# climate and Disaster Risk Reduction – guidAnce note

### Overview

This note supports DFAT staff to design and manage aid investments to reduce the risk of disaster on aid programming and to effectively advocate with partners and stakeholders to help countries meet their Sendai commitments to enhance disaster risk reduction. These are key results under the reducing disaster risk objective of DFAT’s Humanitarian Strategy. Disaster risk management (DRM) involves understanding disaster risk, putting in place appropriate policy, planning and regulatory frameworks and taking action through investment design and implementation to reduce the impact of disasters on program outcomes. It also underscores the strong connection between disaster risk reduction (DRR) and climate change adaptation. This guidance **outlines how to integrate DRR** (including climate change adaptation) into the aid program.

Climate change, rapid urbanisation, population growth and environmental degradation are increasing the vulnerability of populations to disasters. Governments, international agencies, non-governmental organisations and communities agree that urgent and sustained actions are needed to reduce the social, economic and environmental impacts of natural hazards and build resilience to future hazards. Disasters not only result in deaths but also cause ongoing economic hardship, reversal of development gains, an increase in inequality and disproportionately affect women and the poor (and vulnerable). DRR should not be seen as a standalone objective, rather as something which is essential to all development action. All aid programming should consider whether the risk of disaster has the potential to undermine program goals and to explore what strategies can be adopted to prevent, mitigate or adapt to these risks. **DRR is everyone’s business.**

### Summary of Key Actions and Practical Steps

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|  | **Key actions** | **Practical steps** |
| **Risk screening for AIPS, and investment concepts** | * AIP and investment concepts are screened and assessed for disaster risk in line with DFAT’s risk and safeguards processes | * Country and regional programs undertake disaster risk screening * Investment managers undertake risk screening, and disaster risk assessment. |
| **Advocacy** | * Advocate for disaster risks to be identified and effectively managed by partner countries, agencies / organisations and private sector - to ensure risks are minimised | * Discuss disaster and climate risks with partner governments and agencies/organisations especially: disaster management organisations, health and education authorities |
| **Investment design** | * Design includes analysis of disaster risks * “Do no harm” approach ensures investments do not intensify risks * Ensure investments are risk informed | * Undertake risk analysis and consult with civil society, government and communities on known risks * Consult national DRR strategy or disaster risk management plan to ensure alignment |
| **Partnership Framework Development** | * Assess partner capacity to prepare for and mitigate risk of disasters Fund partners with strong DRR and climate policies and an integrated approach to both | * Ask partners if they have risk register or similar which covers disasters * Analyse the DRR and climate change policies of partners including national adaptation plans (NAPs) |
| **Monitoring and Evaluation** | * Learning fed back into ongoing program implementation in DFAT | * Ensure monitoring plans cover disaster risk and that risks are reviewed regularly |

## International Policy Frameworks

In March 2015, **Australia endorsed the Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework),** which built on (rather than replaced) its predecessor the Hyogo Framework for Action 2005-2015. It shifts the focus to disaster risk management – rather than disaster management – in order to get ahead of the curve by reducing the impact of natural hazards. Australia will invest in a safer future through programming and advocacy to support countries to reduce disaster risk in line with the Sendai Framework, focusing on the Indo-Pacific region.

The **Sendai Framework** was the first of the world's post-2015 development agreements, and was followed by four other major intergovernmental policy frameworks: the **Addis Ababa Action Agenda** **on Financing for Development** (July 2015); Transforming our World: the **2030 Agenda for Sustainable Development** (September 2015); the **Paris Agreement on Climate Change** (December 2015) and the **New Urban Agenda** (October 2016). These frameworks reinforce a singular global agenda for disaster risk reduction and include common indicators for measuring progress. Australia has committed to implementing the commitments both domestically and internationally.

The Sendai Framework recognises that the State has the primary role to reduce disaster risk but that responsibility is shared with other stakeholders including local government, the private sector and communities themselves. DFAT investments should support countries to meet their Sendai goals.

The Framework identifies four priorities for action: understanding disaster risk; strengthening disaster risk governance; investing in disaster risk reduction for resilience; and enhancing disaster preparedness for effective response and to “Build Back Better” in recovery and reconstruction. The framework has seven global targets;

(a) Substantially reduce global disaster mortality by 2030,

(b) Substantially reduce the number of affected people globally by 2030,

(c) Reduce direct disaster economic loss in relation to global gross domestic product (GDP) by 2030,

(d) Substantially reduce disaster damage to critical infrastructure and disruption of basic services,

(e) Substantially increase the number of countries with disaster risk reduction strategies by 2020,

(f) Substantially enhance international cooperation to developing countries

(g) Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments by 2030.

### Why an integrated approach to DRR and climate change adaptation?

DFAT officers are encouraged to take an all-hazard approach to screen for and manage disaster risk in Australia’s aid investments. This includes identifying and managing both climate related and geological hazards such as earth quake, tsunami and volcanoes.

[Investments and efforts addressing disaster risk reduction and climate change action](http://dfatintranet.titan.satin.lo/managing-aid/investment-priorities-cross-cutting-issues/investment-priorities/humanitarian-assistance-disaster-risk-reduction/Pages/climate-action-and-disaster-resilience.aspx) are cross-cutting issues with substantial overlap as climate change adaptation impacts DRR and both are concerned with rapid and slow onset disasters. Both require the management of risks in existing aid priority areas and investments, and both require consideration of targeted investments. Many of the significant disaster events in the past decade are climate related and climate change is likely to contribute to the increasing frequency and severity of these disasters. Effective disaster risk management must therefore take into account the changing climate, including likely changes such as evolving rainfall patterns.

For many aid investments, DFAT staff can address both disaster risk and climate change adaptation through the same actions. Please see the forthcoming climate change toolkit for more detail on addressing climate change.

However there are some differences between climate change adaptation and DRR, with DRR also concerned with geo-hazards (earthquakes, volcanoes and tsunamis) and actions to address the risk and management of pandemics. The Sendai framework reflects pandemic prevention as part of the health security agenda.

### WHY THIS NOTE?

The impact of disasters on development investments makes DRR central to the effectiveness of all Australian aid. Climate change will exacerbate these risks, increasing both the frequency and intensity of many disasters. Ensuring investments are resilient to natural hazards increases their value for money.

Disasters disproportionately affect women, people with disabilities, poor and vulnerable groups. When addressing disaster risks, the needs of these groups should be addressed in consultation with them.

Australia supports the implementation of the Sendai Framework in the Indo-Pacific Region by:

* integrating disaster risk reduction into Australian aid investments - especially in core sectors, such as infrastructure, health, education, social protection and food security;
* investments that increase the understanding of disaster risk, such as flood zone mapping;
* strengthening disaster risk governance, such as land use planning or building code enforcement;
* enhancing disaster preparedness and response, such as building capacity of disaster agencies;
* ‘building-back better’ in recovery, rehabilitation and reconstruction, ensuring buildings are disaster resistant; and
* drawing on the experience of technical agencies, multilateral partners and global experts to assist partner countries in these actions

## KEY ACTIONS

Having undertaken an analysis and identified the risks to be considered, investment managers should consider a balanced management plan for these risks. The aim should be to protect DFAT investments and to support countries to minimise risks from disasters.

Central to DRR is the need to understand the context and the risks faced by your investment. DFAT has a three-step approach to DRR and climate change action which investment design and management should address:

**Step 1:** Assess disaster risk (historical and future risks) to and from the investment (could a disaster eliminate investment gains, or could the investment unintentionally increase disaster risk)

**Step 2:** Manage unintended disaster risks (including climatic risk) the investment could create

**Step 3:** Assess and pursue opportunities for positive DRR outcomes

1. **How to identify disaster risks to your country or regional program and investments**

Screen your investment for disaster risk at the **concept and design** stage. *If you have inherited an existing investment, risk screening should still be undertaken.* When considering environmental and social safeguards (see Aid Programming Guide chapter 7 especially section 7.5.4 Safeguards) you should also consider disaster and climate change risks (increasing risk of drought, cyclones, floods and storm surge) which may impact your program or investment. For a useful starting point to understand the disaster risks in your country visit [www.thinkhazard.org/en/](http://www.thinkhazard.org/en/).

1. **Rate the risks and likely consequences of disasters on investment or program using a risk matrix (such as the DFAT risk assessment matrix[[1]](#footnote-1))**

Judgement is needed in deciding which risks need to be managed, and the degree of mitigation needed. Discussing possible risks with partners and technical experts in country is strongly recommended.

1. **Ensure a sensible assessment and management plan is in place.**

Disaster risks should be included in the risk management plan for each investment or program. For convenience and to ensure regular review of risks, this should be incorporated into your environmental and social impact assessment and management plan.

1. **Put in place systems to monitor, update and report on disaster risks**

Disaster risks may change over the life of your program or investment and these changes should be tracked. For example deforestation in areas above an investment site may increase the risk of landslide and therefore require a change in design of structures. Climate change will also have an increasing impact on the size, frequency and scale many disasters including drought, cyclones, floods and storm surge.

### DRR programming

Action to reduce disaster risk could feature: risk screening and assessments, structural prevention measures (e.g. building codes, flood mitigation measures), preparedness measures (e.g. early warning systems) normative prevention measures (e.g. land-use planning) or building local and national capacities and supporting the establishment of efficient and sustainable national structures able to promote disaster risk reduction.

**Examples include**

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| Retrofitting schools and clinics to strengthen their earthquake or other disaster resilience [EDUCATION] | Building disaster ready schools and classrooms [EDUCATION] |
| Adoption and enforcement of land use and zoning practices [ENVIRONMENT] | Implementing and enforcing building codes [INFRASTRUCTURE] |
| ‘Build back better’ housing and social infrastructure [HEALTH, EDUCATION] | Disaster insurance or financing programs [LIVELIHOODS] |
| Raising homes or other buildings in flood-prone areas [INFRASTRUCTURE] | Hazard mapping [INFRASTRUCTURE] |
| Integrating disaster risk reduction into national disaster management legislation and national development plans [GOVERNANCE] | Promoting the use of hazard risk information in land-use planning [INFRASTRUCTURE] |
| Undertaking vulnerability assessment of hospitals in hazard-prone areas [HEALTH] | Combating environmental degradation that enhances disaster risk (e.g. deforestation) [ENVIRONMENT] |
| Interventions to help communities and agricultural industries be more resilient to droughts [FOOD SECURITY, AGRICULTURE] | Assisting partner countries to prepare for disasters [DISASTER PREPAREDNESS] |
| Managing disaster risk to help protect productive industries, assets and critical infrastructure [ECONOMIC GROWTH] | Interventions to manage the impacts of flood and water security challenges [WATER] |

### Entry points to the aid program

Disaster risk reduction should be incorporated at all stages of the aid program management cycle, including strategy, policy, planning and design, implementation, monitoring, performance reporting and evaluation. Country and regional strategies, Aid Investment Plans, sectoral strategies, investment concept notes, designs and risk management processes need to consider disaster risk reduction.

**Integrating DRR in the aid program cycle**

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| **Aid cycle stage** | **Entry points** |
| Policy and Direction | * Aid Investment Plan (AIP) identifies disaster and climate risks? * Are DFAT-supported partners (including multi-laterals) effectively integrating disaster risk reduction (and climate change) in their investments? |
| Risk management | * Which disaster risks should be identified and managed? * What specific measures and actions should be outlined to manage any risks? * Have disaster risks been adequately assessed and are mitigation measures identified? If not what steps can be taken to address these risks? * Are disaster risk reduction actions clearly stipulated in agreements? |
| Policy dialogue | * DFAT advocates for disaster risks to be effectively managed by partner countries and the private sector. * Does the partner government have a national adaptation and action plan and/or Sendai strategy? If not are these planned or can they be supported? |
| Planning | * Is the partner country disaster prone or at high risk of climate impacts? See <http://www.inform-index.org/> for a starting point for reference. * What does the partner country define as its disaster risk reduction priorities? * Are there particular vulnerabilities faced by sections of the community, including women children, persons with a disability, and rural/remote communities? Are these addressed? * Are there particular strengths and coping mechanisms that these or other groups have which can be enhanced? * Which existing networks are involved in DRR, and how can they be supported? |
| Concept and Design | * Has disaster risk reduction been factored into the investment concept and design, particularly in high risk sectors? This should cover both historical and future risks from climate change. * Are DRR opportunities within the aid investment clearly expressed? * Are disaster risk and climate change adequately addressed in any environment impact assessment or management plan for the investment? * Have all key stakeholders been identified and effectively consulted to ensure the appropriateness of program designs – including communities and civil society? * In the event of a disaster (slow or rapid onset), are there contingencies in place for the investment? What flexibility can be incorporated in the design to mitigate these risks? |
| Implementation | * Which disaster risks should be identified and managed? What specific measures and actions are in place to manage risks? Are there opportunities for reducing disaster risk? * How are key learnings about successes and challenges fed back into ongoing program implementation – particularly in a new area of implementation? * Are disaster risks reviewed regularly to update the risk matrix? |
| Monitoring and Evaluation | * Are disaster risk reduction and climate change identified in AQCs? Are management responses being implemented? * Do evaluations assess if the investment is reducing the risk of disaster impacts? * Have disaster risk reduction and climate change been considered in performance benchmarks and Performance Assessment Framework data? * Is data disaggregated, particularly by sex and disability? |

**Case study: Typhoon Haiyan**

In the Philippines, Typhoon Haiyan (2013) was one of the most intense tropical cyclones on record. Australia’s “build back better” approach for the Typhoon Haiyan Shelter and Livelihood Recovery Program ensured that new homes were built in a low-hazard area, and used a disaster-resilient design. The Australian Government, in partnership with the Gawad Kalinga Community Development Foundation and the local government of Palo, constructed safer permanent housing for communities in just 16 months. With support from Australia, 250 of the poorest families in Palo, Leyte were able to rebuild their homes and their lives.

## FURTHER READING, PRACTICAL TOOLS AND RESOURCES

For further advice on this please contact the Disaster Resilience and Recovery Section ([drr@dfat.gov.au](mailto:drr@dfat.gov.au)). For most countries, there is a range of risk information and assessment tools available. National governments or subnational levels may have their own risk profiles. A number of development partners like the World Bank and UNISDR have risk and country profile products you can refer to.

**International policy frameworks**

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| [Sendai Framework for Disaster Risk Reduction 2015-2030](http://www.unisdr.org/we/inform/publications/43291) | [The Paris Agreement](http://unfccc.int/paris_agreement/items/9485.php) |
| [United Nations plan of action on disaster risk reduction for resilience](http://www.preventionweb.net/publications/view/49076) | [Addis Ababa Action Agenda](http://www.un.org/esa/ffd/ffd3/index.html) |
| [2030 Agenda for Sustainable Development](http://www.un.org/sustainabledevelopment/development-agenda/) |  |

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| **DFAT strategy and policy** | **Country Profiles** |
| [Humanitarian Strategy](http://dfat.gov.au/about-us/publications/Documents/dfat-humanitarian-strategy.pdf) | [UNISDR country profiles](http://www.preventionweb.net/countries/map#hits=20&sortby=default&view=pw) |
| [Climate action and disaster resilience](http://dfatintranet.titan.satin.lo/managing-aid/investment-priorities-cross-cutting-issues/investment-priorities/humanitarian-assistance-disaster-risk-reduction/Pages/climate-action-and-disaster-resilience.aspx) | <http://www.thinkhazard.org/en/> |
| **Training and Resources** |  |
| [www.cedrig.org/cedrig-modules](http://www.cedrig.org/cedrig-modules) | **Climate Change Knowledge Portal** |
| **Policy and guidance documents** | <http://sdwebx.worldbank.org/climateportal/index.cfm> |
| [www.preventionweb.net/english/](http://www.preventionweb.net/english/) |  |
| [Words into Action guidelines](http://www.preventionweb.net/publications/view/52828) (UNISDR) | **SPREP Pacific Climate Change Portal** |
|  | [www.pacificclimatechange.net/](http://www.pacificclimatechange.net/) |
| **Risk screening** |  |
| [www.inform-index.org/](http://www.inform-index.org/) |  |
| [startnetwork.org/start-fund/alerts](https://startnetwork.org/start-fund/alerts) |  |

1. <http://dfatintranet.titan.satin.lo/human-resources/work-health-safety-management-system/Documents/DFAT%20Risk%20Assessment%20Matrix.pdf> [↑](#footnote-ref-1)