquiries about APDRF support for other disasters. To date, all the preliminary enquiries that have not progressed have involved relatively minor events and have not justified APDRF assistance, although each has been carefully monitored in case of escalation. However, as awareness of the APDRF on the part of governments continues to increase it would be advisable to formally establish an extra early check in the system to ensure that APDRF resources are used judiciously for major events. It is therefore proposed that an additional step be introduced into the process for grant approval, entailing the early notification of senior management of informal enquiries for support and requesting their guidance at this stage as well as later.

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<sup>28</sup> See <https://startnetwork.org/start-fund> and <http://www.wfp.org/climate-change/initiatives/foodsecure>.

## PROJECT SUMMARIES

**Grant 0162-PHI: Typhoon Ketsana (Philippines).** Typhoon Ketsana hit the Philippines' main island of Luzon on 26 September 2009, bringing the heaviest rainfall in the country since the 1960s. Eight regions were declared disaster areas, prompting the Government of the Philippines to declare a state of national calamity in Metro Manila and 25 provinces. Damage was initially estimated at \$48.8 million, but later revised to \$1.45 billion. Financial assistance from the Asia Pacific Disaster Relief Fund (APDRF) was sought to meet urgent needs for such basics as food, water, clothes, and shelter for the 9.3 million people severely affected. The grant was used to (i) buy food, mats, water jugs, plastic bags, rice bags, mosquito nets, blankets, and fuel; (ii) purchase one forklift truck and two hand pallet trucks; (iii) provide cash assistance; (iv) provide cash for work; and (v) provide medical, burial, and transportation assistance. An undisbursed balance of \$1.35 million was returned to the fund.

**Grant 0165-SAM: Earthquake and Tsunami Disaster Response (Samoa).** An earthquake of magnitude 7.9 that struck Samoa on 29 September 2009, generating a destructive tsunami that caused considerable loss of life, affected 18% of the combined population of Samoa and American Samoa, and caused damage exceeding \$150 million. Widespread damage was caused to power, water, seawall, and wharf infrastructure and to private homes and tourism facilities. The government declared a state of disaster and requested financial assistance for life-preserving food, water, clothes, and shelter for communities affected by the earthquake and tsunami. The grant was used to purchase plant and materials to restore the electricity supply to the affected areas and the new settlement areas, and to reprint curriculum materials and procure other educational aids for schools affected by the disaster as they prepared for the new school year in 2010.

Processing the APDRF assistance highlighted the advantage of having close coordination between the resident mission and Asian Development Bank (ADB) headquarters. As this was only the second grant approved under the APDRF, the lack of precedent and the resulting need to seek clarification on a number of issues delayed the liquidation and submission of the final statement of expenditures.

**Grant 0168-INO: West Sumatera Earthquake Disaster (Indonesia).** A magnitude 7.6 earthquake struck West Sumatera Province in Indonesia on 30 September 2009, and a second earthquake of magnitude 7.0 struck Jambi Province, east of West Sumatera, on 1 October 2009. The two earthquakes, especially the first one, caused more than 1,000 deaths and many casualties, as well as widespread destruction in three districts. Damage was initially estimated at \$600 million. The President of Indonesia pronounced an emergency response period of 1 month and publicly welcomed foreign assistance. Financial assistance from the APDRF was requested for the emergency response efforts. Grant proceeds were used by the executing agency, the National Disaster Management Agency, to purchase communication vehicles, rescue vehicles (pickup trucks, motorcycles, and boats), a rapid response system, mobile communication equipment, communication network equipment and school tents.

Grant processing took some time because the National Disaster Management Agency was new at that time and lacked experience working with ADB and other international agencies.

**Grant 0200-MON: Dzud Disaster Response (Mongolia).** A *dzud*, or extremely snowy winter, started affecting Mongolia in December 2009, and the government declared a state of disaster in 15 provinces from early February 2010 to March 2010. Abnormally low temperatures caused

herder families to become isolated and communities inaccessible. Affected people suffered food shortages and lacked medical assistance and heating fuel. Heavy snow, which could not be removed for lack of machinery, obstructed roads and made it difficult for assistance to reach families in remote areas. The severe winter conditions caused the loss of 8.1 million head of livestock, upon which one-third of Mongolia's population depend for their livelihood. With the arrival of spring, animal carcasses needed to be removed and soil disinfected to avoid soil contamination and reduce the risk of spreading infectious diseases. The government requested financial assistance for the provision of life-preserving services for communities affected by the dzud.

Financial assistance distributed to more than 8,000 herder families helped alleviate food shortages and provide such basic needs as heating fuel and medical assistance. The grant also helped improve social welfare and health service delivery, and strengthened disaster preparedness for isolated herder families and inaccessible communities by delivering 20 ambulances to as many district hospitals. Soil contamination and infectious diseases were prevented with the timely removal of animal carcasses and disinfection of soil. The Government of Mongolia successfully completed the Dzud Disaster Response Project in October 2010.

**Grant 0214-PAK: National Flood Emergency Response (Pakistan).** Heavy rains in late July 2010 over northwest Pakistan caused widespread flooding. The floods were the most severe in Pakistan's recent history, resulting in more than 1,400 fatalities, damaging nearly 900,000 houses, and affecting 20 million people, including 6 million requiring immediate relief and shelter. The government declared an emergency as food, clean drinking water, tents, and other supplies were urgently needed, and outbreaks of waterborne disease threatened. It requested financial assistance from the APDRF offered as humanitarian assistance. The agreement was signed for the grant on 20 October 2010, and funds were immediately transferred from ADB to the cabinet division and then to the National Disaster Management Authority. The grant was used mainly to provide temporary shelters and bedding to protect the displaced population from the approaching winter cold and to stockpile emergency rescue equipment. The procurement and delivery of supplies was completed before the grant closing date of 19 April 2011. With fund utilization at 99.3%, 13,700 tents and 113,500 blankets were procured. Some were distributed to affected population and some used to restock depleted stores in preparation for subsequent disasters.

The ADB grant assistance was a timely intervention that contributed significantly to the government's efforts to provide rescue and relief to the affected population, and helped strengthen national and local emergency response capacity and preparedness for future disasters by restocking depleted stores. The provincial, state, and district disaster management authorities responsible for maintaining these stocks were able to put the remaining stock to good use during floods in August 2011. All stocks in the stores of the district, provincial, and federal authorities are fully utilized.

**Grant 0237-INO: Mount Merapi Disaster Response (Indonesia).** Seismic activity and preliminary eruptions at Mount Merapi increased alarmingly in mid-October 2010. Residents living within 10 kilometers were evacuated when Mount Merapi erupted on 26 October 2010. By the first week of November 2010, the danger zone had been expanded to a radius of 20 kilometers, displacing 400,000 people. Volcanic activity peaked on 4–5 November 2010, making this the most violent Mount Merapi eruption since 1872. Pyroclastic (hot gas) flows and volcanic ash affected villages around the volcano, causing fatalities and displacing people. Agriculture and cattle raising, the two main livelihoods of the local population, were adversely affected. The President of Indonesia declared Mount Merapi a national disaster, and provincial governments



also declared states of emergency. The request for financial assistance under the APDRF was intended for building temporary shelters; normalizing such public services as schools, public clinics, and water supply and sanitation; and setting up a cash-for-work scheme under which refugees cleared debris. However, the grant was canceled because the executing agency, Badan Nasional Penanggulangan Bencana, failed to (i) submit a detailed work plan or procurement plan compliant with the provisions of the grant agreement, or (ii) justify its request to extend the grant closing date for 18 months.

**Grant 0247-SRI: Flood Disaster Response (Sri Lanka).** Heavy rainfall starting in December 2010 caused widespread flooding in 17 of Sri Lanka's 25 districts in what was described as some of the worst in a century. The floods affected more than 1.2 million people, driving more than 300,000 people from their homes. Houses were damaged and destroyed. Fields of rice, vegetables, and other crops were extensively damaged. Inundated roads limited access to affected populations for the distribution of assistance and created difficulties in assessing the floods. The government initially estimated damage at \$43 million and urgently requested financial assistance from the APDRF to help restore the livelihoods of affected populations, purchase emergency relief materials and supplies, and restore community infrastructure and services. The grant immediately supported the government's provision of food, drinking water, and medical supplies, as well as site cleaning and livelihood programs for 25,000 flood-affected people. The government used \$0.6 million for relief items—food, drinking water, medical supplies, personal hygiene kits, water purification and sanitation systems, transitional shelter, temporary classrooms, and teaching equipment. It used the remaining \$2.3 million for site clearing and livelihood programs. The district secretaries responsible for disaster management implemented the project at the district level. The grant supported Sinhalese, Tamil, and Muslim communities in the project area. The project was completed on 17 August 2011 without any extension and with grant funding fully utilized.

ADB's assistance was approved within 4 days. The project significantly contributed to the government's efforts to mitigate the consequences of the January 2011 floods. Relief and livelihood assistance programs were targeted on the most severely affected people, helping to support and, via cash for work programs, contributing to the rehabilitation of damaged paddy fields.

**Grant 0266-PAK: Sindh and Balochistan Flood Disaster Response (Pakistan).** Torrential monsoon rains beginning in mid-August 2011 triggered severe flooding in Pakistan, primarily in the province of Sindh. The impact across vast adjoining areas of Balochistan and southern Punjab had serious humanitarian consequences. Continual rains seriously impeded the delivery of emergency services and flood mitigation works. The government declared 14 of the most severely affected districts of Sindh and 5 districts in Balochistan to be calamity-affected areas. The floods affected infrastructure and more than 890,000 hectares of farmland in the most productive districts of Pakistan. Damage to communication infrastructure seriously challenged relief, reconstruction, and other economic efforts. The government requested financial assistance from the APDRF to help meet the urgent need for food, medical supplies and shelter. The grant was used to purchase tents and mosquito nets, and cover related taxes.

**Grant 0268-CAM: Cambodia Flooding 2011: Humanitarian Assistance.** The Mekong River started to rise in early August 2011. The water level rose more significantly when Typhoons Nesat and Nalgae brought heavy rain in late September and early October 2011. Of 24 provinces and municipalities, 18 were inundated, affecting 1.5 million people. The prolonged inundation prevented the initiation of meaningful remedial measures. The damage to infrastructure and crops was initially estimated at more than \$500 million. The government

requested APDRF assistance to address critical needs for (i) rice seed to enable affected households to rapidly replant destroyed rice fields, (ii) the temporary repair of irrigation canal embankments, and (iii) support to affected families through food- and cash-for-work schemes undertaking emergency repairs to flood-damaged rural roads to restore connectivity with affected communities. The grant was used for the purchase of rice seeds, bags (for the repair of embankments and canals), and fuel; cash for work; recurrent operating and maintenance; consultancy fees; and per diem and representation for missions to affected areas.

**Grant 0269-THA: Thailand Flooding 2011.** Exceptionally heavy rains in August and September 2011 caused Thailand's worst flooding since 1942. By early November 2011, the government had confirmed 527 fatalities and 11.3 million people affected by the inundation. The economic impact was considerable, with initial indications that damage and losses would likely cut 2 percentage points off growth in annual gross domestic product in 2011. Provincial governments declared all flooded areas to be disaster areas. The request for financial assistance from the APDRF was for the provision of life-preserving services for communities affected by the flood. The grant was used to purchase supplies and equipment for flood relief and cash for work subcontracts.

**Grant 0279-PHI: Tropical Storm Washi (Philippines).** Tropical storm Washi (Sendong) swept across the central Philippines' Visayas and northeastern Mindanao from 16 to 18 December 2011, bringing heavy rain that caused massive flooding, flashfloods, and landslides. Three cities and one municipality were badly affected. Rivers overflowed and inundated the cities with muddy water at an alarming rate. The flooding drowned many residents in their sleep and swept away houses made of light materials. The President of the Philippines declared a state of national calamity on 20 December 2011. Early assessments estimated damage to infrastructure, agriculture, and school buildings at \$23 million. The government requested APDRF financial assistance to assist in meeting urgent needs for food, water, soap, hygiene kits, clothes, medical supplies, and shelter, as well as to clear debris and provide livelihood support for affected people. The grant was used to purchase food, water, and kitchen kits; provide transitional shelter; support a cash-for-work initiative to clear debris; and provide hauling and trucking services.

**Grant 0283-FIJ and Grant 0286-FIJ: Fiji Floods.** Tropical cyclones in January and April 2012 resulted in significant landslides and widespread flooding, directly affecting hundreds of thousands and requiring emergency shelter assistance for many thousands. Water and electricity supplies were disrupted and roads, bridges, and dams extensively damaged. The Western Division was the main area impacted by both cyclones, although more provinces and districts were affected as a result of the second cyclone. On both occasions, a state of natural disaster was declared. The National Emergency Operations Centre coordinated and monitored recovery measures by government agencies and nongovernment organizations. Initial damage and needs assessments were undertaken for key sectors such as agriculture, health, water and sanitation, and infrastructure. The Government of Fiji requested and received immediate ADB assistance under the APDRF for \$1 million on both occasions.

In the first case, funds were requested to provide temporary shelter, food, drinking water, and medical supplies; for disease prevention and vector control purposes; to repair health and educational institutions; and for agricultural inputs. The grant was used for civil works purposes, specifically to purchase concrete pipes, crushed rocks, river gravel, base course, and concrete mix, as well as to hire excavators, diggers, bulldozer, dump trucks, and similar equipment.

In the second case, funds were requested to meet emergency needs, particularly the repair and restoration of essential services. The grant was used for the urgent repair of a bridge in Nadi, linking the two parts of the town and providing the only road link between Nadi, the country's third-largest conurbation, and Suva, the capital.

**Grant 0333-SAM: Cyclone Emergency Response (Samoa).** Tropical Cyclone Evan significantly impacted Samoa from 13 to 14 December 2012, causing widespread destruction across both Upolu and Savai'i islands. On the main island of Upolu, flash flooding brought about extensive damage to the urban center and suburbs along the river banks. The southern and southeastern coastal areas of Upolu were flattened. The tropical cyclone claimed five lives in total with 12 persons reported missing. At the height of the storm, 7,739 people (4% of the total population) took shelter in 34 evacuation centers and churches throughout the country. More than 4,000 people remain in the evacuation centers, while the cleanup operation is underway. An allocation of \$500,000 from the APDRF was approved to help augment the government's and development partners' assistance for the basic needs of the impacted population, especially in relation to rehabilitation work and restoration of essential services. The government used the funds to buy fuel and building materials.

**Grant 0344-RMI and Grant 0351-RMI: Drought Disaster Response (Marshall Islands).** In response to a severe drought that started in April 2013, ADB approved two consecutive APDRF grants of \$100,000 and \$200,000 each for the Marshall Islands. The first grant was requested in particular to help meet food supplies, and transport and logistical costs; the second was used to augment the government's drought response plan. The first grant was used for water purification tablets, medical and pharmaceutical supplies, battery replacement, fuel, and a charter flight to deliver disaster team. The second grant was used to cover staff overtime and per diem costs in responding to the drought, food, fuel, and toolkits for the installation of water catchments.

**Grant 0369-PHI: Typhoon Haiyan (Yolanda) (Philippines).** Category 5 Typhoon Haiyan (locally named Yolanda) entered the Philippines area of responsibility during the night of 6 November 2013. Maximum sustained winds reached at least 215 kilometers per hour near the center with wind gusts reaching up to 275 kilometers per hour. Typhoon Haiyan was the third category 5, or "super typhoon," to hit the Philippines since 2010, and possibly the strongest to ever hit land. The United Nations Disaster Assessment and Coordination team described the scale of destruction in Tacloban alone as comparable to the impact of the 2004 Indian Ocean tsunami. A \$3 million APDRF grant was approved in response to the typhoon to provide support for the restoration of life-preserving services to affected communities. The grant was used to procure food and water.

**Grant 0372-CAM: Cambodia Flooding 2013: Humanitarian Assistance.** In September 2013, Cambodia experienced serious flooding because of flash floods from heavy rains and floods from overflowing rivers, especially in the northwestern provinces of Banteay Meanchey, Battambang, Pailin, and Siem Reap. The damage from the 2013 flooding was expected to exceed that of the floods in 2000 and 2011, both in terms of loss of life and impacts on infrastructure and agricultural crops, largely because the period of inundation was prolonged, preventing the initiation of meaningful remedial measures. The National Committee for Disaster Management released an initial damage estimate approaching \$1 billion. An APRDF grant was sought to finance (i) rice seeds to enable affected households rapidly to replant destroyed fields; (ii) temporary repairs of irrigation canal embankments; and (iii) support to affected families through food- and cash-for-work schemes by undertaking emergency repairs to flood-damaged rural roads in order to restore connectivity of affected communities. The grant was used to

support the temporary repairs of irrigation canal embankments and to support food- and cash-for-work emergency road repair schemes.

**Grant 0381-PAL: Super Typhoon Haiyan Response Project (Palau).** On 7 November 2013, Typhoon Haiyan, a category 5 tropical cyclone with sustained winds exceeding 250 kilometers per hour near its center, traversed northern Palau and directly over the State of Kayangel. Through the APDRF, ADB assisted the Government of Palau in (i) providing emergency power to health centers and dispensaries, (ii) providing potable water to Kayangel until the Kayangel water supply lens recharges, and (iii) removing non-green disaster waste from Kayangel to Koror for safe disposal. The grant was used to cover costs incurred in transporting pre-fabricated shelters to affected households and related demurrage charges and for restoration of communication services.

**Grant 0385-SOL: Flood Disaster Response Project (Solomon Islands).** Prolonged heavy rainfall on 3–5 April 2014 associated with a tropical depression, which later became Tropical Cyclone Ita, caused severe flooding in Solomon Islands. The capital city of Honiara was most severely affected after the Mataniko River burst its banks on 3 April 2014. Major infrastructure, including the sewerage system, water supplies, roads, and bridges, was badly damaged or destroyed. The Old Mataniko Bridge in the Central Business District of Honiara was washed away and the eastern approach to the New Mataniko bridge—the only bridge connecting East and West Honiara—suffered erosion. An APDRF grant was used to undertake urgent repairs to New Mataniko bridge to retain connectivity and provide access to hospital and humanitarian support for affected people.

**Grant 0428-VAN: Vanuatu Cyclone Pam Disaster Response Project (Vanuatu).** Tropical Cyclone Pam struck Vanuatu as an extremely destructive category 5 cyclone on the evening of 13 March 2015. The cyclone's eye passed close to Efate Island in Shefa Province, where Vanuatu's capital, Port Vila, is located. Winds were estimated to have reached 250 kilometers per hour (kph) with gusts peaking at around 320 kph. The entire country was affected. Port Vila suffered widespread damage from extremely strong winds, heavy rainfall, storm surges, and flooding. The southernmost islands of Tafea Province, the northern islands of Sanma, Penama and Torba Provinces were reported to have been heavily impacted by the cyclone. An APDRF grant was sought to support urgent humanitarian needs. The \$1 million grant was used for the provision of food rations, a water tank, shipping costs, and the taxation of vehicles donated to the government for the response.

**Grant 0430-NEP: Nepal Earthquake Disaster Response (Nepal).** A powerful 7.8 magnitude earthquake struck Nepal on 25 April 2015, with the epicenter in Lamjung District (north-west) of Kathmandu. Thirty out of 75 districts in the country were affected in the Western and Central Regions, including Kathmandu Valley districts. Roads and other infrastructure were severely affected, hampering the delivery of relief goods and services and causing shortages of food, water, and other essential items. Many houses in the worst affected areas collapsed. A \$3 million APDRF grant was approved to support the response efforts. The grant was used to help finance the government's cash grant scheme for affected households to construct temporary shelters. Lump-sum cash grants of NRs 15,000 (approximately \$150) were provided to beneficiaries for the construction of temporary shelters.

**Grant 0436-MYA: Flood Emergency Response Project (Myanmar).** Heavy monsoon rains during the month of July 2015 caused flooding, flash floods and landslides in several parts of Myanmar. Cyclone Komen, which made landfall in Bangladesh on 30 July, brought strong winds and heavy rains to Myanmar, resulting in further floods, landslides and wind damage in 12 out of

14 states and regions across the country. Farmlands, roads, railroads, bridges and houses were destroyed. Over 1.6 million people were affected and at least 110 fatalities were confirmed, according to initial figures from the Government's Ministry of Social Welfare, Relief and Resettlement. Over 1.42 million acres of farmland were inundated. A \$3 million APDRF grant was approved to help restore life-saving services to affected communities. The grant was used for the provision of medical kits, food and bottled drinking water, and personal hygiene kits, transitional shelter, the bulk purchase of aviation fuel, other transportation charges, site clearance, the provision of emergency rescue and relief equipment, and the purchase of water purification and sanitation systems.

**Grant 0466-FIJ: Fiji Cyclone Emergency Response Project (Fiji Islands).** Tropical Cyclone Winston struck Fiji on 20-21 February 2016 causing widespread destruction across the entire country. With winds averaging 220kph and gusting to 300kph, it was one of the most powerful cyclones ever recorded in Fiji's history. Storm surges and flooding from Tropical Cyclone Winston caused severe damage to hospitals, schools and homes. Power, water and communication outages occurred, leading to a 30-day State of Natural Disaster being declared, and an international appeal for assistance by the Government of Fiji. A \$2 million APDRF grant was sought for the provision of food, transitional shelter, and safe water supplies and used for these purposes.

**Grant 0475-MON: Dzud Disaster Response Project (Mongolia).** Between November 2015 and May 2016, Mongolia experienced a *dzud*. Poor rains between June to early September over the main north-central cereal-producing *aimags* resulted in 40% yield reductions compared to 2014. The drought's impact on herder livelihoods from low yielding pastures was amplified by severe winter conditions, with meager pastures increasingly covered by a snow layer and inaccessible for grazing. Some regions also experienced extreme cold spells below recorded temperatures over the last 30 years. A \$2 million APDRF grant was sought for life-saving interventions to vulnerable households in affected *soums* such as multi-purpose cash grants and emergency vehicles. The grant was used for cash grants to herder households, emergency public health and social services, livestock carcass removal, search and rescue operations, fodder, and related transport costs.

**Grant 0476-RMI: Third Drought Disaster Response Project (Marshall Islands).** The Republic of the Marshall Islands (RMI) experienced severe drought conditions in 2016. As of March 2016, the entire population had been affected, comprising an estimated 15,781 people on 21 outer islands and atolls, 11,408 people on Ebeye and 27,797 people on Majuro. The government sought an APDRF grant in March which was used to support immediate relief efforts to drought-affected areas. The \$200,000 grant was fully utilized by the government for food provisions to provide food, in the order of value comprising sugar, rice, milk powder, baking powder, flour, fruits, vegetables, tuna and cooking oil. The grant beneficiaries comprised 2,133 households on the atolls of Ailinglaplap, Arno, Aur, Jaluit, Kili, Kwajalein (Carlos, Ebadon and Mejattto), Lib, Likiep, Maloelap, Mejit, Mili, Namu, Ujae, Utirok, Wohtho, and Wotje.

**Grant 0480-VIE: El-Nino Disaster Response (Drought and Saltwater Intrusion) (Viet Nam).** Viet Nam was affected by an El-Nino Southern Oscillation (ENSO) effect between late 2014 and 2016 causing serious drought conditions in the South Central and Central Highland regions as well as severe drought and saltwater intrusion in the Mekong delta. While saltwater intrusion is an annual phenomenon, the extent of intrusion encountered was the most severe in 90 years. By February 2016, saltwater had intruded as much as 93 kilometers up the Vam Co River, about 20 to 30 kilometers further inland than normal. Some 400,000 hectares of cropland was affected to varying degrees and 26,000 hectares left fallow. ADB approved a \$3 million APDRF

grant to address immediate humanitarian needs, including drinking water and food, access to clean water sources, disease control, and malnutrition support. The grant became effective in September 2016 and is currently under implementation.

**Grant 0481-SRI: Sri Lanka Flood and Landslide Disaster Response (Sri Lanka).** Sri Lanka was hit by severe Tropical Storm Roanu on 15 May 2016, causing widespread flooding and landslides in 22 of the country's 25 districts and affecting 340,150 people. As a result of heavy rains, several major reservoirs overflowed and flood gates were fully opened to avoid a dam breach, causing flooding downstream. Major landslides also occurred in two districts in Sabaragamuwa and Central Provinces. While the tropical storm passed over Sri Lanka, rain continued over the island as the normal south-west monsoon settled in. The government sought support from ADB which approved a \$2 million APDRF grant for the purchase of emergency relief materials and supplies and restoration of community infrastructure and services. According to provisional information provided prior to extended grant closing in June 2017, the grant is being used for transitional shelters, debris clearance, rural road reconstruction, canal, culvert and drainage rehabilitation, reservoir renovation, and toilet and drinking water provision to re-settled persons.

## TABLES

Table A2.1: Indicated and Actual Use of Asia Pacific Disaster Relief Fund Grants (2009–2014)

Approval Year	Country	Grant Title	Use of grant as indicated in grant memo	Actual use of grant
2009	Philippines	Typhoon Ketsana	Food, water, clothes, shelter	Food, mats, water jugs, plastic bags, rice bags, mosquito nets, blankets, and fuel; 1 forklift truck and 2 hand pallet trucks; cash assistance; cash for work; medical, burial, and transportation assistance
2009	Samoa	Earthquake and Tsunami Disaster Response	Food, water, clothes, shelter	Restoration of electricity supply; school teaching materials
2009	Indonesia	West Sumatera Earthquake Disaster	Emergency relief	Communication vehicles and equipment; rescue vehicles; rapid response system; school tents
2010	Mongolia	Dzud Disaster Response	Emergency relief	Cash transfers to affected households; vehicles to support emergency operations, health care and social services
2010	Pakistan	National Flood Emergency Response	Emergency response needs	Blankets, tents
2011	Sri Lanka	Flood Disaster Response	Livelihoods restoration; emergency relief items; restoration of community infrastructure and services	Food, drinking water, medical supplies, personal hygiene kits; water purification and sanitation systems; transitional shelter, temporary classrooms and teaching equipment; debris clearance; cash for work
2011	Pakistan	Sindh and Balochistan Flood Disaster Response	Food, medical supplies, shelter	Tents, mosquito nets
2011	Cambodia	Cambodia Flooding 2011: Humanitarian Assistance	Rice seeds; temporary repair of irrigation canal embankments; food and cash for work emergency road repair schemes	Rice seeds, bags, and fuel; cash for work; consultants; per diem and representation for missions to affected areas
2011	Thailand	Thailand Flooding 2011	Emergency relief	Flood relief supplies and equipment; cash for work subcontracts
2011	Philippines	Tropical Storm Washi	Food, water, soap, hygiene kits, clothes, medical supplies, and shelter; cash for work debris clearance scheme	Food, water, kitchen kits; transitional shelter; cash for work site clearance; hauling and trucking services

Approval Year	Country	Grant Title	Use of grant as indicated in grant memo	Actual use of grant
2012	Fiji	Fiji Flood Emergency Response Project	Temporary shelter, food, water, medical supplies; disease prevention and vector control; repairs to health and educational institutions; agricultural inputs	Repair and rehabilitation of dam and pipeline, pumping station and bridge
2012	Fiji	Fiji Flood Rehabilitation Project	Emergency needs, especially rehabilitation work and restoration of essential services	Repair of bridge
2012	Samoa	Cyclone Emergency Response Project	Food, shelter; water supply	Fuel and building materials
2013	Marshall Islands	Drought Disaster Response	Emergency needs, especially food and transport and logistical costs	Food; water purification tablets; medical and pharmaceutical supplies; battery replacement; fuel; charter flight to deliver disaster team
2013	Marshall Islands	Second Drought Disaster Response	Immediate drought needs	Staff overtime and per diems; food; fuel; toolkits for installation of water catchments
2013	Philippines	Typhoon Haiyan (Yolanda)	Restoration of life-preserving services	Food and water
2013	Cambodia	Cambodia Flooding 2013: Humanitarian Assistance	Rice seeds; temporary repairs of irrigation canal embankments; food and cash for work emergency road repair schemes	Temporary repair of irrigation canal embankments; food and cash for work emergency road repair schemes
2013	Palau	Super Typhoon Haiyan Response Project	Emergency power for health centers and dispensaries; drinking water; debris clearance	Transportation of pre-fabricated shelters and related demurrage charges; restoration of communication services
2014	Solomon Islands	Flood Disaster Response Project	Medical kits, food, drinking water; personal hygiene kits; debris clearance.	Repair of bridge
2015	Vanuatu	Vanuatu Cyclone Pam Disaster Response Project	Medical kits, food, drinking water, personal hygiene kits; debris clearance; restoration of damaged transport links	Food; water tank; shipping costs; taxation of vehicles donated to government for the response efforts by a third party.
2015	Nepal	Nepal Earthquake Disaster Response	Search and rescue operations; medical assistance; provision of medical kits, food and drinking water; water treatment units; personal hygiene kits; debris clearance; restoration of damaged communication and transport links	Cash grants to affected persons to construct temporary shelters
2015	Myanmar	Flood Emergency Response Project	Life-saving relief support, rebuilding infrastructure and restoring livelihoods	Emergency rescue and relief equipment; medical kits, food and drinking water; aviation fuel; water purification and sanitation system; personal hygiene kits; transitional shelter



Approval Year	Country	Grant Title	Use of grant as indicated in grant memo	Actual use of grant
2016	Fiji	Fiji Cyclone Emergency Response Project	Transitional shelter, safe water supplies.	Food, shelter, safe water supplies
2016	Mongolia	Dzud Disaster Response Project	Basic food rations, medical kits, personal hygiene kits.	Cash grants to herder households; emergency public health and social services; carcass removal; search and rescue operations; fodder and related transport costs.
2016	Marshall Islands	Third Drought Disaster Response Project	Clean water, health kits, food rations; transport and logistics costs.	Food
2016	Viet Nam	El-Nino Disaster Response (Drought and Saltwater Intrusion)	Drinking water, access to clean water sources; disease control; food; nutrition interventions.	N/A
2016	Sri Lanka	Sri Lanka Flood and Landslide Disaster Response	Emergency relief materials and supplies; restoration of community infrastructure and services.	Transitional shelters; debris clearance; rural road reconstruction, canal, culvert and drainage rehabilitation; reservoir renovation; toilet and drinking water provision to re-settled persons <sup>a</sup>

<sup>a</sup> Provisional information, pending grant losing report and liquidation.

Source: Asian Development Bank.

**Table A2.2: Asia Pacific Disaster Relief Fund Grant Timelines  
(2009–2016)**

Approval Year	Country	Disaster	Disaster Date	Emergency Declaration	Request to ADB	SDCC Endorsement	Approval	Agreement	Effectivity	Grant Closing	Final Liquidation	Submission of audit report
2009	Philippines	Tropical cyclone	26-Sep-09	28-Sep-09	28-Sep-09	29-Sep-09	29-Sep-09	01-Oct-09	01-Oct-09	31-Mar-10	08-Feb-13	23-Nov-15
2009	Samoa	Earthquake and tsunami	29-Sep-09	29-Sep-09	30-Sep-09	02-Oct-09	02-Oct-09	02-Oct-09	02-Oct-09	02-Apr-10	01-Sep-10	14-Dec-10
2009	Indonesia	Earthquake	30-Sep-09	01-Oct-09	12-Oct-09	12-Oct-09	13-Oct-09	21-Oct-09	21-Oct-09	21-Apr-10	31-Dec-10	31-Dec-10
2010	Mongolia	Dzud	Dec 2009 - May 2010	02-Feb-10	01-Apr-10	05-Apr-10	12-Apr-10	14-Apr-10	14-Apr-10	14-Oct-10	15-Dec-10	30-Jun-14
2010	Pakistan	Flood	Late July 2010	05-Aug-10	18-Aug-10	18-Aug-10	19-Aug-10	22-Oct-10	22-Oct-10	22-Apr-11	02-Feb-12	30-Sep-13
2010	Indonesia	Volcanic eruption	26-Oct-10	05-Nov-10	26-Nov-10	02-Dec-10	07-Dec-10	10-Jan-11	19-Jan-11			
2011	Sri Lanka	Flood	Dec 2010	11-Feb-11	10-Feb-11	14-Feb-11	16-Feb-11	18-Feb-11	18-Feb-11	17-Aug-11	13-Feb-12	04-Jul-13
2011	Pakistan	Flood	Mid-Aug 2011	Balochistan 16-Sep-11; Sindh 6-Oct-11	27-Sep-11	11-Oct-11	24-Oct-11	27-Oct-11	27-Oct-11	27-Apr-12	19-Jun-13	30-Sep-13
2011	Cambodia	Flood	22-Sep-11		27-Oct-11	28-Oct-11	02-Nov-11	04-Nov-11	04-Nov-11	04-Dec-12	25-Jul-13	15-Aug-13
2011	Thailand	Flood	Aug-Sep 2011	20-Oct-11	4-Nov-11	10-Nov-11	17-Nov-11	22-Dec-11	27-Dec-11	30-Sep-12	29-Apr-14	27-May-14
2011	Philippines	Tropical cyclone	16-18 Dec 11	20-Dec-11	21-Dec-11	22-Dec-11	22-Dec-11	23-Dec-11	26-Dec-11	23-Dec-12	15-Jan-13	16-Oct-14
2012	Fiji	Flood	23-27 Jan12	25-Jan-12	8-Feb-12	13-Feb-12	15-Feb-12	06-Mar-12	12-Mar-12	06-Sep-12	05-Nov-13	1-Oct-15
2012	Fiji	Flood	29 Mar-3 Apr 12	1-Apr-12	5-Apr-12	9-Apr-12	16-Apr-12	19-Apr-12	19-Apr-12	30-Nov-12	18-Oct-13	28-Jul-14
2012	Samoa	Tropical cyclone	13-14 Dec12	17-Dec-12	20-Dec-12	21-Dec-12	24-Dec-12	02-Jan-13	02-Jan-13	02-Jul-13	28-Oct-14	23-Dec-14

Approval Year	Country	Disaster	Disaster Date	Emergency Declaration	Request to ADB	SDCC Endorsement	Approval	Agreement	Effectivity	Grant Closing	Final Liquidation	Submission of audit report
2013	Marshall Islands	Drought	Early 2013	19-Apr-13	10-May-13	15-May-13	17-May-13	24-May-13	29-May-13	24-Nov-13	19-Oct-15	4-Feb-16
2013	Marshall Islands	Drought	Early 2013	8-May-13	11-Jun-13	28-Jun-13	10-Jul-13	18-Jul-13	23-Jul-13	18-Apr-14	19-Oct-15	26-Apr-16
2013	Philippines	Tropical cyclone	08-Nov-13	11-Nov-13	12-Nov-13	13-Nov-13	13-Nov-13	14-Nov-13	14-Nov-13	14-May-14	29-Apr-14	28-Oct-16
2013	Cambodia	Flood	3rd week of Sep13		21-Oct-13	12-Nov-13	14-Nov-13	22-Nov-13	22-Nov-13	22-Jul-14	03-Jun-14	23-Feb-15
2013	Palau	Tropical cyclone	7-Nov-13	9-Nov-13	8-Nov-13	17-Dec-13	18-Dec-13	20-Dec-13	20-Dec-13	20-Jun-14	20-Oct-15	29-Jan-16
2014	Solomon Islands	Flood	3-5 April 14	4-Apr-14	10-Apr-14	11-Apr-14	16-Apr-14	22-Apr-14	22-Apr-14	22-Oct-14	16-Oct-14	3-Sep-15
2015	Vanuatu	Tropical cyclone	13-Mar-15	15-Mar-15	17-Mar-15	19-Mar-15	20-Mar-15	25-Mar-15	25-Mar-15	25-Sep-15	21-Oct-15	31-May-16
2015	Nepal	Earthquake	25-Apr-15	25-Apr-15	26-Apr-15	27-Apr-15	27-Apr-15	29-Apr-15	30-Apr-15	29-Oct-15	11-May-16	23-May-16
2015	Myanmar	Flood	30-Jul-15	31-Jul-15	18-Aug-15	19-Aug-15	21-Aug-15	2-Sep-15	2-Sep-15	02-Mar-16	6-May-16	
2016	Fiji	Tropical cyclone	20-21 Feb-16	20-Feb-16	23-Feb-16	23-Feb-16	24-Feb-16	28-Feb-16	28-Feb-16	28-Aug-16	13-Sep-16	
2016	Mongolia	Dzud	Since Jan 2016	None	29-Mar-16	30-Mar-16	6-Apr-16	11-Apr-16	13-Apr-16	11-Oct-16	27-Jan-17	
2016	Marshall Islands	Drought	Since end 2015	3-Feb-16	3-Mar-16	28-Mar-16	6-Apr-16	26-Apr-16	26-Apr-16	26-Oct-16		
2016	Viet Nam	Drought	Since end 2015	20-Apr-16	20-Apr-16	23-May-16	1-Jun-16	12-Sep-16	12-Sep-16	12-Mar-17		
2016	Sri Lanka	Flood	15-May-16	None	25-May-16	31-May-16	9-Jun-16	13-Jun-16	14-Jun-16	13-June-17		

Source: Grant Financial Information System.

**Table A2.3: Asia Pacific Disaster Relief Fund Grants and Follow-On ADB Assistance**

Approval Year	Country	Grant Title	Approved Amount (\$)	Follow-on ADB assistance
2009	Samoa	Earthquake and Tsunami Disaster Response	1,000,000	Loan 2625 (\$16.0 million)
2010	Pakistan	National Flood Emergency Response	3,000,000	TA7579 (\$0.225 million), TA7795 (\$4.0 million), Loans 2742 (\$600.0 million), 2743 (\$50.0 million)
2011	Cambodia	Cambodia Flooding 2011: Humanitarian Assistance	3,000,000	TA8051 (\$0.225 million), Loan 2852 (\$55.0 million), Grant 0285 (\$5.25 million)
2012	Samoa	Cyclone Emergency Response Project	500,000	Grants 370 (\$10.0 million), 371 (\$1.0 million), 373 (\$8.21 million)
2013	Philippines	Typhoon Haiyan (Yolanda)	3,000,000	TA8536 (\$0.725 million), TA8590 (\$1.5 million), Grant 9175 (\$20.0 million), Loan 3080 (\$500.0 million), 3100 (\$372.1 million)
2013	Cambodia	Cambodia Flooding 2013: Humanitarian Assistance	3,000,000	TA8617 (\$0.225 million), Loan 3125 (\$75.0 million), Grant 0285 (\$6.683 million) - additional financing
2014	Solomon Islands	Flood Disaster Response Project	200,000	Loan 3152 (\$6.61 million), Grant 0403 (\$6.61 million)
2015	Vanuatu	Vanuatu Cyclone Pam Disaster Response	1,000,000	Loans 3331 (\$1.0 million), 3332 (\$2.805 million); Grants 0459 (\$7.0 million), 0460 (\$2.805 million), 0461 (\$2.680 million), 9181 (\$5.0 million)
2015	Nepal	Nepal Earthquake Disaster Response	3,000,000	Loan 3260 (\$200.0 million), TA8910 (\$1.5 million) (\$.6 million-additional financing), Grant 0529 (\$10.0 million)
2015	Myanmar	Flood Emergency Response	3,000,000	Grant 9185 (\$10.0 million)
2016	Fiji	Fiji Cyclone Emergency	2,000,000	Loan 3403 (\$50.0 million)

TA = technical assistance.

Source: Disaster Risk Management Database