Measuring shelter

Sectoral assessments for a more effective response

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The Global Shelter Cluster has made sector-wide and crisis-wide assessments a priority in recent years. Assessments include all types of review, collection and analysis of data for the purpose of assessing a situation, whether relating to preparedness, response or eventual outcomes. This chapter describes how agencies use cluster assessments to plan shelter responses specifically, although the principles hold true for all sector-wide assessments, including those where the cluster has not been activated but a shelter sector response is nevertheless undertaken.

What do shelter actors use to inform a response?

On the individual agency level, shelter actors draw on technical knowledge, complemented by contextual knowledge. For context, operational agencies and local authorities rely on their own knowledge and on secondary data for areas where they operate. Because this knowledge is gathered with an operational aim for the specific area where the actor is working, it is very rarely crisis-wide. On an inter-agency level, the Shelter Cluster takes the lead in providing technical standards

and guidance. The cluster also centralizes information by tracking activities undertaken by shelter actors in a 'Who Does What, Where' matrix,¹ and by sharing operational information between shelter actors. Finally, the Shelter Cluster leads the establishment of a crisis-wide, common understanding of the situation on the ground, through sector-level assessments.² These crisis-wide assessments can help avoid information duplication and improve clarity of understanding, when relied on instead of assessments carried out by individual operational agencies and local authorities, which often produce contradictory findings about the same areas, due to differences in methodology, sources and timeframe.³

How can sector-level assessment inform shelter response?

Crisis-wide, shelter sector—level assessments are usually led by the Shelter Cluster. These take place during humanitarian emergencies when there is a lack of timely, comparable information about affected areas. The information obtained from the assessment enables effective response planning. Assessments are undertaken to inform specific

humanitarian response-planning milestones, such as the Humanitarian Response Plan,⁴ in both sudden-onset disasters and protracted crises, which occur at crucial moments during the Humanitarian Programme Cycle.⁵

At the onset of a crisis, or ahead of a planned response during a protracted crisis, the Shelter Cluster often coordinates a sectorwide needs assessment, to guide response planning, enable resource mobilization, and begin shelter-assistance activities. During the response, the cluster monitors results in order to enable adjustments in implementation. Once the response has been largely completed and the cluster is preparing to close, it evaluates the extent to which the overall response achieved its intended results, thus generating lessons for future responses. Finally, where the Shelter Cluster anticipates an emergency that is likely to need a response, it may assess preparedness, to identify areas and populations at risk, and potential caseload figures.

Since 2011, the inter-agency initiative REACH6 has facilitated sector-wide assessments of Shelter Cluster responses to conflicts and sudden-onset disasters in 18 countries.⁷ Many of these crises have seen sector-wide assessments conducted several times at specific phases in the response, from shelter-sector or multi-sector needs assessments through to response monitoring and evaluations.⁸ A range of lessons has been learned from Shelter Cluster assessments, which can help guide future sector-wide needs assessments, monitoring and evaluation.⁹ A selection of Shelter Cluster assessments is summarized below, followed by a description of lessons learned and a way forward.

Shelter Cluster assessment typology

This section describes examples of Shelter Cluster preparedness assessments, needs assessments, response monitoring and response evaluations – from both sudden-onset and protracted crises.

Preparedness assessments

In anticipation of an event that could require a shelter response, the Shelter Cluster may launch a preparedness assessment.

Before the 2016 monsoon season in Nepal, 10 concerns were raised that the destabilization of terrain caused by the 2015 earthquakes could significantly increase the risk of landslides during monsoon rains, both in areas historically prone to landslides and flash floods, and areas that had become susceptible following the earthquakes. The Nepal Shelter Cluster therefore launched a monsoon-preparedness assessment. This included a macro-level secondary-data analysis of 14 earthquake-affected priority districts, and 22 districts in the Terai region previously affected by widespread flooding, to identify risk areas and estimate potential caseloads. Focus group discussions with people living in twelve areas at risk, complemented by interviews with local officials, traders, carpenters and builders, were conducted to understand expectations of assistance, level of preparation and potential coping strategies. Findings were used by the Nepal Shelter Cluster and the humanitarian coordination overall for contingency planning ahead of the monsoon season.

Needs assessments

Immediately following a sudden-onset disaster, and at crucial points in the humanitarian programme cycle during a protracted crisis, the Shelter Cluster conducts needs assessments to inform response planning. Following widespread damage caused when category-five Tropical Cyclone Pam hit Vanuatu in March 2015, the Global Shelter Cluster and humanitarian actors on the ground launched a detailed inter-agency shelter and settlements vulnerability assessment. The assessment aimed to identify gaps by evaluating needs and verifying emergency shelter and non-food items coverage, and to establish a baseline for potential future assessments of the recovery. Assessment teams chose 13 sample sites for data collection, and conducted household interviews on these sites in April-May 2015.

The assessment found that 81 per cent of assessed households had sustained shelter damage from the cyclone. Although almost half had not yet received emergency shelter assistance at the time of data collection, 72 per cent had begun shelter reconstruction, with many relying on local community networks or using recovered or recycled materials. In addition, 65 per cent of households reported having been temporarily displaced after the cyclone, while 29 per cent were hosting other displaced families. The Vanuatu Shelter Cluster used these findings to identify gaps in the response, and, in August 2015, the Global Shelter Cluster redeployed the assessment team to carry out a detailed evaluation of the shelter response through additional data collection and analysis.

An area-based needs assessment in a protracted crisis was undertaken in Ragga, Syria. 11 At the end of October 2017, Ar-Ragga city was completely evacuated following six months of intense conflict. When the conflict ceased, large numbers of civilians began voluntarily returning to their homes, despite high levels of unexploded ordnance contamination and largescale destruction. The city had been inaccessible to humanitarian agencies since 2014, resulting in significant gaps in information and inhibiting the ability to plan an effective response. A series of area-based assessments was undertaken, aimed at facilitating planning at the local level, including comprehensive satellite imagery analysis to identify and classify structural damage to shelter and major infrastructure.

The damage assessment, conducted in February 2018, quantified the significant damage to Ar-Raqqa city due to the recent conflict: 1667 damaged or destroyed structures were observed in imagery from February 2017, compared with 12,668 in imagery from October 2017. Furthermore, the analysis enabled classification of the level of damage to 398 infrastructure points of interest identified by partners, including bakeries, education facilities and health facilities. The level of damage was found to vary between

neighbourhoods, and neighbourhood-level maps were compiled into a damage atlas, which was made available to humanitarian organizations.

Response monitoring

Once the response is launched and shelter organizations begin implementation, the Shelter Cluster can assess progress of the response.

Typhoon Haiyan, which hit the Philippines in November 2013,¹² was one of the strongest and deadliest typhoons to have ever struck that country, killing more than 6000 people and leaving millions homeless. Given the large-scale destruction of homes and livelihoods, shelter support became a significant part of the humanitarian response. The Philippines Shelter Cluster, supported by the Global Shelter Cluster, undertook a series of assessments to inform the response, including a needs assessment launched jointly with the WASH Cluster in December 2013, followed by a shelter and WASH response assessment in March 2014.

A second assessment was undertaken in 2014, to understand the remaining needs of the affected population, the differing needs of vulnerable groups, and the longer-term results of the shelter sector response. It assessed the extent to which households were living in safe and adequate dwellings, based on shelterrecovery guidelines developed by the cluster. This assessment covered priority areas within 50 kilometres of the storm path. More than 3800 households were randomly selected and interviewed, using multi-stage cluster sampling. It showed that shelter recovery seemed to have slowed, and that households had grown increasingly frustrated by the stagnation of assistance, as longer-term assistance needs were not being met. Furthermore, shelter assistance that had reached households had not led to minimum levels of safety for much of the population. Assessments were critical to understanding gaps in continuing assistance, progress against the strategic response plan, and the extent to which the affected population was ready to move into the recovery phase.

Response evaluations

Once a response has been largely completed and the cluster is preparing to close, an evaluation is conducted to understand to what extent the response achieved its overall aims, and thus generate lessons for future responses.

In 2011, drought and violence triggered a surge in large-scale displacements into Bossasso in north-eastern Somalia. 13 In response, humanitarian agencies built transitional shelters for internally displaced persons (IDPs) in planned settlements in Bossasso. In November 2014, the Global and Somalia Shelter Clusters evaluated the response, by surveying 887 households stratified across two groups: settlements with landtenure agreements of less than five years, and settlements with five-to-ten-year agreements.14 The evaluation showed that the transitional shelter response in Bossasso brought several benefits for IDPs. When compared to other IDP settlements in the same location, transitional shelters had been constructed with higherquality materials than those in non-transitional settlements. However, most households had not been trained in maintenance techniques, and there was limited access to high-quality materials to maintain shelters to the standard at which they had been built. Overall, the evaluation helped the Global and Somalia Shelter Clusters understand the effects of the shelter response on the IDP population and identify major gaps and lessons learned. Findings also helped inform future shelter programming in Somalia.

Lessons learned: the elements of effective sector-wide assessments

To be effective, a Shelter Cluster assessment faces several challenges:

 being timely – assessments undertaken too early or too late for a humanitarian milestone lead to findings being outdated when used, or not used at all

- being participatory an assessment process without the active participation of shelter actors undermines ownership, acceptance and ultimately the use of findings
- being representative an assessment methodology that is not accurately tailored to information need, access, resources and time does not generate generalizable findings effectively¹⁵
- being comprehensive an assessment that does not cover all affected areas and groups risks leaving vulnerable populations in hard-to-reach areas neglected during 'big-picture' response planning, due to lack of information
- measuring damage because assessors rarely possess expertise in structural engineering, their direct observations cannot be heavily relied upon to categorize structural damage to homes¹⁶
- measuring adequacy a shelter that
 has been built or repaired does not
 automatically provide an adequate living
 space, whether by established standards
 (such as those of the Sphere Project)¹⁷
 or in the opinions of its inhabitants.
 Furthermore, different measures of
 adequacy may be inherently contradictory,
 depending on the context
- measuring response outcomes and gaps

 Shelter Cluster assessments show that families who can remain on the site of their damaged or destroyed home often begin to repair and rebuild immediately, before any Shelter Cluster assistance has been provided. This is one reason why attributing progress in rebuilding or repairing to the Shelter Cluster response, as opposed to self-recovery or recovery with the assistance of non–Shelter Cluster actors (such as civil society or the private sector),

can be difficult. As a result, assessing the relative effectiveness of different methods of shelter assistance (for instance, cash versus in-kind) also becomes difficult, given the complex interactions between different forms of cluster assistance, self-recovery, and assistance from non–Shelter Cluster actors.

The way forward

A comprehensive data analysis framework for the entire shelter sector, including a theoretical framework, ¹⁸ could help systematize the measurement of causal factors across shelter assessments, and the relationships between them, thus enabling more accurate measurement of response outcomes and impacts. It could help link response activities and outputs that are tracked by Shelter Cluster information management on one hand, with snapshots of the situation on

the ground provided by needs assessments, response monitoring and evaluations on the other hand, to identify gaps in the response. This would bring a clearer understanding of the remaining gaps, since the snapshots take into account progress made through self-recovery, along with support provided by private actors and others outside the coordinated humanitarian system.

The framework could be accompanied by clear definitions of adequacy, damage categories and any other factors that are generalizable – at least at a broad level – across all types of crisis. It could be complemented by a menu of methodologies and tools that are compatible with the framework, a minimum standard level of rigour, and a maximum possible level of representativeness. Both the framework and its accompanying methodologies could focus on understanding the perceptions of affected populations – in particular their views on the adequacy of shelters.¹⁹

- 1 A planning tool showing operational presence in an emergency, by sector and location. United Nations Office for the Coordination of Humanitarian Affairs (2018) Humanitarian Response: 3W – Who Does What, Where? www.humanitarianresponse.info/en/applications/tools/category/3w-who-does-what-where
- 2 This information, particularly in needs assessments, may also be obtainable through multi-sector needs assessments (conducted jointly by several clusters or sectors), which the Shelter Cluster joins when launched.
- 3 Operational agencies and local authorities use many tools and methods to inform their planning at different stages: rapid needs assessments, damage assessments, market assessments, Participatory Approach for Safe Shelter Awareness (PASSA) and vulnerability and capacity assessments.
- 4 United Nations Office for the Coordination of Humanitarian Affairs (2018) Humanitarian Response: Strategic Response Planning: Overview. www.humanitarianresponse.info/en/programme-cycle/space/page/strategic-response-planning.
- 5 See United Nations Office for the Coordination of Humanitarian Affairs (2018) Humanitarian Response: Programme Cycle. www.humanitarianresponse.info/programme-cycle.
- 6 REACH provides the Global Focal Point for Assessments, Monitoring and Evaluation, through a formalized partnership with the Global Shelter Cluster. See Global Shelter Cluster (2018) Resources. www.sheltercluster.org/resources/reach-partnership.
- 7 Afghanistan, Bangladesh, Central African Republic, Democratic Republic of the Congo, Iraq, Kyrgyzstan, Libya, Mali, Nepal, Niger, State of Palestine, Peru, Philippines, Somalia, South Sudan, Syrian Arab Republic, Ukraine and Vanuatu.

- 8 Notable examples include Typhoon Haiyan in the Philippines in 2013, where an initial needs assessment was followed by two rounds of response-monitoring assessments and a final outcome-evaluation assessment in 2016; and the 2015 Nepal earthquakes, where a needs assessment was followed by a response-monitoring assessment and a preparedness assessment ahead of the 2016 monsoon season.
- 9 See REACH (2018) Tag: Emergency. www.reach-initiative.org/tag/emergency.
- 10 Shelter Cluster Nepal (2016) Monsoon Preparedness Assessment: 14 Earthquake Affected Priority Districts and the Terai Districts Final Report: Nepal, 2016. www.sheltercluster.org/nepal/documents/monsoon-preparedness-assessment-report.
- 11 Reach (2018) Humanitarian Atlas: Ar-Raqqa City, Syrian Arab Republic, Infrastructure Damage Reference Maps. www.reachresourcecentre.info/system/files/resource-documents/syr map ar-raqqa city structure damage atlas february2018 1.pdf.
- 12 Philippines Shelter Cluster (2014) Shelter Sector Response Monitoring: Typhoon Haiyan, Philippines, 2013. Final Report: Monitoring Assessment 2, September 2014. www.sheltercluster.org/typhoon-haiyan-2013/documents/reachphlreporthaiyansheltersectorresponsemonitoring2sep20140.
- 13 Shelter Cluster (2015) Shelter Sector Three Phase Response Evaluation: Transitional Shelter Case Study, Bossasso Somalia, January 2015, www.sheltercluster.org/somalia/documents/shelter-sector-three-phase-response-evaluation-transitional-shelter-case-study.
- 14 The sample size provided generalizable results with a 95 per cent confidence level and 5 per cent margin of error.
- 15 Wherever possible, all primary data collection components of Shelter Cluster assessments that address quantitative research questions and indicators should be undertaken using probability sampling to select affected households to be assessed. This enables generalization of findings with a specified level of precision (e.g. 95 per cent level of confidence with a +/-5 per cent margin of error), which can be powerful, since it is the only approach that enables a quantified level of certainty that the situation on the ground is reflected accurately by the findings.
- 16 An exception was Nepal in 2015, when local engineering students volunteered to collect data for the needs assessment.
- 17 See The Sphere Project (nd) 'Minimum standards in shelter, settlements and non-food items', The Sphere Handbook, Chapter 2. www.spherehandbook.org/en/how-to-use-this-chapter-2/.
- 18 For a review of sectoral and inter-sectoral data analysis frameworks and their uses, see P Chataigner for the Joint Inter-Sectoral Analysis Group (2017) Analytical Framework Review Report: A Framework Analysis of Analytical Frameworks. www.sheltercluster.org/sites/default/files/170902%20Analytical%20Framework%20Review.pdf.
- 19 A working group on shelter vulnerability classification was launched in 2018, to develop a framework and methodologies.