

November 2022

Filling the gap: Addressing climate-driven crises in Pakistan

Briefing

Acknowledgements

The lead author of this briefing is Kirsty Lazer. We are grateful to all those who have contributed to the compilation of data found here. At Development Initiatives: Erica Mason, Euan Ritchie and Suzanna Nelson-Pollard, Senior Policy Advisors; Dan Walton and Jordan Beecher, Senior Analysts; and Emma Woodcock, production management and copy-editing.

Expert information and advice: Cat Pettengell, Climate Action Network UK; Lyndsey Walsh, Oxfam; Nishanie Jayamaha, ICVA; Mattias Söderberg, DanChurchAid; Debbie Hillier, Mercy Corps; and Colin McQuistan, Practical Action.

Qualitative Data collection: Mustafa Talpur, Oxfam Asia; Irfan Ullah, UNFCCC; and Anam Rathor, Climate Action Pakistan.

The programme's funders: the Department of Foreign Affairs, Trade and Development, Canada; the Stabilisation and Humanitarian Aid Department of the Ministry of Foreign Affairs, the Netherlands; the Ministry of Foreign Affairs, Denmark.

Introduction

Existing funding systems are not working for the new realities of climate change and its impacts on people, particularly those most marginalised and least responsible. There is an urgent need for a better targeted, more reliable, and more comprehensive global response. Humanitarian and development funding is not currently sufficient, is not rooted in climate justice and does not address the full spectrum of loss and damage. Without confronting and addressing the gaps in existing systems, catastrophic climate events will devastate individual lives, families, and communities.

In June 2022 after a devastating heat wave, Pakistan began experiencing torrential monsoon rains, which, combined with melting glaciers, contributed to the worst flooding the country has ever experienced. Climate change increased extreme monsoon rainfall, flooding highly vulnerable communities.¹ One in seven people in Pakistan – 33 million people – have been impacted by the flooding and over 1,600 people have died, with around 2 million homes damaged or destroyed.² As a result, an estimated 20.6 million people are in need of humanitarian assistance and the cost of the damages has recently been estimated as US\$30–40 billion.³

The story of Pakistan in 2022 is not unique. The humanitarian and development response to flooding in the country in 2010 did not embed resilience in communities made vulnerable by climate change, leaving them susceptible to later floods. But this failure takes on a new definition in the context of fundamentally altered climate systems with accelerating and constant changes, where events and impacts are not extraordinary but expected. ⁴

Across the world, responding to disasters as if they occur in isolation, rather than as part of an escalating pattern of climate change, is a failure of responsibility to the communities worst hit and contributes to cycles of crisis. Failing to respond to climate losses and damages creates vulnerability worldwide, as climate change impacts drive displacement, impact food supply chains and undermine wider economic stability.

What is loss and damage?

'Loss and damage' (L&D) refers to the consequences of climate change impacts which cannot be averted or minimised.

Loss refers to things that have been lost such as lives, cultural practices or historical sites, or economic or material losses that could be replaced if there is money to do so, such as a failed harvest or destroyed infrastructure.

Damage refers to things that may be able to be repaired or recovered such as disability or ill health, or damage to roads and buildings.

Under the UN Framework Convention on Climate Change (UNFCCC), there is global agreement to act to avert, minimise and address Loss and Damage. To date, climate finance arrangements have been agreed to avert (referred to as 'mitigation finance') and minimise (referred to as 'adaptation finance') the impacts of climate change, but not to address L&D. Funding, when it comes, is mostly in the form of humanitarian assistance or loans.⁵ The picture emerging for the countries most vulnerable to and least responsible for the impacts of climate change is one of insufficient preparation (adaptation) and ill-equipped or damaged systems of recovery and rebuilding. This is producing cycles of crisis, the effects of which are increasingly severe.

See our recent blog for more on the potential of loss and damage financing.

The case of Pakistan highlights the shortcomings of the humanitarian and development financing architecture to respond to climate change impacts, which require multi-faceted responses of relief, reconstruction and resilience-building. Given these limitations, developing an approach to disaster response that consciously links and aligns humanitarian, development and climate interventions and finance will be key as climate change impacts increase.

The need for a better system

This briefing examines the current response to the 2022 floods in Pakistan. It focuses specifically on the immediate humanitarian response to the disaster, linking this to some elements of the wider financing response, specifically development assistance for climate adaptation and disaster risk reduction. The briefing highlights the shortfall in funding for the humanitarian appeal, the speed of response and the participation of local actors. By examining the 2010 and 2011 floods in Pakistan and a similar response to climate change impacts in Mozambique, it shows the insufficiency of immediate relief and reconstruction in both purpose and funding. It also illustrates how shortfalls in adaptation finance inadequately prepare communities for climate change impacts, but that even when it does, irreparable losses and damages will still occur. Throughout, it discusses aspects of loss and damage finance as an important part of addressing climate change impacts.

2022 Pakistan floods An insufficient response

Figure 1a: International support for the Pakistan 2022 Floods Response has been insufficient, and fallen far short of meeting the needs of affected people UN OCHA Pakistan 2022 Floods Response Appeal requirements and funding

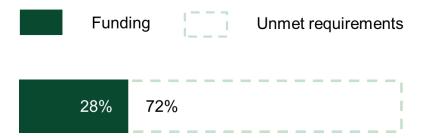
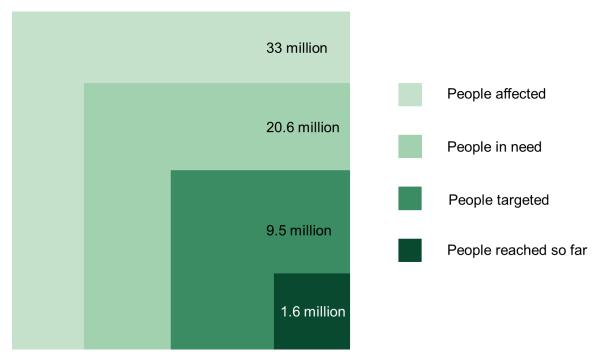


Figure 1b: The funding falls does not reach the total number of people in need People targeted by UN OCHA Pakistan 2022 Floods Response plan against people affected and people in need of assistance



Source: UN OCHA's FTA Appeal Data. 2022 Floods Response Plan Pakistan (Revised).

Notes: This data reflects the state of financing and targeting as of writing on 26 October 2022. The funding and requirements in chart a) reflect those of the revised appeal for 2022 alone. The appeal has been extended to 31 May 2023 and requirements set at \$816 million, however the data here reflects the requirements to the end of 2022. The appeal running in 2023 aims to target 9.8 million people by the end of May.

International humanitarian response seeks to provide immediate lifesaving assistance, complementing domestic responses from government and civil society. It should form part of a wider array of resource flows to countries in crisis that address short- but also longer-term needs for preparedness, response, recovery and resilience. In reality, little international financial support is reaching the most vulnerable countries experiencing climate-related crises and an already overburdened humanitarian system is being stretched even further. These systemic challenges – the absence of adequate development and climate finance for recovery and resilience, and an over-stretched, insufficiently funded humanitarian response – are clearly evident in Pakistan in 2022.

The size and speed of humanitarian response

One in seven people in Pakistan – 33 million people – have been impacted by the floods in 2022.⁷ Of those, 20.6 million are estimated to be in need of humanitarian assistance, including shelter and food (<u>Figure 1b</u>). However, the flash appeal launched by Pakistan and the UN aims to target less than half (9.8 million) of these people by May 2023. As of October 2022, humanitarian assistance had reached less than 8% of people affected (1.6 million) and by late October the appeal was only 28% funded (US\$130.0 million; <u>Figure 1a</u>). The scale of the response is inadequate compared to the level of need.

The humanitarian system is already overstretched and underfunded. Without sufficient global action, the frequency and severity of climate-driven crises will only increase, and the gap between requirements and funding is likely to grow further. Between 2000 and 2021, the percentage of humanitarian appeals linked to extreme weather increased from 36% to 78%, illustrating how climate change is an increasing drain on humanitarian resources.8 Humanitarian appeals often fall short of required need and have been increasingly underfunded in recent years: total appeal funding shortfalls have increased from US\$4.1 billion in 2012 to US\$16.9 billion in 2021, and protracted crises are increasingly common.9 Once an appeal is raised and approved through the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), it takes time for funding to be granted and to reach responders on the ground. Interviews conducted for this briefing with those working to support the response in Pakistan emphasised that the initial and early response to the 2022 flooding was largely run by local people, communities and organisations with little or no international support for the first few weeks. The time taken to establish an appeal and release financial assistance to support first responders cost lives and forced people to deal with difficult and uninhabitable conditions on the ground.

Humanitarian response at the local level

Events in Pakistan clearly demonstrate that in the post-disaster phase first responders are local communities and domestic structures and organisations with little or no direct access to finance. A large part of the initial response is being implemented by civil society, including local communities and grassroots responders who have been leading the response since the flooding began. ¹⁰ International NGOs have had a relatively small presence in Pakistan in recent years as tightened government regulations reduced the space within which they can operate. ¹¹

Pakistan has well developed channels for getting <u>funding to the local level</u>, with government institutions established specifically for this purpose and a network of NGOs already at the forefront of the response. Since 2005, Pakistan has had a National Disaster Management Authority (NDMA), and subsequent Provincial Disaster Management Authorities (PDMAs). These structures oversee disaster management plans and coordinate operations, including in response to the floods in 2022. The NDMA is leading the procurement of relief supplies and coordinating bilateral donations. The NDMA, PDMA and District Disaster Management Authorities (DDMA) are leading sector coordination mechanisms, which are set up at provincial level to ensure better coordination with the humanitarian sector.

However, these channels are not adequately equipped to deal with the scale of current or future crises, and the overall lack of humanitarian financing further hampers their response. Local actors have emphasised the need for more funding – for humanitarian, development and climate response – to be channelled through these purpose-built local and national systems and to support them with additional knowledge, skills and equipment so that they are more able to respond in the face of climate change. In Pakistan, the channels exist for further funding to be provided to reach local communities quickly. However, for the 2022 flooding, financing has come too late and has been insufficient.

Non-economic losses and damages

The economic loss and damage costs from the floods in Pakistan are estimated to reach up to US\$30–40 billion, around 10% of Pakistan's GDP. 12 This amount includes damages to homes, agriculture, and infrastructure. However, what it does not include could potentially be of much greater value. The non-economic losses and damages (NELDs) from events such as the floods are much harder to quantify. Local and national actors emphasised the impact that the trauma of repeated flooding and subsequent loss of shelter, livelihoods and loved ones was having on the community's mental health.

For some losses and damages, like ecosystem and nature loss, the impacts are not yet measurable. Damage to woodland and biodiversity in Pakistan is widespread and will have significant consequences for the future productivity and resilience of the landscape. For example, there have been devastating impacts to the government's Ten Billion Tree Tsunami project, which aimed to protect ecosystems and build natural capital. It began in 2019 and had led to the planting of over a billion trees, many of which have now been destroyed in the floods. The impact of damages to the ecosystems on both physical and mental health will take decades to measure and restore.

Cultural heritage sites, such as the 5,000 year old Mohenjo-Daro, have also been damaged or lost and the social cohesion of communities – which is a key element of resilience to crisis – has been damaged, as people may never be able to return to their homes and need to permanently relocate. These non-economic losses and

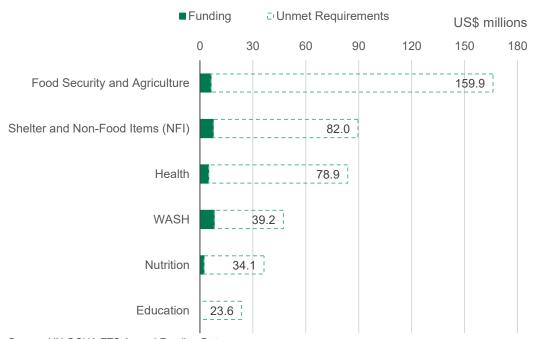
damages are just as, if not more, important to the people and communities impacted by the floods.

Focus on immediate needs

The humanitarian system is set up to respond to basic immediate needs and provide immediate lifesaving support. Longer-term recovery and rebuilding are not within its remit, nor is the provision of funding that incorporates climate justice – an understanding of the causes of climate change and the burdens its impacts have on people's lives and livelihoods.

Local and national organisations responding to the crisis in Pakistan interviewed for this briefing stated that the immediate humanitarian response has been largely focused on temporarily housing and feeding people, as well as trying to prevent the spread of disease. Analysing funding data to the humanitarian clusters within the response, which focus on the key areas for humanitarian action (Figure 2), illustrates in practice how limited humanitarian funding is being targeted and the extent to which it is falling short against individual areas of need.

Figure 2: Humanitarian response focuses on immediate, life-saving needs Pakistan Floods 2022 Appeal cluster requirements and funding



Source: UN OCHA FTS Appeal Funding Data.

Notes: Requirements by cluster reflect those for the updated appeal with total requirements of US\$472.3 million, that is running to the end of 2022 (not the appeal extended into 2023) to give fairer comparison with funding so far. Funding as of writing on 26 October. This chart shows funding to the clusters with the six largest funding requirements in the 2022 appeal, it does not reflect funding to the remaining clusters, multi-sector funding or funding that has not been allocated to a cluster. Delays in the allocating of funding to a cluster in reporting mean some unspecified funding is likely to have been allocated to clusters, meaning funding to certain clusters may be higher than data shows.

- The Food Security and Agriculture cluster accounts for 35% of all requirements.
 Over 50% of the required funding for this cluster is for immediate food assistance.
 This cluster also aims to target activities beyond immediate need, such as rehabilitation of agriculture and irrigation, however this assistance is not intended to contribute to consistent and long-term food security and nutrition. According to current data the Food Security and Agriculture sector is only 3% funded.
- The second largest cluster by requirements is Shelter and Non-food Items (NFI), which accounts for 20% of required funding and provides emergency shelter and essential household items. The Health, WASH and Nutrition clusters have the next largest requirements. The humanitarian response plan documents indicate that the Health cluster is prioritising the provision of lifesaving medicines and supplies, the WASH cluster will support improved access to water and toilet facilities, and the Nutrition cluster is focusing on provision of lifesaving treatment of malnutrition.
- The education cluster accounts for 5.0% of all funding requirements, but according to available data as of 26 October it has not yet received any funding.

National response capacity and level of responsibility

The Government of Pakistan is a potential source of funding for recovery and rebuilding efforts. However, local and national actors suggested huge levels of government debt make it largely unable to provide sufficient funding to help affected people rebuild their lives. In line with climate justice principles, Pakistan would not be responsible for providing this finance; the highest historical emitters would.

The human-attributed impacts of climate change, like the floods in Pakistan, put devastating pressure on communities, as well as local and national governments. This pressure is exacerbated for countries already under the burden of debt and who receive little international support. ¹⁶ Pakistan's external debt levels were extremely high even before the floods in 2022, reaching US\$76 billion. ¹⁷ Debt repayments in 2022 will be around US\$13.6 billion, a huge proportion of government revenue. For example in 2021, debt servicing was US\$11.9 billion, or 32% of government revenue. ¹⁸ However, some estimates put it much higher. ¹⁹ The 2010 floods led Pakistan to borrow between an estimated US\$20–40 billion more than would have been the case, which resulted in annual interest payments of between US\$1.6 and US\$3.1 billion. ²⁰ This is a common picture across many climate-vulnerable countries, who are trapped repaying vast sums to their creditors every year, hampering their ability to respond to the mounting impacts and costs of the climate crisis. In this way, debt and climate crises are mutually reinforcing: climate finance provided as loans increases the burden on communities, and local and national governments responding to climate change.

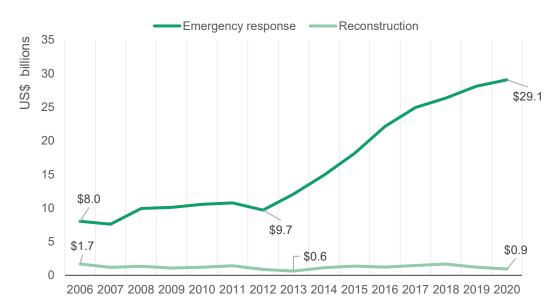
Local actors interviewed reflected the view that the government has no financing to fund the rebuilding and reconstruction needed once the floods abate. They outlined their fears that as flood waters recede, people will have to start rebuilding their own lives with minimal support, and may themselves have to borrow, or sell off possessions, to access the finance they need.²¹ This will push more people into poverty and will increase community vulnerability to future floods.

Moving from immediate response to reconstruction

While humanitarian actors sometimes intend to support early recovery, very little humanitarian funding is allocated for immediate post-emergency reconstruction activities that could provide a bridge to longer-term development assistance for reconstruction. Indeed, while emergency response funding has increased globally in the decade to 2020, immediate post-emergency reconstruction funding has flatlined, with the gap between the two widening greatly. According to the OECD Creditor Reporting System, humanitarian assistance for post-emergency reconstruction has always been small, averaging just over US\$1 billion annually over the last 15 years. However, as crises have become more frequent, finance for emergency response increased more than threefold between 2006 and 2020, whereas finance for reconstruction declined over the same period.

Figure 3: Humanitarian assistance for immediate post-emergency reconstruction stagnant despite more frequent crises

ODA to immediate humanitarian post-emergency reconstruction, 2006–2020



Source: OECD Creditor Reporting System.

Notes: Figures are in constant 2020 prices and include ODA from DAC and multilateral providers

Trends in wider financing for longer term reconstruction compound the impact of the small volumes of funding for immediate post-emergency reconstruction, with pledges of development financing for longer-term reconstruction slow to be released. Analysis of international financial flows to nine crises related to natural hazards showed that on average only 15% of pledged financing for longer-term reconstruction had been committed within eighteen months of the disaster occurring. This analysis also found that there is a gap between the provision of emergency response funding and longer-term development funding for reconstruction.²²

As the frequency of crises resulting from the complex and long-term disruption of the climate system increases, with more severe impacts on the communities most vulnerable and least responsible, this pattern is likely to become more pronounced.

Looking back: Pakistan's 2010 floods

Pakistan experienced similarly devastating floods in 2010, also attributed to the impacts of climate change.²³ Many people impacted by the floods this year had not fully recovered from the 2010 disaster.²⁴ The humanitarian response to the previous floods illustrates the cycles of vulnerability driven by climate change.

When Pakistan was impacted by flooding in 2010, around 20 million people were estimated to be in need of assistance.²⁵ At that time, the initial flash appeal established in August was US\$460 million, which was 80% funded by September 2010.²⁶ This indicates a relatively fast and well-funded response compared to this year's, which is only 28% funded over the same duration (as of 26 October 2022). However, the humanitarian response targeted only a small part of the initial impacts of the disaster, estimated at US\$13 billion.²⁷ Even when the 2010 appeal was extended to US\$2 billion, it only aimed to target 14 million people with immediate life-saving needs.

The NDMA, the UN and other humanitarian and development partners established the Early Recovery Working Group (ERWG), chaired by the NDMA and United Nations Development Programme (UNDP) with the intention that the additional money from the appeal would support early recovery and rebuilding beyond immediate life-saving measures from the end of January 2011. ^{28,29} However, the revised UN Appeal had a shortfall of almost US\$600m and requirements were unmet in critical areas, such as housing and agriculture. This meant there were huge gaps in the post-flood recovery needs and hundreds of thousands of Pakistanis remained without permanent shelter. ³⁰ In July 2011, as the next monsoon season approached, OCHA noted that 2 million people were again at risk from flooding, partly due to lack of funds for reconstruction. ³¹

The 2011 flooding affected 9.2 million people and another humanitarian rapid response plan was launched for US\$357 million (which was only ever 44% funded). As in 2010, an additional early recovery appeal was launched for \$440.5 million in 2012. The need for rebuilding efforts over and above humanitarian assistance for immediate needs, which could bridge to longer-term reconstruction and resilience-building was recognised. However, this only ever received US\$77.3 million in funding, with 82.4% of requirements unmet. When adaptation has been insufficient, humanitarian response falls short after a crisis and little support is provided to help finance recovery and rebuilding, leaving communities increasingly vulnerable to the next cycle of climate change impacts.

Case study: Climate vulnerability in Mozambique

Increasing vulnerability due to insufficient immediate and long-term responses to an unprecedented number of climate change events is common across climate-vulnerable countries and the case of Mozambique reflects the experience of Pakistan.

In 2019, for the first time in recorded history, two strong tropical cyclones (above Category 2) hit Mozambique in the same season. It was also the first time that a cyclone has reached so far north in Mozambique. Both cyclones (Kenneth and Idai) caused devastation across the country, with Idai damaging 240,000 homes

and Kenneth 45,300. Other areas of the country were experiencing crisis in the form of a drought, compounding an already serious food insecurity situation in Mozambique.³³ Together these effects left 3 million people in need of humanitarian assistance.

The humanitarian appeal responding to the cyclones and drought aimed to raise US\$620.5 million. However, only 50.7% of funding requirements were ever met. The appeal hoped to target 2.79 million people, but due to the underfunding many were left without assistance, increasing the vulnerability of people in Mozambique to future crises.³⁴ According to the International Organization for Migration (IOM), tens of thousands remained internally displaced in 2020 due to cyclones and floods.³⁵

As was the case in Pakistan, the clusters with the largest requirements and most funding were those focused on immediate, life-saving needs. While there was some attempt to focus on early recovery, requirements for the Resilience and Early Recovery cluster were only ever 4.3% funded (US\$355,000). This again demonstrates how, in the context of chronic underfunding, the humanitarian sector is designed to prioritise immediate, life-saving needs and efforts to lay the foundations for recovery, on which longer-term development assistance builds, are not supported.

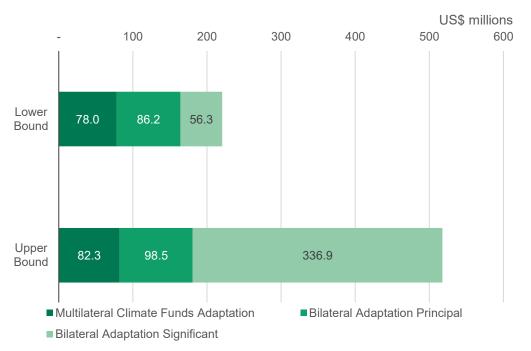
The need for meaningful adaptation finance

Pakistan is among the countries least responsible for climate change, but nevertheless will have to adapt economically, socially and culturally, not only to a different climate, but to a more changeable and extreme climate.³⁶ Even with adequate adaptation finance, Pakistan will still face unavoidable impacts.

As illustrated above, not only is humanitarian finance failing to adequately meet needs in a context where climate change impacts are more frequent and more devastating, climate-vulnerable countries like Pakistan have not received sufficient support for adaptation to climate change. Climate change adaptation finance and activities are crucial in countries like Pakistan to build resilience in the event of future climate-driven crises and yet this finance continues to be insufficient and inaccessible.

Figure 4: International adaptation funding to Pakistan has been insufficient to enable meaningful adaptation and reach the most vulnerable

Upper and lower bound climate change adaptation finance estimates to Pakistan



Source: OECD DAC CRS funding to Pakistan since 2016. ODI's Climate Funds Update.

Notes: Adaptation funding commitments to Pakistan combine climate adaptation-relevant ODA in grant form from DAC members, reported to the OECD DAC CRS and funding for adaptation from multilateral climate funds, since 2016 (as Rio Markers only used consistently since then). All prices are in current yearly prices. Upper and lower bound estimates reflect different assumptions about the treatment of multiple focus projects (i.e., adaptation and mitigation) and the proportion of adaptation 'significant' projects value included in adaptation finance estimates. Principal adaptation commitments by sector reflect bilateral grant flows from DAC donors which are solely tagged as having a principal; adaptation objective by sector (i.e., not mixed objective projects). See Methodology for more detail.

Adaptation finance from multilateral climate funds and bilateral grant official development assistance (ODA) committed to Pakistan since 2016 is somewhere between US\$220.5 million and US\$517.7 million. This range reflects an upper and lower boundary dependent on various assumptions about the treatment of different climate-related finance flows. For example, the treatment of multipurpose flows (those with mitigation and adaptation purposes) and how much of the value of adaptation 'significant' funding to count towards total adaptation finance.³⁷ However, for one of the world's most climate-vulnerable countries, which has done relatively little to cause climate change, and with a population of over 200 million, the volumes of climate change adaptation finance committed to Pakistan is woefully inadequate.³⁸

Bilateral climate-related grant ODA forms a significant proportion of climate finance to Pakistan (Figure 4), and funding with a 'principal' adaptation objective reflects flows intended to directly finance adaptation projects. Around US\$86.2 million has been committed in bilateral grants since 2016 for projects with a 'principal' adaptation objective (i.e. with their main purpose being for climate change adaptation, and not mitigation).³⁹ The sectors to which this funding is targeted indicates how adaptation funding is spent in

Pakistan and should be aligned with Pakistan's National Adaptation Plan. 40 73% of projects with a principal adaptation objective target either the Water Supply & Sanitation or the Disaster Prevention & Preparedness sector. A further 16% of projects are targeted at the Agriculture sector.

It's significant that a small number of larger value projects account for most of this adaptation funding. Long delays between funding commitments and disbursements, project monitoring, and the mis-tagging of some projects as solely for adaptation suggest that the true value of adaptation funding is likely to be smaller than the total commitment. Similarly, multilateral adaptation funding from climate funds is largely driven by two projects from the Green Climate Fund, which together have approved funding of US\$72 million. Since the launch of these projects in 2016 and 2019, only around US\$24 million has been released. As a result, these projects have failed to have a significant widespread impact on vulnerable communities.

The lack of effective adaptation finance demonstrates the failure of higher income countries, most responsible for climate change, to keep their promise to provide climate-vulnerable countries with the finance necessary to adapt. ⁴¹ However, even with sufficient adaptation funding, finance would still be needed to enable countries to respond to losses and damages – which adaptation could not prepare for – in the wake of climate disasters, as adaptation can alleviate some risks but not all. ⁴²

Pakistan and disaster risk reduction

Disaster risk reduction (DRR) is not typically considered to be a part of climate finance under the UNFCCC, however it is a critical element of the wider funding picture for countries experiencing crises driven by climate change. DRR finance is specifically focused on reducing hazard exposure or vulnerability to a disaster, increasing preparedness and response across sectors, and strengthening resilience. DRR funding commitments come under the Sendai Framework for Disaster Risk Reduction and are managed through the United Nations Office for Disaster Risk Reduction (UNDRR).

Despite Pakistan's status as one of the countries facing high risk of disaster it has received comparably very little funding for disaster risk reduction.⁴³ Bilateral ODA grant commitments for the purposes of disaster risk reduction were US\$47.5 million in 2020 – despite a substantial increase from US\$13.5 million in 2019, these grants made up just 1.1% of Pakistan's ODA in 2020. Of this funding, US\$28.1 million was identified for the purposes of both disaster risk reduction *and* climate adaptation, suggesting some overlap in objectives.

In 2020, there was a further US\$160 million in committed multilateral ODA loans for DRR, all of which was for the Sindh Resilience Project, an eight-year project beginning in 2016 designed to make the Sindh region more resilient to flood and drought. The Sindh region was one of those worst affected by the 2022 flooding.⁴⁴ Read more about trends in DRR financing in the 2022 GHA report.

Ending cycles of vulnerability

Countries which have historically contributed the least to the emissions that created these climate change impacts are feeling their worst effects. Despite being responsible for less than 1% of historical global emissions, Pakistan is regularly ranked as one of the nations at highest risk of both sudden and slow-onset climate change impacts.⁴⁵

Compounding the losses and damages from the flooding is the overall shortfall in humanitarian assistance. Appeals remain underfunded, money is slow to arrive and is largely targeted at immediate, life-saving activities. This unmet need demonstrates that humanitarian assistance alone is an inadequate funding stream for responding to accelerating climate impacts. The increased frequency and severity of these impacts, combined with a lack of finance to address loss and damage, place increasing pressure on a system that is ill-equipped to respond to a drastically changed context.

As the flooding in Pakistan demonstrates, there is a vital, urgent need for systemic and locally-led support directed at the most vulnerable, most marginal communities to rebuild lives and build more resilient infrastructure. Systems that are prepared to address an escalating pattern of climate losses and damages are needed to prevent climate-vulnerable communities falling into a cycle of increasing vulnerability to climate-driven crises, as they are not supported to recover and rebuild post-disaster. Without dedicated mechanisms to address climate losses and damages – to complement adequate adaptation finance – any chance of progress on poverty reduction and development will be eroded, as communities attempt to cope with the impacts of climate change.

Current funding for climate change impacts is a mixture of humanitarian, climate adaptation and development funding, and financing has been haphazard, neither following a sequential nor simultaneous pattern. Loss and damage finance provides a climate financing tool to fill the current gaps between humanitarian and development responses. However, the coherence and coordination of different streams of finance and programming is critical, as is evident in ongoing efforts to create more joined-up humanitarian, development and peacebuilding approaches. Similar considerations pertain to loss and damage finance and the role, timing and purpose of this financial support alongside other international and domestic financial flows to countries experiencing crisis. Questions around how to rapidly channel new sources of funding through national response mechanisms and how principles of humanitarian response should interact with funding rooted in climate justice need to be addressed.

People in Pakistan and climate-vulnerable countries across the world need support to respond to the devastating impacts of climate change, for which they are not responsible. This requires coherent support from climate, humanitarian and development actors, as well as a new sources of finance, like loss and damage, to support them in rebuilding their lives and livelihoods so they do not become increasingly vulnerable after each climate disaster.

Methodology

DI estimates for adaptation funding committed to Pakistan

Adaptation finance estimates are made according to Development Initiatives' methodology, which makes use of the best available data. Estimates are based on bilateral grant ODA reported by DAC donors to the OECD DAC CRS. They include projects in Pakistan which are tagged as adaptation relevant using the Rio Marker system. Solely projects funded by grant ODA from DAC donors are counted because these are the only donors who consistently report on climate relevance using the Rio Marker system, and on the basis that climate finance should be provided as grant-based funding. Only projects since 2016 are included, as this is when Rio Markers began to be used consistently.

Estimates also include projects to Pakistan from ODI's Climate Funds Update (CFU) data with an adaptation purpose. Data from 2016 is used for consistency with CRS data.

For projects from the CRS, funding that has been committed is used, as donors more reliably report funding which has been committed. The treatment of disbursed funding is inconsistent. To align with CRS data, funding for projects which have been approved is counted from the CFU. It is important to note that there are often long delays between approved/committed and disbursed funding, so in reality Pakistan is likely to have received even less funding than these estimates reflect.

The upper and lower bounds (<u>Figure 4</u>) reflect different treatment of these datasets according to various assumptions:

- The upper bound estimates include the full value of all projects reported to the CRS
 that have adaptation tagged by the Rio Markers with both a 'principal' and 'significant'
 adaptation purpose. It also includes projects which have a dual purpose (i.e. tagged
 with adaptation and mitigation purpose) under adaptation, from both the CRS and
 CFU datasets.
- The lower bound estimates only include projects from the CRS and CFU with a sole adaptation purpose, not dual-purpose projects. Lower bound estimates include the full value of projects reported to the CRS which are tagged as having adaptation as a 'principal' purpose and the full value of adaptation projects on the CFU. However, for projects on the CRS tagged with adaptation as a 'significant' purpose, only 25% of the project value is included in the adaptation estimate. This is because adaptation is only a consideration of the project and only a small proportion of the project value is likely to go to adaptation. Having examined the projects, 25% is likely to be a generous estimate as many of the descriptions have no mention of adaptation activities.

Disaster risk reduction

For our analysis of ODA to disaster risk reduction (DRR) in 2020, we include the following funding flows as reported to the OECD DAC CRS:

- Funding reported with the purpose code 43060 'Disaster Risk Reduction'
- Funding reported with the value 2 under the 'Disaster risk reduction' marker, expressing DRR as principal objective of the associated activity
- Additional funding with DRR as principal objective as expressed by the project
 information reported to the CRS (this additional funding was identified by
 Development Initiatives through a search for DRR keywords in the project titles
 and descriptions of CRS entries; the output of the keyword search was then
 manually screened for relevance to DRR. The majority of this is preparedness,
 but this approach will also capture response funding with a DRR flag/keyword).

ODA in 2020 to the newly added 'Covid-19 control' purpose code that has also been marked as relevant to DRR has been excluded from this analysis to focus on the risk reduction for natural hazards and to avoid conflating that with pandemic risk.

Notes

World Weather Attribution, 2022. Climate change likely increased extreme monsoon rainfall, flooding highly vulnerable communities in Pakistan. Available at https://www.worldweatherattribution.org/wp-content/uploads/Pakistan-floods-scientific-report.pdf

Development initiatives, 2022. Climate Financing to Africa. Available at: https://devinit.org/resources/?nav=header

⁶ Development Initiatives, 2022. Global Humanitarian Assistance Report. Available at: <a href="https://devinit.org/resources/global-humanitarian-assistance-report-2022/#:~:text=The%20Global%20Humanitarian%20Assistance%20Report%202022%20provides%20a%20critic al%20overview,plateaued%20despite%20historically%20high%20demand.

Government debt service as a percent of government expenditure is calculated as total public sector debt servicing (include public sector enterprises) for Pakistan's financial year 2021 as a share of general government final consumption expenditure. Sources: State Bank of Pakistan, World Bank Development Indicators

² UN OCHA, 2022. Revised Pakistan 2022 Floods Response Plan: 01 Sep 2022 - 31 May 2023 (Issued 04 Oct 2022). Available at: https://reliefweb.int/report/pakistan/revised-pakistan-2022-floods-response-plan-01-sep-2022-31-may-2023-issued-04-oct-2022

³ Bloomberg UK, https://www.bloomberg.com/news/articles/2022-10-19/flood-losses-now-estimated-at-40-billion-pakistan-officals-say?leadSource=uverify%20wall (accessed 20 October 2022)

⁴ WMO, 2021. Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970-2019). Available at: https://library.wmo.int/doc_num.php?explnum_id=10989

⁵ Climate Action Network International, 2022. The debt and climate crises: Why climate justice must include debt justice. Available at: https://climatenetwork.org/wp-content/uploads/2022/10/Debt-and-the-Climate-Crisis-Briefing-October-2022.pdf

⁷ British Red Cross, 22 October 2022

⁸ Oxfam, 2022. Footing the bill: fair finance for loss and damage in an era of escalating climate impacts Available at: https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621382/bp-fair-finance-loss-and-damage-070622-en.pdf

¹⁰ Information gained from interviews conducted for this briefing with those supporting response in Pakistan; Mustafa Talpur and Anam Rathor.

¹¹ This is reflected in the balance of NGOs present according to the OCHA response plan; with 64 national NGOs and 37 International NGOs providing humanitarian assistance.

Washington Post, https://www.washingtonpost.com/business/pakistan-world-bank-estimates-floods-caused-40b-in-damages/2022/10/19/a70025c8-4f8b-11ed-ada8-04e6e6bf8b19 story.html (Accessed 21 October 2022)

¹³ Information from interview with Irfan Ullah from UNFCCC, non-economic loss and damage expert.

¹⁴ Interviews conducted with Anam Rathor, Irfan Ullah and Mustafa Talpur.

¹⁵ Humanitarian clusters represent the main sectors of humanitarian action around which responses are organised. For each cluster in the response plan a calculation will be made of funding requirements to respond to the key issues under the remit of that cluster within the response, funding will then be allocated to each cluster to respond accordingly.

¹⁶ World Weather Attribution, 2022. Climate change likely increased extreme monsoon rainfall, flooding highly vulnerable communities in Pakistan. Available at: https://www.worldweatherattribution.org/wp-content/uploads/Pakistan-floods-scientific-report.pdf

¹⁷ State Bank of Pakistan, 2022. Pakistan's Debt and Liabilities Profile. Available at: https://www.sbp.org.pk/ecodata/Profile.pdf

¹⁸ State Bank of Pakistan, 2022. Summary of Pakistan External Debt Servicing. Available at: https://www.sbp.org.pk/ecodata/pakdebtsvr_summary.pdf

¹⁹ Climate Action Network International, 2022. The debt and climate crises: Why climate justice must include debt justice. Available at: https://climatenetwork.org/wp-content/uploads/2022/10/Debt-and-the-Climate-Crisis-Briefing-October-2022.pdf

²⁰ Predictions based on the existing deficit and IMF Economic Outlook. IMF World Economic Database, 2022.

Available at: https://www.imf.org/en/Publications/CR/Issues/2016/12/31/Pakistan-2009-Article-IV-Consultation-and-First-Review-Under-the-Stand-By-Arrangement-Staff-22879

- ²¹ Anam Rathor (Climate Action Pakistan) and Mustafa Talpur (Oxfam Asia).
- ²² CDP & Development Initiatives, 2021. Funding for Natural Disasters: Tracking Global Humanitarian and Development Funding for Response to Natural Hazards. Available at: https://static1.squarespace.com/static/61542ee0a87a394f7bc17b3a/t/616ad7052646c56d7b356637/163439181

https://static1.squarespace.com/static/61542ee0a87a394f/bc17b3a/t/616ad7052646c56d7b356637/1634391875076/WP 8 16June.pdf

- ²³ Scientific American, https://www.scientificamerican.com/article/is-the-flooding-in-pakist/ (Accessed 28 October 2022)
- ²⁴ The International News, https://www.thenews.com.pk/print/991413-a-question-of-justice-part-i (Accessed 10 October 2022)
- ²⁵ UN OCHA, 2011. Pakistan: Remembering the floods ahead of the monsoon. Available at: https://www.unocha.org/story/pakistan-remembering-floods-ahead-monsoon (Accessed 28 October 2022)
- ²⁶ United Nations News, https://news.un.org/en/story/2010/09/351332 (Accessed 20 October 2022)
- ²⁷ Yale Climate Connections, https://yaleclimateconnections.org/2022/08/cruel-echoes-of-a-2010-disaster-in-pakistans-catastrophic-2022-floods/ (Accessed 28 October 2022)
- ²⁸ United Nations News, https://news.un.org/en/story/2010/09/351332 (Accessed 20 October 2022)
- ²⁹ Relief Web, https://reliefweb.int/report/pakistan/government-and-humanitarian-community-unveils-early-recovery-plan (Accessed 21 October 2022)
- ³⁰ Oxfam, 2011. Ready or Not, Pakistan's Resilience to Disasters a Year after the Floods. Available at: <a href="https://oxfamilibrary.openrepository.com/bitstream/handle/10546/138689/bp150-ready-not-pakistan-resilience-disasters-floods-260711-en.pdf?sequence=1&isAllowed=y
- ³¹ UN OCHA, 2011. Pakistan: Remembering the floods ahead of the monsoon. Available at: https://www.unocha.org/story/pakistan-remembering-floods-ahead-monsoon
- ³² Relief Web, https://reliefweb.int/report/pakistan/government-pakistan-and-united-nations-launch-early-recovery-framework-2011-floods (Accessed 20 October)
- ³³ UN OCHA, 2019. Mozambique Humanitarian Response Plan Revised Following Cyclones Idai and Kenneth, May 2019. Available at: https://reliefweb.int/report/mozambique/2018-2019-mozambique-humanitarian-response-plan-revised-following-cyclones-idai
- ³⁴ UN OCHA, 2019. 2018-2019 Mozambique Humanitarian Response Plan Revised following Cyclones Idai and Kenneth, May 2019. Available at: https://reliefweb.int/report/mozambique/2018-2019-mozambique-humanitarian-response-plan-revised-following-cyclones-idai
- ³⁵ European Commission Mozambique Factsheet
- ³⁶ Government of Pakistan, 2021. Updated Nationally Determined Contributions 2021. Available at: https://unfccc.int/sites/default/files/NDC/2022-06/Pakistan%20Updated%20NDC%202021.pdf
- ³⁷ This range reflects various methodologies and assumptions on the treatment of climate-related flows. Please see Methodology section.
- ³⁸ Government of Pakistan, 2021. Updated Nationally Determined Contributions 2021. Available at: https://unfccc.int/sites/default/files/NDC/2022-06/Pakistan%20Updated%20NDC%202021.pdf
- ³⁹ OECD. Revised Rio Markers for Climate Handbook. Accessible at: https://www.oecd.org/dac/environment-development/Revised%20climate%20marker%20handbook FINAL.pdf
- ⁴⁰ UNEP, 2021. Pakistan to Develop National Adaptation Plan for Climate Change. Accessible at: https://www.unep.org/gan/news/press-release/pakistan-develop-national-adaptation-plan-climate-change
- ⁴¹ UNFCCC, 2015. The Paris Agreement. Accessible at:

https://unfccc.int/sites/default/files/english paris agreement.pdf

- ⁴² IPCC, 2022. Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Available at: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_FullReport.pdf European Commission Mozambique Factsheet
- ⁴³ Countries are grouped using the INFORM composite indicator, with countries scored 6.9 or higher grouped as 'very high', countries between 4.7 and 6.8 grouped as 'high', countries between 2.8 and 4.6 grouped as 'medium', and countries scored 2.7 or lower grouped as 'low'. In 2020, 10 countries were grouped as 'very high', 40 as 'high', 71 as 'medium', and 70 as 'low'. The 10 countries identified as at very high risk of natural hazards in 2020 were: Bangladesh. China, Ecuador, Haiti, Indonesia, India, Myanmar. Pakistan, Peru, Philippines, Somalia and Vietnam.
- 44 Relief Web, https://reliefweb.int/disaster/fl-2022-000254-pak (Accessed on 28 October 2022)
- ⁴⁵ Government of Pakistan, 2021. Updated Nationally Determined Contributions 2021. Available at: https://unfccc.int/sites/default/files/NDC/2022-06/Pakistan%20Updated%20NDC%202021.pdf

Development Initiatives (DI) applies the power of data and evidence to build sustainable solutions.

Our mission is to work closely with partners to ensure datadriven evidence and analysis are used effectively in policy and practice to end poverty, reduce inequality and increase resilience.

While data alone cannot bring about a better world, it is a vital part of achieving it. Data has the power to unlock insight, shine a light on progress and empower people to increase accountability.

Content produced by Development Initiatives is licensed under a Creative Commons Attribution BY-NC-ND 4.0 International license, unless stated otherwise on an image or page.

Contact
Kirsty Lazer
Analyst
kirsty.lazer@devinit.org

To find out more about our work visit:

www.devinit.org
Twitter: @devinitorg
Email: info@devinit.org

Development Initiatives is the trading name of Development Initiatives Poverty Research Ltd, registered in England and Wales, Company No. 06368740, and DI International Ltd, registered in England and Wales, Company No. 5802543. Registered Office: First Floor Centre, The Quorum, Bond Street South, Bristol, BS1 3AE, UK

GLOBAL HUB

Development Initiatives
First Floor Centre, The Quorum
Bond Street South, Bristol
BS1 3AE, UK
+44 (0) 1179 272 505

EAST AFRICA HUB

Development Initiatives Shelter Afrique Building 4th Floor, Mamlaka Road Nairobi, Kenya PO Box 102802-00101 +254 (0) 20 272 5346

AMERICAS HUB

Development Initiatives 1100 13th Street, NW, Suite 800, Washington DC 20005, US