

SHELTER RECOVERY ASSESSMENT IN THE CENTRAL REGION OF MOZAMBIQUE (MANICA, SOFALA, TETE AND ZAMBEZIA)

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DTM
MOZAMBIQUE



ABOUT THIS REPORT

IOM's Displacement Tracking Matrix (DTM) in collaboration with the Government of Mozambique's National Institute for Disaster Management and Risk Reduction (INGD) and as mandated by the Shelter Cluster in Mozambique conducted this assessment in areas of displacement, resettlement sites and areas affected by cyclone Idai, tropical storm Chalane, and cyclone Eloise in the central region of Mozambique. Data collection was conducted through household interviews by random sampling of 4,539 families, 1,605 families in 75 resettlement sites and 2,934 families in affected communities (displaced families in host communities and non-displaced families) in Sofala, Manica, Tete and Zambezia over a period of 16 days. The output of this exercise is to inform the Government of Mozambique and humanitarian and development community on the current living conditions of families affected by cyclone Idai, tropical storm Chalane, and cyclone Eloise, to understand affected households' efforts for self-recovery so far, to identify the type and usage of assistance received by households in relation to their shelter and housing, in order to identify the gaps and needs still present in terms of housing reconstruction and recovery, and to inform the most effective support for further recovery and to effectively prioritize areas of intervention based on likelihood and intention of households to remain in existing resettlement sites or in affected communities.

ACKNOWLEDGMENTS

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INTRODUCTION

In March 2019, Cyclone Idai caused the destruction of housing and infrastructure and that left more than 400,000 people displaced, with 160,927 having immediately sought refuge in over 164 temporary accommodation centres. Tropical Storm Chalane hit Sofala, Manica, and Zambezia provinces on December 30, 2020, affecting 73,254* individuals, and Tropical Cyclone Eloise made landfall in the early morning hours of January 23, 2021, affecting 469,831* people in the aforementioned provinces. They contributed to significant housing damage, particularly in communities with poorly built houses. Since then, displaced populations have either returned to their places of origin, relocated to new areas or have settled in various resettlement sites which were set up across the central provinces.

Working alongside the Shelter Cluster and the Cabinet for Reconstruction (GREPOC), IOM's DTM team collaborated with Mozambique's National Institute for Disaster Management and Risk Reduction (INGD) conducted an assessment of the shelter conditions of both displaced and non-displaced families across the four affected provinces, to gain a better understanding of the current housing conditions and the communities' abilities to self-recover, as well as and the type of shelter and housing support still required to enable affected households to restore their lives.

This assessment was designed through a collaboration between DTM and the Shelter Cluster in Mozambique, and based on the guidance outlined in the Post-Cyclone Reconstruction Programme (PALPOC) developed by GREPOC, to guide the reconstruction efforts by partners. This collaboration ensured that the indicators would align with the PALPOC whilst maintaining DTM methodologies.

Findings from this assessment are presented according to settlement types, and include information on geographic location, demographic composition, displacement history, access to building materials, technical knowledge, housing conditions and the needs of both displaced and non-displaced families.

*Figures as cited by Mozambique's National Institute for Disaster Management and Risk Reduction (INGD)

Map 1: Geographic locations of sites assessed



METHODOLOGY

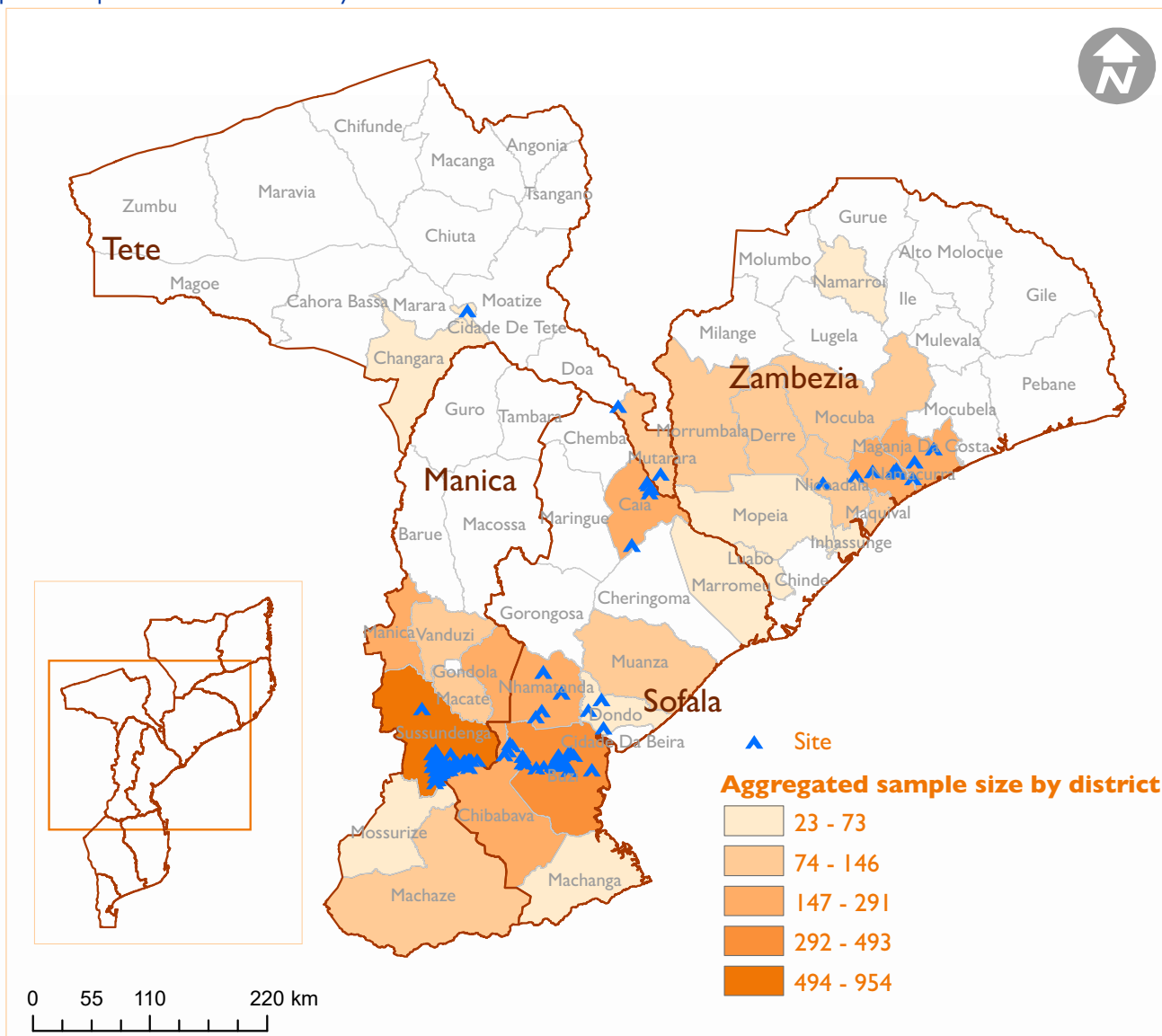
Data was collected through direct interviews with a random sampling of 4,539 families, including 1,605 families in 75 resettlement sites and 2,934 families in affected communities (displaced families in host communities and non-displaced families). The survey covered 132 localities (63 postos) in 29 districts of Sofala, Manica, Tete, and Zambezia. A network of 37 enumerators conducted the interviews.

The sample size of 4,539 statistically represents the displaced population of approximately 116,385 individuals living in resettlement sites (from MSLA 20), as well as affected communities (displaced families in host communities and non-displaced families), based on DTM baseline data. The sample size is based on a confidence level of 85% with a 15% margin of error.

Table 1: Households sample size distribution by province

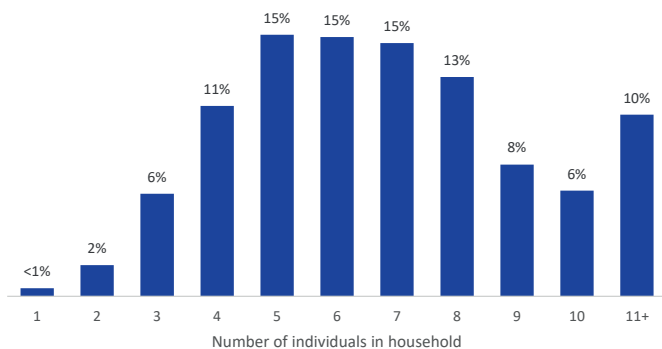
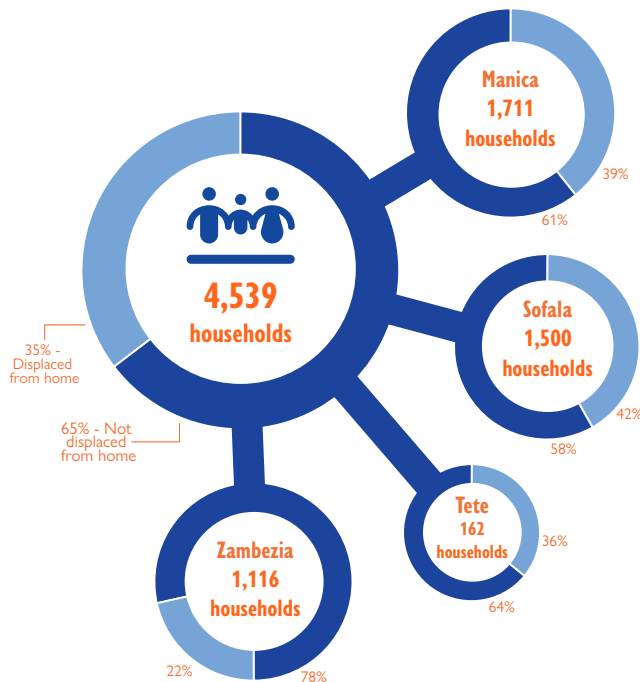
Province	Number of Sites Covered	Total Households Surveyed in Resettlement Sites	Number of Localities Covered	Total Households Surveyed in Localities
Manica	32	672	47	1,711
Sofala	28	624	44	1,500
Tete	4	58	4	162
Zambezia	11	251	37	1,166
Grand Total	75	1,605	132	4,539

Map 2: Sample size distribution by district and location of resettlement sites



DEMOGRAPHICS

A total of 4,539 households were interviewed as part of the Shelter Recovery Assessment Round 2. Of these, 65 per cent were affected by the cyclones and storms but not displaced from their homes (2,934 individuals), and 35 per cent were displaced (1,605 individuals). The figure to the right shows how many households were interviewed in each province, and proportionally how many households were and were not displaced. Manica, Sofala, and Tete all have a similar proportion of households who were displaced to resettlement sites and those who remained home. However, in Zambezia, the proportions of households that were and were not displaced is the inverse as for the other three provinces.



The chart to the left presents a quick breakdown of the number of individuals in interviewed households. The average household has 5.74 individuals (4,539 assessed households with a total of 26,087 individual members). Overall, 45 per cent of households have between five and seven individuals members, and 69 per cent between four and eight members. There are also a significant number of respondents who live in shelters with more than 11 individuals.

KEY FINDINGS

SECTION 1: SHELTER CONDITIONS IN RESETTLEMENT SITES

1 Around half of respondents (50%) still live in temporary shelters, while 30 per cent are in permanent shelters. Proportionally, more people live in permanent shelters in Tete and Zambezia compared to Manica and Sofala.

Generally, while proportionally more shelters suffer from leakages when it rains in Tete and Zambezia, there are greater incidences of both material degradation and structures being collapsed in Manica and Sofala. Economic barriers tend to be the most frequently cited, preventing repairs or improvement to shelter conditions. However, the majority (97%) still do have access to natural materials from the nearby areas.

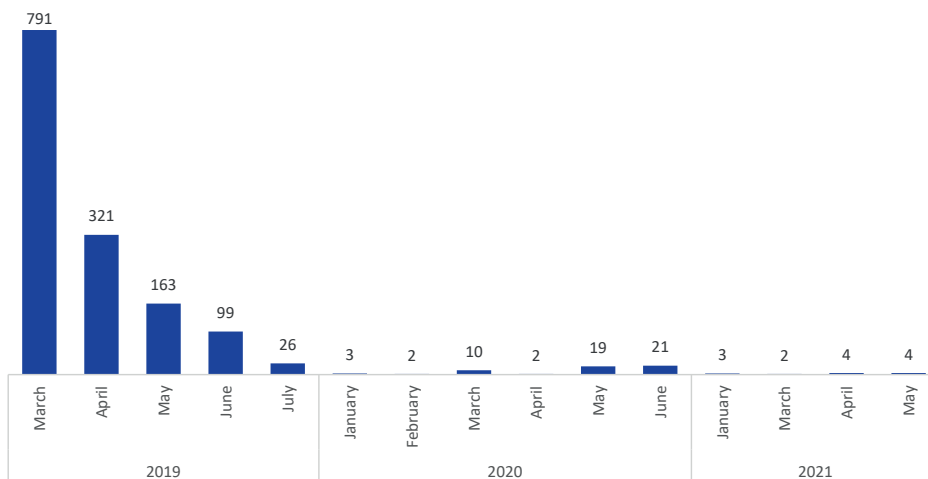
Ninety-five per cent of surveyed households indicated that they believe construction methods need to change to better prepare for the next cyclone and to continue improving shelter conditions

SECTION 2: HOUSING CONDITIONS OF NON-DISPLACED FAMILIES IN AFFECTED COMMUNITIES

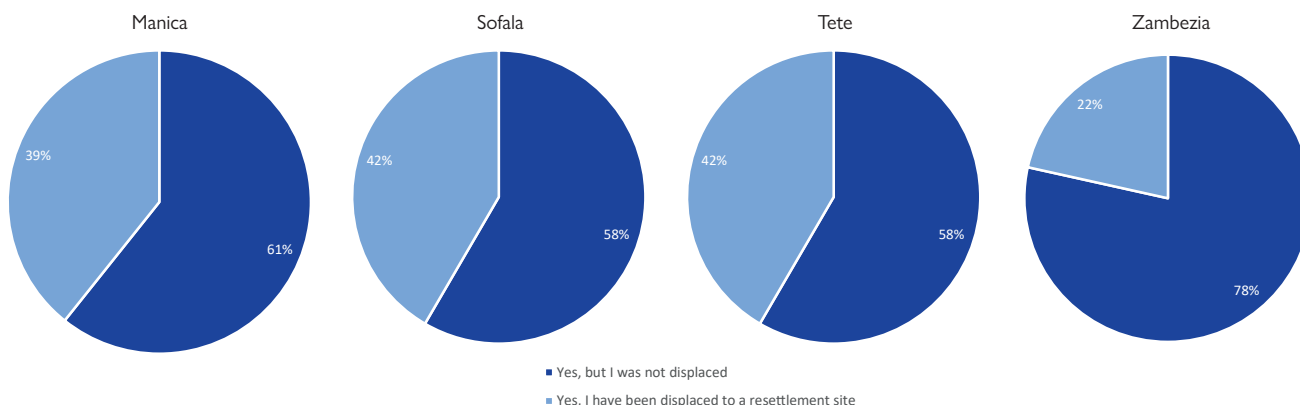
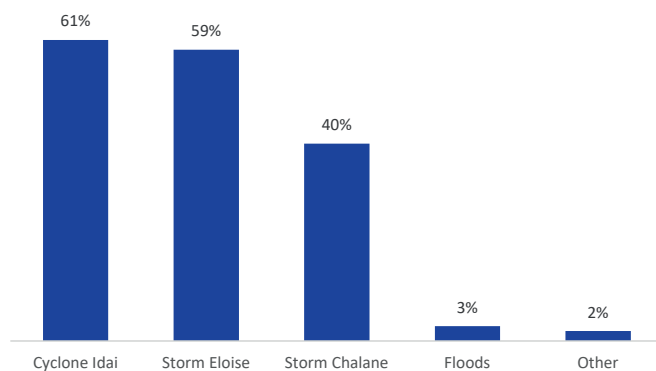
While many households reported that their homes had been completely destroyed by the cyclones and tropical storm, proportionally more individuals in affected communities are now living in permanent shelters compared to those IDPs in resettlement sites. Yet, 91 per cent in this group has also indicated that they believe that construction methods need to be changed and adjusted in preparedness for the future.

SECTION 1: SHELTER CONDITIONS IN RESETTLEMENT SITES

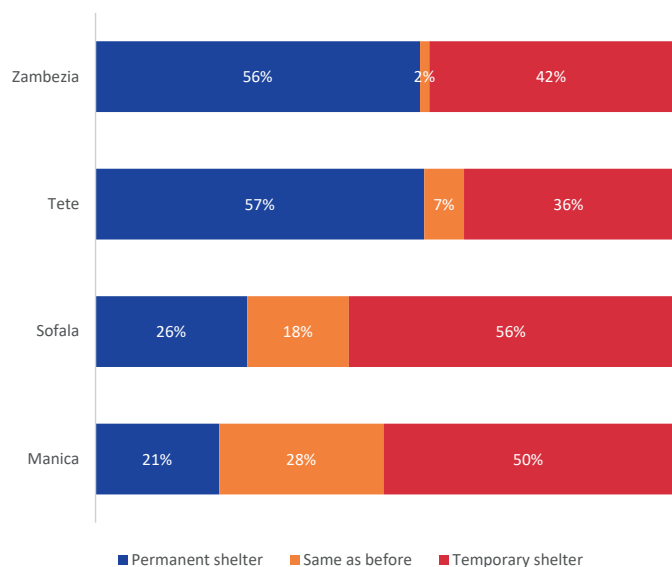
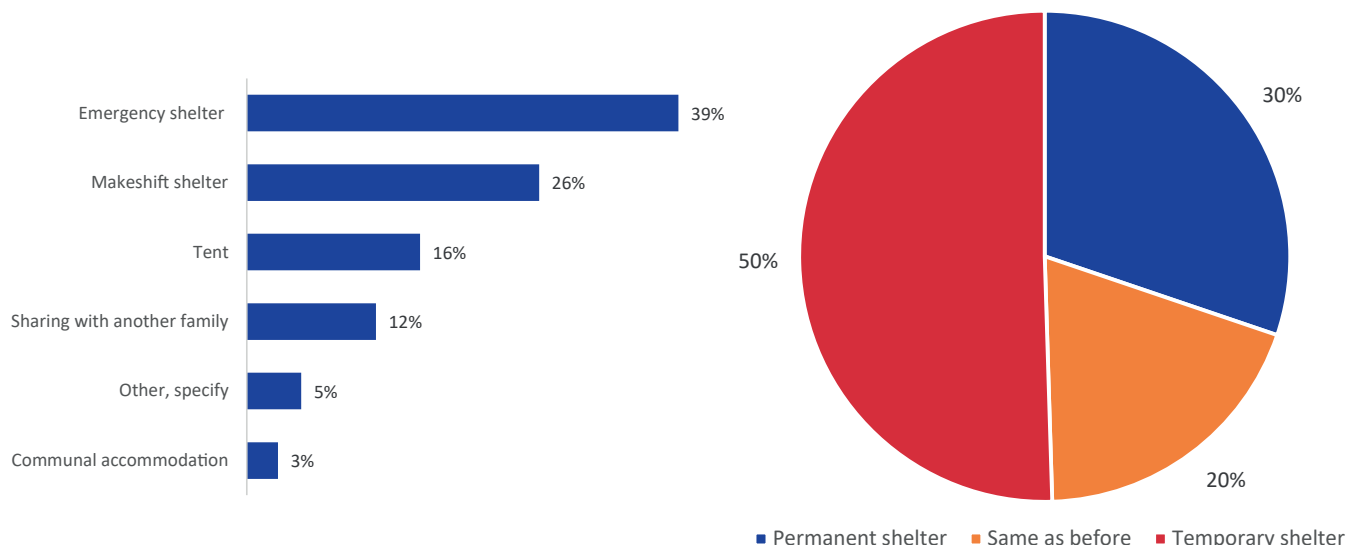
Of the 4,539 households assessed, 1,533 or 35 per cent had been displaced from their homes and were living in resettlement sites. As can be seen below, the vast majority of households became displaced following Tropical Cyclone Idai in 2019, but since then there has been a slow and consistent inflow of arrivals in resettlement sites. Of these households, 74 per cent report that they were also affected by Tropical Storm Chalane and Cyclone Eloise. It should be noted that when looking at date of arrival at resettlement sites for the individual provinces, there have been no new arrivals amongst the interviewed households in Manica since July 2019, and only five per cent of the arrivals in Tete occurred after March 2019. Similarly, only seven per cent of arrivals in Zambezia are recorded after April 2019. Of all the arrivals in 2020 and 2021, 76 per cent arrived to site in Sofala province.



Across Central Region, there are small variations in the proportions of respondents who were either displaced from their homes, or were not displaced while still being affected by the cyclones. While on average, 35 per cent of households have been displaced from their homes, this proportion is much lower in Zambezia, where only 22 per cent were displaced. Zambezia had the second largest number of respondents to the survey (915 in total), with only Manica (1,039) having more. In the other three provinces, the percentage of households displaced is slightly greater than the regional average, 39 per cent in Manica, 42 per cent in Sofala, and 36 per cent in Tete.

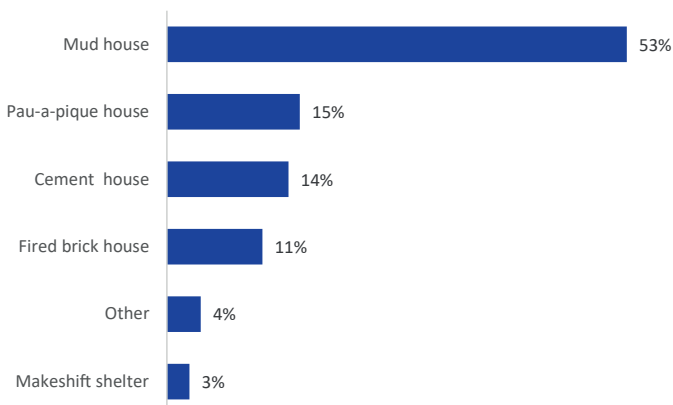


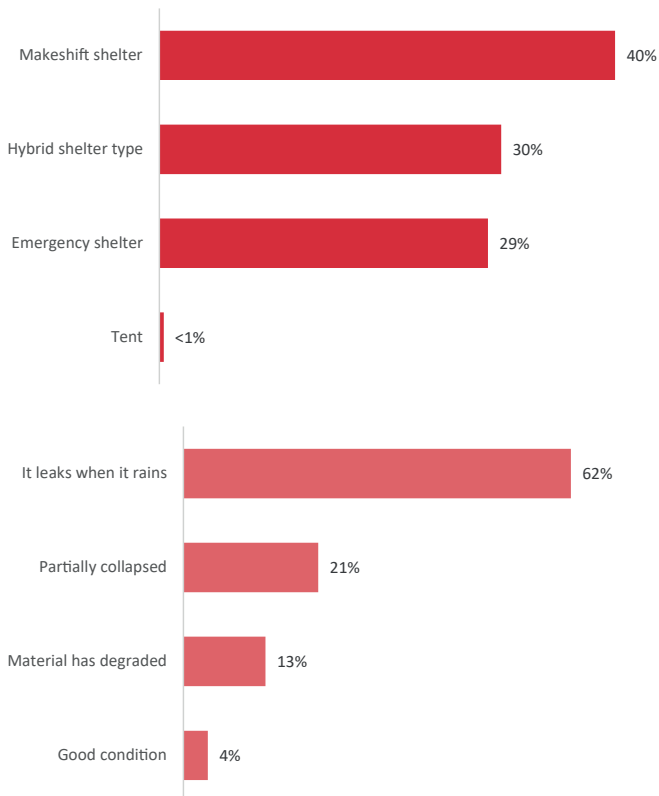
Of the households interviewed living in displacement sites (1,533), when they originally arrived 39 per cent were living in emergency shelters, and 26 per cent in makeshift shelters. Also 16 per cent were living in tents, while 12 per cent were sharing the structure belonging to another family. In the category "other", respondents were living in classrooms, warehouses, and private buildings. Currently, as seen from below on the right, 50 per cent of households are living in temporary shelters, and 30 per cent in permanent shelters. This marks a large and substantive change in shelter conditions, though 20 per cent of households remain in the same shelters they were in before.



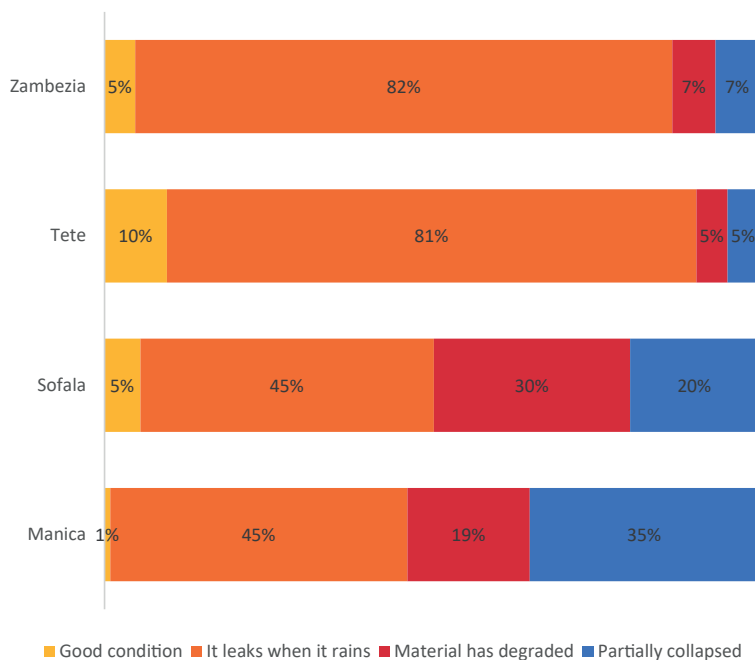
Taking the current shelter conditions, there are quite large disparities between the provinces. While in Zambezia and Tete, almost no households (2% and 7% respectively) remain in the same shelters as at the beginning of their displacement, in Sofala it is 18 per cent and in Manica 28 per cent. In addition, far more households on average are living in permanent shelters in Zambezia and Tete (56% and 57%) compared to Sofala and Manica (26% and 21%). Half of households in Manica, and 56 per cent in Sofala live in temporary shelters, a noticeably larger proportion than in the other two provinces.

Of the 463 households living in permanent shelters across the four provinces, more than half (53%) live in mud houses, followed by houses made form pau-a-pique (15), cement houses (14%), and fired brick houses (11%). When breaking down the results by province, 74 per cent of shelters are mud houses in Sofala, 62 per cent in Zambezia, 48 per cent in Tete, and 25 per cent in Manica. The most common permanent shelter type in Manica is a cement brick house, with 45 per cent of households there living in such shelters. Furthermore, in Sofala 26 per cent of households live in fired brick houses, but only 12 per cent in Tete. Approximate 20 per cent of households in each of Zambezia, Tete, and Sofala living in pau-a-pique houses, but no one surveyed does in Manica.

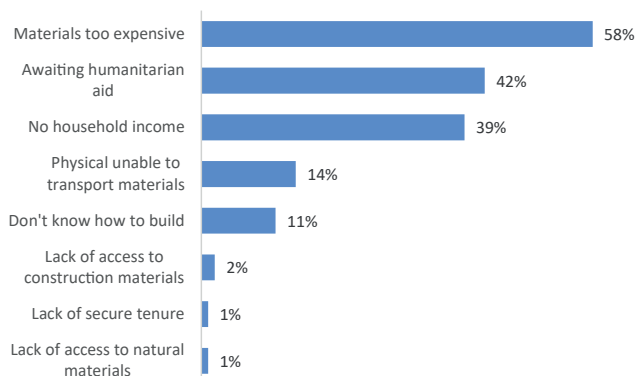


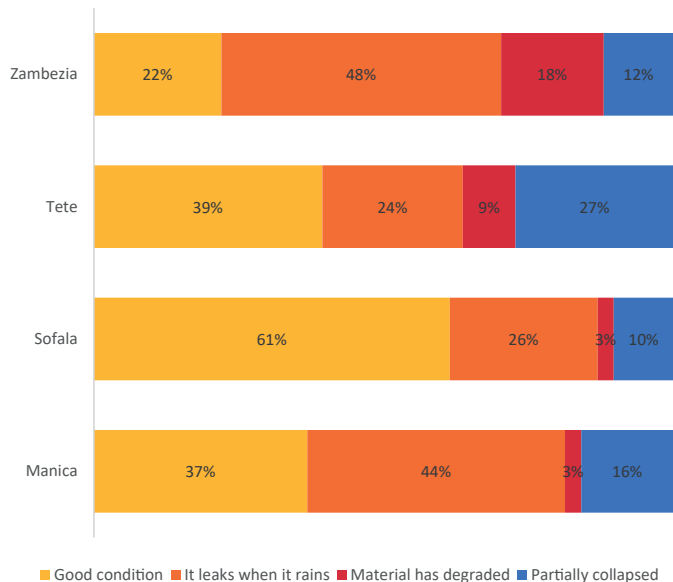


Of the 774 households living in temporary shelters, 40 per cent live in makeshift shelters, 30 per cent in hybrid shelter types, and 29 per cent in emergency shelters. Less than one per cent live in tents (the only households living in tents were in Zambezia). In Zambezia, 91 per cent of households live in makeshift shelters, compared to 52 per cent in Tete, 46 per cent in Sofala, and 18 per cent in Manica. In Tete, 43 per cent of households live in hybrid shelter types, compared to 39 in Manica and 30 in Sofala. In Manica, 43 per cent of households still reside in emergency shelters, while in Sofala 24 per cent do. Only 5 per cent live in emergency shelters in both Tete and Zambezia. The most common complaint or issue with temporary shelters is that they leak when it rain, with 62 per cent of households reporting this issue. This is followed by the shelters being partially collapsed (21% of households), that the construction materials have degraded (13%). Only four per cent of households reported that their temporary shelters are in good condition. It should be noted that the majority of households reporting collapsed shelters reside in Mania and Sofala, with 35 per cent and 20 per cent of households in each province respectively reporting this.



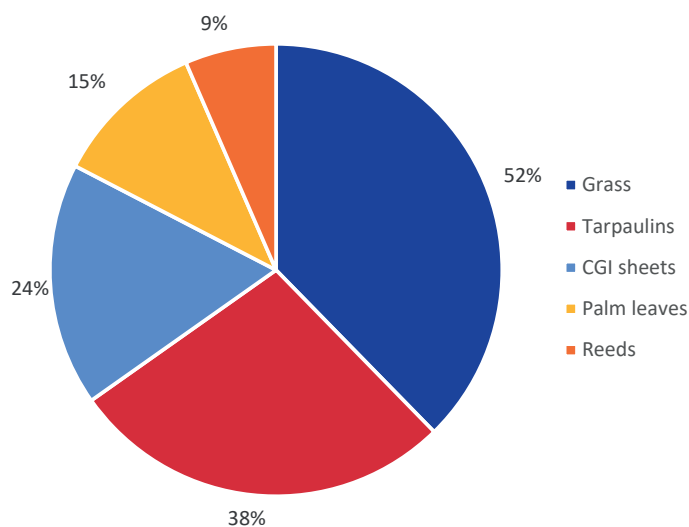
Households were asked why they have not been able to construct a more permanent shelter. Given multiple options, 58 per cent responded that construction materials are too expensive, 42 per cent said they are awaiting humanitarian aid, and 39 per cent said that they cannot improve their shelters as no one in the household has any income. Fourteen per cent of households reported being unable to physically transport these materials, while 11 per cent reported that they do not know how to build a more permanent shelter. Two per cent reported lack of access to construction materials, and one per cent reported lack of secure tenure and lack of access to natural materials.



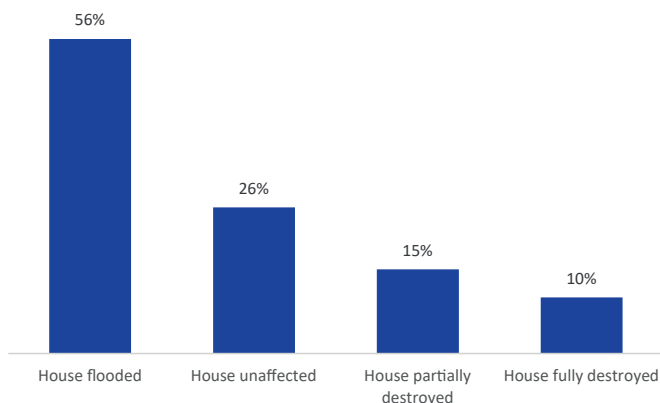


As can be seen on the chart on the left, the problems associated with permanent shelters are very different. Across Central Region, 40 per cent of households reported that their shelters are in good condition. In Sofala, this is as high as 61 per cent, 39 per cent in Tete, 37 per cent in Manica, and it is lowest in Zambezia with only 22 per cent of households reporting a good shelter condition. A significant percentage of households reported that their permanent shelters leak when it rains. Across the four provinces, this averages at 38 per cent, but is much higher in Zambezia (48%) and Manica (44%). A significant number of households in Tete (27% of those interviewed) reported living in partially collapsed structures, while 16 per cent of households in Manica, 12 per cent in Zambezia, and 10 per cent in Sofala are in the same situation.

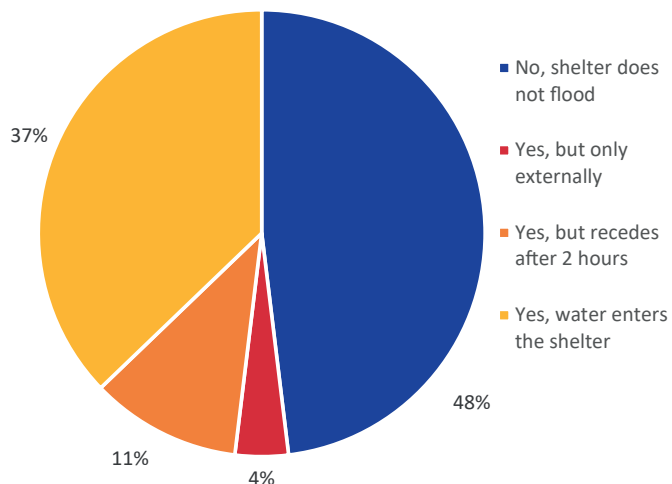
Looking at all shelter types together, the chart on the right shows the different roofing solution employed across the four provinces. Over half (52%) of respondents use grass as a roofing solution, followed by tarpaulins by 38 per cent of households, CGI sheets by 24 per cent, palm leaves by 15 per cent, and reeds by nine per cent. No households reported using concrete for their roofing.



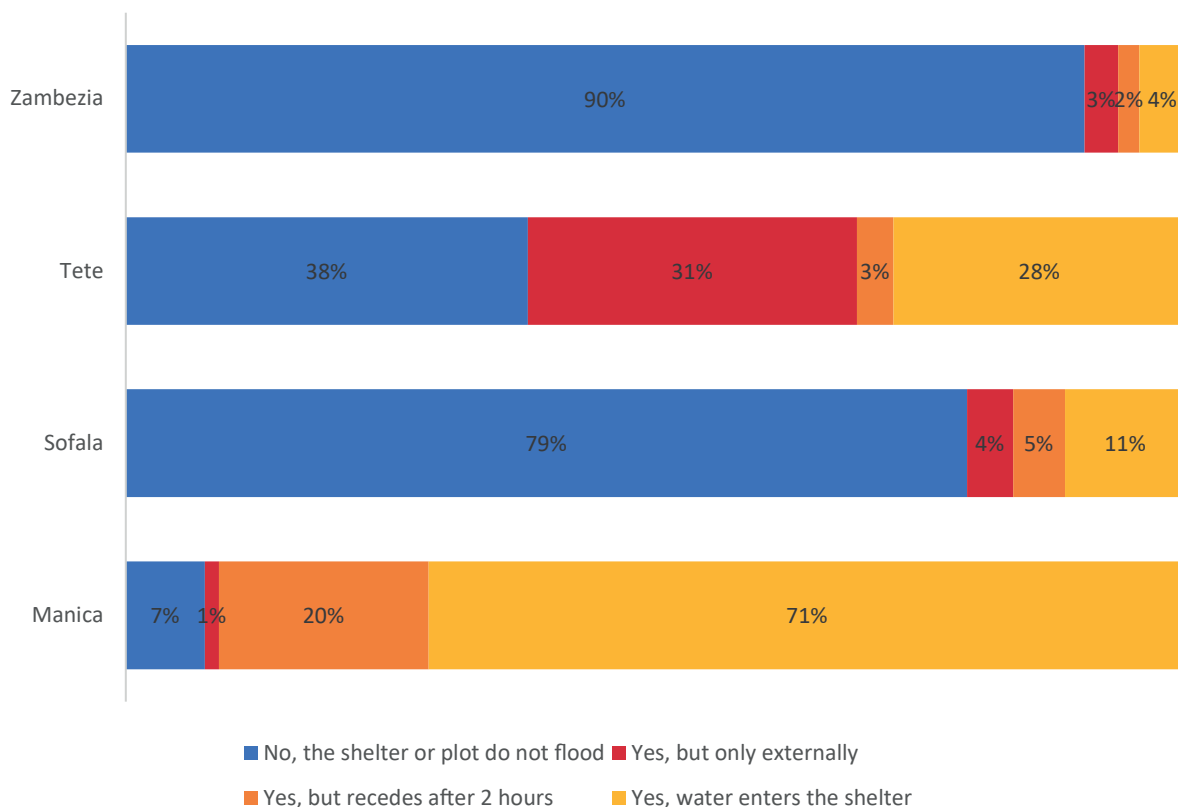
It should be noted also, that of the households interviewed, 69 per cent reported that they had received materials or technical assistance from aid organizations to build their current shelters. However, there are quite large disparities when looking at the provinces individually. While 84 per cent of households in Manica have received the assistance, and 70 per cent in Sofala, only 41 per cent in Tete and 36 per cent in Zambezia have received such aid. This has been reflected in earlier analysis, with conditions consistently being lower in Tete and Zambezia compared to Sofala and Manica.



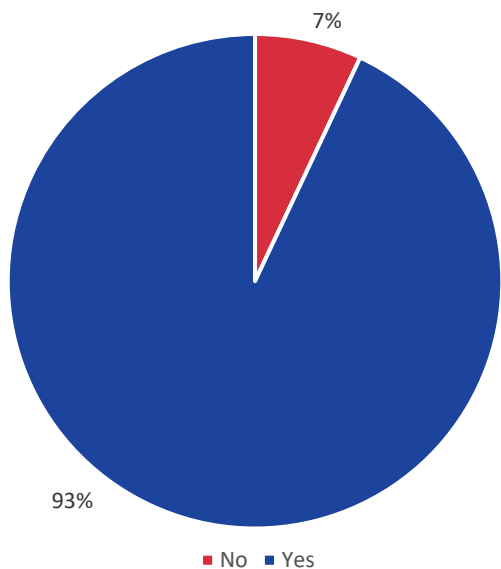
All households in resettlement sites were asked how their homes were affected by Tropical Storm Chalane and Cyclone Eloise. More than half (56%) of households reported that their houses were flooded, while 15 per cent said their house was partially destroyed, and 10 per cent that their houses were fully destroyed. Overall, 26 per cent reported that their houses were unaffected by the tropical storm and cyclone.



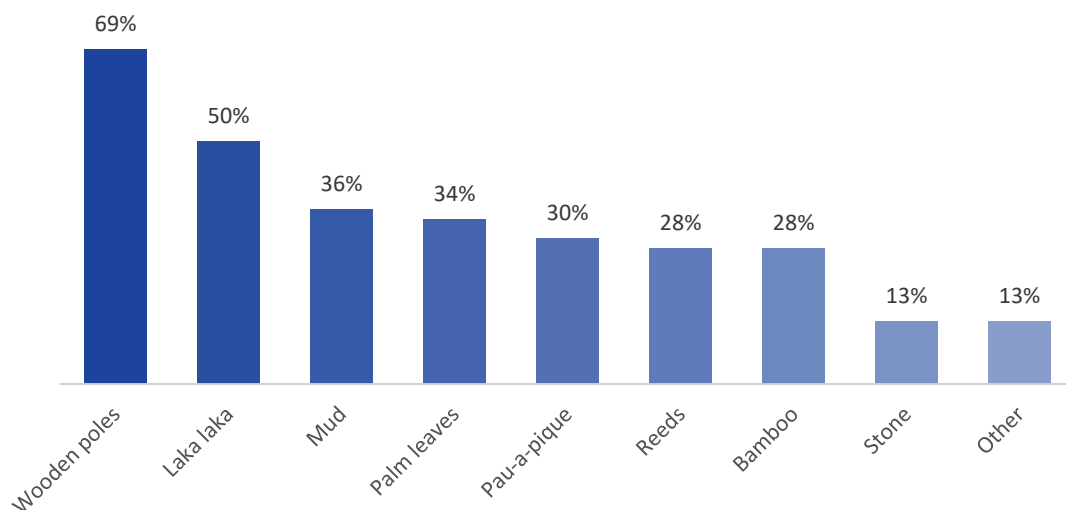
When asked what happens to shelters during heavy rains, 48 per cent reported that their shelters or plots do not flood. Four per cent of households reported that their shelters do not flood, but the plots outside the shelters do flood. Furthermore, 11 per cent of households report that their shelters do flood but that the water recedes within two hours. Fully 37 per cent of respondents said that their shelters or plots do flood, and water easily enters the shelters during heavy rains. Below is a breakdown of the flooding situation of shelters in each province separately.



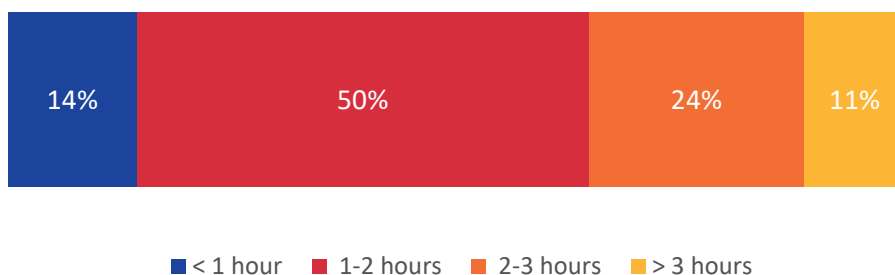
Zambezia has the largest number of respondents who indicated that their shelters or plots do not flood in heavy rains, with 90 per cent selecting this option. It is followed by Sofala where 79 per cent of households report that their shelters or plots do not flood. However, the situation is much more severe in Tete, where only 38 per cent of households reported no flooding, and in Manica only seven per cent reported that their plots or shelters do not flood. While only four per cent of households in Zambezia and 11 per cent in Sofala report that their shelters or plots completely flood in heavy rains, in Tete it was reported by 28 per cent. However in Manica, fully 71 per cent of households reported that their shelters or plots flood and that water easily enters their homes during heavy rains. It is unclear to what degree these issues of flooding are a reflection of shelter conditions, and how many are depending on the geography of the sites.

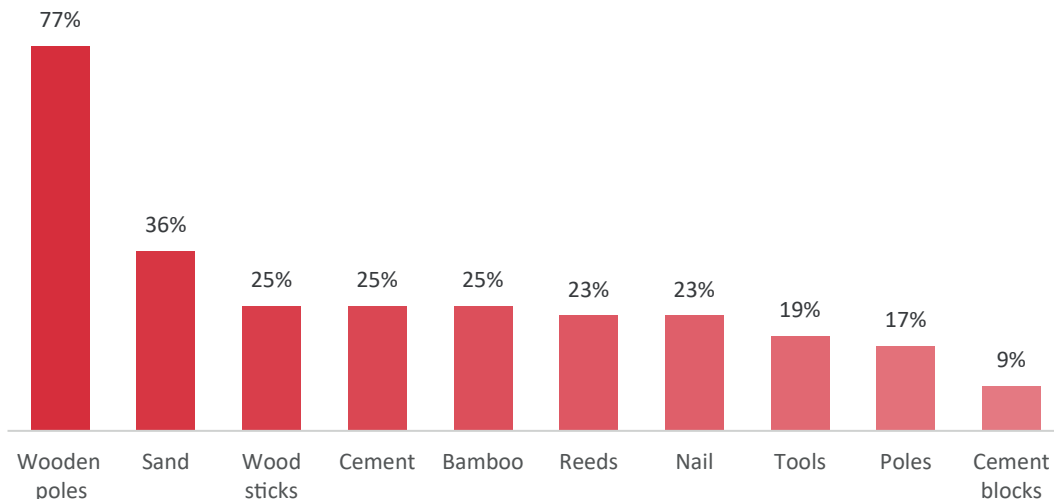


When asked if households in resettlement sites have access to natural building materials that could be used to construct a shelter, 93 per cent responded that they do. While 7 per cent respondents reported they do not have access, the majority of them live in Zambezia and Sofala (in each province 13% of households reported not having access to natural building materials, as did 2% in Tete). For those that did have access, they were asked which materials are available. The results to the multiple choice question can be seen below. More than half (69%) of households have access to wooden poles, and half have access to laka laka. Thirty-six per cent have access to mud, 34 per cent have access to palm leaves, 30 per cent to pau-a-pique, 28 per cent to reeds, 28 per cent to bamboo, and 13 per cent to stone.

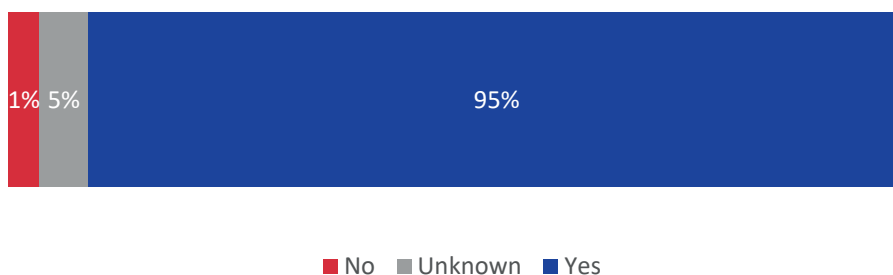


When asked how long it takes to collect materials, 14 per cent of households reported that they could locate the materials less than an hour walking distance from their shelters, 50 per cent said the materials are 1-2 hours away, 24 per cent that the materials are 2-3 hours, and 11 per cent that the materials are more than 3 hours away. When looking at the individual provinces, in Manica 73 per cent of households reported that they would need to walk 1-2 hours to collect building materials, while in Zambezia 42 per cent reported the same, as did 27 per cent in Sofala and 23 per cent in Tete. It should also be noted that no respondents in Manica or Tete reported needing to walk more than three hours, while 27 per cent did in Sofala and 15 per cent in Zambezia. In Tete, 37 per cent of households reported that they could walk less than an hour to find materials, the highest proportion of any province, compared to 29 per cent in Zambezia, and only 13 per cent in Manica, and seven per cent in Sofala.

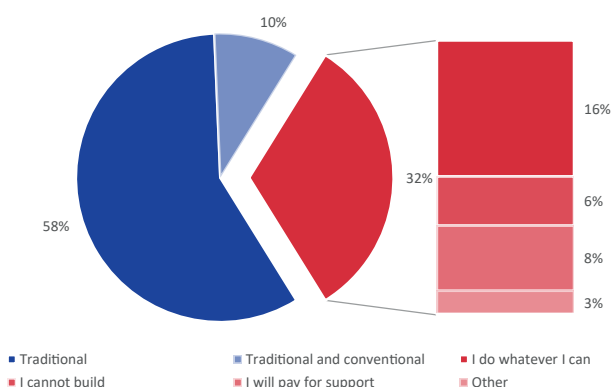




Household in resettlement sites were asked to provide information on the availability of building materials at local markets, or that can be purchased nearby to sites. The majority (77%) of households reported that wooden poles are available for purchase - the only material that is available to more than half of the surveyed households. Thirty-six per cent reported that sand is available for purchase, 25 per cent wooden sticks, 25 per cent cement, 25 per cent bamboo, 23 per cent reeds, 23 per cent nails, 19 per cent construction tools, and 17 per cent poles, and nine per cent cement blocks.

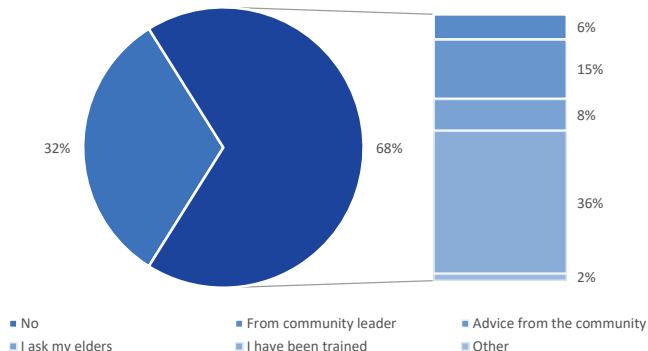


The chart above presents data on whether households in displacement sites believe that they need to change or adjust their construction methods to makes houses that will be more resilient to cyclones in the future. Ninety-five per cent agree that construction methods need to be changed, while five per cent said they do not know, and less than one per cent said that don't need to change. It should be noted that 12 per cent of respondents in Manica said they do not know if the methods should changed, while less than one per cent in Zambezia did, and none in either Sofala or Tete.

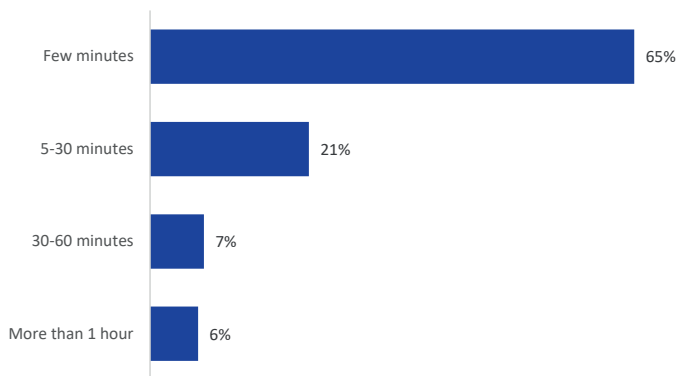


Respondents were asked if members of the household know how to build. Fifty-eight per cent report that there is a member who knows how to build shelters using traditional methods, and 10 per cent reported they know how to use traditional and conventional/modern methods. However, 32 per cent of households do not have any construction knowledge. When asked how they would cope without this knowledge, 16 per cent said they will do whatever they can, six per cent said that they cannot build, and that eight per cent will pay for support. Importantly, 81 per cent of households in Manica only know how to build using traditional methods. Manica also has the lowest proportion of households who do not know how to build, with 14 per cent, compared to 50 per cent in Sofala, 41 per cent in Tete, and 39 per cent in Zambezia.

As seen in the previous graphic, 32 per cent of households have no one with any construction knowledge. Of the 68 per cent of households that know how to construct shelters using either traditional or conventional/modern methods, six per cent say they learned from a community leader, 15 per cent said they received advice from the community, eight per cent seek construction guidance from their elders, and 36 per cent have been trained previously.

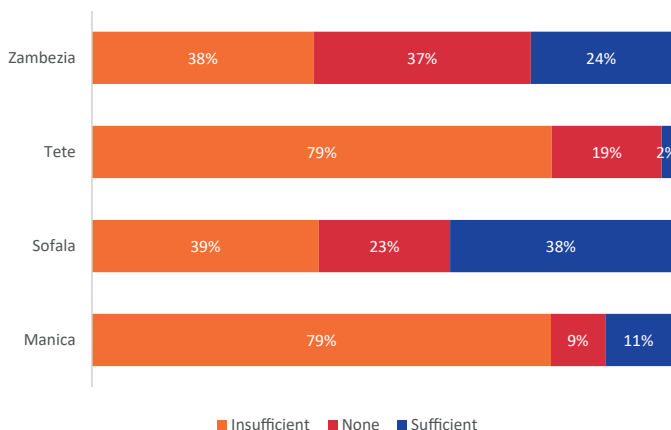
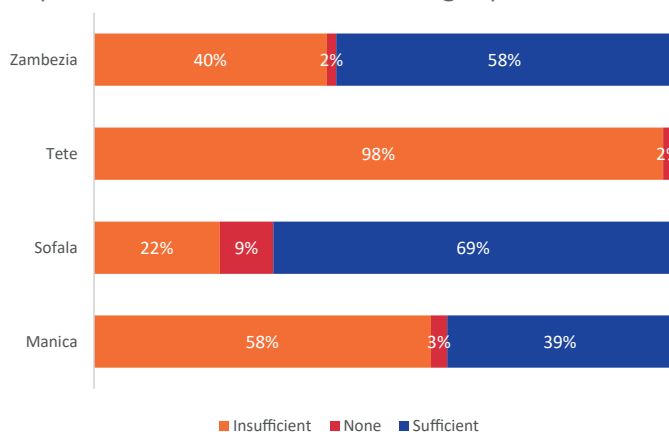


In total, only 18 per cent of respondents in resettlement sites have said that they have formal documents for tenancy or ownership agreements. However, when looking at the provinces separately, 45 per cent of respondents in Sofala have formal tenancy documents, but only three per cent in Manica do, a none in either Tete or Zambezia. Following the disaster, 7 per cent of households report that they are in possession of these documents (breakdown by province: Sofala 14%, Manica 3%, Zambezia 1%, Tete 0%). In addition, 13 per cent of households report that in the case of their displacement that they are able to keep tenancy and ownership of their previous home/land. In Manica, 24 per cent of households are able to keep tenancy in case of their displacement, but only eight per cent in Sofala, two per cent in Tete, and under one per cent in Zambezia.



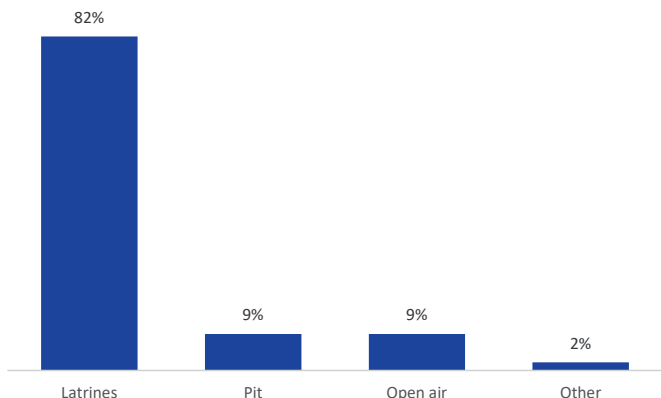
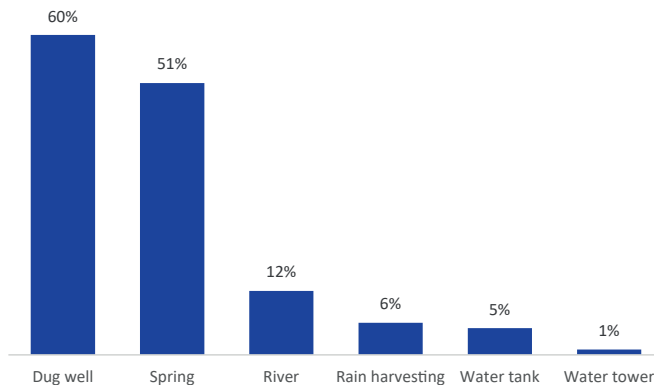
The majority (87%) of households report that water is available all day throughout the year, but in Sofala 78 per cent of respondents gave the same answer, while 14 per cent said water was available only sometimes in the day, and seven per cent said it is sometimes unavailable during the year. In Tete, only 31 per cent reported that water is always available, and 69 per cent reported that sometimes in the year it is not available. For the majority (65%) of households, it takes a few minutes to get potable water, and for 21 per cent it takes 5-30 minutes. Only seven per cent take 30-60 minutes, and six per cent more than an hour to get potable water.

Access to potable water is insufficient for 44 per cent of the total in-site population, but in Tete this is as high as 98 per cent, and 58 per cent in Manica. It should be noted, the methodology does not measure against minimum standards for water access. No one in Tete reported having sufficient potable water availability. Sofala with 69 per cent and Zambezia with 59 per cent have the highest proportions of households reporting sufficient availability.



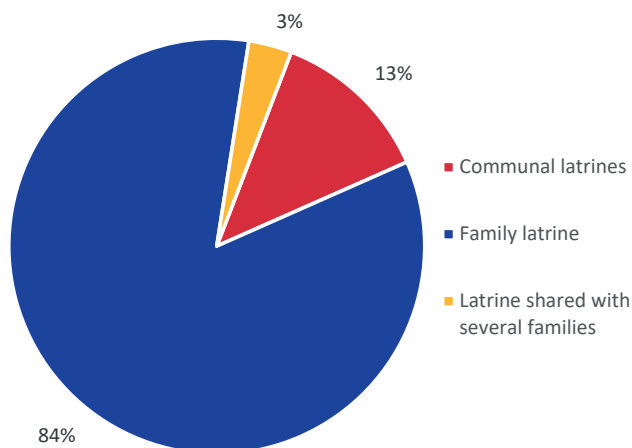
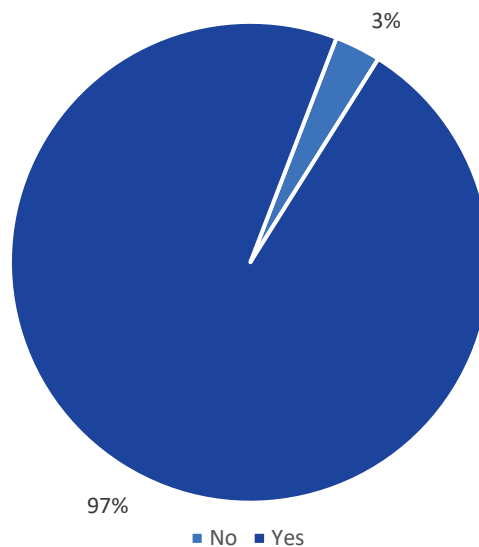
Access to non-potable water is in a similar precarious situation as access/availability of potable water. Fifty-eight per cent of households reported insufficient access, but this is as high as 79 per cent in both Tete and Manica. While few households reported not having any access to potable water, significantly more reported having no access to non-potable water, with 37 per cent of households in Zambezia, 23 per cent in Sofala, 19 per cent in Tete, and nine per cent in Manica being in this condition.

Households in displaced sites were asked where they collect water from. Sixty per cent said that they use dug wells as a water source, while 51 per cent use springs. These are by far the most popular water sources. Only 12 per cent reported to use rivers, six per cent that they harvest rainwater, only five per cent have water tanks, and less than one per cent get their water from water towers.



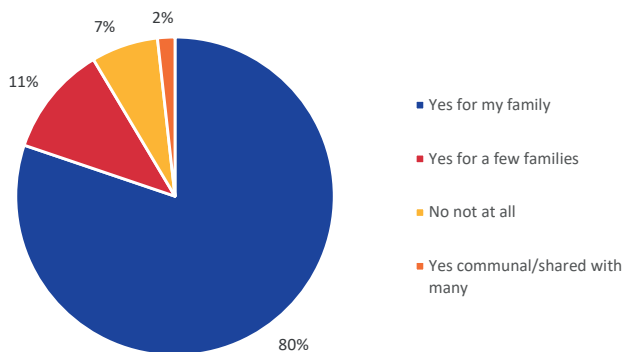
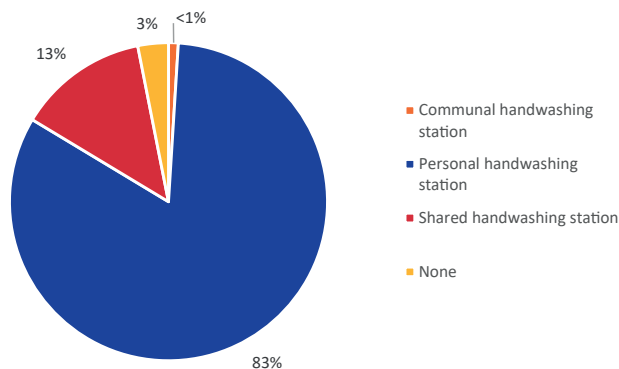
The vast majority of respondents in resettlement sites have said that they use latrines for the disposal of excrement (82%). A further nine per cent reported using pits, and nine per cent said that they leave excrement in the open air, without any specific treatment or facilities. Furthermore, 70 per cent of respondents said that they use burning pits to get rid of waste, while 62 per cent said that they use a hole in the ground that caters for the local block.

Only three per cent of respondents in resettlement sites reported that they do not have functional latrines, while 97 per cent do. When disaggregating the provinces, the access to functional latrines remains universally very high, though there are still some disparities. In Tete, everyone has access to functional latrines, while in Manica less than one per cent of IDPs are in the same situation. Three per cent of households in Zambezia do not have access to functional latrines, but the highest proportion without access is in Sofala, where seven per cent do not have access.



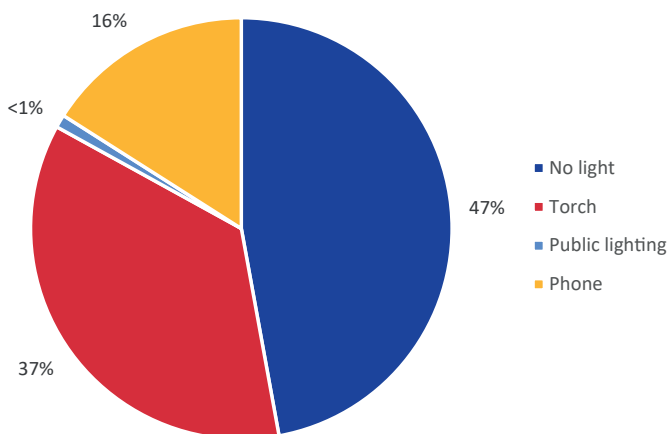
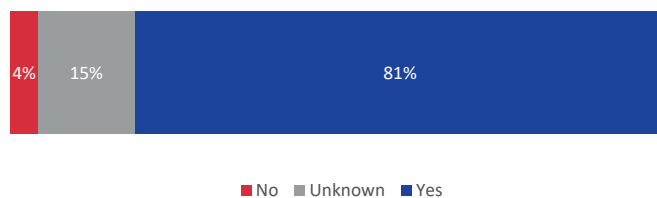
The majority of households (84%) report that they use family/household latrines and that then do not need to share facilities with other families. In Sofala, Tete, and Zambezia this percentage is in fact greater than or equal to 95. Only in Manica is there a different trend, with only 68 per cent of households saying they use family latrines, while 29 per cent use communal latrines. In fact, Manica is the only province where any households reported using communal latrines. Only three per cent of households reported that they share latrines with at most a few other families.

The majority of households (83%) report that they have personal hand washing stations to use in their shelters, while 13 per cent share these stations with several other families. Only three per cent of respondents said that they have no access to hand washing stations, and fewer than one per cent said they use communal hand washing stations. Manica is the only province with a significant number of shared hand washing stations (26%) compared to Sofala, Tete, and Zambezia (5%, 2%, 1% respectively).



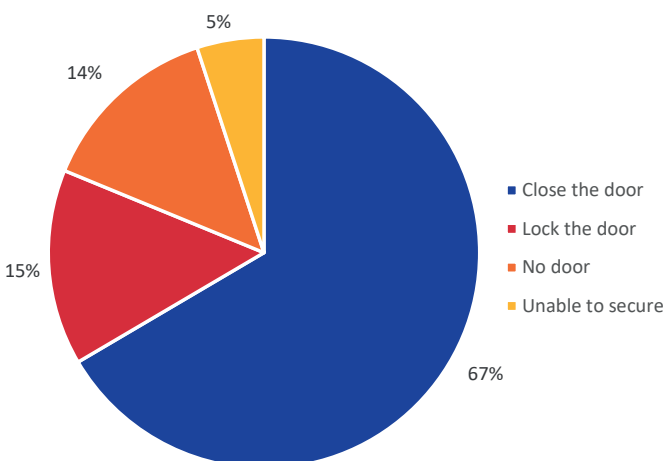
The majority of households (80%) say that they have personal bathing facilities for individual hygiene in their family, while 11 per cent share bathing facilities between a few families, and seven per cent have no facilities whatsoever. When looking at the provinces individually, only in Manica do several households share bathing facilities. The most severe lack of bathing facilities are in Tete, where 36 per cent of households said they do not have personal/private facilities for hygiene purposes.

There have been WASH community engagement sessions reported by 81 per cent of respondents. However, in Manica 26 per cent of the surveyed households and 18 per cent in Zambezia were not sure if such campaigns had been conducted. Furthermore, 19 per cent of households wash their hands all the time, 55 per cent sometimes, and 22 per cent use ash to clean their hands.

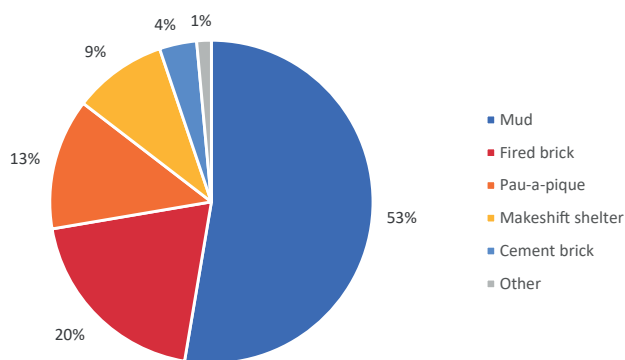


On average, 95 per cent of respondents feel safe in their homes, with the lowest proportion being in Manica province with 90 per cent. Ninety-nine per cent of respondents feel safe in their communities. When leaving their shelters at night, 47 per cent of households report that they have no light source, while 37 per cent have a torch, and 16 per cent can use their phone. It should be noted that 73 per cent of people in Sofala use a torch, compared to an average of 17 per cent for the other three provinces.

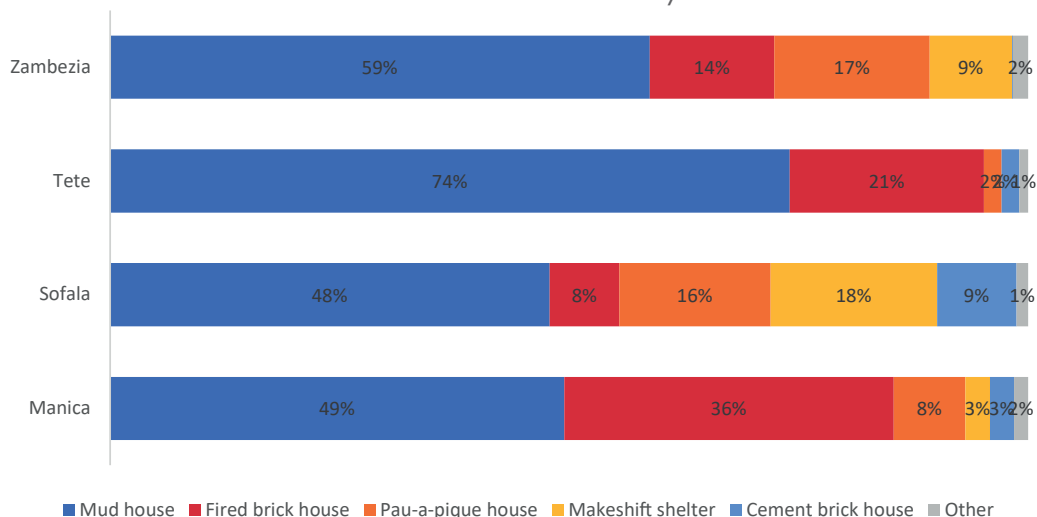
Only three per cent of households in the sites reported that there is enough communal lighting to provide security during the night time. To feel secure, 67 per cent of households close their doors, 15 per cent can lock their doors, but 14 per cent have no doors (and a further 5% are unable to secure their shelters). In Zambezia, 37 per cent of households lock their doors, compared to 13 per cent in Sofala, 10 per cent in Tete, and eight per cent in Manica. Around 70 per cent of respondents said that their shelters have not been adapted to the specific needs of female members, disabled members, or elderly members of the household.



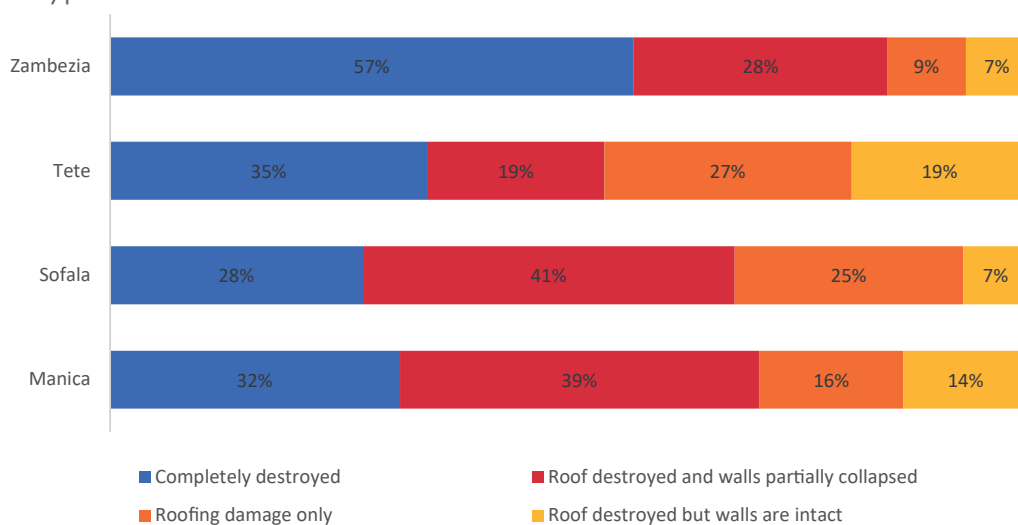
SECTION 2: HOUSING CONDITIONS IN THE AFFECTED COMMUNITIES



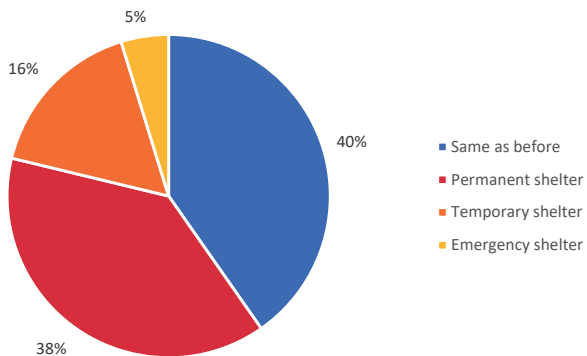
There were 3,006 households interviewed who had been affected by the storms and cyclones but had not left their homes. The majority of these households lived in mud houses (53%), while 20 per cent live in houses made from fired brick, and 13 per cent in houses made with pau-a-pique. Nine per cent live in makeshift shelters, made from materials gathered in the forest, and four per cent live in houses made with cement bricks. These are the shelter conditions of households when the cyclones affected them.



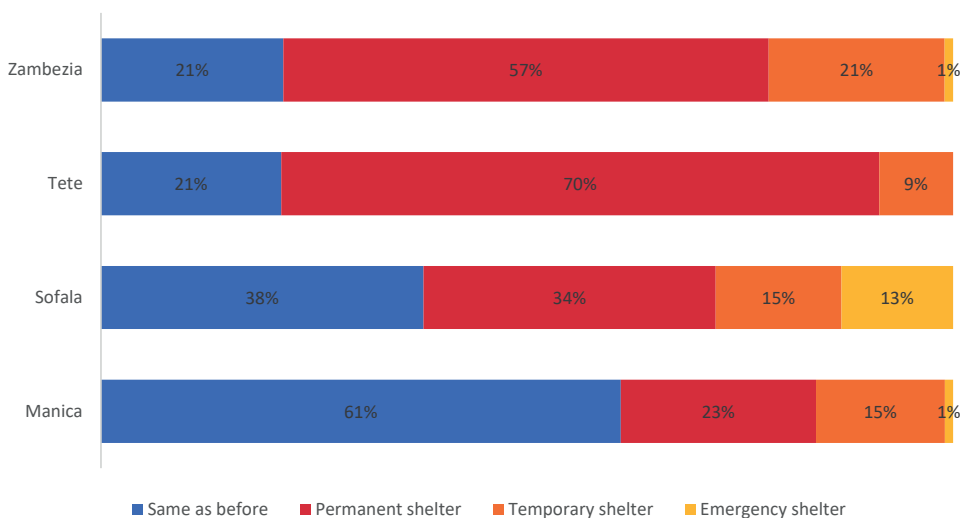
The chart above presents the shelter types for households in affected communities for the four assessed provinces. As can be seen, mud houses are far more prevalent in Tete (74%) compared to the other three provinces, while in Manica less than half live in the same shelter types. However, in Manica, fired brick houses are much more prevalent (36% of households in the province) compared to other provinces like Sofala (8%). There are almost no households in pau-a-pique houses in Tete, and none living in makeshift shelters. Whilst very few households reside in shelters made from cement bricks, there are no recorded households in Zambezia with this shelter type.



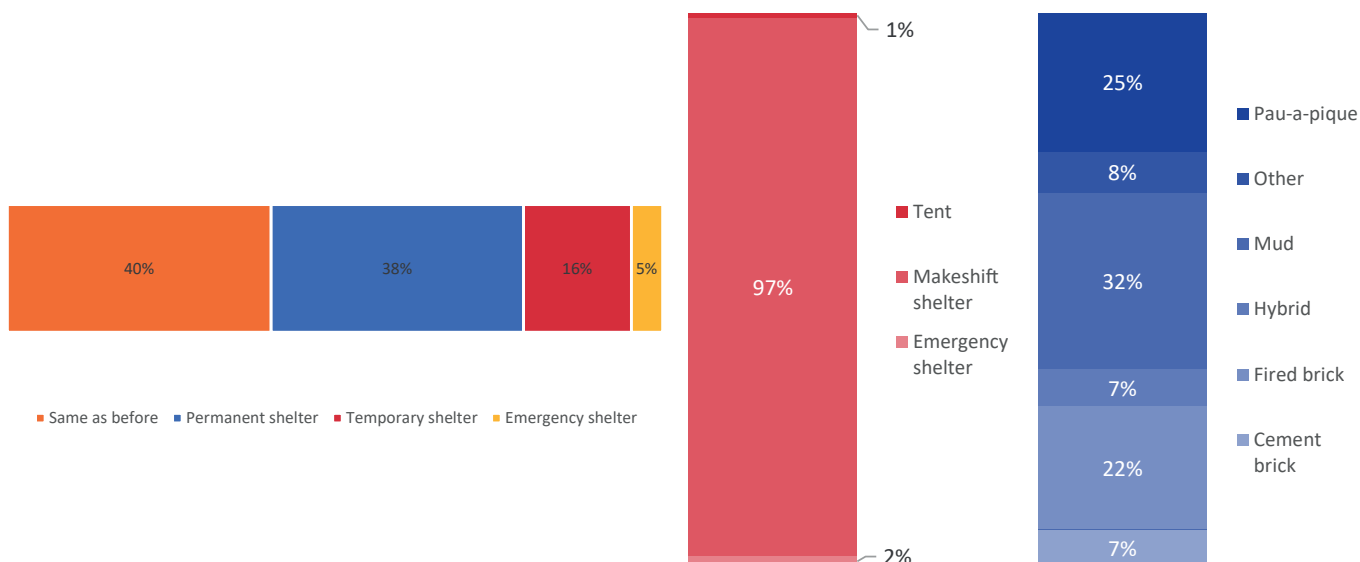
Right after the cyclones and tropical storm, 38 per cent of households reported that their homes were completely destroyed. This proportion is a lot higher in Zambezia, where 57 per cent reported that their homes were completely destroyed. Overall, 35 per cent of households reported that their roofs had been destroyed and walls were partially collapsed, though households in Sofala and Manica were proportionally more affected by this. Roofing damage was most prevalent in Tete and Sofala, while Tete also had the highest incidence of roofs being destroyed.



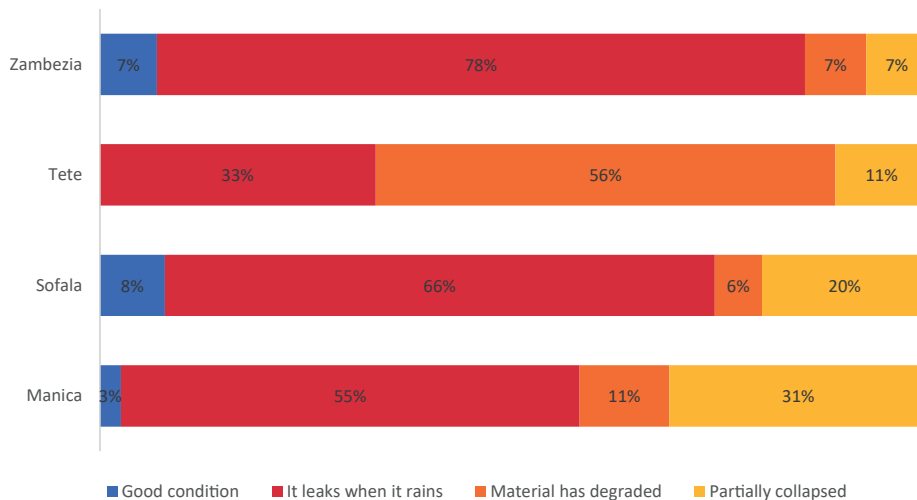
Currently, 40 per cent of households in affected communities are living the same shelters/houses as they were in previously, while 38 per cent are living in new permanent shelters, 16 per cent are now in temporary shelters, and five per cent are living in emergency shelters. The chart below breaks down the current shelter conditions for each of the assessed provinces.



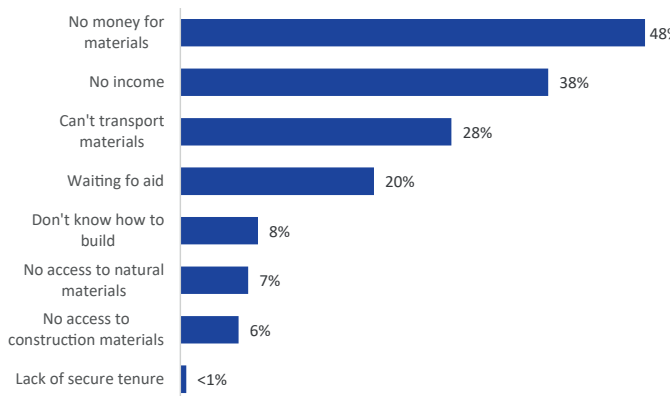
In Manica, the majority (61%) of households live in the same shelter as before the cyclone and tropical storm, the highest proportion of all the provinces. In comparison only 21 per cent of households in Tete and Zambezia are in the same situation. On the other hand, these two provinces have the highest proportions of households living in permanent shelters (70% and 57% respectively), compared to 34 per cent in Sofala, and 23 per cent in Manica. There are no households living in emergency shelters in Tete, and only one per cent in both Manica and Zambezia are in the same condition - most of households still living in emergency shelters are in Sofala.



The stacked bar on the left is the proportion of households living in each shelter type for all four provinces. The two vertical columns break down the shelter materials used for both households in permanent shelters and temporary shelters. Of those in temporary shelters, 97 per cent are in makeshift shelters, made from natural materials salvaged from the forest. While for those in permanent shelters, 32 per cent live in structures made from mud bricks, 25 per cent from pau-a-pique, and 22 per cent from fired bricks. The biggest change from before the cyclones is that previously proportionally fewer households lived in houses made from pau-a-pique compared to now, reflecting the ease of reconstructing shelters with these materials.

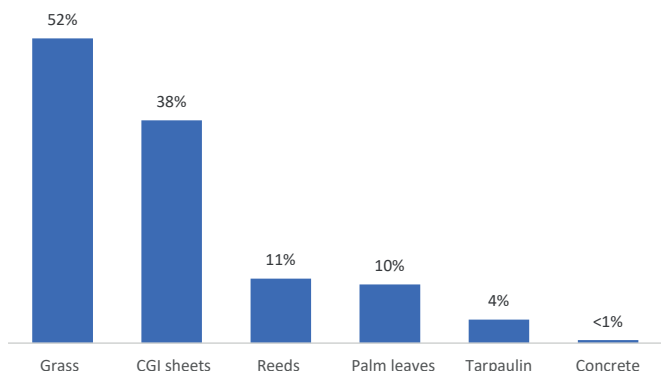
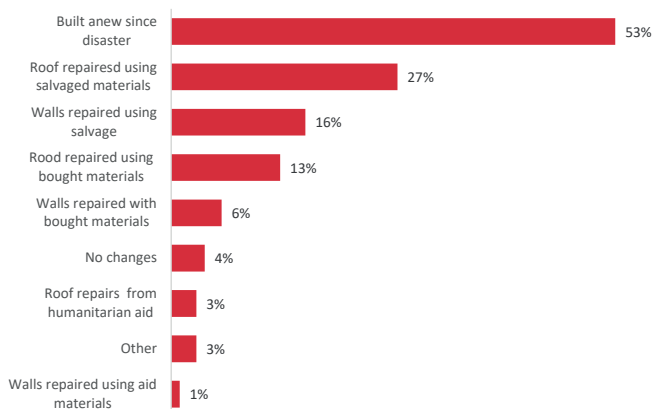


There are considerable differences in the current conditions of shelters between the four assessed provinces. Overall, 67 per cent of households live in shelters that leak when it rains, 19 per cent live in partially collapsed structures, nine per cent live in structures that have partially degraded materials, while only six per cent live in shelters described to be in good condition. In Tete, nobody reported that their homes are in good condition, and the province has the highest proportion of households who live in domiciles where the materials are partially degraded (56%). The other three provinces have proportionally many more residents who reported that their shelter structures leak when it rains (78% in Zambezia, 66% in Sofala, and 55% in Manica). Of concern is that 31 per cent of households in Manica, and 20 per cent in Sofala live in partially collapsed structures.

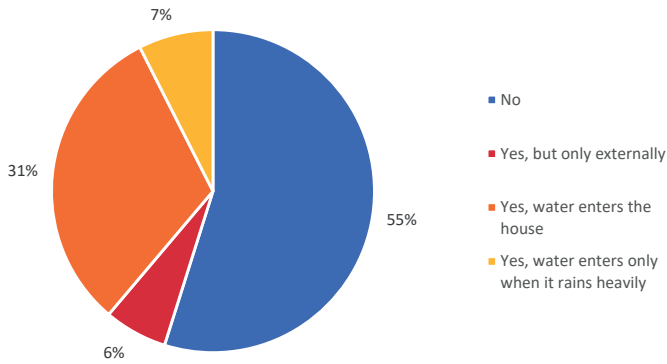


The chart on the left provides all the reasons why households in affected communities have not been able to construct more permanent shelters. The most common reasons are that households have no money to buy materials (48% of respondents), that they have no income (38%), they physically cannot transport the materials (28%), they are waiting for aid (20%), that they do not know how to build (8%), they don't have access to natural materials (7%), and that they have no access to construction materials (6%).

When asked about the current conditions of their homes, households in affected communities in the majority of cases said they had built anew following the disaster (53%), while 27 per cent had repaired their roofs using salvaged materials, 16 per cent had repaired walls using salvaged materials, 13 per cent had bought materials to repair roofs, and nine per cent has bought materials to repair walls. Only three per cent said they used aid materials to repair roofs, and only one per cent used aid materials to repair walls.

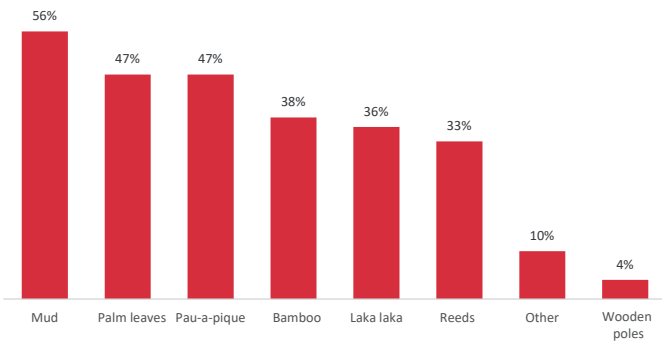
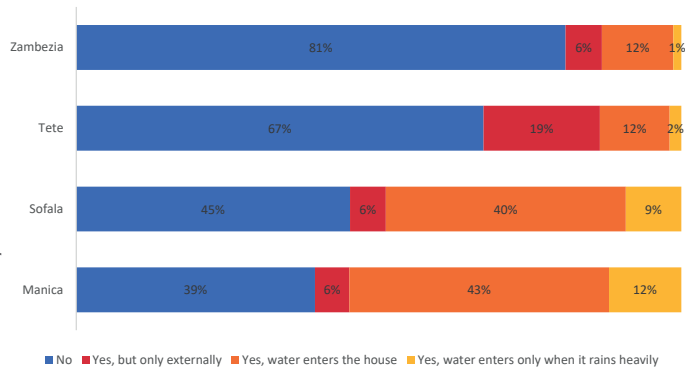


Over half of all houses use grass as the primary roofing materials (52%), followed by CGI sheets (38%), reeds (11%), palm leaves (10%), and tarpaulins (4%). Fewer than one per cent of households reported using concrete as their roofing material. It is important to note that 94 per cent of respondents said they did not receive materials or technical assistance from aid organizations.



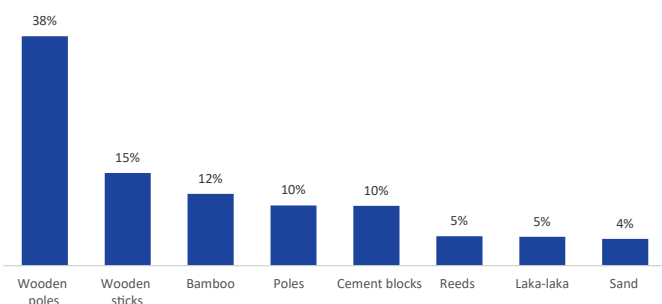
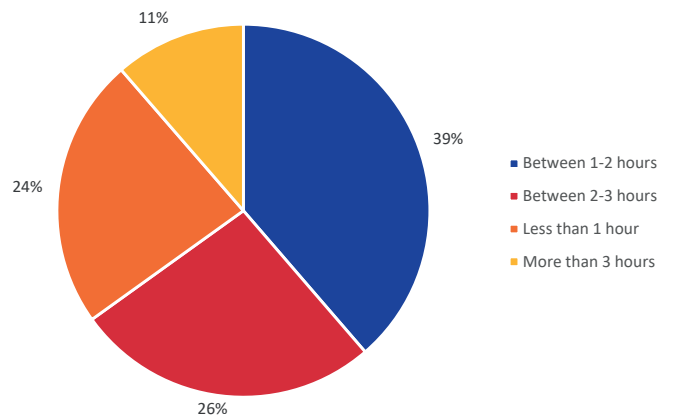
Of those living in affected communities, 55 per cent have indicated that their shelters/homes/plots never flood, even during heavy rains, while 31 per cent report that water does enter the house. Six per cent of respondents reported external flooding on the plot, that does not enter the house, while seven per cent have said that water does enter the house but only when the rains are sufficiently heavy.

The chart to the right reflects the province-level breakdown of the flooding indicator just analysed. The majority of households in Zambezia (81%) and Tete (67%) do not flood at all, compared to Sofala and Manica where less than half in each site do not flood. Water enters the house during rains very often in Sofala and Manica (issues reported by 40% and 43% of households respectively), compared to Zambezia and Tete (both at 12%).

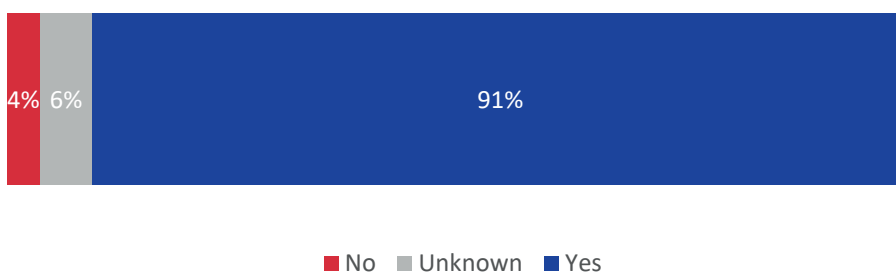


Households were asked what materials are available to collect near their homes. Fifty-six per cent reported that they have access to mud, 47 per cent palm leaves, 47 per cent pau-a-pique, 38 per cent bamboo, 36 per cent laka laka, 33 per cent reeds, and four per cent wooden poles.

Households were asked how long they have to walk from their homes or shelters to collect the aforementioned available materials. For 24 per cent of households in Central Region (but 33% in Tete, and 30% in Sofala) it takes less than an hour. For 39 per cent of respondents (51% in Zambezia, 49% in Tete, 41% in Manica, and 22% in Sofala) it takes 1-2 hours. For 26 per cent of households it takes 2-3 hours to reach the materials and for 11 per cent more than 3 hours.

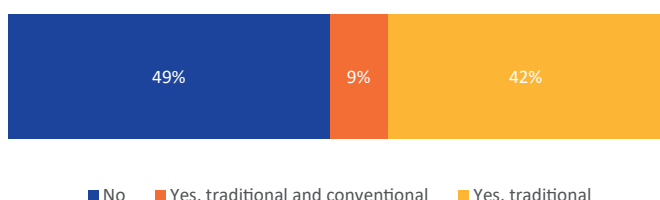


When asked what materials are locally available to be purchased, 38 per cent of respondents mentioned wooden poles, 15 per cent wooden sticks, 12 per cent bamboo, 10 per cent poles, 10 per cent cement blocks, five per cent reeds, five per cent laka laka, and four per cent sand.

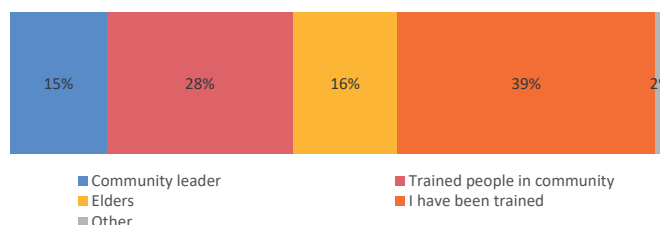


Overall, 91 per cent of people surveyed in the affected communities believe that construction methods need to be changed to make them stronger and more resilient in order to prepare for a future cyclone or extreme weather. Only 4 per cent said they do not need to change anything, but the majority of households who chose this option live in Sofala province (11 per cent of households in the province, compared to <1% in Manica and Zambezia, and 0% in Tete). In Manica, 15 per cent of respondents said they do not know if construction methods should be changed.

Almost half, 49 per cent, of households in affected communities do not know how to construct a shelter, while 42 can using traditional methods, and nine per cent can with both traditional and modern/conventional methods. The highest rate of traditional and conventional construction skills is in Zambezia, with 18 per cent of households having the skills there. In Sofala, 52 per cent know how to construct but only using traditional methods.



Of those who know how to construct, 15 per cent learned from community leaders or chiefs, 28 per cent from other members in the community who have had training, 16 per cent from elders, while the largest segment (39%) said that they have themselves received formal training in construction. The highest rates of formal training are in Manica (51%), and Sofala (41%), compared to Tete (26%) and Zambezia (28%).



Across the region, 54 per cent of households listen to the radio (but this proportion is a lot higher in Zambezia, 74%, and Tete, 64%, compared to Manica, 46%, and Sofala, 41%). When asked if the tenancy or ownership agreement are formal or informal, across the region they are 71 per cent informal (but 99% in both Zambezia and Tete). In Sofala they are 50 per cent informal, and 61 per cent in Manica. Across the region, 85 per cent of households are not in possession of the key documents relating to their leases or ownership (97% in Tete, 95% in Zambezia, 81% Manica, 77% Sofala). Finally, when asked if households kept tenancy of their previous homes, 81 per cent said they did not (though following a similar trend to other indicators in this section, this proportion was higher in Tete and Zambezia - 98% and 93% respectively - compared to Manica and Sofala - 71% and 78% respectively).

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