



Food and Agriculture
Organization of the
United Nations

Concept note: Pakistan

Pilot Programmatic Partnership

Increasing capacities and scale for anticipatory action including
through social protection systems







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Abbreviations and acronyms

AA	Anticipatory action
AAP	Anticipatory action protocols
ADB	Asian Development Bank
BISP	Benazir Income Support Programme
CWG	Cash working group
DDMA	District disaster management authorities
DG ECHO	Directorate-General for European Civil Protection and Humanitarian Aid Operations
DRF	Disaster risk financing
DRM	Disaster risk management
DRR	Disaster risk reduction
EW	Early warning
EWS	Early warning system
FAO	Food and Agriculture Organization of the United Nations
FSAWG	Food security and agriculture working group
GoP	Government of Pakistan
HCT	Humanitarian Country Team
MNFSR	Ministry of National Food Security and Research
NDMA	National disaster management authority
NSER	National socio-economic registry
OCHA	Organization for Coordination of Humanitarian Affairs
PDMA	Provincial disaster management authorities
PMD	Pakistan Meteorological Department
PPP	Pilot Programme Partnership
SP	Social protection
SRSP	Shock-responsive social protection
TWG	Technical working group
UNDP	United Nations Development Programme
WB	World Bank
WG	Working group

About the Pilot Programmatic Partnership

Extreme weather events are increasing in frequency and intensity due to climate change, while conflicts are driving consistent and unsustainable increases in humanitarian needs. Combined, they are pushing acute hunger to new heights reaching a five-year high in 2020.

A strategic shift from responding to predictable shocks to anticipating their impacts has the potential to break the cycle of growing dependence on humanitarian aid. This approach, commonly known as anticipatory action, establishes risk-monitoring systems linked to flexible finance and standard operating procedures by delivering support to protect people's lives and livelihoods ahead of forecast shocks.

Anticipatory action can be delivered through a variety of modalities, including through national social protection systems. Social protection systems consist of policies and programmes designed to address economic,

environmental and social vulnerabilities to food insecurity and poverty. Linking anticipatory action to social protection means making better use of existing infrastructure to reach and proactively support vulnerable populations ahead of forecast shocks.

Recognizing the clear effectiveness of this approach, the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO) established a three-year **Pilot Programmatic Partnership (PPP)** with the Food and Agriculture Organization of the United Nations (FAO) to explore and strengthen the critical link between these two approaches.

The partnership aims at scaling up anticipatory approaches to crises, with an initial focus on the Asia region including Bangladesh, the Lao People's Democratic Republic, Pakistan, the Philippines and Viet Nam.

Country risk profile at a glance

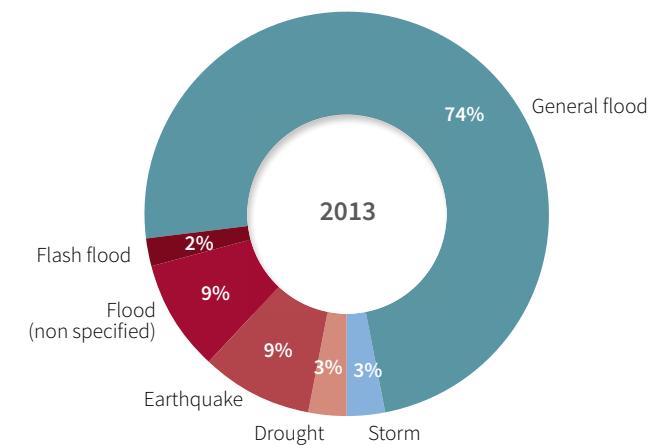
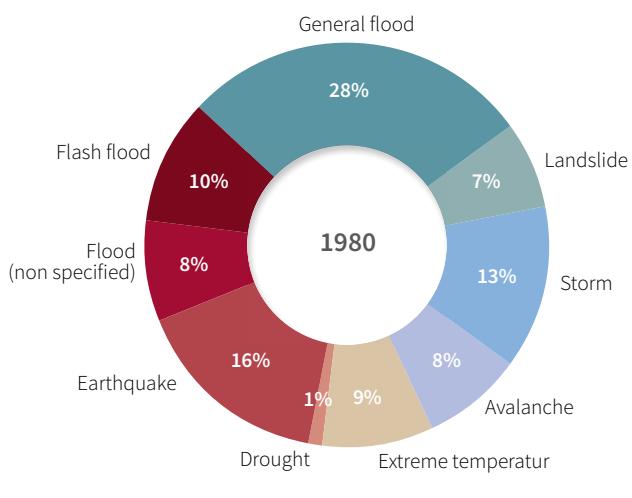
With an extremely diverse geography and topography, **Pakistan is prone to a wide range of natural hazards.** High elevation and mountainous areas of the north experience extreme temperatures, avalanches and snowfalls which cut communities off from services and supply chains. Coastal areas of the country are vulnerable to cyclones, tidal surges, and tsunamis. Drought and flash flooding regularly affect many areas of the country, often in succession. The Indus River system which sustains the country has been negatively affected by environmental damage and natural resource depletion, which increase erosion and flood risks.

The country ranks eighth as most affected by climatic hazards from 2000 to 2019, in the latest *Climate Risk Index*,¹ with flooding (general and flash flood) being the most frequent natural disaster (see Figure 1). The 2010 Indus River monsoon flooding killed 1 752 people and affected 18.1 million across the length of the country.² The 2014 floods killed 367 people and affected more than 2.5 million people.³

The agriculture sector, which employs nearly 40 percent of the workforce in the country, is particularly at risk with the changing climate. Highly agriculture-dependent provinces (see Figure 2) may suffer not only from a loss of livelihoods, but also from increased food insecurity among the poorest households, among other impacts of extreme natural climatic events such as drought or floods.

Drought is also a growing concern in the country as 60 percent of the country is classified as semi-arid to arid; increasing severity and duration of droughts in areas of Balochistan and Sindh are a worrying trend for large populations in these areas. Climate change is expected to further affect the fragile ecosystems of the country with rising temperatures (see Figure 2) or increased variability of river flows. The **agriculture sector is particularly exposed** to both abnormal excess and deficits of water in key productive areas.

Figure 1: Proportion of events and of affected population per hazard, between 1980–2013



Source: Emergency Events Database (EM-DAT). <https://www.emdat.be/>

Figure 2: Spatial distribution of mean annual temperature trends, 1961–2018



Source of map: Population Council. 2019. *Climate, population and vulnerability in Pakistan*. popcouncil.org/uploads/pdfs/2019PERCC_PakistanMonograph.pdf

Review of national disaster preparedness, shock-responsive social protection and anticipatory action systems

Disaster preparedness systems

The Government of Pakistan (GoP) has a comparatively advanced policy framework for disaster risk management (DRM) with significant presence at national, provincial and district levels. The framework has evolved considerably as the country has experienced an array of natural and man-made disasters, incorporating valuable lessons learned. Following the 2005 earthquake in Kashmir and the 2010 extreme flooding of the Indus River, the policy framework was updated to improve preparedness for disaster response in Pakistan with:

- The **National Disaster Management Act**, registered No. M - 302 L-7646 in December 2010, which provides for the establishment of a national disaster management system for Pakistan
- The **National Disaster Management Plan** (2012-2022)
- The **National DRR Policy** (2013)
- The **National Policy Guidelines on Vulnerable Groups in Disaster** (2014)
- The **National Disaster Response Plan** (2019)

The DRM institutional structure in Pakistan is as follows:

- At the federal level, the **National Disaster Management Commission**, headed by the prime minister, is the main policy-making body, with the **National Disaster Management Authority (NDMA)** performing the functions of secretariat with the overall responsibility in coordinating DRM implementation. This structure is replicated at provincial level with provincial disaster management commissions as decision-making bodies headed by the respective chief minister of the province, with provincial disaster management authorities (PDMA) as secretariat and operational arms. At district level, district disaster management authorities (DDMAs) have been established to be responsible for the whole spectrum of DRM in their jurisdiction
- The **Pakistan Meteorological Department (PMD)** under the cabinet secretariat (Aviation Division), oversees the national centre for drought monitoring and the flood forecasting division. As part of its

services, the PMD is providing warning services to farmers.

- The **Ministry of National Food Security and Research (MNFSR)** is an important collaborator in DRM, having authority over the Agriculture Extension Department or the Pakistan Agricultural Research Council, the Fisheries Department, the Livestock Department and the Water Management Department. The NDMA and the networks of DDMAs and PDMA regularly liaise with MNFSR to ensure food supply and production are protected and maintained during disasters.

Shock-responsive social protection systems

When it comes to shock-responsive social protection (SRSP), several notable progresses can be reported in terms of institutionalization in Pakistan:

- The **national socio-economic registry (NSER)** has a clearly defined targeting system and hosts a database of more than 27 million households (about 167 million people) – the first to be established in South Asia. More than 70 organizations are already using this registry for their pro-poor social sector initiatives. Its establishment represents an important commitment to more inclusive national social safety nets and an opportunity to support its technical improvement and performance.
- The Benazir Income Support Programme (BISP) under the poverty alleviation and social safety scheme of the office of the prime minister launched the **Ehsaas Social Protection Programme** which addresses social protection (SP), livelihoods and human capital development and was launched alongside the National Poverty Graduation Initiative in 2019.
- Many of the Ehsaas SRSP programmes are quite new and are under evaluation for their responsiveness and impact. A 2017 Oxford Policy Management study highlighted that the national disaster infrastructure has severe gaps in workforce and technical capacity, especially at the district level, and notes that current protocols in place to regulate data sharing with

external (e.g., humanitarian) partners need regular review to increase timely response, targeting and cost effectiveness.⁴

Anticipatory action systems

At national level, there are several relevant working groups (WGs) which strive to coordinate anticipatory action (AA) and SRSP:

- Information on AA activation is regularly shared by the concerned stakeholders in the meetings of the Humanitarian Country Team (HCT) - furthermore, the **Disaster Risk Reduction (DRR) WG** under the HCT, formerly led by the United Nations Development Programme (UNDP), has also been a forum for discussion of AA and SRSP. Discussions are currently underway with the HCT members and the Organization for Coordination of Humanitarian Affairs (OCHA) to reorganize the DRR-WG into a DRR and AA group.
- The National Disaster Risk Financing (DRF) Steering committee established by the Start Network, which is participated by NDMA, is another venue in which AA learnings are being shared, for instance after any activation of the AA Protocols (AAP).
- **Technical working groups (TWGs)** on drought, flood and heatwave have also been established by the Start Network and are meeting on a quarterly basis.
- More specifically, for drought, a **Strategic Coordination Forum** can be called by NDMA, and serves as the main convenor for a coordinated action between the government and humanitarian or development partners.

At the subnational level coordination efforts are less formalized and AA actors have been operating more independently. FAO is increasingly utilizing its position of co-chair of the Food Security and Agriculture Working Group (FSAWG) which covers both Cash and livelihoods coordination through its monthly 5-W's Data Collection sheet, to coordinate AA and SRSP partners, amongst the more traditional support from partners. The FSAWG forum also operates at the subnational level and is widely attended by government partners. Additional AA actors from the development partner and humanitarian agencies continue to enter the context, including the Red Cross, which is commencing a feasibility study on AA in the coming months.

Several actors are already working on anticipating the impact of **drought**:

- FAO finalized its drought EW early action plan for Sindh province in April 2019. Its trigger methodology relies on a few hydrometeorological and vegetation indices and may provide a lead-time of several weeks or months for a range of AA intended to reduce the losses of farmers (such as seeds distribution, or livestock protection). This first version of the drought AA Protocol, which was developed with financial support from the Foreign, Commonwealth and Development Office, will be updated and expanded to further districts and provinces.
- Through a project entitled Building Disaster Resilience in Pakistan, implemented by a consortium of non-governmental organizations led by Concern WorldWide, FAO trained partners on drought AA in Tharparkar district, which can develop their own AA protocol.
- The Start Network consortium developed a drought AA trigger methodology in partnership with Reading University, based on the use of the normalized difference vegetation index, for a range of AA focusing on wheat crop. The Start Network activated its AA plan in three districts of Sindh in June 2021.

The most frequent and impactful hazard in Pakistan is **flooding**, which is covered by the Start Network:

- The flood AA trigger threshold is based on the Global Flood Awareness System of the European Union, coupled with a probabilistic forecast provided by JBA Consulting,⁵ with a lead-time of up to seven days (although the accuracy is not sufficient at this stage). The AA focuses on the provinces of Sindh and Punjab. The AAP focuses on mitigating impacts at the community and household level and may consist of animal evacuation, drain clearing or embankment reinforcement.

Another frequent hazard is **heatwave**, also covered by the Start Network, which released funds already several times for AA:

- The Start Network heatwave AAP was activated in 2021 in four cities.
- The heatwave AAP was activated in May 2020 in Karachi,⁶ with AAs implemented by Action Against Hunger and HANDS.
- Muslim Aid, Action Against Hunger, Acted and Trocaire implemented AA for heatwave in Karachi in May 2018.

As for SRSP, the World Bank (WB) supported a response to COVID-19 through the BISP scheme.⁷

Key gaps and opportunities

Coordination and institutionalization

While several actors are already involved in AA in Pakistan, the main gap in coordinating AA and SRSP with the government lies on the division of authority between the national and provincial levels in DRR and response. There are sometimes issues on disaster data management resulting from variances in sources of information used by national and provincial level authorities. This is further complicated by regular turnover in government agencies, requiring repeated orientation of new staff on AA and SRSP. With a main goal of institutionalization of AA approaches into government systems, FAO, through the PPP and its role as foreseen role as joint-convenor of AA WG, will actively promote government leadership from the onset.

The relative newness of AA as a conceptual approach and limited exposure to the mechanisms, along with an increasing number of actors in the sector, also remains a challenge. An important strategy for agencies working in AA and SRSP will be to ensure consistent presence and support for federal level coordination, while maintaining necessary technical support at the field implementation level.

One opportunity to reinforce the coordination in AA between humanitarian or development partners and GoP is to convene at national level an **extended TWG on AA** - either based on Start Network DRF Steering Committee, which includes NDMA, or through DRR AA WG under the Regional Coordinator's office. Such a coordination structure would contribute to the alignment of the methodologies between partners, to the sharing of learning including on early warning (EW) methodologies, and to the engagement of the GoP in scaling up the approach. The START Network partners have also recently made significant advances in the development of a national-level **AA dashboard**, which will be launched with NDMA to coordinate AA actors. This very promising development has immense potential to be expanded with the participation and contribution of key GoP line ministries and partners.

The structural division of authority between the national and provincial levels, has led to a good deal of implementation and institutionalization efforts being conducted through PDMAAs for AA and SRSP. The work already undertaken by FAO and NDMA partners in Sindh

has been **highly effective in establishing coordination mechanisms**: for instance, the project established regular multi-sectoral reviews of indicators and triggers which benefitted a wide array of stakeholders. A provincial coordination structure will be proposed at Sindh level, through the leadership of PDMA and FAO, to complement the national TWG on AA: by bringing in relevant line ministries, it will help align approaches and institutionalize AAP.

While the initial work on drought AA was successful, the list of indicators and triggers is now being refined as there is **a need to focus on fewer, more critical indicators and data sources**. This process has highlighted technical gaps in the data gathering and analysis for key drought indicators, prompting FAO to bring in the technical assistance of the Regional Institute for Multi-Hazard Early Warning Systems to assist in further development of early warning systems (EWS). The Organization will bring in a wealth of experience in data source management and analysis, and as well in making indicator and trigger data available to stakeholders for decision making, through the AA dashboard set up by the START Network.

The Asian Development Bank (ADB) and WB have recently committed technical resources to support initial work on AA and SRSP coordination and government capacity building. The **Sindh Resilience Project** funded by WB is being implemented by the Sindh Irrigation Department of PDMA in Sindh with the aim to mitigate flood and drought risks in selected areas and strengthen the government of Sindh's capacity to manage natural disasters and public health emergencies. The continuous sharing of lessons learned, and the subsequent improvement of triggers and response performance, must be targeted to these emerging and significant partners.

Geographic and hazard scope

While Sindh province is well covered by existing AA projects, there is room to expand AAs to new areas. For instance, Balochistan is particularly vulnerable in terms of drought (and flash floods), with most of the drought-hit areas of Balochistan facing crisis or emergency levels of food insecurity (Phase 3 and 4 of the Integrated Phase Classification).

Triggers

FAO's strong relationships and connectivity to relevant line departments (i.e. Agriculture Extension, Livestock, Public Health Department and Water Management) can be leveraged to ensure the systematic provision of monitoring data to support the decision on triggering AA in case of any shock being forecast.

Anticipatory action and shock-responsive social protection delivery

As co-conveners of the Cash WG (CWG), FAO and ACTED are leading discussions and initiatives related to mapping local stakeholders working on cash transfer programming, national collaborations with Telenor and Easy Paisa, development of national emergency guidelines for the usage of cash in collaboration with OCHA and NDMA, and harmonization of Cash programming wage rates in Sindh.

Technical support for beneficiaries' registries development, agreement and tracking could best be managed through existing structures. FAO's role of co-lead of **CWG affords an opportunity to promote the adoption of AAP** amongst food security and livelihood partners. Key actions to take forward include:

- Conducting an AA capacity assessment for all CWG partners to identify gaps and needs.
- Developing tools or actions and conducting training for the CWG to set up unified beneficiaries registries that include all the vulnerable households potentially impacted by an upcoming extreme event.
- Identifying EWS or indicators for different emergencies and developing common hazard calendars (agriculture seasonal calendar and related diseases) to issue alerts or warnings prior to the actual events.
- Conducting evaluations and studies into the role of cash in the execution of AAP in various national contexts.

The AA and SRSP for rapid onset events require a wide range of readiness activities, such as pre-identification of beneficiaries (including those who are not yet covered by the government SP system), pre-agreement with suppliers including financial service providers or remittances companies when considering (digital) cash transfers, or sometimes prepositioning of material. Some

lessons were drawn recently from the cash distribution under the COVID-19 response, including: slow approval processes, access to the financial service provider for cash transfers, availability of qualified vendors and restricted movement to target communities. All of the above may be challenges faced in AA as well.

One gap in SP programming is that despite the establishment of different organizational structures at the provincial levels, the implementation and coordination for key SP schemes remains at the federal level. The PPP will be instrumental in clarifying roles and responsibilities at provincial level by pilot-testing the use of SP and NSER in anticipation of a drought, or flood impact, with an expanded registry of SP beneficiaries.

Financing

Aside from FAO's Special Fund for Emergency and Rehabilitation Activities and the Start network DRF, there is limited funding available for AA in Pakistan. The support provided by ADB and WB to the Sindh Resilience project could be an opportunity to bring in new funding.

FAO will advocate to integrate AA (for drought and flood) into the multi-risks **Rapid Preparedness Response Plan being currently developed by UNDP** as the lead of the Regional Coordinator's DRR AA WG. It represents an opportunity to advocate for the allocation of some portion of emergency funding towards the AA window, with for instance CERF for AA (being currently tested in Bangladesh and Philippines).

Collection of evidence

The links between researchers, policymakers, and the communities in evaluation and promotion of EW early action protocols and indicators is a recognized gap. Evidence-based advocacy support in the integration of EWs and AA into public policy will support in strengthening national capacities for multi-hazard early warning and response systems in Pakistan.

Expected results: year 1

Against this background, DG ECHO and FAO launched the PPP on "increasing capacities and scale for anticipatory action including through social protection systems". Below are the expected results of year 1 activities in Pakistan.

Result	Activities	Deliverables
1. Anticipatory action systems are established and the capacity of national governments, humanitarian partners and local stakeholders to link early warnings to AAs is strengthened.	<p>1.1 Identify end-user needs regarding how EW information can inform site-specific AA in light learning from initial work and experience in Sindh.</p> <p>1.2 Assess risk and humanitarian needs, prioritize hazards and vulnerable target populations. Identify or develop EWS and related AA triggers.</p> <p>1.3 Develop AAP including clear risk monitoring, trigger mechanisms, protocols, and responsibilities, as well as pre-allocated flexible financial resources.</p> <p>1.4 Strengthen national and local capacities to develop, monitor and implement AA systems.</p>	<ul style="list-style-type: none"> Evaluation Report on existing EWS and End-User Interface Technical study and action plan for flood EWS development One updated AAP for drought 70 partners trained 250 persons involved in the development of the AAP
2. Social protection systems are strengthened in terms of anticipatory capacity to allow national governments, humanitarian partners and local stakeholders to link social assistance programmes with humanitarian cash and cash+ mechanisms.	<p>2.1 Assess national social protection systems (policy, programmes and operational mechanisms) related to national policies to manage risk (this will include looking at disaster risk management and disaster risk reduction strategies) and link with humanitarian plan.</p> <p>2.2 Define suitable options to strengthen anticipatory capacity of national SP and/or humanitarian cash programmes.</p> <p>2.3 Organize national capacity development events on shock-responsive social protection and cash programming to channel anticipatory action.</p>	<ul style="list-style-type: none"> One operational SP and AA study and feasibility assessment Pre-determined financing plan for trial area with an aim to increase beneficiary coverage by a percentage agreed with the GoP for proof of concept and replication in subsequent years
3. FAO and DG ECHO partnership is enhanced so that multi-risk anticipatory actions are implemented, including via expanding or complementing national social protection systems, to protect lives and livelihoods ahead of a shock.	<p>3.1 Write the country PPP concept note jointly with DG ECHO.</p> <p>3.2 Regularly update the PPP steering committee on progress made.</p> <p>3.3 Carry out preparedness or readiness activities to ensure the timeliness and effectiveness of AA.</p> <p>3.4 Activate AAP if pre-defined EW triggers are reached or carry it out at a smaller scale through a simulation exercise as proof of concept in year 1.</p>	<ul style="list-style-type: none"> One concept note and corresponding work plan One readiness plan for drought AAP Activation Report
4. Learning and advocacy products are produced to improve future programming and accelerate a system-wide shift towards an anticipatory approach to disasters.	<p>4.1 Integrate a multi-risk approach into all programming.</p> <p>4.2 Produce learning, advocacy and communication products, including based on the results of impact analyses and/or feasibility studies.</p> <p>4.3 Support global and regional advocacy and policy engagement to bolster evidence-based decision making and uptake of AA and shock-responsive SP by national and Intergovernmental entities.</p>	<ul style="list-style-type: none"> One impact analysis One learning and advocacy product with year 2 action plan on recommendations

Way forward

The inclusion of Pakistan within the PPP offers a valuable opportunity to develop capacities further, gather evidence and lessons learned in the unique context of the country. The division of authority between federal and provincial levels is noted as the major challenge to achievement and will require **focused coordination and advocacy of government and partners**. The harmonization of indicators and triggers amongst partners and the mechanisms used for this purpose may be replicated in-country and regionally.

The government prioritization and investment in the **Ehsaas Network of Social Safety Net Programming** also provides an opportunity to build synergies and harmonization from the onset of these new programmes. The Kissan "Farmer Card" Programme will allow for learning of AA impact on government livelihoods support

through SRSPs. The pilot testing of SRSP systems will also provide concrete learning on its feasibility, for either a slow or a rapid onset event.

Focusing on Sindh province with FAO's existing AA programme and agreed indicators and triggers, provides an opportunity to benefit from a revision of indicators based on actual use and performance. It is also a great opportunity to coordinate further with the Sindh Resilience project of ADB and WB, as well as with the Start Network DRF intervention, to develop robust trigger methodologies for drought and flood, and maximize the efforts of all the partners.

The three-year structure of the current PPP will allow for learning from the improvement of these systems and integration into government systems from year 1.

Notes

¹ **Germanwatch**. 2021. *Global Climate Risk Index 2021*. Berlin, Germany. germanwatch.org/en/19777.

² **Jinnah Institute**. 2013. *Year in Review*. Pakistan

³ **Office for the Coordination of Humanitarian Affairs**.

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⁷ **The World Bank**. 2020. *Responsive Social Protection Program and Systems to Serve Pakistan's Poorest People*. <https://www.worldbank.org/en/results/2020/12/09/responsive-social-protection-program-and-systems-to-serve-pakistans-poorest-people>



FAO's Anticipatory Action approach uses risk analysis and forecasts to trigger interventions before a crisis escalates into a humanitarian emergency.

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