Community Coping Capacity after Disasters

Executive summary

This study, conducted during June 2014, provides an overview of how communities from Kashmore, Qambar Shadadkot, Jacobabad and Shikarpur — the four most affected districts in northern Sindh following the 2012 floods — recover after flooding, the challenges they face and the coping strategies they employ. Throughout the study there was a particular emphasis on shelter reconstruction as part of the recovery process, though questions about WASH, protection, health, food security and education were also included in the data collection to provide a broader view of assistance and recovery.

Data collection for the study comprised two parts — formal interviews and direct observation. Fieldwork covered 189 villages to achieve a 90% confidence level and 6% margin of error. In each village study teams identified a primary key informant (KI) to act as a spokesperson on behalf of their community. The study was designed as an initial, exploratory survey to highlight trends in recovery, residual needs and capacities to cope at the community level. Areas for further study are highlighted throughout the report and require deeper analysis through household-level surveys.

Findings show that the main coping strategies employed by communities involved means to increase their capital in order to both rebuild their shelters and provide for basic needs. These coping strategies, though necessary at the time, often impacted negatively on families’ longer term livelihoods and resilience. If provided relief assistance in the form of shelter support, training and/or cash grants, the need to source capital decreased and fewer livelihood-eroding coping strategies were engaged. Training on and subsequent use of disaster risk reduction techniques for shelter construction was found to have a significant impact on the capacity of communities, providing evidence to support the use of ‘building back safer’ approaches.

Background

Almost 3 million houses have been damaged or destroyed by successive floods in Pakistan since 2010, causing the displacement of millions of people and creating a huge demand for emergency and recovery assistance. Recovery efforts are ongoing but remain limited in response to the 2012 floods, with shelter support covering only 20% of the estimated 382,172 affected families across eastern Balochistan, southern Punjab and northern Sindh. In 2013, floods of lower intensity affected the same areas again, hindering recovery from the previous year’s disaster and creating new needs. Disaster recurrence has considerably impacted the capacity of affected families to recover and prepare for future events, particularly in areas hit by floods multiple times over the past four years.

Within affected areas, some communities were provided assistance through humanitarian and recovery interventions while others were not. Both assisted and unassisted communities relied on a variety of coping strategies to recover from the disasters.

This study examines relationships among disaster recurrence, displacement, assistance, disaster risk reduction, coping strategies and recovery in the context of flood-affected communities in northern Pakistan. Particular emphasis is given to shelter assistance and recovery support provided by a variety of organisations under the umbrella of the Shelter/Non-Food Items (NFIs) Cluster.

During the flood disasters covered in the study, the Shelter Cluster’s strategy for relief and recovery advocated maximum outreach with minimum resources, encouraging re-use of salvaged materials and distribution of emergency items that would continue to provide valuable support during the recovery phase (i.e. plastic sheeting, bamboos).
Methodology

The study was conducted in the four districts of northern Sindh most affected by the 2012 floods, based on damage estimates from the National Disaster Management Authority (NDMA) and the Provincial Disaster Management Authority (PDMA) of Sindh, as compiled in the Shelter Cluster Pakistan database. Selected districts were Jacobabad, Kashmore, Qambar Shahdadkot (Qambar Sh.) and Shikarpur. These districts were selected because they have been repeatedly impacted by floods, including in recent years, and some of the affected communities have received relief and recovery assistance from humanitarian actors.

Selection of Union Councils
At least three union councils from each of the four districts were selected according to the below criteria:

- At least 70% of houses damaged by floods in 2012, including at least 25% fully destroyed
- Population displacement reported as a result of floods in 2012

### Table 1

<table>
<thead>
<tr>
<th>District</th>
<th>Union Council</th>
<th>Emergency Support?</th>
<th>Recovery Support?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jacobabad</td>
<td>Nawra</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Kot Jango</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Rind Wahi</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Kashmore</td>
<td>Kajli</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Kumb</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Daulatpur</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Qambar Sh.</td>
<td>Aitbar Khan</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Chandio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shikarpur</td>
<td>Zarkhil</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Jahan Wah</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Hamayoon</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

### Data was collected in two parts:

1) Interview with key informants
2) Direct observation to corroborate responses, with a focus on current living conditions in the village

### Figure 1

![Vulnerability analysis graph](image)
The findings of the study indicate that despite the assistance programmes and resources deployed during recent floods (2010, 2011 and 2012, as well as those prior to 2010), there are residual needs in affected communities which have not been addressed. These unmet needs reflect the cumulative effects of multiple floods and highlight gaps in assistance which are still prevalent years after the disasters.

Findings indicate financial capital as the highest need for communities in the aftermath of disasters. Financial capital is required to cover basic needs such as food, water and health care in the emergency phase and then is required to cover both basic needs and shelter reconstruction during recovery.

The six most common coping strategies identified in the study involve means to source capital. As the financial costs of recovery increase over time, so does the debt. Selling livestock or personal assets has sustained consequences, weakening future resolve by relinquishing longer term income generating assets in order to address more immediate needs (see pages 9-10).

Unassisted communities engaged more often in coping strategies that could erode their capacities in the long term, as they needed to raise resources (both financial and material) to rebuild on their own. They more often sold livestock and belongings and accumulated more debt. They cited more financial barriers to rebuilding than those who were assisted, noting in particular a lack of skilled labourers and building materials (see page 11).

Assisted communities faced reduced pressures to source funding for their shelter construction. Cash grants, skilled labour, building materials and trainings were all part of shelter intervention programmes, and findings showed it was the combination of modalities that helped reduce the financial burden on families. In fact it was reported that some community members experienced ‘upskilling’ and could use newly acquired abilities to earn income as skilled labourers in the future (see page 11, 13).

Assistance provided by Shelter Cluster members in the form of training on disaster risk reduction (DRR) techniques was found to have a significant impact on the capacity of communities to recover. There was a positive correlation between the number of communities that were trained and the number of communities that used flood-resistant techniques when rebuilding their houses. This also linked to an increase in communities citing that their housing conditions were better after the flood, as compared to before (see pages 13-14).

Fewer houses were damaged or destroyed in subsequent disasters due to the use of flood-resistant techniques during reconstruction. This offers some evidence to support the long term value of ‘building back safer’ initiatives and highlights a need to offer more DRR programming both after floods and in the downtime between flooding events to reach more communities and enhance resilience (see page 14).

On average, unassisted communities rebuilt more quickly but with fewer or no DRR techniques as compared to those who were assisted through shelter programmes. They perceived their reconstructed houses to be worse in quality than their original houses before the floods (see page 14).

Findings evidence that the resilience of households and communities to floods and other shocks can be significantly strengthened through adequate cash and shelter assistance, informed by a thorough understanding of various types of capital (financial, natural, human, physical) and lack thereof (see page 16).

Key findings

The six most common coping strategies involve sourcing financial capital for recovery:

I. Contracting debts
II. Selling livestock
III. Selling personal belongings
IV. Selling salvageable materials
V. Searching for employment
VI. Selling productive assets
The study aimed to identify factors influencing coping capacities in communities that have been affected by flooding one or more times. As Figure 2 shows, 15% of communities were affected by one flood, 69% experienced two floods and 14% three floods. In the union council of Khabar in Qambar Sh., 59% of communities were affected by three different floods — significantly higher than the overall average. This can be explained by its location at one of the most southerly points in a low-lying, flood prone area. KIs in Khabar recalled flooding in 2007 as well as 2010 and 2012.

A vulnerable 2% of assessed communities have been affected by flooding four times, including prior to 2010. 17% of KIs in Jahan Wah union council in Shikarpur district reported facing floods four times, due to the positioning of villages along the low-lying, flood prone areas and the numerous canals passing through the union council. It would be interesting to understand why these families remained in such a vulnerable area over many years.

94% of KIs reported their communities were affected by the 2010 floods and 89% by the 2012 floods. A similar number of communities were affected each time in Jacobabad and Shikarpur districts. In Qambar Sh. 55% more communities reported being affected in 2010 as compared to 2012. The district is located at the most southerly point of northern Sindh and, as the 2010 flood damage was largely caused by riverine flooding, Qambar Sh. received the cumulative impact of the overflowing of different rivers. Kashmore saw a 21% decrease in affected villages in 2010 as compared to 2012, potentially because the rivers bypass most of the union councils (see Figure 6).
Overall 85% of the communities surveyed were affected multiple times, of which 44% received assistance and 56% did not. Only 11% of communities were assisted more than once, following floods in both 2010 and 2012.

98% of the 189 assessed communities reported displacement at least once during the period covered by the study (meaning that some or all households within the community were displaced). According to KI reports, 38% of communities assessed were displaced once and 53% were displaced twice (see Figure 4). 7% of KIs reported their communities were displaced three times. No one reported communities being displaced four times even though 2% were flooded four times (see Figure 4). An important finding indicates that displacement was not an automatic consequence for flood affected communities; not all communities were displaced every time they were affected by a flood.

It would be useful to develop further understanding of how communities cope when they are not displaced — for example the 23% who were affected by floods twice but only displaced once (see Figure 5). Are they able to stay in their homes, or reside on a different part their land, and if so why and what type of accommodation can they access? Is it linked to income and livelihoods, i.e. landowners have more access to unaffected areas? Alternatively, it could be a consequence of negative experiences in camps during previous floods, which would make families reluctant to move back to camps.
Early warning

Early warning systems can play a key role in reducing material losses and saving lives during a disaster, thereby increasing communities’ coping capacities and resilience. Where there is advanced warning of a disaster, people prepare before crisis strikes, either through evacuation or protective measures to reduce impact and losses. The findings of the study indicate that few early warning systems were established in the communities, with flood alerts being the most common early warning measure.

31% of KIs reported receiving warnings of the floods in advance. As Figure 7 shows, 29% of communities received warnings of the 2010 flooding, 7% in 2012 and 2% before 2010. No warnings were received in 2011, probably explained by the fact the flooding was not severe in northern Sindh during that year. The difference in warning levels between 2010 and 2012 could be due to the slow onset of floods in 2010, which were linked to the overflow of rivers, as compared to the ones in 2012, which were largely due to unpredicted heavy rainfall. Of the 31% of KIs who reported their communities were warned, the majority (92%) said their communities moved away from the area of impact. Communities that remained took precautions to protect their livestock and assets.

Evacuation

Findings show that organised or assisted evacuation was not a common flood preparedness measure in the assessed communities. If/when made, evacuation requests were largely from community members and community based organisations, not government. In Jacobabad district, 80% of evacuation requests to communities were made by the community leader. Only 8% of KIs reported that their communities evacuated in response to a formal request. Only 6% of communities that evacuated were provided any assistance to do so.

Displacement

Displacement is a common consequence of natural disasters such as flooding, and impacts individual, household and community vulnerabilities and coping capacities. As seen in Figure 8, the flooding in 2010 proved the most disruptive, with 92% of communities reporting displacement. This reflects the scale and severity of the 2010 floods.

Displacement rates decreased to 62% of assessed communities following the 2012 floods. The only year when no displacement occurred was 2011, as northern Sindh was not affected by those floods. When asked to consider their last flood experience, 3% of KIs reported their communities displaced to a government-run camp; 19% moved to a public building such as a school or basic health unit; 25% settled on spontaneous sites ‘near’ to their village and 48% settled on spontaneous sites ‘far’ from their village (over 30km away – see ‘Location of displacement site’ on the following page).

Duration of displacement

The length of displacement is a key factor in assessing coping capacities as it indicates a break in traditional housing and livelihoods, which contributes to heightened vulnerabilities and delays the start of recovery activities. When asked about their last experience of flooding and displacement, 92% of KIs reported their communities were displaced for more than one month. 34% were displaced for more than three months, with the highest percentage from Qambar Sh. and Shikarpur districts. The longest duration of displacement was reported in 2010, reflecting the severity of the flood.
Reasons for displacement

The most obvious reason for displacement was the sheer amount of water, which was cited as a factor by all communities reporting displacement. Villages were either under water or surrounded by it. This was the underlying cause of all other reasons given for displacement (see Figure 9). When asked about their most recent displacement experience and why they were forced to move, 83% of KIs reported that their communities suffered destroyed/damaged houses (63% communities reported fully destroyed houses in 2010 and 54% in 2012).

Damaged crops and lost livelihoods were also cited by 67% of KIs as reasons for displacement. Lack of food in villages of origin, and a need to protect livestock and assets by taking them to a safer site, also proved common reasons for displacement.

59% of KIs reported some members of their community were left behind in villages of origin while the rest of the community was displaced. Protection of household items was cited as the justification in 73% of the cases. Other reasons included to protect livestock and salvage crops. In 7% of cases, KIs reported that some people were left behind because they were unable to move. It would be interesting for further studies to explore why they were unable to move and if that lack of mobility was associated with vulnerable members of the community (i.e. elderly, disabled, etc.). This could inform future emergency management interventions and vulnerability targeting.

Location of displacement sites

When asked about the last time they were displaced, over 50% of KIs reported their communities had to travel more than 30km to their displacement site. The highest number who reported travelling so far lived in Qambar Sh. and Jacobabad (62% and 63% respectively). The communities who travelled the least distance — under 5km — were from Kashmore, where over half of the displacement sites were located close to the village of origin. Reasons for location choices included wanting to stay close to home5, and having no other options available due to the extent of the flooding.

Living conditions

KIs were asked to rate the living conditions in their displacement sites. 88% indicated the conditions were ‘bad’. Common reasons included lack of assistance during the movement from place of origin to displacement site, as well as lack of food and livelihood opportunities. Most KIs said the displacement site was chosen initially because it was either close to the village of origin (and flood damage was not extensive), or because they did not receive any assistance to evacuate and therefore choose the closest or easiest-to-access place possible.

The remaining 12% reported conditions in their displacement sites were ‘good’. The reasons cited were mainly linked to provision of food, water and/or emergency shelter such as tents from the government.

Returns

When discussing returns a similar trend was observed in all districts. As expected, 90% of displaced communities returned to their village when the water receded. 40% also cited triggers such as the need to cultivate crops and livestock as reasons to return, and 33% went back because they were not receiving assistance at the displacement site. Anecdotal reports from KIs suggested the expectation of assistance could have affected the duration of displacement for some communities. People waited to be offered assistance at their displacement site and when/if it did not come, they moved back to their villages of origin.

Other push and pull factors included the onset of recovery activities in home villages, the spread of diseases at the displacement site and the in/accessibility of roads. Similar factors could also explain why displacement was not an automatic consequence for those affected by floods, as highlighted in the previous section on ‘Accumulative flood impacts’.

The 10% who had not returned at the time of the survey had found livelihood opportunities elsewhere or felt the area was too unsafe due to the risk of flooding in the future. Debts and a lack of resources to rebuild houses also influenced decisions not to return.

Overall the main reasons for site selection during any of the floods included the lack of alternative location options, the possibility to take livestock and assets to the site and the desire to stay close to places of origin. This is perhaps reflective of the lower scale of flood damage in Jacobabad in 2012, allowing for sites to be closer to the affected communities’ places of origin.

The main reasons for site selection during any of the floods included the lack of alternative location options, the possibility to take livestock and assets to the site and the desire to stay close to places of origin. This emphasis on the protection of livestock and productive assets, thereby safeguarding future earning potential, underscores how important these assets are to communities’ coping capacity in the face of disasters. This is validated in the previous section on ‘Reasons for displacement’, where it was identified as the main reason some family members are left behind in home villages.

Returns

When discussing returns a similar trend was observed in all districts. As expected, 90% of displaced communities returned to their village when the water receded. 40% also cited triggers such as the need to cultivate crops and livestock as reasons to return, and 33% went back because they were not receiving assistance at the displacement site. Anecdotal reports from KIs suggested the expectation of assistance could have affected the duration of displacement for some communities. People waited to be offered assistance at their displacement site and when/if it did not come, they moved back to their villages of origin.

Other push and pull factors included the onset of recovery activities in home villages, the spread of diseases at the displacement site and the in/accessibility of roads. Similar factors could also explain why displacement was not an automatic consequence for those affected by floods, as highlighted in the previous section on ‘Accumulative flood impacts’.

The 10% who had not returned at the time of the survey had found livelihood opportunities elsewhere or felt the area was too unsafe due to the risk of flooding in the future. Debts and a lack of resources to rebuild houses also influenced decisions not to return.

Previous displacements

Comparisons were drawn between communities’ multiple experiences of displacement to identify patterns in coping strategies. When comparing communities’ last displacement period with the one before that, about half of the overall respondents went back to the same displacement site and half to a new one. In Jacobabad, however, 75% of communities displaced a second time went to a different site. This is perhaps reflective of the lower scale of flood damage in Jacobabad in 2012, allowing for sites to be closer to the affected communities’ places of origin.
Emergency/relief assistance is fast-paced, reactive, short-term, and focused on meeting immediate basic needs and preventing morbidity and mortality.

In order to understand past assistance trends, respondents were asked to highlight the type of emergency assistance received during any of the flood periods covered in the study. 77% of KIs reported that their communities received some kind of emergency assistance at some point.

The most common form of assistance was food aid, followed closely by water provision, hygiene kits, emergency shelter and non-food items. Medical and education needs were least provided for during the emergency phase. Results indicate that communities received more than one type of emergency assistance. UN/NGOs and the government led the assistance efforts.

When asked about the most recent flood assistance received, the findings show that satisfaction levels when rating non-food items (NFIs) were over 90%. This indicates recipients found the item of assistance (the majority of which were hygiene kits, buckets, jerry cans and tents) helpful on some level. Apart from bedding and mats over half the communities rated items as ‘a great help’. This would suggest that NFI relief assistance, when received, corresponded with the needs of the affected communities.

**Access**

Access to emergency assistance is often challenging for people affected by disasters. According to the study findings, 72% of assisted communities faced barriers to access. This was consistently reported by KIs across all districts.

Numerous challenges were cited. 71% of KIs reported that community members without a computerised national identity card (CNIC) did not receive assistance. 70% indicated that even when assistance was received, it was insufficient in relation to the level of need, and 37% reported that fights at the assistance points prevented access. Other challenges included insufficient advance notice to alert communities of the arrival of assistance, unequal access for women and physical access barriers to reach designated distribution points from affected villages (see Figure 11).

**Impact of floods**

Flooding can inflict significant direct and indirect losses on vulnerable communities, in particular through the physical destruction of housing and the loss of crops and productive assets. The study findings showed that 99% of assessed communities lost houses (including both damaged and destroyed), 98% lost crops, 93% lost livestock and 60% reported a loss of livelihood opportunities. Further, 44% cited lost documentation such as CNICs. As highlighted in the preceding section on ‘Emergency assistance’, if families did not have CNIC documentation they were often prevented access to aid in the emergency phase. Other losses included damages to irrigation channels, schools, community infrastructure, hand pumps and roads as well as loss of personal belongings and productive assets (see Figure 12). These losses have a bearing on community coping capacities as the more families lose, the more they have to replace, increasing the costs of recovery. In the case of lost CNIC cards, delays in much-needed assistance may hinder families’ ability to recover at a crucial period when communities have limited resources and assets to cope are time critical.
Key problems families faced after the floods

The main problem faced across all districts, both at the time of return and currently, is food insecurity. A shortage of drinking water, lack of seeds and tools for land cultivation, and decreased fodder for livestock were also among the major problems faced in both phases. Findings show that for all but one of the issues cited (debt), severity decreased over the two years. This indicates that communities demonstrated some level of recovery, and coping strategies and/or assistance received were effective.

The fundamental problem, which significantly increased between the time frames, was that of debt. Over the two years, the number of KIs citing debt as a challenge for their communities increased from 13% to 61%. This reflects the mounting costs in a protracted recovery process. Communities need to borrow more to buy food, resources, building materials and assets as time goes on in order to survive, rebuild and cope after a disaster. Contracting debt is an example of a difficult-to-reverse coping strategy because it leaves a family more vulnerable to future disasters, in turn lowering levels of resilience.

One point of interest is that, although cited by 44% of respondents during returns as a major problem, the lack of documentation was not an issue at all for communities two years after floods. This suggests a process for acquiring new versions of damaged or lost documents. In turn this provides a level of support for families coping in the aftermath of a disaster. An efficient replacement process ensures communities can gain access to aid. In future, early warnings could incorporate key messages related to civil documentation, urging families to protect or rescue CNICs.

The findings of the study show that problems faced by families at the time of return remain similar to the ones faced by some families more than two years later, though with a notable recovery ratio for key problem areas. This was found across all districts. The most commonly reported challenges are displayed in Table 2.

### Table 2

<table>
<thead>
<tr>
<th>Key problem areas</th>
<th>Challenges (after water receded) %</th>
<th>Challenges (current) %</th>
<th>Recovery ratio (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Food</td>
<td>91</td>
<td>57</td>
<td>37</td>
</tr>
<tr>
<td>Lack of financial resources for most basic needs</td>
<td>59</td>
<td>25</td>
<td>58</td>
</tr>
<tr>
<td>Insufficient drinking water</td>
<td>52</td>
<td>36</td>
<td>31</td>
</tr>
<tr>
<td>Lack of seeds/tools</td>
<td>50</td>
<td>33</td>
<td>34</td>
</tr>
<tr>
<td>Insufficient/unavailability of fodder for livestock</td>
<td>44</td>
<td>24</td>
<td>46</td>
</tr>
<tr>
<td>Loss of documentation such as CNIC cards</td>
<td>44</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Difficulties accessing the market</td>
<td>43</td>
<td>29</td>
<td>40</td>
</tr>
<tr>
<td>Not managing to cultivate/sell crops as much as before</td>
<td>41</td>
<td>32</td>
<td>30</td>
</tr>
<tr>
<td>Inaccessible medical facilities/ medicines</td>
<td>40</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>No house/shelter to protect from heat/cold</td>
<td>40</td>
<td>20</td>
<td>50</td>
</tr>
<tr>
<td>Insufficient water for domestic use</td>
<td>28</td>
<td>16</td>
<td>43</td>
</tr>
<tr>
<td>No tools/material to repair houses</td>
<td>25</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td>Debts</td>
<td>13</td>
<td>61</td>
<td>-79</td>
</tr>
</tbody>
</table>

Coping strategies

Community coping strategies employed in the aftermath of the floods were similar across all districts and showed communities engaging in multiple activities simultaneously. This indicates that impacts following the flooding were too severe to be managed through only one activity. Figure 14 on the following page highlights the most common coping strategies employed by communities to meet their immediate needs after a disaster. The three main activities are borrowing money/contracting debts, selling livestock and selling personal belongings such as jewellery: reported by 84%, 77% and 55% of KIs respectively. Results showed that 42% of KIs reported that community members engaged in all three simultaneously, significantly eroding future income-generating potential.

Three additional coping strategies reported also involve ways of sourcing capital – selling salvageable materials from destroyed buildings, searching for paid employment and selling off productive assets such as tools and rickshaws. When asked why families prioritised these six main coping strategies, reasons reported by KIs across all districts were consistent: 99% said they needed to buy food, 92% said they needed to pay for health care and treatment, and 75% needed money to start repairing their houses (see Figure 13).
Given the cost of recovering from the impact and losses caused by disasters, and the livelihood disruption they bring, it is not surprising that the six main coping strategies relate to financial resources. However, resorting to multiple coping strategies that erode longer term capacities and resilience has serious implications for the success and sustainability of recovery. Families suffer heightened vulnerability as they decrease their opportunities for future livelihood activities. This highlights the need for continued and dedicated measures to address cash shortages in affected communities throughout response, recovery and risk reduction programming.

**Self-recovery initiatives**

**Building back**

Reconstruction of damaged infrastructure and buildings, and rehabilitation of livelihoods in affected villages, are key needs during recovery. The initial activities prioritised by communities immediately upon return to villages of origin following flooding were similar across all districts: 97% repaired their homes, 80% cleared or levelled their land, 79% removed rubble, 44% started cultivating crops, 37% cleared irrigation channels and 29% rehabilitated road access.

There was not a single community in which members were unable to engage in some sort of self-recovery initiative immediately after populations started returning home.
Housing needs and recovery

Shelter is a key component of families’ ability to cope after a disaster. The number of houses damaged by flooding over the years was similar across districts. In total, 63% of KIs reported that houses in their villages were fully destroyed in 2010, with those residing in Kashmore least affected. This decreased to 54% in 2012, with communities in Qambar Sh. the least affected.

The findings show that when recovery interventions (specifically hazard-resistant shelter trainings) were offered they largely targeted the needs identified by the communities themselves. Not only were they rated as helpful but the techniques were also applied when communities built back. This reflects that assistance in these areas essentially delivered what was needed, in order to support the communities through the recovery phases after the floods.

Rebuilding needs versus assistance

42% of KIs reported that communities received some assistance rebuilding their houses, with more support received after the 2012 floods, which badly affected northern Sindh. 25% of assisted communities received assistance in the form of a complete house, and the remaining 75% were given some support to rebuild – this aimed to enhance the capacity development and ownership of the communities through participation in the process. Overall 58% of the villages built back their houses with no assistance from external stakeholders. The main needs they faced were similar across all districts, indicating a set of common needs in shelter reconstruction. 95% reported a lack of capital to buy materials, 82% cited a lack of building material (it was not clarified if this figure indicates a lack of money to buy the materials or instead implies a physical lack of materials owing to everyone building back at the same time), and 53% reported lack of skills. The main types of assistance beneficiary communities received through recovery shelter programmes were in line with these needs. 70% of communities received skilled labour support, 54% were given technical training, 48% received building materials and 46% were given incremental cash grants over an allotted time period (see Figure 16). This use of different modalities in shelter assistance proved effective to fulfil the diverse needs reported by the communities.

Rebuilding costs for unassisted communities

Financial capital plays an important role in determining available livelihood options and coping strategies. It is to be expected that there are higher costs for those who rebuild their houses without assistance as compared to those who rebuild with assistance. For those in the study who rebuilt using their own resources, the findings show that the main sources of financial capital to pay for construction were similar across all districts. 83% of KIs reported that community members sold livestock and productive assets, and 75% reported cases of borrowing money and contracting debt (see Figure 17). 62% of KIs reported families in their communities engaged in both selling assets and borrowing money, rendering them more vulnerable to future disasters. The consequences of employing two livelihood-eroding coping strategies at the same time leaves households with even less resilience to face future crises.

The study found the same coping strategies are also used to meet immediate needs after a disaster. This implies that similar livelihood-eroding coping strategies are employed in both the emergency and recovery phases. Future interventions could apply this knowledge to better support vulnerable communities so they do not need to resort to activities with such long term consequences.
In addition to livelihood-eroding coping strategies, KIs reported that 29% of unassisted communities used free materials they were given or were able to salvage some materials such as timber posts, bamboo, girders and doors to help them in reconstruction and reduce the cost burden.

Communities that received assistance participated in reconstruction different ways (see Figure 18). Over 90% of KIs reported that assisted community members participated in the rebuilding of their houses.

In 23% of communities, beneficiaries plastered the walls of their shelters, in 15% of communities they built walls, in 11% they contributed skilled labour, in 4% they provided doors and windows, and in 49% they provided unskilled labour. Female participants contributed to reconstruction in 80% of communities.

As is evident from these findings, assisted community members predominantly participated by providing labour for reconstruction, which resulted in huge cost savings for affected households. By directly participating in reconstruction, individuals developed skills and required fewer financial resources, as they did not hire contract labourers. As a result, fewer families residing in assisted communities needed to sell assets or borrow money, leading to better recovery and increased resilience against future disasters.

**Figure 18**

**Community participation when assisted**

<table>
<thead>
<tr>
<th></th>
<th>Jacobabad</th>
<th>Kashmore</th>
<th>Qambar Shahdadkot</th>
<th>Shikarpur</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build walls only</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Provided unskilled labor</td>
<td>49%</td>
<td>49%</td>
<td>49%</td>
<td>49%</td>
<td>49%</td>
</tr>
<tr>
<td>Provided skilled labor</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Did the plastering of walls only</td>
<td>23%</td>
<td>23%</td>
<td>23%</td>
<td>23%</td>
<td>23%</td>
</tr>
<tr>
<td>Contributed with material</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
<td>11%</td>
</tr>
<tr>
<td>Provided doors and windows</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
<td>4%</td>
</tr>
</tbody>
</table>

**Time taken to rebuild houses**

The communities who rebuilt without assistance finished their houses more quickly than their assisted counterparts. 24% of unassisted communities took between one to three months to rebuild, 24% took between three and six months, 19% took over 6 months and 26% took over one year.

Assisted communities built back more slowly. Results highlight a delay in housing assistance: 15% of communities were delayed between three to six months, 19% were delayed between six and twelve months and 66% waited for housing assistance for over a year.

This is indicative of recovery assistance programmes commencing at least 6 months after the disaster. However, the quality of, and beneficiary satisfaction with, both assisted and unassisted housing reconstruction is also a relevant factor for consideration, as covered in the section ‘Housing conditions before and after flooding’.

**Disaster risk reduction measures**

**Unassisted communities**

KIs from unassisted communities were asked to reflect on the technical knowledge of community members. The findings reflect a similar level of assumed expertise across all districts: overall 44% of KIs felt confident that community members could rebuild their houses without assistance, training or guidance. The remaining 56% felt community members lacked the required knowledge. In 85% of unassisted communities, skilled labourers were hired during reconstruction. This again highlights the increased costs of rebuilding without assistance and the associated impact this may have on overall coping capacities (see earlier section on ‘Coping strategies’).

Overall, 45% of KIs from unassisted communities reported that community members tried to incorporate at least one technique to improve flood resistance when rebuilding their houses. It is encouraging to see an underlying grasp of some key DRR techniques as part of self-recovery. Interestingly the findings were consistent across all districts: 35% of KIs reported that unassisted community members built houses on a raised platform, 18% cited better plinths, 15% indicated stronger roofs and 12% cited thicker walls.

**Figure 19**

**DRR techniques used by unassisted communities**

<table>
<thead>
<tr>
<th></th>
<th>Jacobabad</th>
<th>Kashmore</th>
<th>Qambar Sh.</th>
<th>Shikarpur</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raised platform</td>
<td>35%</td>
<td>35%</td>
<td>35%</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>Deeper foundations</td>
<td>24%</td>
<td>24%</td>
<td>24%</td>
<td>24%</td>
<td>24%</td>
</tr>
<tr>
<td>Better Plinths</td>
<td>18%</td>
<td>18%</td>
<td>18%</td>
<td>18%</td>
<td>18%</td>
</tr>
<tr>
<td>Better Roof</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
<td>15%</td>
</tr>
<tr>
<td>Thicker walls</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Did not try/could build better</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
<td>55%</td>
</tr>
</tbody>
</table>

**Assisted communities**

In comparison, 88% of KIs in communities that received DRR technical training assistance reported that beneficiaries tried to incorporate the newly acquired training techniques when rebuilding or repairing their own houses or those of others. Again results were similar across all districts and followed the same descending pattern of use: 67% of KIs reported that community members built houses on raised platforms, 53% reported the use of deeper foundations, 51% cited building of stronger roofs and 48% indicated improved plinths.
Trainings

Training overall comprised guidance on building safer/resistant houses, repairing damaged houses and seeking safe shelter during a flood. 28% of KIs reported that communities received training assistance after a recent flood. Shikarpur received 21% less training than the other districts, and also reported 20% fewer people who used learning from trainings to rebuild.

The proportion of communities in which households implemented more than one DRR technique during reconstruction was much higher in communities that were assisted than in communities that were not assisted; 31% of KIs from unassisted communities reported application of more than one DRR technique versus 62% of KIs from assisted communities. This indicates that recovery interventions have made a significant contribution in advocating and training on the use of DRR techniques.

However, findings also reveal that 29% of KIs from assisted communities reported that families did not employ any DRR techniques when rebuilding. It would be useful to understand why some assisted communities did not apply DRR measures. Is it a gap in understanding the benefits of DRR, or a lack of financial resources or skills to implement recommendations? Training content and design as well as multi-sectoral recovery programmes could then better target needs, providing comprehensive and focused recovery assistance, in turn reducing communities’ vulnerability.

Training attendance

Overall, 63% of KIs reported that all community members could attend trainings, assisted or not (as opposed to trainings only being open to direct beneficiaries of a shelter intervention—a decision made by organizations and donors). In Kashmore only 36% of communities reported trainings were open to all, which possibly reflects the low number of KIs (only 28%) who reported any learning from trainings and claimed no one used the knowledge or skills to rebuild. For the other 37% of communities trained, restrictions were applied – only direct beneficiaries of a shelter programme could attend.

As expected, training attendance appears to positively correlate with use of, and knowledge of, DRR building techniques among communities, reducing vulnerability to future disasters.

Figure 20

Technical training usefulness and satisfaction levels

96% of KIs found the trainings ‘useful’. This is verified by the 88% of respondents who actually applied their learning. The high level of useable training content suggests that when received, shelter training is targeting the correct gaps in knowledge.

Anecdotal reports from KIs noted that the technical guidance not only gave them skills to repair their homes against flooding but also for some community members, gave them enough expertise to work as a skilled labourer when work was available, supplementing their income.

One consideration implied that although useful, the theory still could not be put into practice due to limited available resources. To that end, once again, combining training programmes with effective assistance modalities such as cash grants and conditional cash support could support recovery more broadly, including livelihood development and further dissemination of safer construction techniques, thus contributing to the building of more resilient communities.

The findings show a direct link between training and increased use of DRR techniques. This directly augments the ability of communities to mitigate future hazards. Increased housing durability leads to increased resilience within communities. Ensuring a focus on technical capacity building not only after disasters but also as part of ongoing disaster risk reduction programmes will support more communities to reduce their vulnerability moving forward.
Increasing the level of outreach of trainings in between disasters as well as in the recovery phase will contribute to making houses more flood resistant, reducing vulnerabilities in the future. This is evidenced through communities building back without assistance much more quickly than those who receive assistance—some waiting up to six months before they can rebuild. Therefore it is vital to increase trainings before disasters occur so these families already have some knowledge of how to build back safer when they start rebuilding. This would reduce suffering and facilitate timely, informed and safer self-recovery shelter activities following a disaster.

Note: When KIs (who attended trainings) were asked if the community would be able to rebuild flood resistant houses in the future without assistance only 20% said yes. This is despite positive reports regarding the outcome of the trainings. It would be interesting to know why so many expressed a lack of confidence rebuilding on their own even with DRR training experience. This could be linked to relief and recovery assistance structures and access to support in future floods.

Housing conditions before and after flooding

Worse than before

Unassisted communities were asked about the condition of shelters in their villages before and after the floods. KIs in 61% of communities revealed that, after rebuilding on their own, families felt that their houses were now worse than before. Only 39% of KIs reported that houses were of the same quality or better than before, with 78% of these citing that houses got damaged again in the next flood or storm. This could be expected when over half of communities building on their own did not use any flood resistant techniques (see previous section on ‘Disaster risk reduction measures’).

Other reasons cited for the deterioration in quality were financial: could not afford building materials and lacked skilled labour. Of the 39% of KIs who considered housing in their communities to be of the same quality or better than before, most said families had either built different types of houses or had paid for skilled labour.

Once again lack of financial resources is flagged as a major reason for the use of livelihood-eroding coping strategies, reflecting a relationship between lack of money and poor housing durability. Without adequate, resistant housing, resilience is compromised.

In comparison, only 32% of assisted communities reportedly thought their housing was worse after the floods, and 27% indicated that houses got damaged in a subsequent flood. The reasons cited were the same as those in unassisted communities: could not afford skilled labour or materials to fill in gaps not provided by assistance.

Better than before

Of the 68% assisted communities who thought their housing had improved, 37% were satisfied that they now had permanent houses, and 41% said their houses proved durable in subsequent floods (see Figure 21). These findings should be flagged as an indication that when trained and resourced, communities do build back better.

These figures could further be used during trainings or advocacy campaigns/training promotion (on leaflets, posters, radio announcements, etc.) to endorse DRR techniques and provide proof that building back safer is actually effective.

![Shikarpur district, Sindh © IOM 2014](image)

**Communities’ perception of reconstructed houses**

- People have permanent houses now
- Houses have been improved to resist future floods
- Houses seem more solid
- Houses resisted during subsequent floods

**Figure 21**
Key respondents reported that the number of communities with katcha (mud) housing since the most recent flooding has decreased by 17% — probably because the houses did not withstand the flooding. This is consistent with the overall 14% increase in communities with makeshift shelters after the flooding, suggesting a shortage of permanent, adequate shelter and perhaps linking to the delay in recovery shelter assistance (see ‘Time taken to rebuild houses’). KIs in most communities reported a majority of households living in one-room accommodation both before and after the floods, with only a 6% increase in communities with a prevalence of one-room accommodation after the floods. This increase can be linked to the 5% decrease in communities citing a predominance of two-room shelters overall and the 1% decrease in communities with three-room shelters — suggesting an overall decline in the quality of accommodation in affected areas.

Temporary housing arrangements

Some KIs reported that there are families in their communities still living in ‘unliveable’ or ‘uninhabitable’ conditions or temporary arrangements. The term ‘unliveable’ includes makeshift shelters and emergency shelters. Among unassisted communities, 28% of KIs indicated that families still reside in ‘unliveable’ conditions. Some 46% of these communities have suffered ‘unliveable’ conditions since 2010 and 54% since 2012. Reasons are similar across all districts, with lack of money and skills to rebuild most commonly cited.

Among assisted communities, only 12% of KIs cited families still residing in ‘unliveable’ conditions. The highest proportion of communities with ‘unliveable’ accommodation are in Kashmore (64%). Even when assisted, 30% of communities affected in 2010 and 35% in 2012 reported that families have not rebuilt. The reasons provided by assisted communities are similar to those of communities that received no help at all, with a lack of money and skills to rebuild cited as the biggest obstacles to recovery.

Overall, only 3% of KIs reported that their communities did not find assistance helpful. 58% reported the assistance (including training, cash, materials, skilled labour, etc.) to be a ‘great help’ (see Figure 22). The main reasons, similar across all districts, included increased knowledge of housing construction, an acknowledgement that without assistance the family would have been too poor to rebuild, and an increased number of new houses withstanding subsequent floods. In addition more of the families gained a permanent house which they did not have before. The main criticism from the 3% who did not find the assistance helpful related to the limited nature of support, which was not sufficient to cover all needs, and the long delays in arrival of assistance.

By directing more technical assistance in the downtime between flooding events for these vulnerable communities, families would be better equipped to cope when a crisis occurs, thus reducing the level of support and resources required from relief services when a disaster strikes.
Coping strategies after disasters are influenced by a variety of pre-existing factors and vulnerabilities, which cut across sectors and impact communities’ potential for self-recovery. These relate in part to the availability of various types of capital.

**Financial capital**

As highlighted throughout the study findings, lack of financial capital was repeatedly cited as a barrier to recovery following disasters. When asked to estimate the monthly income of families in their communities, KIs guessed around 3,000 PKR; however when asked about monthly expenditure the majority of KIs estimated approximately 15,000 PKR – over 60% of this on food.

KIs in 97% of assessed communities reported that the main source of livelihood for families is agriculture, followed by livestock and unskilled labour. Sale of livestock primarily profits landowners, who also own the livestock, leaving other community members with limited opportunities to generate income. Cycles of debt are common, even prior to the onset of disasters, which further strain available resources. Lack of financial capital is therefore not only experienced during emergency and recovery phases after a disaster, but is a sustained challenge facing families in many communities. The ‘upskilling’ of individuals through trainings could be useful to supplement cash flows when work is available (see ‘Technical training usefulness and satisfaction’).

89% of communities received cash assistance (not connected to the shelter assistance) following flooding; 86% of these received a ‘watan card’ and the remaining were provided with other types of cash assistance. KIs in 87% of communities reported that families bought food with the cash assistance, 72% cited health care or medical expenditures, and 53% indicated purchasing of household items (see Figure 23). Very few KIs reported that families used the cash to pay off debts, rebuild their houses or buy livestock. This reflects an expected prioritisation of immediate survival needs over shelter reconstruction or rehabilitation of livelihoods.

**Natural capital**

Availability of natural resources is vital to communities’ livelihood strategies and resilience. In the context of the communities surveyed, land ownership is a key concern. 62% of the KIs reported that land in their communities is owned by landlords rather than by the community members themselves. This leaves more communities vulnerable to external shocks and hinders recovery because landlords can determine whether families are allowed to reconstruct, and whether access will be granted for provision of assistance.

In terms of food production KIs reported that 98% of communities produce their own rice/wheat/corn and 75% produce milk and yoghurt. When consumed, meats, poultry, vegetables, oils, fruits, beans and lentils are bought from the market. 71% if KIs reported that families in their communities eat three meals per day.

Regarding access to water, 97% of KIs reported communities had hand pumps in their villages. However, 40% indicated the water they used was ‘mucky’. For 89% of communities, water sources were either inside the village or less than one kilometre away, and for 57% of communities water could be collected in fewer than five minutes.

90% of KIs cited that families in their communities use wood as a major source of fuel, and 64% use cow dung as well. Communities employing livelihood-eroding coping capacities, such as selling livestock (refer to Figure 14), to fund recovery will suffer the consequence of increased fuel costs, since cow dung as a ‘free’ source of fuel will become limited.

**Human capital**

Education can increase available livelihood options and enhance resilience. 56% of KIs responded that their communities had access to educational facilities, with those residing in Qambar Sh. citing the most access (64%) and those in Jacobabad citing the least (46%). 66% of KIs reported that education facilities were functional and 79% reported facilities within one kilometre of the village. 48% of KIs indicated that some children in their communities do not attend school – the main reasons being the distance of schools in some cases, the children being needed for work, unavailability of teachers, or children receiving education through madrassas.

**Physical capital**

Surveyed communities reported some access to physical capital, albeit limited. Almost all KIs said their communities used electricity as the main lighting source. 39% of KIs indicated that families used motorcycles for transport and many others use public transport – buses/mini vans, rickshaws or mule carts. On average, it costs a family 84 Pakistani rupees for a round trip to the nearest market.

---

**Figure 23**

**Expenditure breakdown of cash assistance**

<table>
<thead>
<tr>
<th>Category</th>
<th>Jacobabad</th>
<th>Kashmore</th>
<th>Qambar Sh.</th>
<th>Shikarpur</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buying food</td>
<td>87%</td>
<td>53%</td>
<td>72%</td>
<td>61%</td>
<td>60%</td>
</tr>
<tr>
<td>Buying household items</td>
<td>9%</td>
<td>5%</td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Health / Medical</td>
<td>9%</td>
<td>5%</td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Paying debts</td>
<td>9%</td>
<td>5%</td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Rebuilding damaged houses</td>
<td>9%</td>
<td>5%</td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>Other</td>
<td>9%</td>
<td>5%</td>
<td>9%</td>
<td>10%</td>
<td>9%</td>
</tr>
</tbody>
</table>
Recommendations

The study has analysed coping strategies employed after disasters and identified recommended areas for future research and programming that will not only support coping capacities, but will also enable communities to better withstand disasters, improving resilience.

Increase access to capital

Low levels of literacy, the ongoing depletion of natural resources, lack of land and livestock ownership, and inadequate financial services limit livelihood options and coping strategies. Throughout the study, lack of financial resources was cited as a challenge to recovery, as families needed capital throughout both emergency and recovery phases. There is a need to implement measures that would enhance capital asset accumulation through institutional support and finance/cash grant service providers. If implemented this would enable poor communities to build a capital base, offer them greater livelihood options, and improve their resilience.

Provide mixed modalities of assistance

When providing shelter assistance, a combination of modalities such as cash grants, livelihood support and conditional cash support should also be offered to enable more communities to affordably apply DRR training theory in practice, reducing risk in the face of future disasters. Likewise due to low levels of financial resources, an increase in combined recovery and development interventions (shelter assistance integrated in multi-sectoral recovery programmes) would provide a more comprehensive, focused assistance.

Offer more training in between floods

The relationship between the use of DRR techniques and better housing was evident throughout the study, as was the usefulness of trainings. Capacity development of communities and technical training should therefore not only be offered to more communities overall, but also could be offered in the downtime between flooding events. This would allow communities to be supported and trained to make their houses hazard-resistant in a calmer, less critical period before a new flood arrives. The communities could then learn and apply DRR techniques over a longer timeframe and continue their livelihood activities at the same time. An extended timeframe would allow them to incrementally allocate their income to flood-resistant upgrades while at the same time covering their basic daily needs. Saving money over time would ease some of the financial burden and reduce the need to resort to livelihood-eroding coping strategies.

Further study

As noted throughout the report there are various findings which would require further study to provide maximum benefit for future programming. This includes understanding where communities go or what they do if they do not get displaced during a flood, and what factors impact on this decision/outcome. Results also indicate a need for a market analysis to research the availability of building materials before/during/after a flood to gauge the influence availability maybe have on disaster preparedness and recovery, and the subsequent impact on rebuilding, if any.

Evacuation decisions could be studied to determine why the rate of evacuation was so low, and also, when evacuation took place, if the length of preparation time correlated with the type of flood, thereby informing preparedness planning for the future. For those whose did not pay for transport during evacuation, were they among the richest and used their own transport and/or amongst the poorest and had to walk?

It would also be of value to learn more about host families and their coping capacities, in addition to the families that are hosted by them. Several questions are raised around this topic. For example, how can relief and recovery agencies better reach host families and those staying with them to support building back safer? How long do families stay with their hosts, and is this more or less time than those staying in displacement sites? It would be helpful to identify if camps are in fact a last resort, and how staying with a host family impacts on aggregate vulnerability and access to assistance.

Results also suggest the need for more information on the 7% of people who were left behind during displacement because they ‘could not move’. Is this lack of mobility connected to vulnerable members of the community, i.e. elderly or disabled, and could therefore inform emergency management interventions and vulnerability targeting in future? It might also be useful to identify the main factors leading to a ‘good’ rating for living conditions in displacement and incorporate these factors into disaster preparedness and planning.

In terms of rebuilding, further studies may be able to identify whether/how much the delay in housing assistance affects communities’ coping capacities and whether they engage in re-building before the assistance comes or not. Also why do some assisted households still not apply DRR techniques in reconstruction? Is this due to difficulty or cost? Lastly, it could also help inform future programming to better understand why, even when the training was rated as useful by most people, the vast majority still felt unconfident rebuilding without assistance.

To fully understand the various components of recovery and the nuanced coping strategies, needs and vulnerabilities present within communities, any further research into these topics would need to employ household-level surveys and analysis.
Terminology

**Affected communities**: All key informants and communities surveyed in the assessment were impacted by flooding in recent years. Not all communities within an affected district were necessarily impacted by the flooding, but all communities included in the study were.

**Assisted and unassisted communities**: Assisted communities were those in which a significant proportion of households were assisted following disasters. Unassisted communities were those in which a significant proportion of households did not receive assistance, or where no assistance was provided at all.

**Coping strategies**: Akin to ‘survival skills’. Learned behavioural patterns, used to deal with stresses, pain and external shocks experienced in life. Although crises occur periodically, they only escalate into disaster situations when they outstrip the capacity of a community to cope with them. People affected by disasters employ coping strategies to minimise suffering and support recovery. Some coping strategies have livelihood-eroding impacts; decisions made during crises that may be necessary to meet immediate needs, may also affect quality of life and vulnerability in the longer term.

**Displaced**: Refers to ‘persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalised violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized state border.’ Not all communities/families in this study were displaced as a result of flooding, even though all were ‘affected’ by the disasters (see above).

**Recovery**: Refers to the ‘restoration and improvement where possible, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.’ Recovery programmes afford a valuable opportunity to develop and implement disaster risk reduction measures and to apply the ‘build back stronger’ principle.

**Resilience**: ‘The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions’.

**Vulnerability**: ‘The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. There are many aspects of vulnerability, arising from various physical, social, economic, and environmental factors. Examples may include poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures, and disregard for wise environmental management’.

---

**Endnotes**

2. As per the Shelter Cluster database, Pakistan 2012
4. TSSU Phase I and Phase II reports, Pakistan Shelter Cluster 2012
5. TSSU Phase 2 (2012) findings indicated that people tend to remain in close proximity to their damaged/destroyed houses
6. Government of Pakistan National Database and Registration Authority (NADRA) card and cash disbursement method established in 2010 to provide cash aid to targeted, disaster-affected districts
7. Religious education institutions
8. Hammock, J; Lautze, S (1996) “Coping with Crisis; Coping With Aid Capacity Building, Coping Mechanisms and Dependency, Linking Relief and Development”
9. [Guiding Principles on Internal Displacement](http://www.idpguidingprinciples.org/), Introduction, paragraph 2
10. [http://www.unisdr.org/we/inform/terminology](http://www.unisdr.org/we/inform/terminology)
11. [http://www.unisdr.org/we/inform/terminology](http://www.unisdr.org/we/inform/terminology)
12. [http://www.unisdr.org/we/inform/terminology](http://www.unisdr.org/we/inform/terminology)