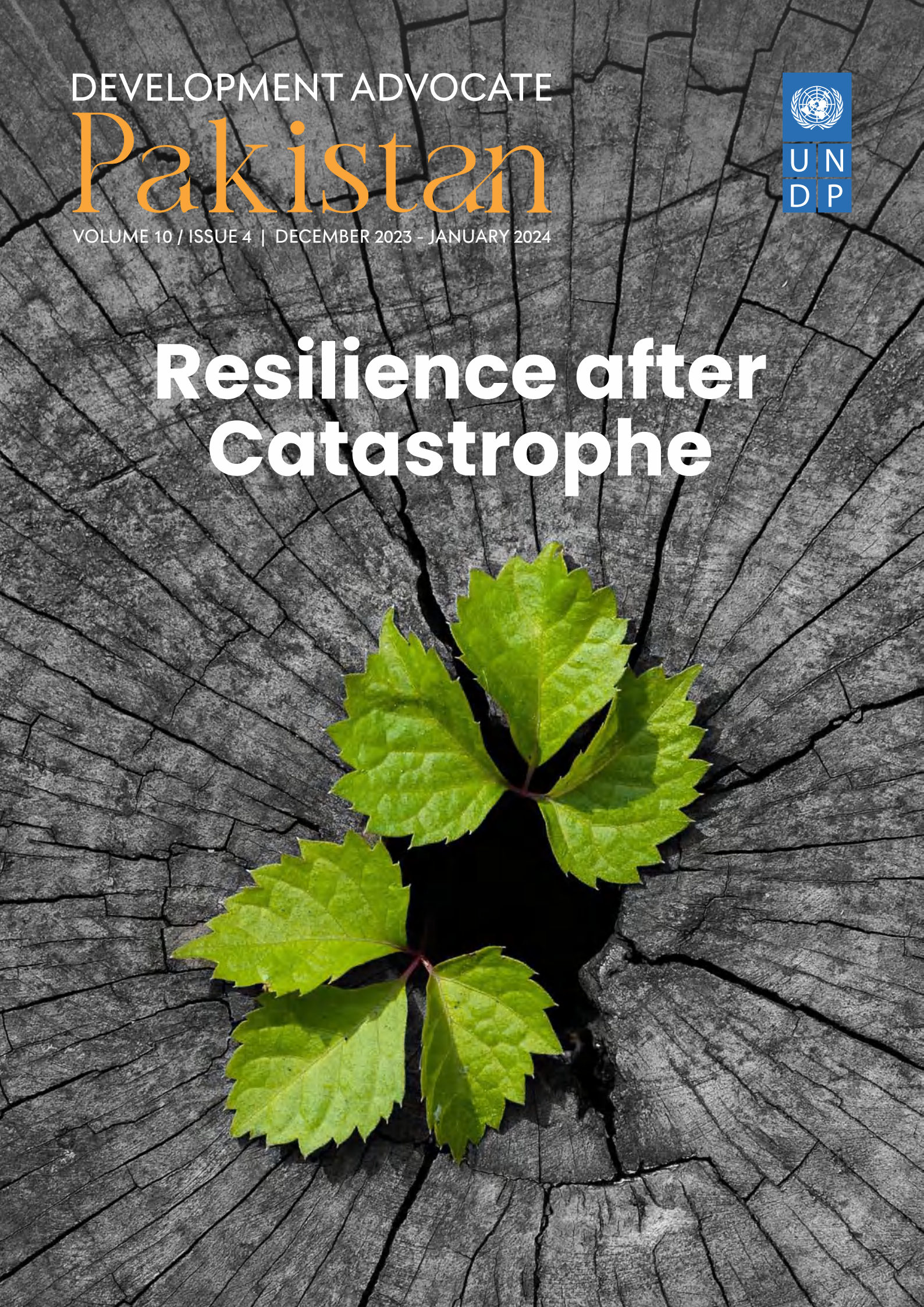
DEVELOPMENT ADVOCATE
Pakistan
VOLUME 10 / ISSUE 4 | DECEMBER 2023 - JANUARY 2024

Resilience after Catastrophe



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Contents

Development Advocate Pakistan provides a platform for the exchange of ideas on key development issues and challenges in Pakistan. Focusing on a specific development theme in each edition, this quarterly publication fosters public discourse and presents varying perspectives from civil society, academia, government and development partners. The publication makes an explicit effort to include the voices of women and youth in the ongoing discourse. A combination of analysis and public opinion articles promote and inform debate on development ideas while presenting up-to-date information.

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A Rights-Based Approach to Resilience in Pakistan

Pakistan needs an institutionalized resilience policy that is grounded in the idea that individuals and communities have a right to be supported by all development stakeholders – governmental and non-governmental.

In its simplest definition, resilience is the ability to flex but not break. Yet, we currently live in a world that is seemingly stretched to the breaking point or beyond, not least due to human activity (referring to UNDP's 2020 Human Development Report, The Next Frontier – Human Development and the Anthropocene). Over the past 50 years, global climate and weather-related disasters have surged five-fold. The last 12 months have been the Earth's hottest on record. Three times more people are displaced by disasters than war. At last year's COP28, U.N. Secretary-General António Guterres emphatically stated: "We cannot keep kicking the can [of climate action] down the road. We are out of road."

Pakistan ranks high in the global matrix of increased vulnerability, as well as frequency and intensity of disasters, both climate-induced and man-made. It is the 11th highest disaster risk-prone country out of 193. In South and South-West Asia, it faces the highest projected loss of Gross Domestic Product (9.1 per cent annually) due to climate change. The impact is disproportionately borne by the most vulnerable populations, including marginalized communities, women, children, farmers, and those residing in glacial terrain and low-lying coastal areas. This ominous analysis came to fruition when Pakistan experienced first-hand a devastating flood in 2022, which impacted 33 million people, displaced eight million, pushed 9 million people below the poverty line, and caused damages and economic losses of USD 30 billion and reconstruction needs of USD 16.3 billion. That is also why at COP28, Pakistan's Caretaker Prime Minister, Anwaar-ul-Haq Kakar, called for quick operationalization of a Loss and Damage Fund for which Pakistan very successfully led the advocacy at COP27.

Pakistan has in place a commendable national climate change policy architecture. The Federal Ministry of Climate Change and Environmental Coordination (MoCC&EC) has adopted the UNDP-supported National Climate Change Policy and the Nationally Determined Contributions (NDCs). Approved by the Federal Cabinet, the MoCC&EC's National Adaptation Plan provides an effective framework for partnerships and financing, including an estimate that the country requires USD 7-14 billion per year on climate change adaptation investments. Pakistan is also a pathfinder country for the Global Shield Against Climate Risks, is the first country in Asia to initiate the in-country process in November 2023 (led by MOCC&EC, supported by UNDP), and is modelling itself as an example for other countries seeking to strengthen their financing options for climate change resilience, including in the area of risk insurance.

By
Dr. Samuel Rizk
Resident Representative,
UNDP Pakistan

As we head into 2024, it is important to recall that January marks a year since the United Nations Pakistan and its Development Partners convened the International Conference on a Climate Resilient Pakistan in Geneva in 2023. Pakistan secured financial pledges of over USD 10 billion for the implementation of a national Resilient Recovery, Rehabilitation and Reconstruction Framework (4RF). One year on, it is important for all stakeholders to track not only the financing mobilized but also assess progress made to build resilience in Pakistan.

Convened by the Ministry of Economic Affairs, and with UNDP supporting the process in a secretariat function, an International Partners Support Group (IPSG) is facilitating the 4RF's implementation. To date, Pakistan has received roughly 70 percent of the Geneva pledges (around USD 7 billion) to design and implement bankable, transparent, and accountable climate resilient public and private sector projects. Of these, projects worth USD 4.74 billion have been approved for implementation through existing national mechanisms, such as the Central Development Working Party and the Executive Committee of the National Economic Council. Projects worth another USD 1.9 billion are in the pipeline. To support this effort through effective and transparent impact assessment and knowledge management, UNDP and the World Bank are establishing an integrated and digitized 4RF monitoring and evaluation framework at the Federal Ministry of Planning, Development & Special Initiatives.

Over 60 per cent of the planned projects will support affected communities in Sindh, while others will be implemented in Balochistan and Khyber Pakhtunkhwa. In UNDP, we will leverage the knowledge and experience developed through our USD 36.9 million Glacial Lake Outburst Flood (GLOF) Programme, which focuses on building communities' resilience to disasters through build-back-better recovery initiatives while also installing early warning infrastructure in Khyber Pakhtunkhwa and Gilgit-Baltistan. Our USD 90 million Flood Recovery Programme will continue in 2024, given the extensive and still-palpable damage from the 2022 floods, focusing on cash-for-work, rehabilitation of damaged community infrastructure, flood-resilient housing, revival of livelihoods, and WASH services.

Pakistan's Caretaker Prime Minister Anwaar-ul-Haq Kakar with President UAE Sheikh Mohammed bin Zayed Al Nahyan and UN Secretary General Antonio Guterres at COP28.

For lower middle-income countries like Pakistan, there is a cyclical interplay between climate change and pre-existing economic vulnerabilities. Climate-induced economic risks erode agriculture, infrastructure, livelihoods, public health, and exacerbate socioeconomic fragility. Understanding this interplay, and adopting a climate-economic-resilience framework has significant relevance for Pakistan, including addressing the heavy debt burden in the country. Like other successful examples from the region, Pakistan could potentially consider accessing the IMF's Resilience and Sustainability Trust (RST), and working on an RST credit line to support the country's financial resilience and debt sustainability in the next loan programme expected this year.

Resilience is now central to global policymaking for sustainable development and climate change. It is a core pillar of UNDP's five-year Country Programme 2023-2027, informing not just climate change but also the domains of governance, economic growth, inclusion, and innovation. Pakistan needs an institutionalized resilience policy that is grounded in the idea that individuals and communities have a right to be supported by all development stakeholders – governmental and non-governmental. And because they are the first responders in any disaster, provincial governments and their disaster management authorities require urgent and dedicated strengthening of capacities and resources to ensure resilience is localized.

At the Geneva Pledging Conference last year, UNDP Administrator Achim Steiner noted that Pakistan's next phase of climate response represented a "monumental moment of reckoning for the entire world". With general elections scheduled for February 2024, a new government will have an opportunity to translate that moment into action, not only as a short-term response to a disaster, but as a framework that positions Pakistan as a resilient nation – a nation that will surely be tested but will not break. The implementation of such a framework requires a sustained commitment from the Government of Pakistan, private sector stakeholders, civil society, and the international community. Together, we will meet the challenge.

INTERVIEW

Ahmad Irfan Aslam

Minister for Climate Change and Environmental Coordination

> “Empowering local communities with knowledge, skills, and resources to prepare for, respond to, and recover from disasters is essential for building resilience.”

A year on from the "Geneva Conference for a Climate Resilient Pakistan", what lessons has Pakistan learned about disaster risk reduction and resilience?

The 2022 floods in Pakistan were devastating, highlighting the nation's vulnerability to climate change and the urgent need for enhanced measures. The key lessons learned about disaster risk reduction (DRR) and resilience are:

i. **Inadequate early warning systems:** Delayed and inadequate early warning systems contributed to the severity of the floods' impact. Investing in robust early warning systems that reach communities effectively and provide timely alerts is crucial for minimizing disaster losses.

ii. **Weak flood infrastructure resilience:** Existing flood control infrastructure, including dams, levees, and drainage systems, proved inadequate in handling the extreme floodwaters. Upgrading and strengthening flood infrastructure in accordance with climate change projections, is essential for reducing flood risk.

iii. **Absence of resilient land-use planning:** Unplanned urbanization and encroachment upon floodplains exacerbates flood vulnerability. Implementing comprehensive land-use planning that considers flood risk and promotes sustainable development is critical for reducing future flood impacts.

iv. **Community-based DRR:** Empowering local communities with knowledge, skills, and resources to prepare for, respond to, and recover from disasters is essential for building resilience. Community-based DRR initiatives foster local ownership and enhance preparedness.

v. **Need for integration of DRR into development planning:** Disasters like floods and droughts should not be treated as isolated events but as interconnected risks that require integration into overall development planning. Mainstreaming DRR principles into development strategies ensures that growth is inclusive and sustainable.

> “Disasters like floods and droughts should not be treated as isolated events but as interconnected risks that require integration into overall development planning.”

vi. **Weak disaster risk financing mechanisms:** The financial burden of disaster response and recovery is straining government resources. Establishing robust disaster risk financing mechanisms, such as green bonds or insurance schemes, can provide financial buffers to mitigate the impact of disasters.

vii. **International cooperation and knowledge sharing:** Climate change and its associated risks transcend national boundaries. Collaboration with international partners, sharing knowledge, and adopting best practices from other countries can significantly enhance DRR and resilience efforts in Pakistan.

viii. **Poor coordination:** Effective and proactive coordination among federal and provincial governments, districts governments, NGOs, and the international community is lacking.

ix. **Weak capacity:** The capacity of all stakeholders, both public sector and private, to handle this kind of natural hazard is mostly weak.

Based on the lessons learned, the Government of Pakistan has undertaken the following initiatives:

- Prepared and approved its National Adaptation Plan (NAP) in August 2023.
- Disaster Management Authorities being established at the district level.
- Launching of Living Indus Initiative (LII) to address adaptation and resilience.
- Integration of adaptation and resilience-building measures into the planning process.
- Initiation of work on preparations of provincial and local adaptation plans to address vulnerabilities and build community resilience.

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A weather station at Burche, Gilgit.

© UNDP Pakistan

> “A lack of comprehensive early warning systems at the district and tehsil levels is hindering disaster-preparedness.”

What are the main challenges and opportunities in developing and implementing effective climate resilience programme and policies in Pakistan?

Challenges:

i. **Limited infrastructure for Early Warning Systems:** A lack of comprehensive early warning systems at the district and tehsil levels is hindering disaster-preparedness and the timely dissemination of information to vulnerable communities.

ii. **Financial constraints:** Mobilizing adequate financial resources for climate resilience efforts remains a challenge. Pakistan's developing economy necessitates careful allocation of funds, and natural disasters like the 2022 floods can divert resources away from climate action and even reverse development.

iii. **Lack of capacity-building:** A shortage of expertise in climate change adaptation and resilience poses a significant barrier. Strengthening capacity at all levels, from policymakers to local communities, is crucial.

iv. **Limited community understanding:** Understanding of local communities and marginalised groups in disaster-prone areas about the calamities related to natural disasters and their linkages to climate change is limited.

v. **Poor policy integration:** Integrating climate resilience into national policies, such as agriculture, water, and disaster management, can mainstream adaptation and resilience efforts.

Opportunities:

i. **Integrating resilience into Disaster Risk Reduction:** Integrating climate resilience into disaster risk reduction strategies can minimise the impacts of extreme weather events. Early warning systems, disaster preparedness plans, and risk-informed infrastructure development are crucial for reducing vulnerability.

ii. **Climate-smart agriculture:** Enhancing agricultural practices to be climate-resilient can safeguard food security and livelihoods. Adopting drought-resistant crops, water-efficient irrigation systems, and climate-informed agricultural practices can significantly improve resilience.

iii. **Ecosystem-based adaptation:** Pakistan's rich biodiversity provides opportunities for ecosystem-based adaptation approaches. Protecting and restoring forests, wetlands, and other natural ecosystems buffers communities against climate change impacts.

iv. **Low-carbon transition and carbon credits:** Pakistan's transition towards low-carbon development through carbon credits and investment in renewable energy, energy efficiency, and sustainable infrastructure can enhance resilience to natural disasters while mitigating emissions.

v. **Knowledge sharing and collaboration:** Fostering knowledge sharing and collaboration among stakeholders, including research institutions, NGOs, and international partners, can accelerate the development and implementation of effective climate resilience solutions.

> “Enhancing agricultural practices to be climate-resilient can safeguard food security and livelihoods.”

Some of the other opportunities are:

- Participatory, inclusive, and green recovery for long-term resilience.
- Pro-poor, pro-vulnerable, and gender-sensitive interventions, targeting the most affected.
- Coordination of government tiers through centralised policy, planning, and coordination, and decentralised implementation.
- Conflict-sensitive implementation.
- Prioritising institutional and regulatory reforms to ensure sustainability.
- Strengthening synergies between humanitarian effort and recovery.
- Accessing international climate finance.

How can the Government of Pakistan balance short-term disaster response with long-term resilience building to ensure sustainable development, especially in disaster prone areas?

Balancing short-term disaster response with long-term resilience building is a crucial challenge for governments worldwide, and Pakistan is no exception. For building resilience to natural disasters like the 2022 floods, the government has identified the following steps to build resilience of the communities and relevant institutions:

i. Develop robust disaster and climate risk-screening tools to be integrated into the public financial management processes at both the federal and provincial levels.

ii. Mainstream disaster and climate risk screening into public investment appraisals, planning, implementation, and monitoring at both the federal and provincial levels.

iii. Implement cost-effective, innovative, and no-regret DRM solutions to reduce the loss of life, infrastructure, and livelihoods at all scales.

iv. Establish Climate and DRM Funds at the sub-national or provincial levels.

v. Develop and implement climate and disaster risk financing and insurance products, with a focus on the most vulnerable and marginalised communities.

vi. Building on existing programs, establish a climate and disaster shock-responsive social protection system, with a focus on the most vulnerable and marginalised communities.

vii. Ensure that infrastructure, including telecommunication, power, utilities, and transport, are resilient in the face of climate change impacts, particularly extreme weather events.

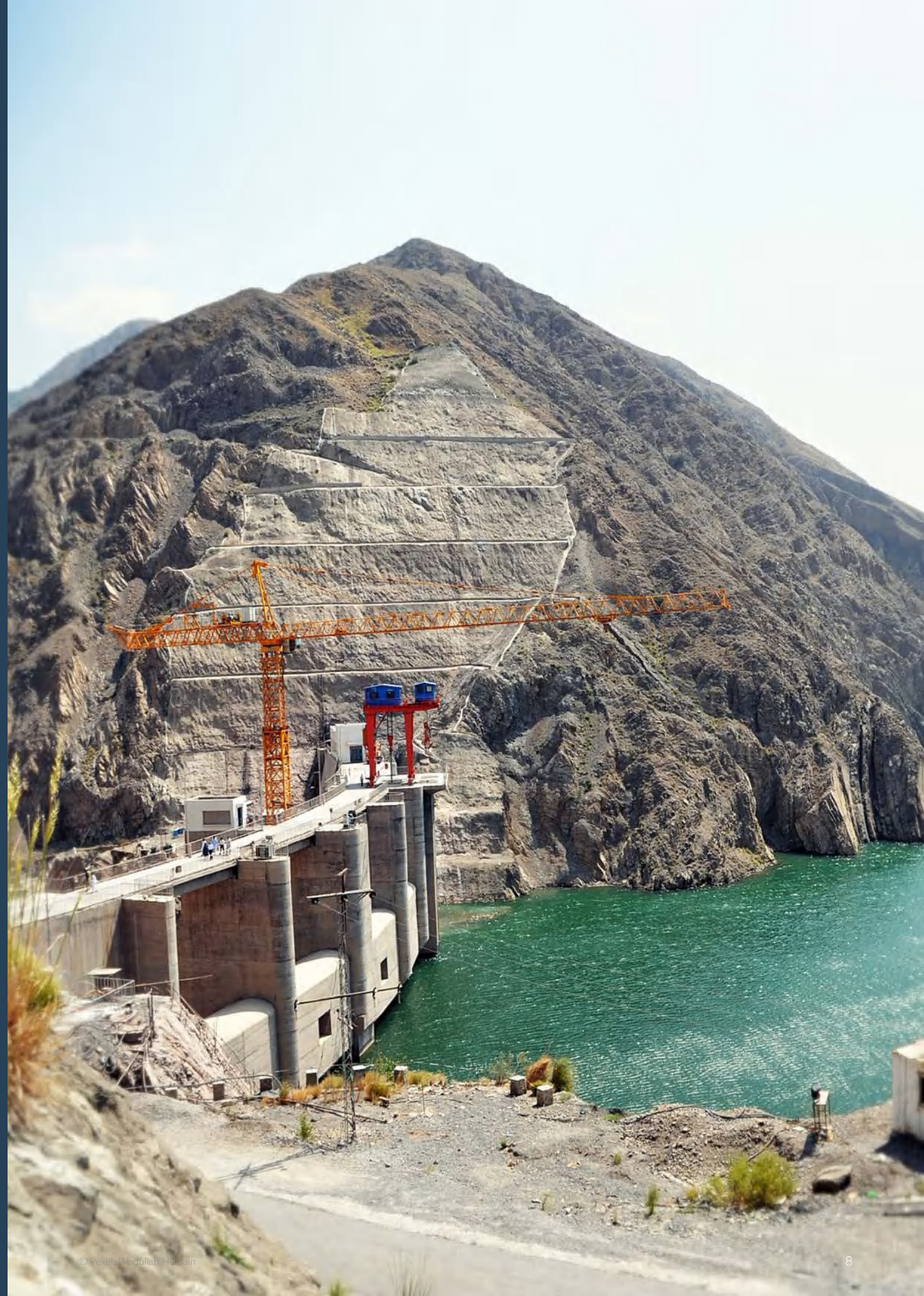
Disaster Reduction through Enhanced Policy and Financing

The goal of resilience building cannot be achieved without a comprehensive disaster risk financing approach aligned with the specific climatic variabilities and fiscal realities of Pakistan.

By

Bilal Anwar

CEO,
National Disaster & Risk Management Fund (NDRMF)



Pakistan's policy landscape and provision of funding largely remains focused on post-disaster actions and immediate relief and recovery needs.

The vulnerability of Pakistan to natural hazards is driven by a range of factors. Apart from the global phenomenon of global warming due to increasing concentration of greenhouse gases (GHG) into the atmosphere, local factors such as rapid population growth, urbanisation, deforestation, and land degradation are equally responsible. Pakistan also remains one of the most under-invested countries in terms of adapting to climatic changes and addressing disaster risks. Successive governments have undertaken a range of policy measures, and despite persistent fiscal challenges, an increasing magnitude of financial resources have been made available for relief, recovery, and rehabilitation of disaster-hit areas and communities.

However, building resilience against climate threats and disaster risks remains a tenacious challenge to address in a sustainable manner. Frequent climate-induced disasters and catastrophes have compelled the government to erect several policy and institutional set-ups which have certainly augmented the preparedness capacity and coordination of relief and recovery work in the aftermath of disasters. However, the policy landscape and provision of funding largely remains focused on post-disaster actions and immediate relief and recovery needs . This, of course, is essential for a disaster-prone country like Pakistan, but such a reactive approach has not contributed much towards reducing long-term climate change risks and building the resilience of the country.

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The fundamental aspect of resilience building includes the recognition and institution of ex-ante approaches and the need for early action. Such an approach requires policy formulation and actions to be designed and built on scientifically-backed climate and disaster risk modelling information and funding instruments to be designed in advance, with the risk reduction focus sharply integrated.

Unfortunately, this has not been the case in Pakistan. Consequently, most of the disaster-related financial and physical risks are hard to reasonably quantify and forecast, effectively disallowing the analysis of funding gaps and budget exposures. As a result, the dominant share of disaster-related financial risks are retained by the federal and provincial governments on their books, primarily relying on supplementary and contingent budgetary allocations. This means they have to divert funds from social and development sectors to meet immediate post-disaster activity needs, which has potentially debilitating developmental impacts.

The goal of resilience building cannot be achieved without a comprehensive disaster risk financing approach aligned with the specific climatic variabilities and fiscal realities of Pakistan. Such an approach would involve planning ahead to better manage the cost of disasters, ensure predictable and timely access to financial resources, and ultimately mitigate long-term fiscal impacts. The core characteristics of this approach and strategy may entail ensuring timeliness of funding, an effective mechanism for disbursement of funds, and filling the knowledge gaps for disaster risk data and analytics and creating a pool of instruments aligned with the frequency and severity of disaster risks through risk layering. A carefully designed risk layering approach allows for the combination and pooling of a range of financial instruments (insurance & non-insurance) to protect against events of different frequency and severity, either before or after a disaster strikes. It essentially ensures that cheaper sources of money are used first and the most expensive instruments are used only in exceptional and more damaging circumstances. It would also mean creating the necessary policy frameworks for a gradual shift from risk retention to risk transfer instruments. Disaster insurance can be an important instrument and significantly contribute to increased funding after disasters and a lower post-disaster funding gap.

Financial resilience is focused on pre-arranging predictable

Funded flood protection infrastructure across Pakistan.

© NDRMF

A carefully designed risk layering approach allows us to pool a range of financial instruments to protect against climatic events of different frequency and severity.

funding for post-disaster activities to protect the fiscal balance, subnational governments, households, and businesses. Financial resilience to disasters must also be complemented and reinforced by physical and social resilience to complete the equation of disaster resilience. This includes focusing on the physical reinforcement of buildings, building flood protection structures, and strengthening the coping capacity of populations.

National Disaster Risk Management Fund (NDRMF), as the federal government fund, is mandated to strengthen the resilience capacity of the country against climate change and natural hazards and threats. The Fund, while extensively contributing towards physical risk reduction through its projects and programs for flood protection, early warning systems, and a host of other measures, is also leading the work on reducing the socioeconomic and fiscal vulnerability of the country against natural hazards and disasters. A Disaster Risk Financing strategy being finalised by the NDRMF will be the first national level strategy providing a comprehensive approach for strengthening the financing framework for resilience building in Pakistan.

Landslide stabilisation undertaken in Sadhanuti, Bagh, and Poonch

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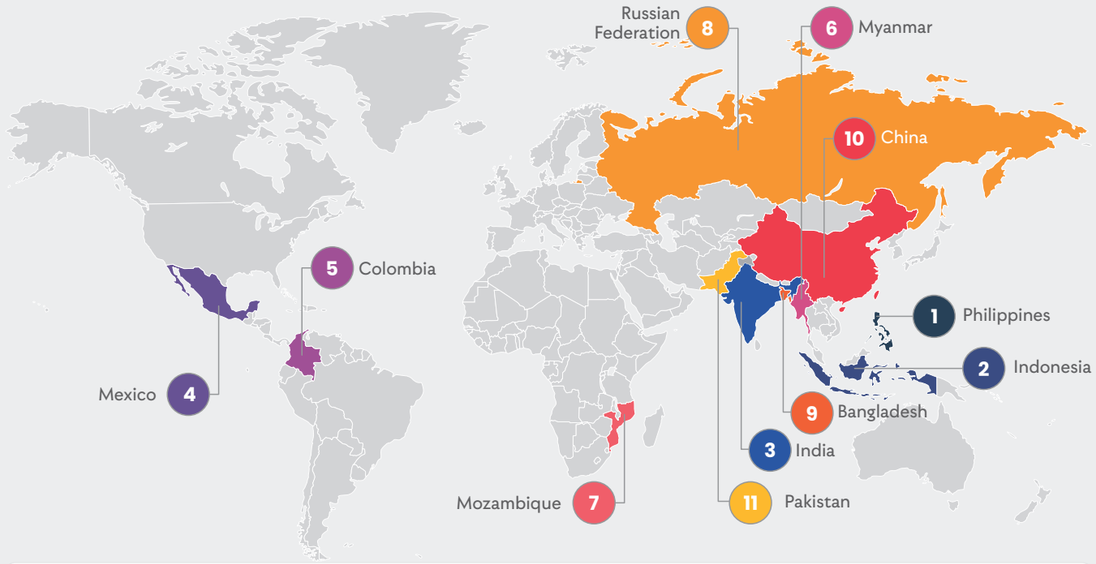
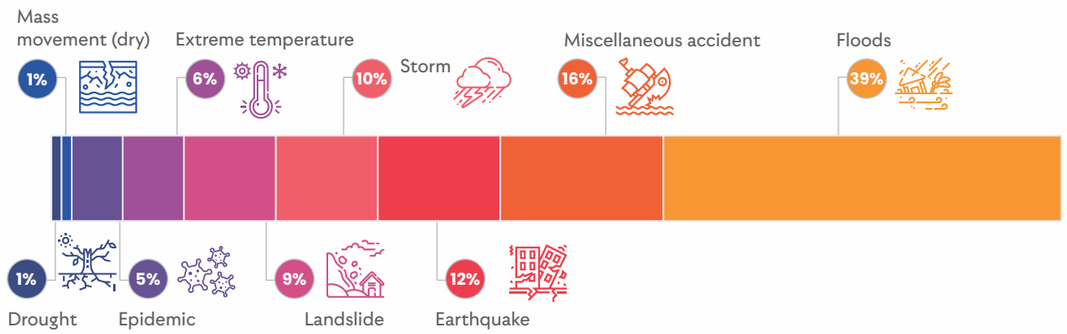
Pakistan's Vulnerability Profile

World Risk Index 2023

The World Risk Index ranks Pakistan as the 11th highest disaster risk country out of 193.



Average Annual Natural Hazard Occurrence (1980-2020)



Average Annual Losses

Pakistan faces the highest projected loss of GDP from climate change in South and South-West Asia, reaching 9.1 percent of GDP annually in the worst-case climate change scenario.

Number of People Affected by the 2022 Floods

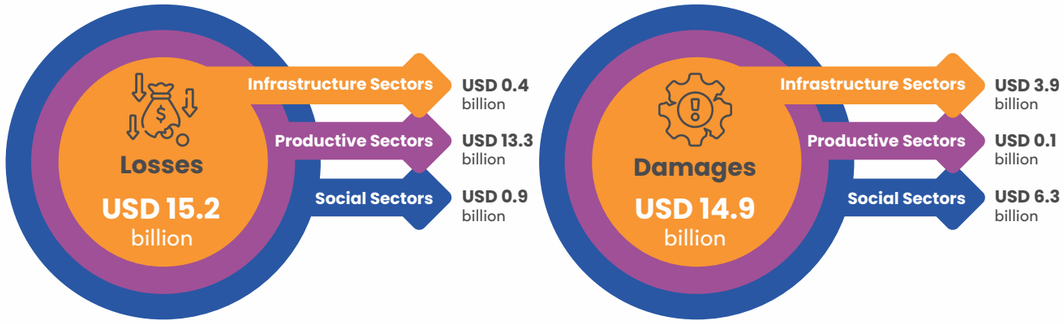
33 million Estimated people affected in Pakistan in the 2022 Floods

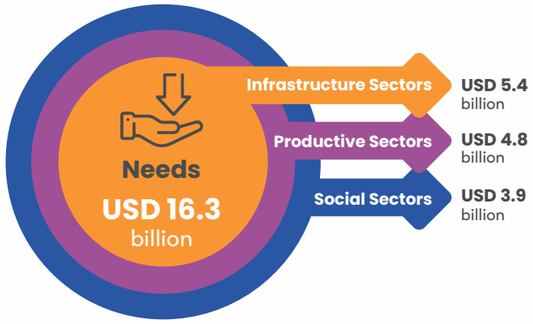
8 million Estimated people displaced due to the floods

1,700+ Flood-related deaths in Pakistan (one third of which were children)

12,000+ People injured in the 2022 floods

Summary of Loss and Damage from the 2022 Floods





Loss is defined as changes in economic flows resulting from the disaster and valued in monetary terms.

Damage is defined as direct costs of destroyed or damaged physical assets. It is valued in monetary terms with costs estimated based on replacing or repairing physical assets and infrastructure, considering the replacement price prevailing before the crisis. Together, damage and loss constitute the effects of the crisis.

- **Social Sectors:** Housing, Health, Education, Culture and Heritage
- **Productive Sectors:** Agriculture, Food, Livestock, and Fisheries
- **Infrastructure Sectors:** Transport and Communications, Energy, WASH, Services, and Community Infrastructure

References:

- ESCAP. (2022). Asia-Pacific Riskscape @ 1.5°C: Subregional Pathways for Adaptation and Resilience —Asia-Pacific Disaster Report 2022 for ESCAP Subregions: Summary for Policymakers. Retrieved from https://www.unescap.org/kp/2022/asia-pacific-disaster-report-2022-escap-subregions-summary-policymakers
- NDMA. (2022). NDMA Floods (2022): Sitrep Report No.128. Retrieved from https://cms.ndma.gov.pk/storage/app/public/situation-reports/October2022/QECa7rSLzWINuxZFHrHV.pdf.
- Ministry of Planning Development & Special Initiatives, Government of Pakistan. (2022). Pakistan Floods 2022 Post-Disaster Needs Assessment Main Report. Retrieved from https://undp.org/pakistan/publications/pakistan-floods-2022-post-disaster-needs-assessment-pdna

INFOGRAPHIC

Institutionalising Climate Resilience

1994

Ratifying the UN Framework Convention on Climate Change (June)

Pakistan formally commits to UNFCCC, stating its recognition of the global challenge posed by climate change.

2005

Hyogo Framework for Action (June)

Pakistan endorses the framework which calls for a comprehensive, integrated, multi-disciplinary approach to identifying and implementing disaster risk reduction (DRR) measures.

2007

National Disaster Risk Management Framework Pakistan (2007-2012) March

NDRMF to serve as an overall guideline for disaster risk management at national, provincial and district levels.

National Disaster Management Authority established (April)

NDMA to serve as the implementing, coordinating, and monitoring body for disaster risk management at the national level.

2010

The National Disaster Management Act 2010 (December)

The National Disaster Management Act establishes the National Disaster Management Commission and a multitiered system for disaster management (national, provincial and district levels).

Establishment of:

- Provincial Disaster Management Authority Punjab
- Provincial Disaster Management Authority Sindh
- Provincial Disaster Management Authority
- Khyber Pakhtunkhwa
- Provincial Disaster Management Authority Balochistan
- Gilgit-Baltistan Disaster Management Authority
- State Disaster Management Authority Azad Jammu & Kashmir

2012

The National Disaster Management Plan (2012-2022) August

The NDMP aims to improve the country's capacity to prepare for and respond to disasters by developing resilience and enhancing disaster preparedness.

National Climate Change Policy (August)

Pakistan introduces the NCCP, providing a comprehensive framework for the development of action plans pertaining to national adaptation and mitigation efforts.

2013

National Disaster Risk Reduction Policy (February)

Pakistan adopts a comprehensive policy to enhance resilience to disasters, emphasizing timely and dedicated investments in human resources and infrastructure at all levels.

Framework for National Climate Change Policy (2014-2030) November

Outlining vulnerabilities across sectors in the face of climate change, the framework identifies adaptation and mitigation measures, setting a national roadmap for climate action until 2030.

2015

Sendai Framework for Disaster Risk Reduction 2015-2030 (March)

As the successor to the Hyogo Framework for Action, the Sendai Framework prioritizes disaster risk management over disaster management, emphasizing the primary responsibility of states to prevent and reduce disaster risk, and engagement of all-of-society and all-of-State institutions.

2016

Pakistan's Intended Nationally Determined Contributions (November)

Pakistan presents its plan for climate change mitigation and adaptation while highlighting the country's development challenges and acute vulnerability to climate change.

Paris Agreement (November)

Pakistan ratifies the climate change accord and joins the global community in supporting the Paris Agreement, reinforcing its commitment to limit global temperature rise and foster climate resilience.

National Disaster Risk Management Fund (NDRMF)

A federal government non-banking financial intermediary established and dedicated to investing in disaster risk reduction initiatives, especially in vulnerable regions.

2017

Pakistan Climate Change Act 2017 (April)

The Act establishes the Pakistan Climate Change Council, tasked with approving and monitoring the implementation of comprehensive adaptation policies, strategies, plans, programs, and projects.

2021

Updated Nationally Determined Contributions (October)

Pakistan reaffirms its international commitment to mitigating climate change by updating its Nationally Determined Contributions, including the outlining of adaptation measures taken and planned.

Updated National Climate Change Policy 2021 (October)

With a renewed vision, Pakistan updates its National Climate Change Policy, aimed at steering the country towards a climate-resilient and low-carbon development future.

2022

Resilient Recovery, Rehabilitation, and Reconstruction Framework (4RF) Pakistan (December)

The Government of Pakistan's strategic policy and prioritization document geared towards guiding the recovery, rehabilitation and reconstruction of the country following the mega floods of 2022.

2023

National Adaptation Plan (August)

The plan aims to empower vulnerable communities through equitable resource utilization and a progressive empowerment process, fostering social, economic, and environmental resilience.

Lessons from COP28

The just-concluded COP28 was successful in ratcheting the climate agenda one notch higher, but left gaps to be addressed by future COP Presidencies over the next two years, building on the 'Roadmap to Mission 1.5'.

By

Aisha Khan

Founder, Civil Society Coalition for Climate Change & Mountain and Glacier Protection Organization

Every year, the annual climate summit provides a moment of reckoning and reflection to negotiate the future of the planet, and move the needle on contentious issues one step closer to making the world a safe and livable place. The 28th Conference of Parties (COP28) held this year in Dubai under the Presidency of UAE marked the first Global Stock Take after the Paris Agreement, to assess progress on earlier commitments and set new targets to keep the ambition of 1.5°C alive.

COP28 is seen as a continuum of conversation spread over 28 years. However, the present discourse built on the pillars of the Paris Agreement is only eight years old. Anchored in the Paris Rule Book, with explicit modalities on steering the process, the progress made so far has been significant in addressing issues of emission reduction, financial flows, adaptation needs, and recognising loss and damage as a separate financing window.

The just-concluded COP28 was successful in ratcheting the climate agenda one notch higher, but left gaps to be addressed by the Presidencies of COP28, COP29 and COP30 in the next two years, building on the 'Roadmap to Mission 1.5'.

The two weeks of negotiations in Dubai saw over USD 85 billion dollars and 11 pledges and declarations committed to climate action. Beyond finance, the other significant achievements include commitments by 132 countries to tripling renewable energy capacity and doubling the annual rate of energy efficiency worldwide by 2030; prioritising food and agriculture systems in national climate plans; and a declaration signed by 140 countries to place health at the heart of climate action.

The floods 2022 highlighted Pakistan's fragility to climate induced disasters, bringing focus on the need to bridge the widening gap between preparedness, available finance, capacity, and technology to reduce losses and protect assets.

UAE's investment of USD 30 billion into a new private fund and focus on climate projects in developing countries through the Alterra Fund with an expected USD 250 billion by 2030 open new windows of opportunity to access finance.

The noteworthy record-breaking pledges at COP28 also expose glaring gaps in the global financial system that restrict the affordability, access, and scale needed for climate proofing vulnerable countries and providing timely support for strengthening resilience. The floods in 2022 highlighted Pakistan's fragility to climate induced disasters, bringing focus on the need to bridge the widening gap between preparedness, available finance, capacity, and technology to reduce losses and protect assets.

Taking into account the enormity of the challenge and the high risk to human security, it is vital to initiate reforms in the global financial architecture and at the national level to align both with changing needs and emerging threats. The broad-based consultations by the World Bank in developing its evolution roadmap and the pivot of the Asian Development Bank towards climate are both good signs, but not enough to make the shift from the Bretton Woods model to the Bridgetown agenda. Without concessional finance, low interest rates, debt rescheduling, and converting loans into grants, it will be difficult for poor and developing countries to come out of the debt trap and plan a resilient future.

At the country level, there is a need for more robust financial mechanisms with transparency and accountability built within the system to align it with international requirements for financial disbursement and a demonstrated capacity in developing bankable projects, as well as capability for monitoring and evaluating results.

Strengthening resilience is connected closely to Means of Implementation, as per the Paris Agreement. The resistance to make MOI a part of the finance package at climate

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Without concessional finance, low interest rates, debt rescheduling, and converting loans into grants, it will be difficult for poor and developing countries to come out of the debt trap and plan a resilient future.

negotiations poses a serious impediment to resilience. Access to finance without means of implementation is like giving a spoon to an infant and expecting it to feed itself. Catastrophes come in different shapes and sizes, which is why resilience cannot be a stand-alone objective. It needs to be built on the blocks of many other structures that come together as a strong foundational footing to bear shocks and rebound, without creating new fault lines or deepening existing fissures.

Drawing from global best practices, evidence supports that regional approaches work more effectively, allowing countries to pool resources and use strengths to move forward, taking a people-centric and ecosystem-based approach to resilience. South Asia has not optimized its potential for building cooperative mechanisms for development, and has lost out on opportunities for collaboration in climate action. With a regional population of over two billion relying on fresh water from a common source, cooperation is an imperative and not a choice. The topography of the region lends itself to hydrometeorological disasters, starting from the cryosphere to the ocean, with everything in between vulnerable to either too much or too little water. Looking ahead while keeping science at the heart of planning will require working together with a wide range of actors at the national, sub-national, regional, and international level to forge alliances with a singular focus on building a safe future. There is too much at stake right now to allow differences to come in the way of human survival.

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Financing the Climate Future

Pakistan urgently needs significant investments in climate adaptation and resilience in order to protect its population from climate vulnerabilities, turn around its economy, and reduce growing poverty and inequity.

By

Ali Tauqeer Sheikh

Member, Pakistan Climate Change Council

In the absence of any precise usage, the term 'climate finance' is used to suit competing, and even conflicting interests. The United Nations Framework Convention on Climate Change (UNFCCC) Standing Committee on Finance provided the closest thing to an official version: "Climate finance refers to local, national or transnational financing drawn from public, private and alternative sources of financing that seeks to support mitigation and adaptation actions that will address climate change."[1]

It primarily covers both mitigation and adaptation, the two key anchors of the UNFCCC. The projects in mitigation fund initiatives reduce or prevent the emission of greenhouse gases, while the projects in the realm of adaptation help communities adapt to the impacts of climate change, such as rising sea levels, Extreme Weather Events (EWEs), and changing precipitation patterns. International climate financing is also used for capacity-building to support the development of skills and infrastructure in developing countries to effectively respond to climate change. The anticipated Loss and Damage Fund is also expected to be a part of this UNFCCC architecture. Several other multilateral and bilateral climate funds are aspiring to become compliant with the Paris Agreement, including several mechanisms of carbon trading, especially the ones under the regulatory and compliance mechanisms.

1. UNFCCC. (2023). Introduction to Climate Finance. Retrieved November 27, 2023, from UNFCCC: https://unfccc.int/topics/introduction-to-climate-finance

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While Pakistan needs to improve its access to international climate finance and strengthen the pipeline of bankable projects, global climate finance windows simply cannot meet the country's growing needs.

Since Pakistan is one of the least prepared countries to cope with climate change, the magnitude of the adverse impacts of EWEs such as floods, heatwaves, tropical storms, and GLOFs is far higher in the country. This ill-preparedness makes Pakistan one of the most vulnerable countries that has multiple and diverse climate hotspots in all its regions, ecosystems, and agro-ecological zones. Leaving aside other EWEs, the floods in 2022 alone - triggered by changes in the monsoon pattern in the Indian subcontinent - caused losses and damages to Pakistan's economy in excess of USD 30.1 billion according to the Post-Disaster Need Assessment (PDNA) report prepared by the Planning Commission of Pakistan in partnership with UNDP and other development partners. At the Conference of the Parties (COP 27) in Sharm el-Sheikh, Pakistan emerged as a 'poster child', but the climate summit or the donors' meeting co-hosted with the United Nations Secretary-General António Guterres in Geneva in January 2023 failed to meet Pakistan's needs or anticipated projections. Pakistan urgently needs significant investments in climate adaptation and resilience in order to protect its population from climate vulnerabilities, turn around its economy, and reduce growing poverty and inequity.

Pakistan, however, has been less than successful in accessing international climate finance. The losses and damages of USD 30.1 billion inflicted by the 2022 floods was more than the total disbursement by all UNFCCC funds since their inception: the Global Environment Facility (1991), Adaptation Fund (2001) and the Green Climate Fund (2014). According to some estimates, they have collectively disbursed about USD 22 billion globally. Pakistan has accessed less than USD 1 billion from all these three funds in the last 30 years. It has not directly accessed, through accreditation, any of the globally significant international climate finance windows: Green Climate Fund (GCF), Adaptation Fund (AF), or the Climate Investment Funds (CIF), managed by the World Bank on behalf of Multilateral Development Banks (MDBs) including the Asian Development Bank (ADB). Most importantly, Pakistan's absorptive capacity does not match this need for annual investment.

To begin with, international finances are extremely limited, and their architecture is overly complicated. International climate financing has faced criticism of recycling and double counting. For countries like Pakistan, who rely on intermediaries for access, it is also extremely slow, sluggish, and

UN Secretary General António Guterres and then-Prime Minister of Pakistan Shehbaz Sharif at the 2023 International Conference on Climate Resilient Pakistan in Geneva

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Pakistan needs fundamental shifts in its development path and policies, requiring substantial investments in people-centric climate adaptation and resilience.

unpredictable. While Pakistan needs to improve its access to international climate finance and strengthen the pipeline of bankable projects, global climate finance windows simply cannot meet the country's growing needs. Clearly, no global financial fund, including the anticipated Loss and Damage Fund, will have the resources anywhere close to meeting the climate investments needed in Pakistan. The World Bank has recently estimated that Pakistan will need to spend five percent of the country's GDP, or USD 20 billion annually, in climate resilience. It is an intimidating figure, but arguably manageable particularly since it is an existential threat and a matter of national security.

Like any other developing country, Pakistan's preference is for grants and concessional lending. These are however neither predictable nor significant or adequate for the country's immediate fiscal requirements. This leaves Pakistan with no option but to mobilize domestic resources, in spite of the extremely narrow fiscal space. The climate economists have long argued that increasing investments in climate adaptation will help expand the fiscal space needed for accelerated and sustained economic growth. It is important to underline that allocations by climate funds are based on a project's merit and alignment with their objectives, and not on any country's specific needs or requests. Clearly, as our needs far exceed presently available external finances, Pakistan's best practical option is to weave climate considerations into ongoing and future projects and mobilize domestic public and private sector resources, rather than ignoring reforms for climate-smart development.

Pakistan needs fundamental shifts in its development path and policies, requiring substantial investments in people-centric climate adaptation and resilience. It will require a quantum increase in the availability of international finance, including access to domestic and international private sector investments. Unlike many national funds that receive their resources from national taxes, levies and fees, bonds, subsidies, and ecological fiscal transfers, Pakistan has not made substantial progress in building foundations for generating its own resources from domestic sources. In addition, Pakistan has not fully and systematically exhausted concessional finances - below-market-rate finance provided by major financial institutions such as development banks and multilateral funds - because its reliance on short-term commercial loans has been too high to loosen the immediate pressures on the balance of payment. It can be argued that Pakistan can, despite its extremely limited fiscal space, muster substantially higher domestic resources to offset climate disasters and turn around its economy.

THOUGHT PIECE

Navigating Climate Law

The existence of policies does not necessarily translate into an effective mechanism for their implementation.

By

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Director, Governance and Policy, WWF-Pakistan

Did the 2022 floods finally put climate change on the governance agenda in Pakistan? It is true that climate change has been on the policy agenda for quite some time now. Be it the 2012 Climate Change Policy (revised in 2021), its associated framework, or any number of provincial laws or global commitments, climate change is on the policy agenda in Pakistan. Yet, without implementation, policies and laws remain meaningless. As such, the governance agenda implies a broad based buy-in across the societal level, be it the political realm, civil society, bureaucracy, or private sector.

In 2015, Asghar Leghari a Pakistani farmer and a lawyer brought a case against the Government of Pakistan for failing to implement the stipulations of the climate policy and the associated framework. Leghari argued that government's failure to address mitigation and adaptation needs were having an impact on Pakistan's water, food and energy security. He suggested that inaction on climate change impacted his "right to life."

In response, the Appellate Court held that 'delay and lethargy of the State in implementing the framework offends the fundamental rights of citizens which need to be safeguarded.' It further asked that a Climate Change Commission with representatives from the government, civil society and scientists be created to monitor government's progress.

The Asghar Leghari case highlighted that existence of policies does not necessarily translate into an effective mechanism for their implementation. Moreover, it highlighted that the courts can serve as an oversight mechanism when governance issues are hindering policy implementation. Yet since then,

Division of powers and the number of governments involved means climate action is complicated at best and divisive at worst.

many more court appointed commissions have been given the mandate to look into governmental inefficiencies. In effect, rather than being a means to an end, they've become an end unto themselves.

The development of a policy needs to be followed up with effective implementation. Barring that, adhoc decision-making will continue to rule the roost.

Pakistan has to adapt to slow and fast onset manifestations of the climate crisis. On the mitigation front, it requires a concerted effort towards just energy transition. This necessitates a coherent and integrated approach, whereby all stakeholders in the federal, provincial and local governments come together with a common agenda.

The 18th amendment brought devolution to the fore. In federal or decentralized systems of governance, policy formulation is a complex undertaking where intergovernmental cooperation should ideally take center stage. The decision-making power and policy levers available to constituent decentralized units can be gainfully employed for effective climate policies. Yet, the same make-up which lends itself to effective decision-making can also hinder collaboration due to pre-existing tensions, conflicts, and coordination challenges.

Division of powers and the number of governments involved means climate action is complicated at best and divisive at worst. With each federating unit in the country having its own socio-economic, geographical, cultural, and linguistic character, climate action in Pakistan is increasingly complex. Yet, with the inherent complications come opportunities for learning.

The multi-level challenges require a multilevel response which the federal system is well suited for. The Paris Climate Agreement of 2015 highlighted the "importance of all levels of government and various actors in accordance with respective national legislations of parties in addressing climate change." But here too, without an effective local government system, concerted efforts to address the climate crisis will go begging.

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Nearly six years since the promulgation of the Climate Change Act, the Climate Change Authority is still to be developed.

Finally, existing legislation should be implemented in the spirit in which it was developed. Take the example of the Pakistan Climate Change Act 2017 whose mandate essentially remains unfulfilled, even after over six years since its promulgation. While the Climate Change Council was finally able to meet a couple of times over the last year, the Climate Change Authority – which aims to develop policies that cater to Pakistan's adaptation and mitigation needs, as well as the establishment of institutional and policy mechanisms for their implementation - has yet to be formed.

The climate crisis is already having a devastating impact on the people of Pakistan. Adhoc approaches are no longer fit-for-purpose in such a scenario, if they ever were in the first place. While the Asghar Leghari case remains a watershed in terms of Pakistan's response to the climate crisis, it also serves as a reminder that even the most famed legal responses to governance issues have their pitfalls. As such, the situation necessitates a comprehensive, integrated, all-encompassing approach whereby most vulnerable communities, such as those impacted by the 2022 floods, can be facilitated in a timely manner.

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Governing Climate: The National Adaptation Plan

The National Adaptation Plan when aligned within an overarching climate resilience framework for Pakistan is sure to accelerate resilience gains.

By

Sobiah Becker

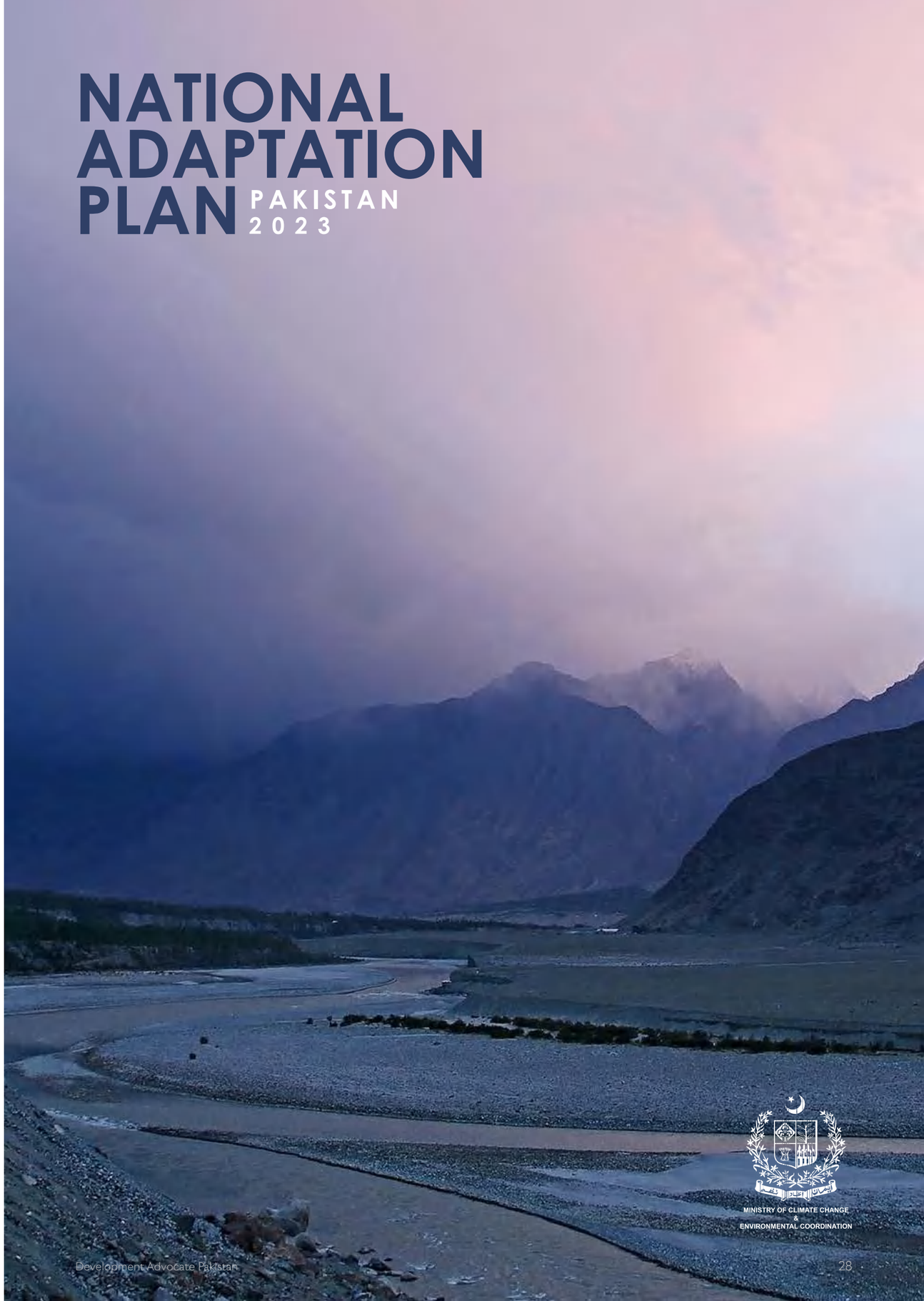
Advisor, Pak-German Climate & Energy Partnership, GIZ

The catastrophic floods of 2022 left 33 million Pakistanis exposed and vulnerable to disease, displacement, and destitution. Given Pakistan's climate vulnerability, the ferocious floods of 2022 were certainly not the first and sadly, will not be the last. Without appropriate and effective adaptation responses rolled out at speed and scale to manage disastrous climate impacts, Pakistan will see decades of social and development gains reversed. As Pakistan grapples with the escalating impacts of climate change, adaptation becomes a cornerstone for sustainable development. The National Adaptation Plan (NAP) can be pivotal to increasing resilience when policies, actors and institutions, and finances align. In this article, I set out three major governance challenges that could hinder climate resilience.

Adaptation planning without robust data is a missed opportunity

The poor are poor because they lack the resources to withstand climate shocks – repeated, successive, extreme weather events increase as well as deepen poverty over time.[1] To help affected communities successfully adapt, actions to increase resilience must be underpinned by a thorough understanding of the highly-nuanced

1. The 2022 floods have likely increased the national poverty rate by as much as 4 percentage points, potentially pushing 9.1 million more Pakistanis into poverty.



Without appropriate and effective adaptation responses rolled out at speed and scale to manage disastrous climate impacts, Pakistan will see decades of social and development gains reversed.

factors that exacerbate poverty in target communities.[2]

When anchored in current and future climate models and vulnerability assessments, NAP can be a key process for identifying, prioritising, implementing, and monitoring climate adaptation actions. This process envisages the systems and capacities needed to make adaptation an integral part of national development planning, decision making, and budgeting processes. The release of the NAP earlier in 2023 is a promising development but critical missing elements such as risk and vulnerability data could potentially undermine its efficacy.

Adaptation planning without sectoral investment plans is a missed opportunity

A second critical missing element is the absence of sectoral costing plans to drive finance flows for the NAP. It would be useful to develop cost benefit analyses and climate information-based investment tools to direct finance to priority adaptation sectors such as agriculture, water and sanitation, and energy. Although the NAP recognizes the interconnectedness of agriculture, energy, and water, the lack of specific financial blueprints impedes effective implementation. Without sectoral costing plans, the chain linking adaptation policies to on-ground actions will remain weak, further heightening climate vulnerability.

Adaptation planning without citizen participation is a missed opportunity

Local communities possess a nuanced understanding of their context and priorities, as well as indigenous knowledge that can be successfully leveraged for increasing the effectiveness of adaptation outcomes. Adaptation should ideally be locally-led and appropriate top-down and bottom-up mechanisms should be established to ensure that communities have a voice in shaping adaptation outcomes. Affected communities should be given agency over identifying, prioritising, implementing, and monitoring adaptation actions to ensure sustainability.[3]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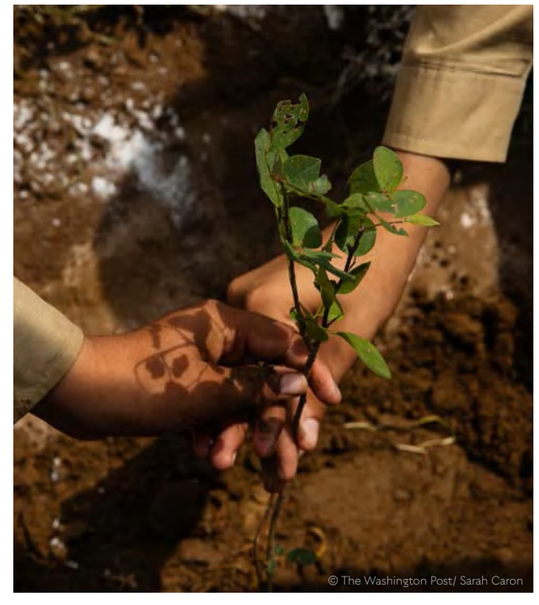
2. Typically, the poor will live in rural areas, lack skills and education to switch livelihoods, are unable to access information and resources to reduce (income) losses; do not have access to public support or financial services. In addition, they will be unable to access water and electricity, both of which are key determinants of physical vulnerability. Other measures that could be considered are access to sanitation or irrigation, mobility and access to markets or services, investments in water drainage infrastructure, improved household dwelling structures, resilient farming practices, and access to early warning systems.

Conclusion

To cope with climate change, Pakistan needs a whole-of-Government and whole-of-society response. Strengthening adaptation planning requires not just closing critical gaps, but also providing an enabling environment in terms of institutional arrangements and governance. Pakistan's path to a sustainable, climate-resilient trajectory will be shaped by working towards the interlinked, mutually-reinforcing climate goals set out in its Nationally Determined Contributions and National Adaptation Plan. The National Adaptation Plan is an important conduit for reducing vulnerability, which, when aligned with the overarching climate resilience framework, is sure to accelerate resilience gains.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The National Adaptation Plan can be a key process for identifying, prioritising, implementing, and monitoring climate adaptation actions.


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3. Recent studies show that locally led adaptation projects can enhance efficiency and effectiveness, avoid duplication, and mitigate unintended consequences of climate and development programs.

The Water-Energy-Food Nexus

As the world gears up to achieve the Sustainable Development Goals (SDGs) by 2030, thinking in terms of the Water-Energy-Food Nexus has become the need of the hour.

By

Simi Kamal

Founder and Chairperson, Hisaar Foundation, Pakistan

Chair, International Water Management Institute, Sri Lanka

The water–energy–food nexus (WEF) is about understanding and managing often-competing interests while ensuring the integrity of ecosystems. The concept is now organised as an appropriate analytical tool, a measure for a reality check and as a strategy for practical outcomes. As the world gears up to achieve the Sustainable Development Goals (SDGs) by 2030, thinking in terms of the Water-Energy-Food Nexus has become the need of the hour.

This nexus is particularly important for Pakistan, given that the country has the world's largest continuous irrigation system - now beset with climate change - dwindling water supplies, salt deposits, and management problems. Pakistan's economy is a 'water economy', where the Water-Energy-Food nexus plays itself out in myriad ways. Yet the theoretical underpinnings of the nexus concept and the tools they provide have not been sufficiently explored or applied.

Whichever way we look at it and whenever we talk of water, energy, and food in Pakistan, we depend heavily on the Indus River and all the systems and infrastructure associated with it. So let us begin there.

The Indus irrigation system, the world's largest contiguous irrigation system, covers about 14.3 million hectares of farmland, representing about 76 percent of the cultivated area in Pakistan. It enables the production of more than 80 percent of the food grains of Pakistan, including the staples of wheat, rice, corn, several grains and lentils, as well as several cash crops.

Within the Indus system, 800 potential sites have been identified for hydropower generation. As per the government of Pakistan, the collective potential is about 60 Giga Watt (GW), but only 6,720 Mega Watt (MW) (11%) have been realized to date.

The overall policy environment in Pakistan appears somewhat feasible for positive reinforcement of water management, nature-based solutions, and resilience-based programming.

The Indus river system is increasingly coming under the impact of climate change, as was witnessed in the cloud-bursts, storms, and floods of 2022, which devastated vast areas, affecting 33 million people, and causing economic loss of USD 32 billion. The water regime of the Indus basin means increasing water insecurity in the future. With an annual growth rate of 2.4 percent and fertility rate of 3.6 percent, Pakistan's population is set to rise to 300 million by the end of this decade. Malnourishment and stunting is the new challenge of Pakistan. When this is combined with major trends of climate and land use change, and the depletion of natural resources, the ability of the existing system to meet growing demands is severely compromised. All of these require approaches that promote resilience and the ability to recover from shocks.

The most distinctive feature of the nexus in Pakistan is the high degree of dependency of downstream communities on upstream ecosystem services for dry-season water for irrigation and hydropower, drinking water, and soil fertility and nutrients. Essentially, this relates to upper and lower riparian issues across Pakistan (the old Sindh-Punjab debate). This has translated into tensions between agricultural, industrial, municipal and cultural sectors, as well as encroachment upon water bodies and conserved lands (common lands, shamilat, gauchars, national parks, and forest areas).

Pakistan's recent National Water Policy, the provincial water policies, food security policies, and energy policies and stand-alone documents do not refer to this nexus at all. In spite of this, the overall policy environment in Pakistan, following its engagement with climate change initiatives, appears somewhat feasible for positive reinforcement of water management, nature-based solutions, and resilience-based programming. There is much discussion on nutrition and food requirements and on means to manage crop

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The water regime of the Indus basin means increasing water insecurity in the future.

production better. Time is also ripe for paying attention to the rain-fed, drought-prone coasts and delta areas of Pakistan that are outside the country's heavy infrastructure zones, have different water and food conditions, are energy starved, and are also affected by climate catastrophe. These areas should be the focus for developing platforms for nexus-based action built on local adaptation, preparedness and resilience initiatives and interventions.

To resolve resource conflicts and get optimum efficiency of the nexus, we must refer to hydrology, geography, geology, land use patterns, crop patterns, the potential of generating energy from many sources, and the water balance at different levels. We also have to look at the power structures, gender dimensions, and the sociology and psychology of different groups. Scientific data available about river flow and each of the three components of the nexus is required. Very little data is available about behaviour around water use, energy and food consumption, and on the sociology and psychology of each of the three components of the nexus. In the aftermath of catastrophe, when basic human requirements of survival come into sharp focus, communications are limited, which is why solutions have to be local in order to benefit from the linkages between the three components of the nexus. There is a whole new discipline here, ready to be born!

At the local level, changes in the supply of rural energy and water are likely to have different implications for men and women, given their different roles within the household and community. Gender-responsive planning for the Water-Energy-Food nexus acknowledges and addresses power differentials among men and women in the water, energy and food sectors. Controlling and managing demand for energy and food is crucial to the water debate. Balancing the equation between water-for-food and water-for-energy is much needed, if the complex nature of the nexus is to be realized in the simpler adaptations at local levels.

Unpacking Resilience

My fear stems from the question of whether I would like Pakistan to be resilient or ready.

By
Afia Salam
Journalist

Words assume an elasticity that sometimes completely flip their meaning. They start to mean something quite opposite to what they had earlier meant. For me, two words have done this spin: 'disrupt' and 'resilience'!

The connotation of 'disrupt' was devastation, destruction, and disturbance. All negative. Now it wears a positive mantle as it is seen as shaking up a stagnant system, to inject vigour and energy.

So, what has 'resilience' morphed into? Resilience meant the ability to bounce back, to be able to cope in the face of hardship and difficulty; certainly, a trait to be admired.

As a person who has seen millions of fellow Pakistanis being buffeted by repeated shocks and disasters, not only am I weary of listening to this word being attached to them, I am more than a bit apprehensive.

My fear stems from the question of whether I would like Pakistan to be resilient or ready. The bigger the disaster, the greater the devastation, and the higher the expectation expressed about the 'resilience' of the Pakistanis to somehow become like the mythical phoenix and rise from the ashes, and in due course stumble back to normality.

The other word used in the theme of this edition of the publication, 'catastrophe', unfortunately remains the same in meaning, connotation, and implication, and is one with which the people of Pakistan have a great though uncomfortable familiarity.

The frequency and intensity of shocks and disasters has seen a shift in the attention of regional, bilateral, and

Compelling competing needs from many other countries hit by catastrophic exogenous shocks and strapped for resources means there is less in the resource pool to go around.

multilateral institutions and donor agencies after the immediacy of the need to rescue has been addressed.

Such weariness, also known as 'donor fatigue,' is becoming more and more pronounced. There are promises and pledges, which fall way short of the assessed needs of the 3R arc of Rescue, Relief and Rehabilitation. Is this happening because Pakistanis are 'seen' as resilient? They are not even close to the dictionary meaning of the word, which describes resilience as the capacity to withstand or recover quickly from difficult conditions. Being hit by repeated disasters and absence of adequate assistance has compromised their ability to bounce back to the same level they were at before the shocks.

Compelling competing needs from many other countries hit by catastrophic exogenous shocks and strapped for resources means there is less in the resource pool to go around. This is why the wavering and waning donor interest is understandable.

Despite struggling with inadequate or delayed assistance, people bearing the brunt of disasters are considered resilient as they are seen coping with grief and loss of hearths, loved ones, assets like livestock, the land that ensured their food supply, and income. They are seen as resilient as not all sit and wait for a handout of help. They come together as communities that watch out for one another.

They look for alternative means of earning, which are also hard to come by because the economy too is hit hard by disasters and doesn't offer many opportunities to them get back on their feet. Families already living in cramped spaces in low-income settlements take in a large number of relatives, sharing whatever little they have. Nutrition is impacted as there is less food per capita to go around. The risk of communicable diseases increase due to cloistered living. Turning away those less fortunate than themselves is not their

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culture. They become host families for months until the displaced relatives can make their way back to where they had come from and take on the arduous task of building back again.

The resilience that is celebrated is actually a result of this culture of helping out, at individual, family, community, and organisational levels. It kicks into action, as witnessed as recently as the 2022 floods, and emerged as a force in the 2005 earthquake, when total strangers banded together into vibrant groups, pooled in their capacities and material resources, and became the first responders even before formal bodies could stir themselves into action.

It is this coming together during times of catastrophe - be they natural disasters like earthquakes, floods, pandemics, or strife leading to internal displacement - that shows the resilience of Pakistanis and their creative ability to respond.

This resilience came riding on the strength of linkages developed in real-time on social media channels where people unknown to each other banded together to help the victims of catastrophe.

However, my discomfort with this kind of resilience after every disaster, especially when they are years apart, is because the systems that need to be the first responders appear to be taking a backseat. It makes me wonder if there are inherent weaknesses and inadequacies of resource and capacity that are responsible for the apparent lag in action. Or, are they, too, taking comfort in the knowledge that there is a societal 'resilience' that will kick in and allow enough time for the systemic behemoth to move.

Once it moved, the impact of coordinated effort was immediate. The repurposing of funds at the disposal of the government meant there was unity of purpose in assessing and meeting the needs. It did appear to have become apparent after the visit of the UN Secretary General's visit to the areas hit by the flood catastrophe and his rallying for international support.

However, until such coordinated action of governance bodies and institutions becomes reflective of the inherent resilience of the society, to me 'resilience' will have flipped from the positive to the negative corner in life's playbook.

Digital Catchments for Resilience

Can vulnerability be offset by digital resources?

By

Salman Zaidi

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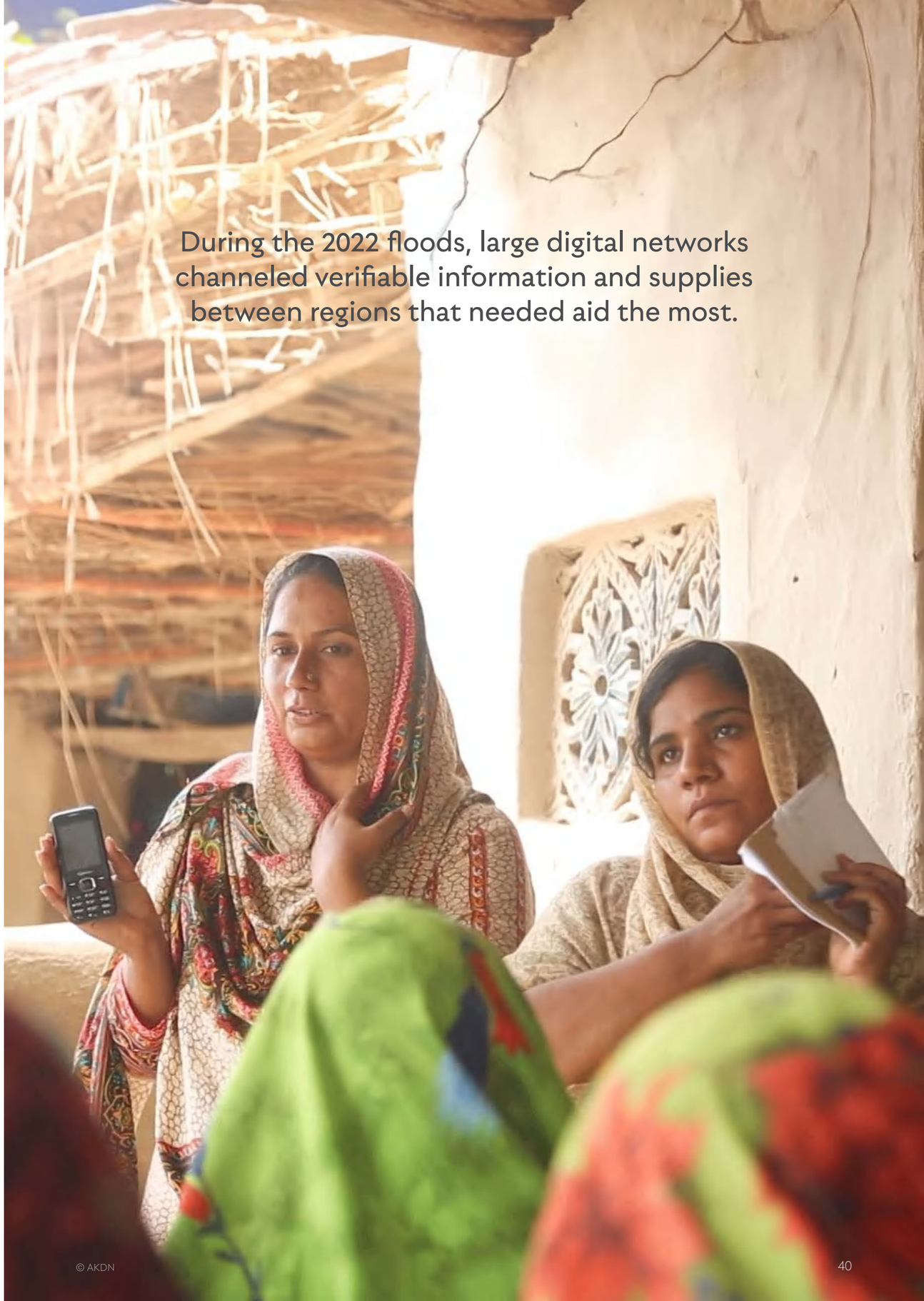
Pakistan's digital journey is on track to realize several multipliers enabled by digital technology. This owes a great deal to private sector investments in digital infrastructure, as well as high consumer subscription for mobile broadband over the last decade, both of which have made the internet a regular household good. The transformation is evident in rural settings, as it is in densely populated urban areas, where per capita mobile phone ownership and usage has generated several positive externalities. One of these externalities is digital proximity to social services, especially those that enhance resilience and offset vulnerabilities.

In the same timeline that digital technology has seen greater demand within, Pakistan has also witnessed a record number of slow and rapid onset disasters. Extreme climate stress has made almost all districts vulnerable to extreme weather events, and the fallout is increasingly unpredictable. All leading forecasts of Pakistan's stability and growth see climate stress as the largest impediment to development that pushes communities to the brink of no return.

This much is known to us. What is also known is that traditional pathways to rescue, rebuild and rehabilitate have been effective only insofar as governmental institutions can mobilise in real time. Although disaster management has emerged as one of Pakistan's best technical and administrative strengths, the climatic onslaught is unrelenting. What we have learned from the 2022 floods and recent extreme weather events is that communities and civil society are now playing a much larger role in disaster management than the state is able to.

This is thanks to digital technology. The availability of smart devices and their extensive usage helped document the 2022 flood and its prolonged aftermath through crowd sourced experiences, and immediately revealed needs on ground. Large digital networks channeled verifiable information and supplies between regions that needed aid the most. These networks continue to exist on-ground and have carried on



A virtual social network reinforces local community ties, including knowledge of persons in greater need, community challenges, and indigenous solutions.

with community rehabilitation more than a year after the flood. Had digital infrastructure not been available in these regions, particularly mobile phone towers, it would have been impossible to know the extent of damage or coping mechanisms.

Digital resources are as crucial to relief work as they are to survival. There are key digital interventions that have enabled resilience on-ground, and patterned new socio-economic dynamics that alleviate vulnerability. First among these, as highlighted above, is the virtual social network that prevents households from buckling in the event of a crisis. A virtual social network reinforces local community ties, including knowledge of persons in greater need, community challenges and indigenous solutions. Virtual networks allow women greater agency, as they dovetail into their community nurturing roles. Most rural women do not possess smart phones, but many urban women do, and use their virtual social networks for everything from informal commerce to committee savings. One of the greatest disadvantages climate affectees face is loss of a coherent community network - especially if they become displaced - and digital technology helps overcome this challenge for many households in that situation.

Another crucially important digital resource is mobile wallets, now used by the great majority of Pakistanis who possess smart devices. Mobile wallets and digital payments have revolutionised financial transactions in Pakistan, and have come to the aid of climate affected communities in unprecedented ways. Cash transfers made through mobile wallets have sustained communities caught up in disasters, in some cases supporting several households through a single account owned by a smart phone user. Most charities

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Digital payments are climate-proof, but this must not be taken to mean that all of Pakistan's poor and underprivileged utilise mobile wallets.

funded by public donations have digital payment methods, and everyday charity payments also rely on mobile wallets. Digital payments are climate-proof, but this must not be taken to mean that all of Pakistan's poor and underprivileged utilise mobile wallets. On the contrary, the poorest groups are mostly caught outside digital catchments, and neither own smart devices nor mobile wallets. Depending on where they stand on the resilience curve, mobile wallets will greatly assist marginalised communities if they own them.

Another digital resource that has helped dislocated communities, especially those migrating out of disaster-prone districts, is the likelihood of acquiring skills online. Exposure to improved technique, craft, product, and marketing through social media platforms has benefited labour across almost all sectors, but especially semi-skilled workers from Punjab and Sindh employed in Karachi and Lahore. In addition, rural out-migration has enabled new supply chains, whereby entrepreneurs from Gilgit-Baltistan are acquiring local produce and selling it across Pakistan's urban centres. Entrepreneurs anywhere in Pakistan are leveraging the internet for e-commerce, but those from climate-vulnerable districts have developed supply chains unlike others.

There are several specialised digital applications and tools – such as Geospatial Information Systems, climate dashboards, and Early Warning Systems - made especially for climate adaptation that help policy stakeholders and practitioners make more informed decisions. Such digital interventions assist climate governance, but they might not be meaningful to communities in the same way. As more and more households adopt digital technology, the greater chance there is of resilience through people-centered apps focusing on information, access to social services online, digital transactions, and livelihood rebuilding. This will empower communities to not just withstand climate shocks, but to anticipate and mediate future complexities on the road to resilience.

A Paradigm Shift towards Urban Risk Reduction

Jawed Ali Khan
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Mohammad Aslam Khan, PhD
Former Chief, Environment Section,
United Nations ESCAP, Bangkok

The impact of natural hazard risks in Pakistan has been magnified in urban areas due to the rapid rate of urbanisation, rural-urban migration, and urban expansion into hazardous areas prone to natural disasters.

Recognising the grave disaster risks and climate change problems faced by Pakistan, this piece highlights key issues on natural disasters and climate change parameters, with a special focus on urban areas. Moreover, imperatives that need consideration in the development and implementation of policies and plans regarding these have also been discussed.

Risk Scenario in Pakistan

Pakistan faces some of the highest disaster risk levels in the world. In overall rankings, it ranked 23rd out of 191 countries in the 2024 Inform Risk Index. In terms of exposure to natural hazards, it was elevated to rank 13 (figure 1). Among various hazards, floods, earthquakes, and cyclones top the list (table 1).

Climate Change and Disaster Risk

Climate change is a risk multiplier, with potentially highly negative consequences and ripple effects. It has worsened the disaster scenario, as glaringly depicted by the events of 2022. First, a severe heatwave saw temperatures rise continuously above 45°C, causing crop losses, power outages, and forest fires. Then, an unprecedented monsoon rain brought disastrous floods estimated to cost a total eco-

UN Habitat will continue backing national institutions in implementing plans to reduce disaster risks and enhance preparedness to combat climate change through adaptation actions.

nomic loss of about USD 15.2 billion. As a direct consequence of the floods, the national poverty rate is projected to increase, pushing an additional 8.4 to 9.1 million people into poverty.[1]

Globally, Pakistan has been ranked in the top ten countries most affected by climate change in the past twenty years by Germanwatch. In terms of climate change, according to IPCC and other scenarios and projections, the country is to face further warming at a rate considerably above the global average. There is a significant probability of more frequent and more intense extreme weather events. Water and energy security will be under grave threat. Heatwaves will intensify and contribute to more severe, frequent, and longer droughts. Moreover, climate change will enhance the melting of the mountain glaciers, altering the flow of the Indus River and seriously threatening Pakistan's economy and ecology. Sea-level rise is another risk, which will cause the ocean to encroach on coastal settlements and infrastructure.

Over the past three decades, climate-related disasters have caused significant loss of life and enormous socioeconomic damage in Pakistan (figure 2). During the last three decades (1990- 2019), climate- and weather-related disasters in Pakistan resulted in a total economic loss of USD 29.3 billion (inflation-adjusted to 2021 USD) - equivalent to 11.1 percent of the 2020 GDP.

© DAWN

1. World Bank, 2022. Country Climate and Development Report, Pakistan

Figure 1: Pakistan's Risk Ranking Among 191 Countries

Source: Inform Risk Index, https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Risk/Country-Risk-Profile

Table 1: Record of Natural Hazards in Pakistan (1900 – 2020)

Disaster Type	Disaster Subtype	Events Count	Total Deaths	Total Affected	Total Damage ('000 USD)
Drought	Drought	1	143	2,200,000	247,000
Earthquake	Ground movement	35	144,116	7,435,786	5,376,755
Epidemic	Bacterial disease	3	142	11,103	0
	Parasitic disease	1	0	5,000	0
	Viral disease	2	130	56,338	0
	Others	5	131	370	0
Extreme temperature	Cold wave	3	18	0	0
	Heat wave	15	2,936	80,574	18,000
Flood	Flash Flood	24	3,590	22,114,253	10,184,119
	Riverine flood	43	9,229	34,967,357	9,727,030
	Others	39	5,286	23,863,294	2,670,030
Landslide	Avalanche	12	567	4,435	0
	Landslide	9	222	29,707	18,000
	Mudslide	2	16	12	0
Storm	Convective storm	15	402	1,906	0
	Tropical cyclone	7	11,555	2,599,940	1,715,036
	Others	7	184	2,988	0

Source: World Bank and Asian Development Bank, 2020, Climate Risk

Climate change is a risk multiplier, with potentially highly negative consequences and ripple effects.

Risks to Urban Areas

The impact of natural hazard risks in Pakistan has been magnified in urban areas, due to the rapid rate of urbanisation, rural-urban migration, and urban expansion into hazardous areas prone to natural disasters.

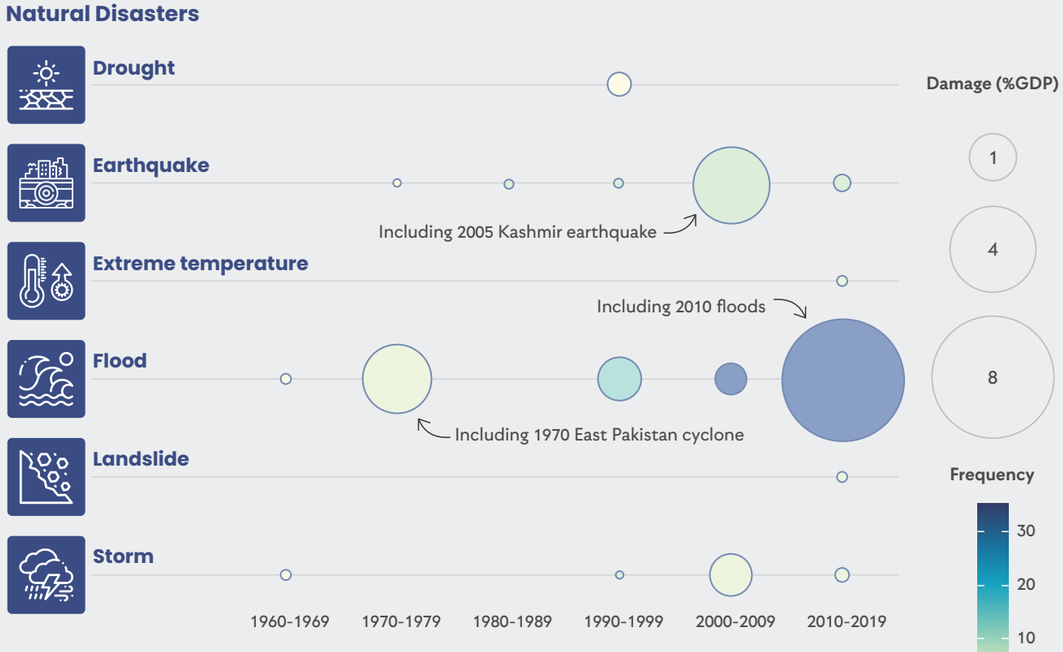
The urban share of the population in Pakistan more than doubled between the 1998 and 2017 censuses. The share of migration in urban growth was 26 percent during the 1981-1998[2] period, and went up to 44 percent between the 1998 and 2017 censuses.[3] This acceleration may intensify further in a business-as-usual scenario. Rapid urbanisation heightens demands on utilities, infrastructure, and services, straining limited resources. The existing deficiencies in housing and other basic services have already reached a breaking point, and accelerating migration is creating serious problems for local governments. Further, increasing costs of land and buildings, together with housing deficits in cities is forcing new migrants to move to risk-prone areas, where land and housing is cheaper but exposes them to climate and other natural disasters.

Imperatives in Policy Response

A multi-pronged strategy is needed to manage the impacts of natural disasters and climate change in urban areas. Along with creating resilience to natural disaster and climate change, it also demands development and implementation of a human settlement policy for promoting livable cities while reducing rural-urban migration by creating opportunities for employment in rural areas.

In terms of a policy response in building the resilience of communities to natural disasters and climate change, priority should be given to strengthening and investing on climate change adaptation and disaster risk management plans. UN Habitat Pakistan has already initiated a pilot project in Dadu, one of 2022's worst-affected districts in Sindh. The output of this project will serve as a model for local flood resilient settlement planning. In addition, UN Habitat will continue backing national institutions in implementing plans to reduce disaster risks and enhance preparedness to combat climate change through adaptation actions. It also intends to provide technical support to the government in the formulation and implementation of a human settlement policy that could promote livable cities as envisaged under the New Urban Agenda. UN Habitat, as in the past, will continue to promote partnerships with bilateral and multilateral agencies in implementing these initiatives.

Figure 2: Average Economic Damage as Percentage of GDP (1990-2019)



Note: Decadal figures are measured as the annual sum over the subsequent ten-year period.
Source: The international disasters database

2. Karim M S, and A Nasar, 2003, "Migration Patterns and Differentials in Pakistan: Based on the Analysis of the 1998 Census Data." In Population of Pakistan: An Analysis of 1998 Population and Housing Census, edited by A. R. Kemal, M. Irfan, and N. Mahmood, 173–80. Islamabad: Pakistan Institute of Development Economics.
3. Naveed H, 2023. "Our Cities are Unfit to Absorb Migrants", Dawn, 2 November

© Tribune

Between 1990 and 2019, climate- and weather-related disasters in Pakistan resulted in a total economic loss of USD 29.3 billion.

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THOUGHT PIECE

Building Back Jaffarabad

Years of disaster management work have taught me one lesson: We must plan an integrated pyramid of initiatives, build upon current work, and trigger positive multiplier interventions.

By

Nilofer Afridi Qazi

Public Policy Specialist, Author & Philanthropist

June 2022 saw human suffering in 16 districts of Balochistan, where physical and social infrastructures are weak, if not nonexistent. Bridges, dams, and roads were washed away. Mud huts of the poor and brick homes of the elite were equally destroyed or damaged. There was a sea of death as far as you could see. Neglect, apathy, and corruption amplified existing vulnerabilities of the disenfranchised in Balochistan.

How did we get here?

Pakistan does not have an effective climate change response mechanism in place. The country's governance apparatus has not accommodated the necessary systems, expertise, or basic structures required to prepare or respond to climate-induced challenges.

At the global environmental and climate change policy levels, Pakistan is leading various important environment and climate change meetings, but at home, there is no coherent policy nor budget reallocation to accommodate dire needs and prepare millions of citizens.

Solar panels critical in building alternative energy infrastructure continue to be taxed. There are many disincentivising policies at every level of green solution. There are no conservation codes, mandatory water conservation, or laws calling for insulation materials in public works or buildings. These are basic incentives, and indicators of a nation interested in environmentally-friendly and sustainable pro-poor risk reduction policies.

In fact, like much of Pakistan's public sector, the country is visibly unresponsive to the needs of the people. Do we have any stories of excellence or best practices of note from them? The

© AFP via Getty Images

80 percent of Balochistan's budget is funded by the Federal Government's central transfers - approximately PKR 17,000 (USD 56) per resident.

bottom-line for the past five decades has been the expectation of the civil society and foreign donors to step in, backstop projects financially, and expend their efforts where the state should have provided basic services, social security, and infrastructure to its citizens.

Even so, those who step in to address some of the challenges cannot possibly meet the overwhelming need without government.

In a Quetta Provincial Disaster Management Authority planning meeting preparing for possible rains and flooding in 2023-2024, the budget for the mitigation measures was laid in front of non-governmental organizations and international and bilateral donors. The lack of funds was cited as a major challenge in addressing these catastrophes.

This is corroborated through the fact that at the provincial level, 80 percent of Balochistan's budget is funded by the Federal Government's central transfers, which is approximately PKR 17,000 per resident or USD 56. What can a sparsely populated province do with this paltry sum? Whose responsibility is it to provide equitable standards across Pakistan? Are we a federation or autonomous provinces?

Years of disaster management work have taught me one lesson: We must plan an integrated pyramid of initiatives, build upon current work, and trigger positive multiplier interventions. Six villages in Jaffarabad have become my mission, where we are working towards developing an integrated resilience model. This decision was based on several pre-conditions. We wanted to open this intervention up to poor villagers who own their own land, and were willing to transfer ownership into a women's name. The ranking of the most vulnerable was undertaken by the village community, enabling an informal community organization in the process, for future resilience development initiatives.

It takes a village to provide a home. We began with building homes for 145 families. Without a roof, all other assistance matters little. With UN Habitat as my design and technical partner, and SPO as my implementing partner, we discussed various options for rebuilding in Jaffarabad. Technical conclusions excluded the local (and preferable) adobe mud homes. Although cheaper, quicker, and easier, they are not a sustainable option nor reduce risks for a sustainable and resilient habitat. To build disaster risk reduced homes, sometimes local knowledge and tradition is the challenge, not the solution.

The author meeting locals in Jaffarabad.


© AP Photo/Fareed Khan

At the heart of climate change adaptation is a simple question: What is the value of a human life?

Knee-deep in rebuilding, another challenge emerged; 30 percent of the women and 100 percent of the children are undocumented. Balochi women who were born in Sindh but married and settled in Jaffarabad are unable to get CNIC cards here. Widows or women with husbands who have disabilities are expected to provide supporting documents, which is a near-impossible task for these impoverished, non-literate families. Even more worrying is the lack of registered children; none of them had B-Forms.

Even more acutely, the Allahbad and Arbab Malla villages are located on Jaffarabad city's waste dump. On the edge of one of the city's drainage canals resides the Marasee community, which is at the bottom of the social pecking order in the Baloch social structure. 200 souls live on two acres - tiny plots with no boundary walls, no privacy, no physical infrastructure, no gas, no electricity, no sewerage systems, no schools, and no health facilities. The residents are 100 percent non-literate, and perpetually unwell.

In response, we have decided to establish both skill centers and literacy centers. The former will teach how to make safe, reusable, low-cost, biodegradable sanitary pads. The idea emerged during the course of relief work, where sanitary pads for women and girls were required. Conscious of the absence of waste management systems, I did not want to further contribute towards waste. The literacy centers will provide an alternative accelerated learning programme, providing numeracy, literacy, and life skills for children, young adults, and adults after work. This is resilience building in action.

At the heart of climate change adaptation is a simple question: What is the value of a human life? While we cannot make the fault-lines in Jaffarabad disappear, we can try to build resilience for the 800 human lives in that community.


Strengthening resilience for communities in Jaffarabad.

Glaciers and the Climate Plague

By

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Harboring the Earth's most interesting of habitats is Pakistan's North, where the mountains stand tall and dignified, wearing eerily white glacial crowns elemental to all life forms of the area. Running amidst these glaciated mountains is the indomitable Indus River, gushing through a vast trajectory of varying temperatures and earthen soil, nourishing all that it meets, and phenomenally depicting for the world the relationship between ice, water, soil, and humans, as if all of these are not separate bodies of nature, but one soulful entity, incubating the most spectacular and complex of ecosystems.

Such are the mystical terrains of Gilgit-Baltistan and Khyber Pakhtunkhwa, mothering the Earth's natural wonders through many arrays of space and time.

Nature has its own order, which human activity is wildly obstructing.

© UNDP Pakistan

Gabion Wall, Rupal Valley, Gilgit Baltistan.

Disasters are soaring every year around the globe, just as they are in Gilgit-Baltistan and Khyber Pakhtunkhwa, and while all disasters bear some semblance; **Glacial Lake Outburst Floods (GLOFs)** are like no other.

A GLOF conquers brutally, leaving no spoils of war, but only skeletal testaments which both astound and terrify the survivors. Such was evident in 2022, when both Gilgit-Baltistan and Khyber Pakhtunkhwa were shook with ninety episodic flash floods due to massive glacier melting, with approximately seventy-five horrific GLOFs occurring in the region, mercilessly consuming eighty-one lives.

Being rolled out in the twenty-four most climate-vulnerable valleys of Gilgit-Baltistan and Khyber Pakhtunkhwa, where the susceptibility of the occurrence of GLOFs remains high, is the **Glacial Lake Outburst Floods Risk Reduction Project (GLOF-II Project)**.

This has included the installation of technologically advanced Early Warning Systems (EWS) in the project valleys, the construction of 250 small-scale infrastructures such as gabion walls and check dams, and the rehabilitation of 240 irrigation channels. The adaptiveness of the communities is organically expanded, and their resilience in the face of climate-induced disasters such as GLOFs is further strengthened. Beyond issuing alerts to community members through the EWS so that they can be safely moved to (the project's) safe havens, the Project is actively supporting 'local' nature-based practices, which are built upon the indigenous knowledge of the communities, imbued with ancient wisdom, to overcome water scarcity in the region. These include glacier grafting (enjoyably referred to as the 'marriage of the glaciers'), avalanche harvesting, and ice-stupas. Slope-stabilization is another strong connection that the project cements with nature, undertaking 700 hectares of plantation to prevent soil erosion. The interventions are multi-layered in this way, and are synchronised in their aim to transform the dynamics within which communities respond to disaster (GLOF) risks.

Artwork by Abdaal Bukhari | on the left – Maryum Bibi © Kashif Ali Khan/UNDP Pakistan, on the right – Suraya Shahab © Navroza Sherali/UNDP Pakistan

Between the Glaciers of Arindu

Pillared around the village of Arindu in the district of Shigar, Gilgit-Baltistan, are two astounding glaciers - the Karfoghora and the Choloma, gazing assiduously at the hundreds of the valley's residents, one of whom is a woman named Maryum.

Being born into the village, Maryum is incredibly attuned with the climatic history of Arindu, and how it has altered lives in the course of only a few years, influencing trends of rural to urban migration, and propelling issues of mobility amongst others.

"During the disaster (GLOF), everything becomes difficult to do. Our movement anywhere is impossible as we become locked in," says Maryum. "I thought of migrating too to a safer place, but that required resources which I did not have," she continues.

In 2018, the GLOF-II Project, after an intensive survey to assess the climate-vulnerabilities of the valleys, kicked off the execution of its committed actions, with the roll-out of mock drills and with the onset of construction-based activities to enable communities in safeguarding themselves in the event of a disaster.

"We know that there are Community Based Disaster Risk Management Centres (CBDRMCs) being constructed for the community members. The members actively hold discussions through various sessions on how to respond to GLOF events to protect ourselves and our loved ones. This naturally poses a lot of ease for us," remarks Maryum, as she feels equipped with information on Disaster Risk Management and Reduction.

Caregiving can be hugely overwhelming, especially when the climate remains as shaken as one's personal circumstances. Maryum's relief relies on the GLOF-II Project's actions, based on which she feels secure in her residence at the valley. Maryum also voices how the rehabilitated irrigation channel ensures that the flow of water remains intact, and is accessible to the residents. Her children go to school now, and she envisions a different future for them as opposed to the dismal circumstances she had thought she would have to face.

GLOFs, Pickles and Apple Jam

The Reshun valley of Chitral, Khyber Pakhtunkhwa, echoes all natural wonders of the Earth, with its starkly pink soil, and verdant pastures complimented with the stunning backdrop of the mountains. Crisp and freshly borne out of the Chitrali chill are the apples grown in the Reshun valley amongst other decadent fruits such as pears, grapes, and figs.

But Reshun too has been scarred with climate-induced calamities, affecting the lives and livelihood of its residents.

Suraya Shahab is a Lady Health Worker (LHW), working ardently on women's reproductive health by going door-to-door to check up on them. Suraya's work is challenging as it is, considering that gender disparities are astonishingly aggravated during a GLOF event, whereby women have to unequally bear social and economic burdens.

Tapping into the collective voice of the women, with the aim to build their agency, the GLOF-II Project has been rolling out trainings on kitchen gardening, under which the women of the valley are capacitated to make use of the fruits that they have at hand, and transform them into marketable products. With the provision of utensils and a training kit, the women are taught various techniques to accomplish the deliciousness of organic fruit jams, marmalade, and pickles, in sustainable packaging.

Suraya regards the training to be of great value, as formerly, the apples which grew in her garden would rot since she could not find time to make use of them owing to her LHW duties.

"Through the training, I felt informed about food preservation. The method of making jams and pickles was demonstrated in a very simple way! Now, I hand-pick the apples from the garden, wash and peel them, and then boil them meticulously with sugar and all other necessary ingredients. Once done, I pour the jam into recycled jars which I have stored at home. I use the jam that I make everyday for breakfast, instead of buying it from the market. In fact, my jam has become quite popular. I have bottled my apple jam for my daughter who lives in the city, and for my neighbors too!"

Suraya then speaks of the prospect of selling her apple jam, as do the other women who have taken the training, thus building up on the ties between gender equality, sustainability, and inclusive climate action.

The resilience of the communities of the GLOF-II Project valleys is as strong as nature's most resplendent heritage, and UNDP's commitment to build upon their strength remains unshakable. The project's early warning systems continue to be installed for timely evacuations. The water in the irrigation channel streams through beds of rocks and greenery, and the gabion walls stand erect.

And so, as the daylight transitions into the haze of dusk, and the sun descends slowly behind the silhouette of the mountains, hope remains steady and high.

In the midst of this rejuvenating hope is an even stronger will for the future to be bright, secure, and climate friendly, such that everyone will say in unison, "We were not left behind."

And no one indeed is left behind or forgotten. Not even the glaciers of Northern Pakistan.

Trainings for GLOF-II's Kitchen Gardens.

© UNDP Pakistan

Shigar Valley, Skardu, Gilgit Baltistan.

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CASE STUDY

Pakistan's Climate Promise

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Climate Promise, UNDP's global flagship initiative on climate change, strives to address environmental challenges through a holistic portfolio in Pakistan focusing on enhancing local capacities to achieve the country's Nationally Determined Contributions (NDCs).

Pakistan faces a plethora of multi-dimensional climate change-induced challenges demanding immediate coordination towards integrated action. Ranging from macroeconomic instability to the aftermath of the 2022 mega-floods, the country has a substantial agenda ahead for establishing a comprehensive set of resilience-enhancing mechanisms. As the fifth largest country in the world, boasting a population of nearly 247 million in 2023, there is vast potential to steer collective effort towards lasting inclusivity and sustainable development.

Climate Promise, UNDP's global flagship initiative on climate change, strives to address environmental challenges through a holistic portfolio in Pakistan focusing on enhancing local capacities to achieve the country's Nationally Determined Contributions (NDCs). It takes a top-down approach by supporting various government entities with the development of evidence-based strategies towards low-emission development, as well as a bottom-up approach by enhancing community resilience through technical capacity-building and green skills training.

During Phase I, Climate Promise assisted the Government of Pakistan by laying the groundwork for concrete and methodological climate action through the revision of the National Climate Change Policy and updated Nationally Determined Contributions in 2021. The project team also conducted nationwide consultations in 2022 and identified 59 high-

UNDP's Climate Promise Snapshot

CLIMATE PROMISE

An interactive workshop on Electric Vehicle Charging Infrastructure.

The launch of Karachi's City Climate Action Plan with KMC.

Youth Policy Dialogue on climate change.

Youth delegates selected to represent Pakistan at COP28.

While politicians come and go, the threats posed by environmental collapse are here to stay, and the consequences of inaction are not worth the gamble.

priority actions under mitigation, adaptation, and socio-economic growth to make progress towards NDC implementation in the country, amounting to USD 2,367 million in total. Currently, under Phase II of its chapter in Pakistan, Climate Promise aims to provide institutional support to local governments by adapting NDC implementation plans into provincial climate change policy. In Punjab and Sindh, Climate Promise is providing technical support to local government departments by constituting NDC Implementation committees to enhance coordination between priority stakeholders and on-ground implementing partners. UNDP's Climate Promise team is also engaged in Karachi city, for the development of a dedicated Climate Action Plan (K-CAP) to fulfil the cities commitment to the Paris Agreement through C40 Cities platform. In Balochistan, UNDP is pioneering inclusive and gender-responsive climate action through the formulation of the Balochistan Climate Change Policy, Action Plan and Financing Strategy. Similarly in Gilgit-Baltistan (GB), the project is developing an Environment Policy to enhance government ownership towards enhancing the resilience of fragile ecosystems. The focus on the institutionalisation of climate action policy is so that the risks induced by the country's turbulent political landscape may be mitigated. While politicians come and go, the threats posed by environmental collapse are here to stay, and the consequences of inaction are not worth the gamble.

Going beyond the NDCs, Climate Promise is supporting the Ministry of Climate Change and Environmental Coordination (MoCC&EC) on various initiatives encompassing the development of Pakistan's Long-Term Low-Greenhouse Gas Emission Development Strategy (LT-LEDS). Under Article 4, paragraph 19, of the Paris Agreement, all Parties should strive to formulate and communicate LT-LEDS, taking into account their common but differentiated responsibilities and respective capabilities considering different national circumstances. Pakistan's LT-LEDS will propose an evidence-based roadmap to delivering the ultimate 'Net Zero' emissions target by 2050 while effectively aligning national growth with broader global goals.

The project also aims to enhance social inclusion by reducing technological and skills gaps through capacity building of local communities and endeavours to empower the country's vast reserves of human capital, particularly its youth bulge. In partnership with the Gilgit-Baltistan Rural Support

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Climate Promise is laying the fundamental groundwork in Pakistan by supporting provincial governments and local communities.

Programme (GBRSP), UNDP under Climate Promise is establishing three Green Business Centres in 2024, one in each district of Skardu, Ghizer and Astore. This initiative aims to empower upto 60 female entrepreneurs in green skills for livelihood opportunities and the establishment of small and medium-sized enterprises (SMEs) for the manufacture of bio-degradable bags, thus contributing to a circular economy and the 'Zero-Plastic' initiative in GB. A mass awareness campaign on better solid waste management practices will also be conducted through this initiative to ensure an extensive outreach programme tailored for 76,000 individuals with at least 50% females reached.

Embarking on an impactful initiative to establish industry linkages between the private sector and farmer community from all the provinces, Climate Promise is also gearing up to organise a roadshow to promote energy-efficient technologies in the key sector of Agriculture. As the primary source of livelihood for 63% of the rural population, Pakistan's agriculture-food system is critical for the country's growth, employment, poverty reduction and food security ambitions. This event will be conducted to promote awareness and adoption of innovative energy-efficient technologies and climate-smart agriculture practices to enhance the resilience of food security in Pakistan. In conjunction with the Green Jobs-Just Transition assessment and gender-specific sectoral analysis in the key sectors of Agriculture and Energy, that are being conducted under the LT-LEDS development process, these initiatives are aimed at effectively closing the gap towards a thriving social and circular economy in Pakistan.

Pakistan's Long-Term Vision envisions the mammoth task of low-emission development towards eventual carbon neutrality, while catering to its rapidly increasing population, in eight sectors including Energy, Transport, Agriculture, Forestry and Other Land Use (AFOLU), Industrial Processes and Product Use (IPPU), Urban Development, Waste, Air Pollution, and Human Capital. Although the journey to Net-Zero may be long and arduous, there is 'no Planet B', and given that the frequency and intensity of climate change-induced disasters is expected to exacerbate in the coming years, every member of the international system has a critical role to play. Climate Promise is laying the fundamental groundwork in Pakistan by supporting provincial governments and local communities. It aims to ensure that the country can undo the climate stress that has disrupted the country, its people, vulnerable ecosystems, and beyond.

Global Shield against Climate Risks

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The integration of insurance, alongside investment and innovation, into comprehensive risk management frameworks is essential for countries to tackle uncertainty and enhance resilience.

Insurance and risk finance have a critical role in reducing vulnerability and uncertainty, and increasing the financial resilience of governments and the communities whom they protect. The integration of insurance, alongside investment and innovation, into comprehensive risk management frameworks is essential for countries to tackle uncertainty and enhance resilience, delivering better, more inclusive development, in a world of seemingly ever more complex risks.[1]

The increasing severity and frequency of natural disasters pose significant challenges to Pakistan's fiscal resilience and sustained economic growth. With one of the highest population growths in South Asia, ranking 150th on the Human Development Index (HDI), and shrinking per capita water availability, the number of people vulnerable to natural disasters is projected to increase exponentially by 2030.[2] Pakistan ranks among the top ten countries in the world most vulnerable to the impact of climate change.[3] Negligible financial resilience in the country is evident from the fact that out of USD 30 billion of damage and loss caused by the 2022 flood, only a fraction of public and private assets were financially protected through such risk transfer measures as insurance. According to World Bank figures, this resulted in a 2.2 percent loss in Pakistan's GDP, with the agricultural sector the worst hit, accounting for 0.9 percent of this loss. Pakistan suffers from 'high risks and low insurance penetration' – a dilemma in many Asian countries.[4] The underdeveloped insurance market and negligible catastrophe risk retention restrict the government from effectively sharing its fiscal burden with the private sector, which offers much capacity and expertise. Long-term investments in ex-ante solutions that can leverage global and local insurance industry partnerships are therefore urgently needed.

1. UNDP, Uncertain times, Unsettled lives, Shaping our future in a transforming world, Human Development Report 2021/2022
2. http://hdr.undp.org/en/countries/profiles/PAK
3. Global Climate Risk Index

UNDP and the Ministry of Climate Change & Environmental Coordination kick-started the In-Country Process for the Global Shield with a two-day multi-stakeholder consultation on climate-risk insurance and financing.

Pakistan has institutional champions for both climate and economic resilience, but there's a need for harmonization horizontally at the central level, and vertically among central, provincial and district levels. Fortunately, the policy foundation is in place for agendas that are relevant to climate and disaster risk financing, such as climate change adaptation, disaster risk management, sustainable finance, financial inclusion, and social protection, among others. A new Disaster Risk Finance Strategy and Strategic Plan for an Insured Pakistan (2023-2028) is being developed by the government and will align with the existing policy landscape. The rallying cry is to shift to a culture of proactivity.

In this context, development partners are looking to the government to steer collaboration for prudent policy formulation, strengthening institutional capacities and innovative partnerships for climate and disaster risk financing. During COP27, Pakistan was identified as one of the 'Global Shield against Climate Risks'[5] (GS) pathfinder countries that will access more and better pre-arranged financing arrangements before disasters hit. Led by the Ministry of Climate Change & Environmental Coordination, the In-Country Process (ICP) of the GS is being facilitated by UNDP to harmonize conversations on Climate and Disaster Risk Finance and Insurance (CDRFI) across various actors and government institutions that are implementing or financing relevant interventions. The ICP was officially kicked off in November 2023 and reiterated the priorities of improving the existing insurance industry development roadmap, promoting institutional harmonization and public-private partnership to enhance institutional capacity, and developing cost-effective insurance solutions at the macro, meso and micro levels and address the protection gap in the country.

UNDP will continue its support to the Government of Pakistan and collaborate with the development community to ensure synergy in building financial resilience and safeguarding sustainable development for vulnerable people, communities, enterprises, and ecosystems.

4. Low Insurance Penetration, High Catastrophe Exposure; Source: www.munichre.com/topics-online/en/economy/insurance
5. The G7-V20 Global Shield against Climate Risks has been established to provide and facilitate more and better pre-arranged protection against climate and disaster related risks.

Mapping Opportunity in Karachi's Rehri Goth

By

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UNDP Pakistan and IBA Karachi's urban resilience work in Karachi aimed to empower women, youth, and marginalized groups to create a City for All.

Ruqqaiya shows her trainees how to work in the ends of a kameez.

"When I was a child, I loved to sit and watch my mother sew – to see how the scissors glided on cloth," shares Ruqaiyya, 52.

She belongs to Rehri Goth, an informal settlement neighboring Landhi Town in Karachi. As a 400-year-old coastal community, the livelihood opportunities here revolve mostly around the male-dominated space of fishing. With overfishing and marine pollution, however, the average income of the households does not match the growing inflation in the country. To further complicate matters, most families are not comfortable with the women in their households stepping out to work on the open seas. Therefore, a lot of women like Ruqaiyya had historically fallen to the wayside, unable to earn a living on their own.

Ability without opportunity is of little consequence, which is why Ruqaiyya, armed with bolts of fabric and a dream of self-sufficiency, sought out a City for All.

Co-creating and community-listening

UNDP Pakistan and IBA Karachi's 'City for All' project aims to strengthen the inclusion and resilience of migrants, displaced people, and host communities in the informal urban settlements of Azam Basti and Rehri Goth in Karachi.

Ruqaiyya's sewing center is a safe haven for many of the trainees enrolled there.

This intervention is informed, influenced, and powered by the Social Innovation Platform (SIP) approach and methodology, being leveraged effectively by the Agirre Lehendakaria Center (ALC) with the support of UNDP Bangkok Regional Hub governance. This approach brings together a variety of stakeholders, methods, and interventions to address development challenges for greater systemic change, through deep listening and co-designing together with target communities.

In Karachi, UNDP and IBA did this by conducting in-depth qualitative research and identifying challenges relating to water and sanitation, education, women employment and livelihood, the environment, and basic amenities and services. These themes were then applied to two Challenge Cups which invited the community to offer their own solutions to the problems they faced.

Claiming spaces, a stitch at a time

Ruqaiyya was one of our Challenge Cup applicants. As with other residents of Rehri Goth, she was trying her best, with the limited means she had, to be a contributing member of her families. She received a grant for her plans of establishing a sewing center to train other women in her locality to earn an income from their homes – a quiet act of not just claiming a space, but thriving in it.

Standing in this room reminds us why the Social Innovation Platform's underpinnings of co-creation and community listening have been so important for this project. Ruqaiyya's facility is community-owned and market-integrated, carved to precisely fit the needs of the women there. It currently operates in afternoon and evening shifts to account for the trainees' employment and study schedules. Each shift has 20 enrolled trainees, with three months for basic training and another six for learning advanced skills.

The sewing center caters to the needs and schedules of the women of Rehri Goth.

Haseena is one of these trainees. At 29, she regrets not getting the opportunity to study after the first grade. She has four sisters and three sisters-in-law – all of whom are self-proclaimed fashion fanatics. It gives them a small measure of agency, allowing them to express their individuality through the little means they have. They used to get their clothes stitched from a nearby tailor, but it was getting too expensive for their entire household. Within two months of her classes, Haseena was able to stitch Eid clothes for her mother as well as the rest of the women in her family, which saved them an impressive amount of money. Along with this, she was able to stitch dresses for her neighbours, earning PKR 1000 for each formal dress.

"When I received my very first thousand Rupees, I was extremely pleased. Even my brother praised my efforts, saying 'Now you are able to take care of yourself, and your skill will help other women of our home, too'. These words of encouragement from my brother instilled immense pride in me. They made me feel powerful," shared Haseena. She aims to complete the six month advanced course at the institute.

It is not just the prospect of earning a resilient living that makes women flock to Ruqqaiya's. They also see it as a safe haven – a brief but meaningful respite from the harsh world outside these pale pink walls; a world of uncertainty, struggle, and ambiguity. Now that the sewing center is profitable and self-sustaining, Ruqaiyya's work will continue to highlight the transformative power of community and craft.

Ruqaiyya with her soon-to graduate trainees, eager to start the next chapter in their lives.

Resilience building in a City for All

The sewing center was just one example of the scope of the City for All project. It focused heavily on the importance of change from the inside out, and that too at multiple inter-connected levels. It aligned community capacity-building with structural reinforcements in the form of in-kind grants, partnerships, and logistical support. This allows us to marry ability with opportunity – an important first step to building a City for All.

Back at Ruqaiyya's, we notice that the young trainees mirrored their hand-sewn designs – bright, complex, jubilant. It is our hope that our work continues to weave strength and resilience into the lives of the women of Pakistan.

Rehri Goth – considered to be Pakistan's oldest fishing settlement.

One of the projects' many deep listening exercises with Halima, a roadside vendor.

Photos by: Humza Afzal, Concepts Unlimited; Sharmeen Talpur, IBA Karachi; Aqsa Jawed, IBA Karachi; Mariam Khan, IBA Karachi

Rising above the Waters: Pakistan's Women-led Flood Recovery

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In the chronicles of Pakistan's history, August 2022 marked a catastrophic chapter with one of the nation's most severe climate-induced disasters. A convergence of forces - downpours, GLOFs (Glacial Lake Outburst Floods), and riverine flooding - unleashed torrents of water that reshaped the topography of Sindh province, witnessing the creation of a vast 100 km wide lake. While other regions did not form inland seas, the devastation was nonetheless profound. Neighbourhoods, streets, and villages succumbed to the unyielding force of the monsoon. Tragically, over 1,700 lives were lost, over 8 million were displaced, over 9 million were pushed into hardscrabble poverty, and more than 33 million individuals were affected. The aftermath reveals a sobering reality - homes, infrastructure, and educational institutions lay in ruins, and essential food stocks were destroyed, leaving millions at risk of malnutrition and waterborne illnesses. The country suffered staggering losses and damages to the tune of 30 billion USD. This piece delves into the grim narrative of the 2022 floods, unraveling their significant impact on the nation.

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Despite Pakistan's familiarity with seasonal monsoons and sporadic downpours, the cataclysmic force of last year's deluge arrived like a haunting nightmare, leaving an indelible mark of unprecedented devastation. The unrelenting downpour, described by United Nations Secretary General Mr. António Guterres as a 'Monsoon on Steroids', caught the nation off guard. The National Disaster Management Authority (NDMA) paints a stark picture, citing a staggering 84 calamity-hit districts out of the total 160. Coastal provinces, notably Balochistan and Sindh, bear the scars of an escalating climate crisis, enduring intensified tropical storms, coastal inundations, and the encroachment of seawater. NDMA assessments reveal a meteoric 500-700 percent surge in rainfall in these regions compared to the norm. This surge wreaked havoc, rendering over 13,115 kilometers of roads impassable, demolishing or severely damaging more than 1.1 million homes, and tragically claiming the lives of over 800,000 livestock - a critical source of livelihood and sustenance for many affected communities.

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The village of Jalal Khan in Balochistan's District Kacchi stands as a devastating testament to the relentless floods. Over 90 percent of its homes were razed, while the rest lay partially destroyed, rendering them uninhabitable. Streets, culverts, and vital water channels were washed away, leaving behind not just debris but a shattered community.

Amidst the ruins, the heartbreak extends beyond bricks and mortar. Crops, livestock, and the life's work of small shop owners vanished overnight. Essential Water, Sanitation, and Hygiene (WASH) facilities, including sources of drinking water, were obliterated, leaving the villagers not only grappling with physical losses but also facing the profound challenge of rebuilding their very means of survival.

Fareeda Bibi, a resilient survivor of the 2022 floods in Jalal Khan, Balochistan, bears witness to the challenges faced in the aftermath. Her story echoes the emotional and physical trauma endured by her family and the community in the wake of the climate catastrophe. Her memories vividly capture the resilience required to navigate through such harrowing circumstances.

Fareeda Bibi hails from a humble background, navigating a life marked by economic hardships. The backbone of her family's survival rested on goat-rearing, despite her own physical challenges. Undeterred by her disability, Fareeda worked tirelessly to make ends meet, sharing the financial burden with her husband as they raised their two children. Their collective hope was that their persistent efforts would one day yield a brighter future.

However, the flood that swept through their village shattered these aspirations, plunging them into despair. Their home, a symbol of their hard-earned livelihood from goat-rearing, was destroyed. Years of investment were washed away, leaving them with nothing. In the face of this calamity, they found temporary shelter in tents provided by an NGO - a modest respite amid their challenges.

She narrated:

"My home was washed away; we were not able to save anything we had built throughout our lives. I have kids and my entire family to raise, and our livestock was the only major source of income for us. The heart wrenching truth is that I lost the very foundation to my livelihood.'

In response to the aftermath of the floods, UNDP, alongside its implementing partner Taraqee Foundation, swiftly initiated comprehensive measures. The primary objective? To ensure enduring recovery and upliftment for those impacted by the floods. Employing a community-driven approach, UNDP achieved notable milestones, marking a significant stride in the recovery process.

A critical facet of their strategy was a dedicated focus on addressing gender disparities. The aim was clear: empower women within the framework of recovery and resilience efforts. This translated into a robust plan facilitating the transition towards advanced programming, specifically focusing on women-led livelihood recovery and collective action against the long-term repercussions of climate-induced disasters.

Central to this pursuit was the formulation of a comprehensive gender action plan. This meticulously devised

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strategy integrated women into every facet of project activities, striving for a transformative shift in women-led livelihood recovery. This plan also aimed to fortify social and environmental resilience within the affected regions.

At the core of the mission lay the meaningful empowerment of women in flood-affected areas. The initiatives deployed were multifaceted, including targeted interventions such as cash grants and cash-for-work schemes. Notably, priority was given to women-headed households in the allocation of cash grants, providing them with a means to reinvigorate their businesses and livelihoods post-flood disruptions. Additionally, women played pivotal roles in cash-for-

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work programmes, contributing significantly to the restoration of domestic spaces and the rehabilitation of livelihoods within their communities.

Under this initiative, Fareeda Bibi received a PKR 60,000 cash grant, to restore her lost livelihood.

"The support provided by UNDP and Taraqee Foundation in this dire time has been invaluable, and it has given our family hope for a better future. I have received PKR 60,000. This money gave me a new lease on life, and now my husband and I are able to restart our goat-rearing business. With the help of this small grant, I bought two goats and started earning a living again. Despite the hardships we face, we are grateful for the small blessings in our lives, and we will continue to work hard and persevere."

In the drive to uphold women's empowerment throughout the recovery phase and shield them from marginalization within their communities, local-level grievance mechanisms were established. These channels were communicated extensively to project participants, ensuring an effective institutional response system for addressing any concerns related to inclusivity in project execution. This approach aimed to safeguard women's active involvement in development initiatives, attuned to the ground realities while respecting local cultural and political nuances.

This support served as a beacon of hope for individuals like Fareeda Bibi, granting them a renewed sense of security, privacy, and a hopeful outlook for themselves and their families. Their journey from despair to recovery owed much to the unified spirit of the community and the steadfast backing provided by UNDP.

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