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Forewarned, but not Forearmed?

Lessons for the Recent Floods in Pakistan from 2010¹

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Pakistan is witnessing some of the worst flooding in decades. With over 33 million people already affected directly, the scale of the catastrophe presents an enormous challenge to the Pakistan economy and its people. Occurring in a context of global recession, political instability, macroeconomic volatility, and the pandemic, the timing couldn't have been worse. This year also marks 12 years since the cataclysmic flooding of 2010; until now the country's worst natural disaster in history that ravaged terrain and infrastructure over "an area the size of England," affected over 20 million people in its path, and resulted in damages of the scale

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of 5.8% of the preceding year's GDP. The sheer scale of the 2010 calamity provoked a large response from government and donor agencies at the time and prompted deep inquiry in the natural and social sciences on its occurrence and impact, generating a wealth of knowledge for the future.

In this note I reflect upon the findings from some of the research on the 2010 floods in Pakistan that can potentially inform thinking and action in the current tragedy, focusing on social protection and disaster response measures. This comes with a strong personal motivation for me; my doctoral research between 2011 and 2016 focused on household behavior in the aftermath of the 2010 Pakistan floods and deepened my interest in the impact of intersecting and recurrent shocks on households.

Finding 1. **Building Social Protection** and Disaster Relief Systems and Capacity in regular times pays off during a crisis

Access to formal programs and social protection systems, can critically enable the rollout of a large-scale damage compensation. Much of the literature on shock-responsive and adaptive social protection invokes two types of program expansion in the aftermath of a shock - horizontal (increasing the number of recipients to include the larger numbers of people with needs for support), and vertical (increasing the quantum of *support* to enable existing recipients to meet greater needs in crisis). Both forms of expansion require the existence of a social protection and/ or citizen registry system that can be used to channel cash and in-kind assistance. On this front, Pakistan was somewhat well-placed in 2010, with a good coverage of the poverty-targeted flagship Benazir Income Support Programme (BISP). In some districts, benefit amounts for BISP recipients were temporarily increased to help them meet contingencies arising from the flood, serving as a textbook example of vertical expansion. The initial response in 2022 seems to already build on existing systems such as the BISP for targeting immediate relief.

However, in 2010, additional capacity had to be mobilized to set up the Citizen's Damage Compensation (CDCP – or more popularly, Watan) Programme. In contrast to the BISP which pre-dated the 2010 floods, the CDCP (Watan) program, set up a new cash-based damage compensation program. It relied on the registration architecture developed by NADRA as well as home visits to assess flood-induced damages. Since 2010, Pakistan has strengthened its civil registration and payment systems, and is now better placed to rely on existing databases to undertake enrollment and disbursement of especially cash assistance. Other good practices from 2010, involved tailored outreach and communications deployed in the CDCP.²

The experience from 2010 underscores an important lesson: that investments made upfront to establish and sustain large-scale social protection systems can have a huge pay-off when disaster strikes. The time to repair the roof is indeed, when the sun is shining.

Finding 2. Pre-flood Inequities affect both, exposure to shocks and the trajectory of coping and recovery

Shocks such as the floods in Pakistan, by their very definition, reflect a disruption of familiar patterns. Yet, so much of how a disaster plays out depends on the **initial conditions of individuals**, **households**, **and communities that may exacerbate**, **or reduce their vulnerability to flooding**. Communities residing in precarious dwellings and in low-lying areas are typically more vulnerable to floods.

In the 2010 floods, traditionally vulnerable groups were also less likely to receive flood relief. Research has shown that in the 2010 floods, traditionally marginalized groups including women, rural communities, and displaced persons (especially those not living in designated

² Seyfert and Ahmed (2020), pp. 54

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flood relief camps) were more likely to be excluded from disaster relief.

Finding 3. Recovery from Flooding implies different forms of support to affected households over time

Affected households and communities may sequentially require immediate relief, followed by support for relocation and return, and compensation of losses, but the duration and timing of various kinds of support needed could vary. The types of support needed, in large part be determined by households' initial capacities as well as the extent of flood damages suffered. Consequently, people's expectations of relief and reconstruction efforts will hinge on their needs at a given point in time, and the extent to which these are being bet. A study by Kirsch et al. (2013) found overwhelming (> 80%) dissatisfaction with relief efforts in 2010. What did however correlate with higher satisfaction in the first month after flooding was receipt of food, hygiene and household items. After 6 months, the receipt of medicines also correlated with greater satisfaction. However, the study also found a high prevalence of unmet needs 6 months after flood exposure and as relief efforts were being wound down, as some households may require longer durations and different types of support to compensate the loss of their productive assets.

Finding 4. Large-scale flooding can harm people's mental wellbeing (in addition to their physical health and economic condition), but timely action can limit such effects

A disaster of such large proportions such as this can hardly be expected to leave the people and economy unscarred. Likely effects range from the obvious (damaged physical infrastructure, cropland) to the secondary (physical and mental health, livelihoods, human capital more broadly) and the less apparent. The latter includes, critically, aspirations

that have been shown to affect long-term development and poverty-reduction. Research by Katrina Kosec and Cecilia Mo at IFPRI shows that the 2010 floods had a damaging effect on rural people's aspirations, but also that the CDCP was able to attenuate these effects by "easing mental burdens, and thus raising aspirations for the future."

Finding **Social** networks matter immensely for households coping with natural disasters

People rely heavily on their social networks for coping in times of need. These prove particularly critical for flood-affected families seeking to migrate temporarily or to borrow money to meet contingencies, for instance. Support from social networks can greatly supplement the assistance provided by formal government and humanitarian agencies. Akbar and Aldrich (2017) found that social capital measures were strongly related to post-flood recovery in 2010, and argue that in responding to natural disasters, attempts should be made to ensure that affected people are able to maintain their networks of friends, family and neighbors. This may be done, for instance, by allowing greater autonomy to people in choosing their location within flood relief camps, providing mobile and phone connectivity where this may be disrupted, and supporting people to migrate temporarily to join extended family and community members. Semple (2011) also provides a useful reminder of the need to uphold human dignity and move from patronage-based to an entitlements-based access to disaster relief.

Finding 6. Security Risks may affect displaced communities, and people's access to flood relief

Security concerns are another critical underlying factor that can affect the trajectory of disaster response and mitigation. In my own research I found

that pre-flood exposure to violent conflict, reduced the likelihood of affected households receiving cash transfers from government programs, potentially due to opposition and scuttling from non-state armed groups that may resent the state's outreach to the population through such programs. In contrast, the reach of local NGOs and charities, though smaller in scale, did not seem to be affected by pre-flood conflict. This underlines the potential value of partnering with such organizations for delivery of assistance in violence-affected areas in the current crisis. Security concerns may also dictate the choice of implementation partners for last-mile delivery. During the 2010 floods, several commercial banks were unwilling to operate in conflict-affected areas because of security risks involved during the replenishment of cash, requiring the National Bank to undertake payment operations and provide their own security. Another concern to be mindful of during the first few months after the flood, is the likely spike in crime and insecurity within communities, as was documented in 2010. Crimes may stem from the loot of abandoned properties, aid, and assets, and perceptions of insecurity when people have to live in relief camps rather than in their own homes. Over time, this can result in social breakdown and can also prevent people from leaving their homes in flooded areas even when the floodwaters present clear dangers. The proactive provision of security would be critical for both relief camp and regular residential settings.

Finding 7. While Remittances can serve as a means of informal social protection, security and investment considerations may limit or mediate their reach.

Remittances can be a critical lifeline to those in need. While remittances tend to respond counter-cyclically to shocks such as flooding, in another part of my doctoral research I found that remittances were in fact lower for households in communities affected by conflict before the 2010 floods. I postulate that this could be because of diminished investment prospects for those sending remittances in areas affected by conflict. In other words, the prospective

development path for an area in the future could itself affect the receipt and purpose of remittances. Exposure to violent conflict, a factor that diminishes economic prospects, can therefore limit people's access to this important source of support for coping.

Finding 8. Natural Disasters can enhance political awareness and activity

The 2010 floods had important political ramifications. A detailed study on the effects of the 2010 floods on voter turnout in the 2013 national elections found strong evidence for higher voter turnout, especially in areas with lower ex-ante flood risk. With elections expected soon in Pakistan this time around, the effects of the flood and the state's response to it will not only shape the political discourse, it is also likely that newer and more voters may participate in the electoral process. Another observation following the 2010 floods was the emergence of what Ayesha Siddiqui terms 'digital citizenship', characterized by the overlap of informal citizen-state interactions with formal policy, and enabled by the rollout of assistance using digitization and financial outreach through ATM cards.

What Lessons can we draw from the Rollout of Flood Relief in 2010?

The experience of the 2010 flood relief and rehabilitation rollout provide important recommendations for responding to the 2022 floods in Pakistan, and indeed for a range of other settings.

- First, Investments in Governance and Delivery Systems pay off during a crisis. Well-defined and functioning social protection systems offer the basis for reaching out to poor and vulnerable populations in times of need. While building such systems requires time, resources and coordination across institutions, such investments made during regular times prove critical when disasters occur.
- Timely and substantial social protection or disaster relief transfers is critical. In the aftermath of flooding, timely and adequate cash and in-kind support can help affected communities meet immediate needs, as well as ease mental burdens and protect people's productivity in the longer term.
- Underlying economic and social Inequities need to be overcome through better outreach to, and the inclusion of traditionally excluded groups. Groups such as Isolated communities in remote and rural areas, women, and especially women-headed households, and displaced households that are not living in camps may be more likely to be excluded from relief and rehabilitation efforts. Relief managers should pay special attention to vulnerable groups to take steps to ensure their inclusion in relief and rehabilitation and address the barriers they may face in accessing programs or assistance
- Relief and Recovery Timelines should be informed by people's needs. In the ongoing crisis, relief efforts (and consequently funding and capacity needs) should not be planned for any arbitrarily determined length of time but should instead base the

duration of support on assessments of households' needs and the pace of recovery.

- Security Risks Need to be Understood and Mitigated Against. Conflict-affected areas may pose additional and different challenges to the rollout of assistance to flood-affected populations. Pre-existing security risks need to be considered more carefully and in advance while planning relief and rehabilitation efforts this time round. This implies the appropriate choice of delivery mechanisms, implementation partners and security provision for the rollout of disaster relief and during reconstruction, especially in camp settings.
- over the medium term, rebuilding destroyed capacity physical, human and social will be critical for future resilience, including building back better. While immediate efforts will have to focus on providing basic necessities food, shelter, sanitation, in the medium to long term, other requirements will need to be addressed. The indirect fallout of flooding disease, crop loss, disrupted schooling, damaged infrastructure, will all contribute to an erosion of the productive capacity of the country. Over time, relief must give way to reconstruction, and critically, building back better, to reduce the human contribution to the factors that may have accentuated the damages from flooding.

As shocks arising from climate change patterns increase in intensity and frequency, we cannot afford to ignore the lessons they have taught us to be better prepared for their recurrence. Learning from the 2010 floods is as important for governments, donors, and humanitarian and aid agencies, as it is for poor and vulnerable households who simultaneously bear the brunt of nature's fury, human errors of omission and commission and a limited means of coping.

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