ShelterCluster.org
Coordinating Humanitarian Shelter

SHELTER SECTOR THREE PHASE RESPONSE EVALUATION

Transitional Shelter Case Study

BOSSASSO - SOMALIA

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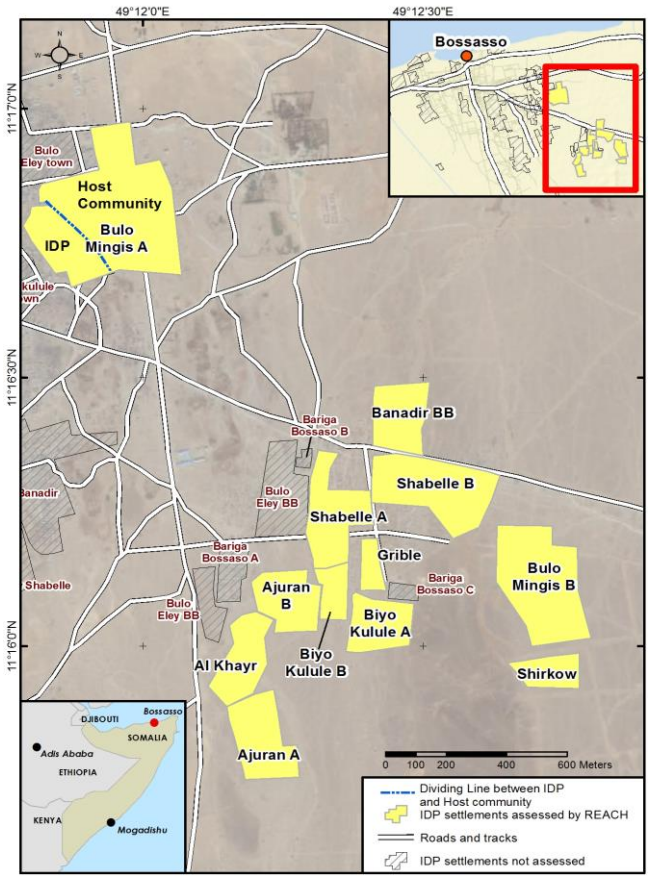
Cover photo: Miguel Gomez, NRC

BACKGROUND

Map 1: IDP Settlements Evaluated



The town of Bossasso in north eastern Somalia has historically hosted large numbers of internally displaced persons (IDPs). In 2011, drought and violence triggered a surge in large-scale displacements from the south central region into Bossasso. At the time, all IDP settlements were located inside the town boundaries. Beginning in 2011, the government provided a relocation site with permanent land tenure for IDPs from Bulo Eley settlement in town near the current Bariga Bossaso site. UNHCR was tasked with constructing transitional shelters on this relocation site for IDPs. Due to land tenure complications and squatting of other evicted IDPs on the land, the relocation site was abandoned. The Shelter Cluster, UNHCR and other agencies, in close collaboration with the authorities, were able to secure longer term land agreements with the individual landlords in Bariga Bossaso for 5 to 10 years. Following the construction of a pilot transitional shelter project, many other IDPs began moving to the area because of the lower risk of evictions.

The evaluated area of transitional shelter settlements shown in **Map 1** is currently home to an estimated 3,763 IDP households (24,460 IDPs)[1]. The majority of IDPs in this area live in transitional shelters, built from plastic and iron sheeting. Makeshift shelters have also been constructed in these settlements using branches or wooden sticks for the internal structure, and either cloth, waste carton, or plastic sheeting for the external covering.

Since the beginning of 2011, implementing agencies in Bossasso have built more than 3,500 transitional units in planned settlements. Transitional shelter is one of the main objectives of the Shelter Cluster in Somalia, yet due to complex clan relations and the lack of public land, permanent land tenure has been difficult to secure throughout the country. Furthermore, the physical characteristics of Bossasso – layers of deep rock and a lack of good soil or timber to build with – make it difficult to build low-cost permanent housing and settlements. In response to these issues, the Shelter Cluster advocated for transitional shelter to address the main concerns of the population: safety and protection with a timeframe of five to ten years for these shelters to remain a viable shelter solution.

REACH was requested by the Global and Somalia Shelter Clusters to conduct an evaluation in the IDP settlements in the transitional shelter settlements outside Bossasso town. In order to achieve this, the evaluation team employed a household survey with a 95% confidence level and 5% confidence interval, stratified across two groups: settlements with less than 5 year land tenure agreements; and settlements with

[1] For total IDP population, the household figure was multiplied by 6.5 (the average number of individuals living in each household).

5-10 year land tenure agreements. The sample size was calculated from the total household population of each group and then divided proportionally among the settlements based upon the number of households located within each. A total of 887 households were interviewed by trained enumerators in November 2014 These data were compared to household data available from the November 2012 Shelter Sector Review conducted by REACH and the Somalia Shelter Cluster, and data from the infrastructure mapping conducted by the Somalia Shelter Cluster in June 2014[2].

SUMMARY OF RESULTS

Evaluation findings show that the transitional shelter response in Bossasso consists of a number of positive outcomes for the IDP population living in these settlements with some key improvements to the shelter typology that should be considered. The expansion of transitional shelter is a promising sign of household investment and a desire to remain in the current location, however, the materials being used to do so may suggest that changes need to be made to the original design. Overall, when compared to other IDP settlements in Bossasso, the transitional shelters in the assessed settlements use higher quality materials – plastic and iron sheeting, as opposed to cloth and rags. The safety and protection of this shelter type is also commonly high due to its fire-retardant properties, its impenetrability, and the ability to install a lockable door. However, the current proliferation of plastic sheeting used to cover shelters that were built by cluster partners as corrugated iron sheet houses calls into question whether corrugated iron sheeting is appropriate for this context. Some of this plastic sheeting could be used for repairs, while for some households it may be used for expansion or improved ventilation. Regardless of the reason for the high levels of plastic sheeting use – expansion or repair – there seems to be either an inability (due to lack of access to materials or lack of knowledge about maintenance) or a lack of interest among the IDPs to use the same corrugated iron sheeting materials in their housing. With this said, the corrugated iron sheet shelter typology was chosen due to the scarcity of natural materials. In a dry region with few trees or shrubs and very poor soil, the options for building materials are limited. Furthermore, this shelter type could be transported and reused should the beneficiaries experience eviction – a key element of transitional shelter in Somalia. In a context in which permanent land tenure is challenging to obtain and where there are limited resources for building materials, the corrugated iron sheet shelter typology served as an interim solution while other building materials could be explored.

Another positive outcome observed as a result of the transitional shelter response is the larger proportion of kiosks compared to non-transitional settlements. This is a possible sign that IDP households are able to invest household income in livelihoods—usually an indicator of overall sustainability of a transitional shelter project.

The transitional shelter response in Bossasso has been successful in encouraging greater livelihood investment and the use of comparatively higher quality shelter materials. There is also a very high level of satisfaction among the beneficiary households and nearly all households have access to critical services and infrastructure within an appropriate standard. However, most households have not been provided training on proper maintenance techniques, and also lack access to high quality materials to maintain their shelter at the level at which it was built. While the purpose of the response was to increase safety and protection, the percentage of displaced households reporting to feel safe decreased over the past two years. This could be due to a variety of factors related to the shelter and settlement situation or separate externalities, but should be a concern for shelter actors going forward.

[2] It is difficult to compare findings on security and satisfaction between data sets from different periods, as people will provide different answers depending on the time of the evaluation. IDP insecurity can also be perceived differently in two different time periods.

Table 1: List of Evaluation Indicators

Results	Indicator	November 2012	November 2014
Increased use of high quality materials, however not of equal quality to originally constructed transitional shelters	1. Materials used for shelter roof and walls construction	Walls Plastic sheet: 3% Iron sheet: 65% Roof Plastic sheet: 7% Iron sheet: 67%	Walls Plastic sheet: 33% Iron sheet: 80% Roof Plastic sheet: 32% Iron sheet: 81%
Signs of shelter self-improvement; a proxy for sustainability	2. % of households using additional material inputs for shelter improvement or repair	-	86%
High proportion of households reporting problems with shelters	3. % of beneficiary households reporting problem related to their shelter assistance	-	81%
High satisfaction level among beneficiary households	4. % of targeted households satisfied with their shelter or non-food item assistance they received	-	85% satisfied/very satisfied
Higher levels of livelihood investment in beneficiary settlements	5. % of livelihood infrastructure in beneficiary settlement compared to non-beneficiary settlement	-	57% transitional 43% non-transitional
Higher level of infrastructure/service access among beneficiary households	6. % of beneficiary households with access to services/infrastructure	-	Latrines: 19% outside 50 metre radius Water points: 0% outside 200 metre radius
Decreased perception of safety and security	7. % of households that perceive that they are safe from security-related issues and natural hazards	86%	75%

RECOMMENDATIONS

1. **Shelter Materials**: Given the limited access to corrugated iron sheeting and the fact that it provides little ventilation to inhabitants, it is recommended that alternative materials be explored for transitional housing in Somalia. While the iron sheeting was chosen due to the lack of natural materials in Bossasso, it has not been proven to be an appropriate shelter material. The current corrugated iron sheet shelter design has few openings for ventilation and the sheeting used in this design radiates heat within the shelter. Many households have begun to use plastic sheeting to expand their shelter even though it is a less durable material than the iron sheeting. Furthermore, the corrugated iron sheeting is not available in the markets, making expansion and maintenance difficult.
2. **Shelter Maintenance**: IDP households should be included in the construction process and provided with training on maintenance of their particular shelter typology to ensure households expand and repair their shelter safely and effectively. Many households reported needing repairs, yet also reported that they had not received training on how to maintain and expand their shelter safely and effectively. Those households that had expanded their shelter did so using inferior materials to those that were initially used. While this could be due to a number of factors, including lack of materials in the markets, desire for greater ventilation, or lack of knowledge about shelter maintenance, beneficiaries must know how to maintain their shelter and the lack of training and lack of quality maintenance suggest that this should be a focus for any transitional shelter project in Somalia. The current push by the Shelter Cluster in Somalia for more owner-driven approaches should be continued.

3. **Settlement Planning**: During settlement planning, involve all clusters, particularly WASH and Protection, in needs assessment to improve emergency shelter planning and access to services and facilities in IDP settlements.
4. **Safety, Protection, and Security**: Concentrate markets outside residential areas to ensure safety and security of shelter occupants.
5. **Assessments and Evaluation**: The comparison between shelter-assisted and non-assisted households is vital to understanding the outcomes of the shelter response. Future evaluations should sample from both assisted and non-assisted households to compare outcomes.

RATIONALE

The evaluation was commissioned by the Global Shelter Cluster in order to better understand the impact of cluster coordination on the shelter response, and the resulting impact of the shelter response on the IDP population. The evaluation is expected to inform future cluster strategy and to be used as an advocacy tool for future targeted shelter response planning in Somalia.

PROCESS

The evaluation team followed six key steps in order to conduct the evaluation of the Somalia Shelter Cluster coordinated transitional shelter response in Bossasso. First, REACH shared an evaluation terms of reference, analysis framework, and household questionnaire with the Global Shelter Cluster and Somalia Shelter Cluster for review, feedback, and approval, ensuring collaboration and contextually-appropriate lines of inquiry. Second, REACH hired and trained staff from implementing agencies in Bossasso to collect quantitative household data using a questionnaire built on the mFieldwork mobile phone application. Third, REACH coordinated with the appropriate district commissioners in Bossasso and all settlement umbrella leaders to allow enumerator access to the settlements. Fourth, a consultant for the Global Shelter Cluster concurrently collected qualitative data from cluster partners and associated stakeholders on the cluster's role in coordinating the shelter response in Bossasso. Fifth, REACH shared preliminary findings factsheets based on quantitative data with the Somalia Shelter Cluster's Strategic Advisory Group (SAG) and implementing partners in Bossasso to ensure findings were accurate and allow for clarification where needed. Sixth, the evaluation team combined the validated quantitative and qualitative data into a series of case studies and a final report covering the shelter response across three locations and shelter response modalities in Somalia. This case study and the corresponding report includes comparative analyses between data collected in November 2012 and during the most recent data collection exercise in November 2014, as well as infrastructure data collected by the Somalia Shelter Cluster in June 2014. Where possible the comparative analysis included household data and comparisons between the number and type of shelters and facilities in the intervention area.

PEOPLE AND RESOURCES

The evaluation team drew upon the expertise and knowledge of a wide variety of stakeholders in order to carry out the evaluation in Mogadishu. REACH provided five assessment and GIS staff to design and manage quantitative data collection and analysis. Two cluster partners provided a total of 5 team leaders and 26 staff to collect primary quantitative data, including Danish Refugee Council (DRC) and Norwegian Refugee Council (NRC). Accommodation for the evaluation team and the training venue were provided by cluster partners. The Somalia Shelter Cluster provided access to and use of the mFieldwork platform to support data collection and database management.

Challenges and Limitations

During this evaluation, there were two critical challenges and limitations. First, a sufficient number of households were not sampled, in order have a control group and compare the outcomes of assisted and non-assisted households. Where possible, responses of households regarding whether they had received assistance or not were used to make comparisons between these groups. However, given the understanding among IDPs that underreporting aid will encourage agencies to provide further support, it was difficult to identify households within these two groups. Household responses regarding assistance received were triangulated with geographic information about assistance provided in order to identify any possible patterns in responses (**Map 2**). The addition of a large enough control group to provide statistically significant results would be an important methodological change for any future evaluations in Bossasso.

Second, female enumerator participation was limited due to cultural norms and practices. Despite this, there were a small number of female enumerators and every effort was made to ensure that female enumerators spoke with women in households where no men were present.

Evaluation Results

Shelter Response

Shelter Materials

The use of higher quality materials such as plastic and iron sheeting, in place of the cloth and rags seen in other IDP settlements in Bossasso, is a promising trend. However, the current proliferation of plastic sheeting used to cover shelters that were built by cluster partners as corrugated iron sheet houses calls into question whether corrugated iron sheeting is appropriate for this context.

When comparing transitional shelters in November 2014 to transitional shelters in November 2012, clear changes can be observed. In 2012, 65% of the transitional shelters used iron sheeting for the walls, while in 2014, this proportion had risen to 80%. There was a related increase in the use of plastic sheeting for the walls between these two periods from 3% to 33%. Similarly, the roofs are covered with iron sheeting for 81% of the shelters and with plastic sheeting by 32% - up from 67% and 7%, respectively, in 2012. These increases can be connected to the continued construction and expansion in these settlements illustrated in **Map 3**.

Assuming that plastic and iron sheeting are superior materials to cloth and rags, the increased use of these materials at the exception of cloth and rags is a positive trend. However, given that the transitional shelters built in these settlements were corrugated iron sheet houses in which the walls and roofs were constructed of iron sheeting, the widespread use of plastic sheeting as a roofing and wall solution may suggest that an alternative to iron sheeting as a shelter material in Bossasso should be explored.

Shelter Improvement

Using shelter expansion as a proxy indicator for household investment in shelter and the sustainability of a shelter intervention, the construction of transitional shelters in Bossasso could be considered a success.

A positive progression can be seen in the 86% of households having upgraded their shelters recently: 74% report extending the size of their shelter, while 57% report partitioning their shelter in some way or adding decoration (49%). Shelter self-improvements are often considered a positive indicator of a sustainable shelter

solution. With this in mind, the use of plastic sheeting across a large proportion of households in the assessed settlements could also be connected to the extension of the shelters in which iron sheeting was too expensive or not available in the markets, thus, households were forced to choose an alternative material.

Despite self-improvement, 81% of households report needing repairs to their shelter, with nearly half of these reporting they need better materials. Given that the Shelter Cluster intended these shelters to last for at least five years, if not more, and the average age of these shelters is 23 months, the fact that such a large proportion of the transitional shelters need repairs calls into question the sustainability of using a building material in a context in which many beneficiaries may not be able to maintain their shelter or expand using the same quality of materials.

Shelter Assistance Satisfaction

Satisfaction levels are generally high among transitional shelter beneficiaries, however 15% of households remain dissatisfied. The lack of training and community consultation before construction has likely played a part in this and is likely connected to the lower quality of shelter maintenance. Shelter implementing agencies have addressed this concern as the "contractor-driven approach", common prior to 2014, has been largely replaced by an owner-driven approach in 2014. The impact of this change in approach remains to be seen.

On a four-point scale from very unsatisfied to very satisfied, most respondents report being either satisfied (61%) or very satisfied (24%). 10% of households report being very unsatisfied with the assistance they received. One possible contribution to the dissatisfaction is the fact that households did not report being consulted during the planning process, nor has there been any sufficient training on shelter issues. 92% of households report having not been involved in the planning process and 95% report having not received shelter-related training.

Access to Services & Facilities

Beneficiary access to household services and facilities is at a higher level among beneficiary households than other IDP households located in Bossasso Town. All households located in the transitional shelter settlements have access to a water point within 200 metres of their shelter. **Map 4** illustrates this and show the comparison with non-transitional households where a small proportion are outside the 200 metre radius.

Furthermore, there is a much higher proportion of households located in the transitional settlements that have access to latrines within a 50 metre radius than households located in other IDP settlements. **Map 5** illustrates that 46% of households in non-transitional settlements are located outside the 50 metre radius, compared to only 19% among transitional households.

Access to Livelihoods

While livelihoods promotion was not an explicit objective of the Shelter Cluster in the transitional shelter response, a medium-term shelter solution such as this would commonly consider the possibility of livelihood development. It is difficult to attribute any impact on livelihoods to the shelter response, but the existence of a larger proportion of kiosks among transitional shelter settlements suggests a higher degree of livelihood investment.

78% of households report working outside the settlement they currently live in. The main form of income for surveyed households is garbage disposal (40%) followed by stone mining, herding, assistance from relatives, begging and the sale of goods produced in the household – each reported by 11-15% households. Without comparisons with IDPs living outside of the transitional settlements, we cannot make any conclusions about whether these livelihood strategies are more stable than those found outside the settlements.

Using data from the Shelter Cluster Infrastructure Mapping exercise, conducted in June 2014, there is a clear difference in number of kiosks that can be found in the transitional settlements compared with the non-transitional settlements. **Map 6** illustrates that 57% of the kiosks in IDP settlements in Bossasso are found in transitional settlements. Given that the population of these settlements is a relatively small proportion of the IDP population of Bossasso, the existence of a disproportionately large number of kiosks points to a higher degree of livelihood investment – a possible indirect outcome of the transitional shelter intervention.

Safety, Protection & Security

When comparing perceptions of safety and security among transitional shelter households between 2012 and 2014, there is a slight decrease in those households that report feeling secure, 86% in 2012 to 75% in 2014. It is unclear why the perception of security has decreased among transitional shelter households, but could be due to the expansion of the settlements with newly arrived IDPs (illustrated in **Map 3**) along with the development of small market spaces and kiosks in the settlements (illustrated in **Map 6**). Indeed, 59% of those households that perceived that they were unsafe responded that the market was the source of these feelings of being unsafe. IDP households across Somalia often identify markets as a source of insecurity, thus the proliferation of them within the settlement could be introducing higher levels of insecurity. Other external factors, however, could play a part in this change in security and perceived safety.

Furthermore, a large proportion of households (32%) report feeling unsafe in the latrines. This is likely due to the fact that 70% of the latrines are communal and not separated by gender. While the latrines in the transitional settlements are effectively located to allow for access to all shelters within a 50 metre radius, as seen in **Map 5**, the fact these facilities are not gender segregated could be contributing to gender based violence or the perception of this possibility.

ADDITIONAL INFORMATION

The evaluation was conducted by REACH as part of its partnership with the Global Shelter Cluster. In Somalia, the Shelter Cluster is led by the UN Organisation for Refugees (UNHCR) as cluster lead. All of the reports, web-maps, static maps, factsheets can be accessed directly from the REACH Resource Centre: www.reachresourcecentre.org, as well as through the Shelter Cluster website: www.sheltercluster.org.

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