

Kenya: El Nino Flash Floods Rapid Needs Assessment

Background

The Arid and Semi-Arid Lands (ASALs) counties in Northern Kenya, who are emerging from four consecutive drought seasons are now grappling with the disastrous impact of heavy rainfalls and flash floods as a result of the El Nino weather phenomenon. Severe floods are exacerbating vulnerability and destroying livelihoods that had been gradually recovering from the prolonged drought shocks that ended last month.

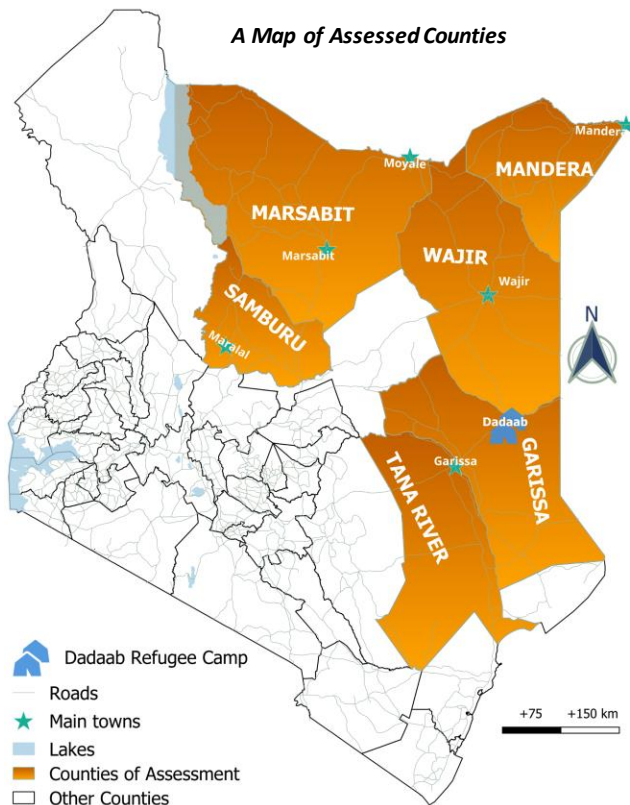
Rainfall has continued to intensify across the country, with the Northeastern areas, including Garissa, Mandera, Wajir and Tana River counties, being the most affected to date according to the UN Office for the Coordination of Humanitarian Assistance (OCHA) updates. The enhanced rains have led not only to infrastructural damage but also to deaths and displacements of communities. According to OCHA's November 19 estimate, 136,025 people (27,205 households) have been displaced so far in Kenya due to flooding, predominantly within the ASAL counties. The number is expected to rise further as El Nino enters its peak, which was forecasted between October and December 2023.

Acted has been actively providing multi-purpose cash assistance to communities affected by droughts. To enhance and coordinate responses and mitigation measures to the ongoing heavy rains in the northern Kenya region, Acted conducted a rapid needs assessment to understand the current impacts of the ongoing flash floods and the needs among the affected communities in the ASAL counties of Mandera, Wajir, Garissa, Tana River, Marsabit, and Samburu.

Assessment Methodology

Through simple random sampling, a total of 401 interviews were conducted among the communities in the targeted location. The sample size exceeded by 13 more interviews, which was a positive development as it increased the accuracy of the data. The sample size (388) was determined with a confidence level of 90% and a margin of error of 10%. Using a randomized list of project participants, respondents at the household level were identified, and interviews were conducted through a phone-based survey by Acted staff, supported by a team of trained enumerators. The assessment took place from November 16th to November 18th, 2023. Annex 1 below shows the respective locations of assessment disaggregated at the ward level and sample distribution across these locations. Using Excel macro-enabled sheets, the data was cleaned, and a descriptive analysis of the data was conducted via Excel Analyzer.

A Map of Assessed Counties



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Summary of Findings

Livelihood Impact: Communities in the assessed regions predominantly (45%) rely on livestock keeping for livelihood with sale of livestock (25%) and casual labour (21%) as the main sources of income.

Priority Needs: The current priority needs among flood-affected communities are food assistance (27%), shelter (22%), and Non-Food Items (NFI) (16%).

Food Insecurity: 56% of respondents reported that food access, primarily through market purchases, has been severely disrupted due to impassable roads and limited availability of key commodities. 97% reported an increase of prices for basic food items such as maize flour, wheat flour, rice, cooking oil, sugar, pasta/spaghetti, milk, and other dairy products, further contribute to food insecurity.

Water Contamination: 50% have reported drinking from surface water (rivers, dams, reservoirs, water pans, etc.), leading to severe contamination of drinking water sources and escalating health risks.

Sanitation Challenges: Sanitation problems are reported at both household (66%) and community levels (71%), with reported concerns about waterborne diseases, including recent cases of diarrhea and cholera. More than half (68%) of the households relocating due to floods (91%) lack access to health facilities and medical outreaches.

Shelter Conditions: Current places of residence are either flooded (40%) or have damaged roofs (14%) and walls (9%), posing challenges to the affected households.

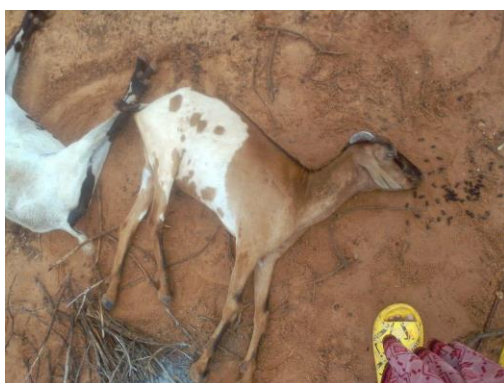
Infrastructural Damage: Significant damage to key access roads and bridges (57%) hampers the communities' ability to access essential commodities and services from vital institutions like hospitals and dispensaries.

Employment and Income Impact: Infrastructural damage, including the transportation system and continuous rainfall, has adversely affected employment opportunities according to 37% of respondents.

Community Response: 16% of the respondents are evacuating flood-affected households and providing shelter and basic items to those affected by the flood.

Awareness and Action: A notable portion (35%) of assessed communities' households were aware of flood risks, with a half of them (53%) taking action after receiving early warnings.

Communication Preferences: Assessed communities prioritize using hotlines (47%) and engaging with aid providers' staff (33%) for information and feedback, emphasizing the importance of effective communication channels in disaster response.



Picture 1. Marooned Homesteads and Pit Latrine in Sambo Village, Saala Ward Tana North Sub County

Picture 2 & 3 Shoats killed by flood waters in Maramtu Village, Saala Ward Tana North Sub County

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Summary Recommendations



Provision of Immediate Food Assistance

With these communities already experiencing or being on the brink of food insecurity, the provision of immediate food assistance is key. This, coupled with cash transfers, will be vital in addressing food security among the flood-affected communities.



Provision of Non-Food Items

The provision of essential non-food items (NFI) such as soap, jerrycans, sanitary towels, and other hygiene products to promote sanitation should be prioritized for the flood-affected communities. The distribution of emergency shelter materials, for example, tarpaulins, sleeping bags/blankets, sleeping mats, etc., should be prioritized for those with damaged homes. Facilitating the relocation of households living in flooded or unsafe areas remains a priority amidst the ongoing enhanced rainfalls.



Immediate Implementation of Sanitation Measures

There should be immediate implementation of urgent sanitation measures, including the distribution of water purification tablets, to address the contamination of drinking water. This should be coupled with awareness campaigns to educate communities on waterborne diseases, prevention, and hygiene practices.



Rehabilitation and Repair of WASH Assets

There is a need for the repair and restoration of damaged water sources, for example, boreholes, shallow wells, handpumps, and dams/water reservoirs to ensure a safe and accessible water supply for the affected communities.



Implementation of Cash or Food for Work Activities

Through cash/food for work, critically damaged infrastructure such as cut-off access roads can be restored for the benefit of the whole communities among the flood-affected population.



Provision of Medical Outreaches

Leveraging with other aid providers/humanitarian actors, medical outreaches should be mobilized to address the current/eminent health crisis among the flood-affected communities. This should focus on waterborne diseases and other flood-related health risks.



Information Sharing

As the enhanced rainfall continues, aid providers should ensure information sharing among the affected populations. The packaging of the information should include the following day/week rainfall forecast, potential flooding areas, and available high ground for evacuation, not forgetting referrals to respective actors/agencies on the various key concerns raised by the affected population.



Early Warnings Awareness and Campaigns

Sensitization and awareness on the response components following early warnings among communities should be a priority in the ASAL counties, as they have been facing recurrent shocks.

Forecast Based Action

Humanitarian actors should adopt forecast-based action, which will ensure that resources are available for a response to these recurrent shocks among communities in the ASAL region of Kenya. This can come in handy by utilizing already available resources from key institutions such as the Kenya Meteorological Department and the National Drought Management Authority (NDMA).

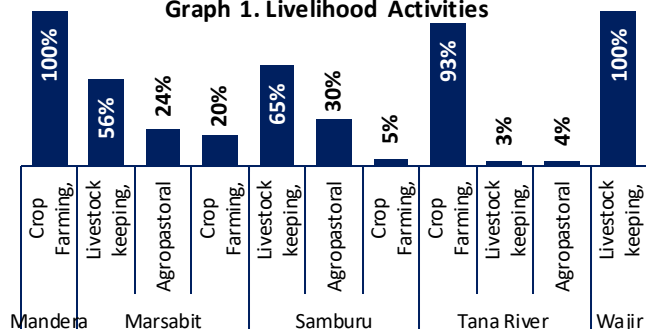
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Demographic & Livelihoods

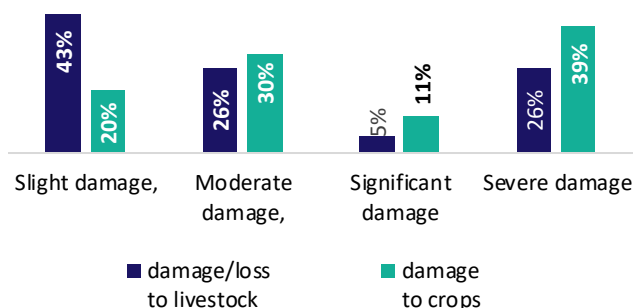
Based on the assessment sampling methodology, females (65%) and males, (35%) formed part of the respondents for this assessment. The respondents' households were reported to have an average size of 7 persons.

In the last two months to the date of this assessment, the assessed households reported to be engaging in agricultural activities where the majority (overall, 45%) reported to have been keeping livestock. More than half (56%) of the respondents from Mandera reported not to be engaging in any agricultural activity in the last two months with the rest (44%) purely engaging in crop production. These communities are just emerging from a four failed consecutive rain seasons. Livestock sale and casual labor was reported to be the major source of income among the assessed households **before** (livestock sale 28%, casual labor 22%) and **after** (livestock sale 25%, casual labor 21%) the month of October 2023. The relentless rains were reported to have caused damage on the livelihood's activities including on both crops and farmland areas and livestock loses which is the predominant source of livelihood from the assessed counties. This puts the lives and livelihood of the communities in this region at risk.

Graph 1. Livelihood Activities



Graph 2. Crops and livestock scale of damage

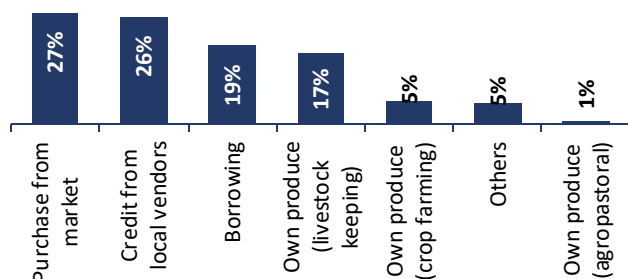


El Nino Flash Flood Impacts & Immediate Needs

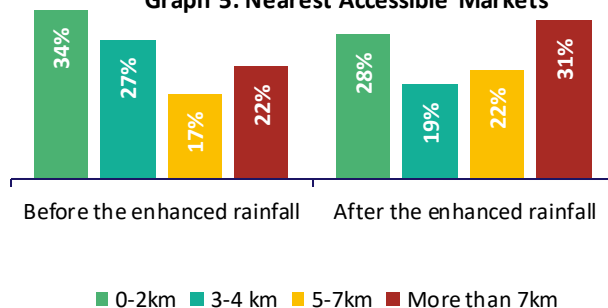
Food Security

Overall, purchases from the market (27%), credit from local vendors (26%), and borrowing (19%) were reported as the top three common sources of accessing food by the assessed households, as indicated in graph 3. In Mandera, livestock keeping was reported as the main source of accessing food. The majority of respondents reported that the nearest market before the start of the ongoing enhanced rainfall was accessible at less than two (2) kilometers. Currently, most respondents (31%) reported accessing the nearest market at more than 7 kilometers, as shown in graph 5 below.

Graph 4. Common sources of accessing food



Graph 5. Nearest Accessible Markets



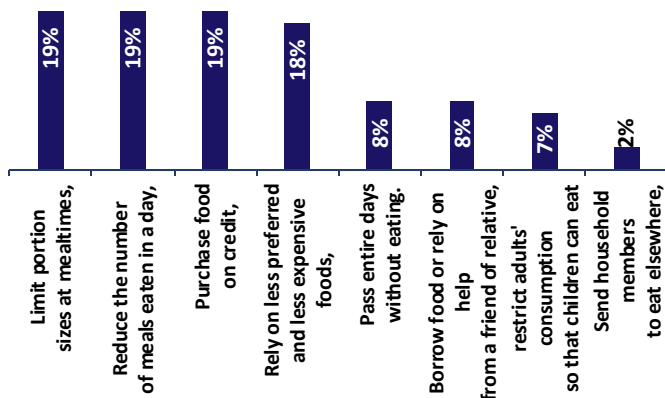
The assessment indicates that more than half of these households (61%) have had their access to food affected by the ongoing enhanced rainfall, with nearly all (98%) reporting decreased access to quantity/low supply. Overall, more than half (56%) of these households reported limited availability of most key commodities from accessible markets. Only 4% of the assessed households overall reported having all commodities available in their accessible markets.

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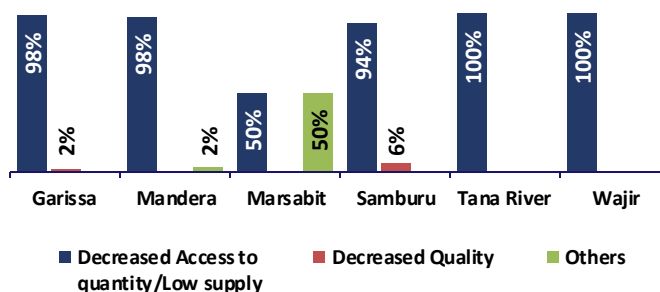
The assessment further shows that there has been an increase in prices of basic food commodities, as reported by nearly all respondents (97%). Basic food commodities affected by increased prices include maize flour, wheat flour, rice, cooking oil, sugar, pasta/spaghetti, milk, and other daily products. Similarly, the assessed households overall are on the brink of food insecurity, as nearly all of the respondents (97%) declared not have enough food for their households in the next month. This situation has been exacerbated by the rains, which have taken a toll on infrastructure, as key bridges and link roads are swept away.

Furthermore, the ongoing situation has forced households to adopt various coping mechanisms as a mitigation measure for the food shortages. Limiting portion size at mealtimes, reducing the number of meals eaten in a day, and purchasing food items on credit were the most common coping mechanisms reported by the assessed households, as shown in graph 6.

Graph 6. Current Coping Mechanisms used by households



Graph 7. Current impact on the household ability to access food

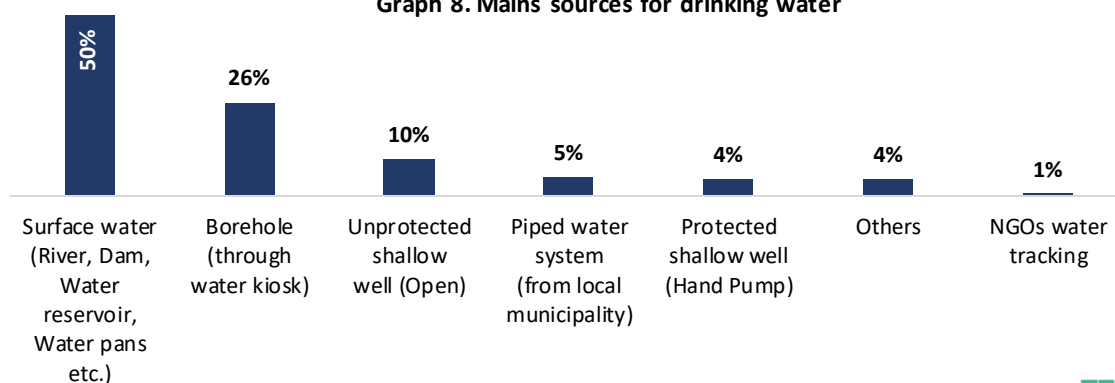


Water and Sanitation

Surface water (rivers, dams, water reservoirs, water pans, etc.) was reported as the current main (50%) source of drinking water for the assessed households. Boreholes (through water kiosks) were reported as the second (26%) main source of drinking water. Rainwater (4%) was reported as the other current main source of drinking water. More than half (68%) of the respondents described the condition of the surface water sources mainly to be not clear/murky (27%), contaminated by animal fecal waste (17%), and contaminated with human fecal waste (14%).

The floods following the ongoing enhanced rainfalls put the community's health at risk, as most (71%) of the assessed households reported contamination of drinking water as the most severe problem with drinking water from the different main sources reported.

Graph 8. Mains sources for drinking water

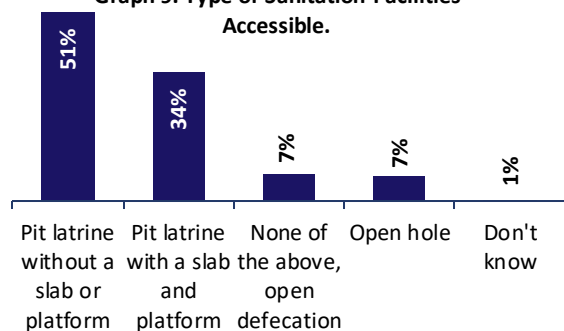


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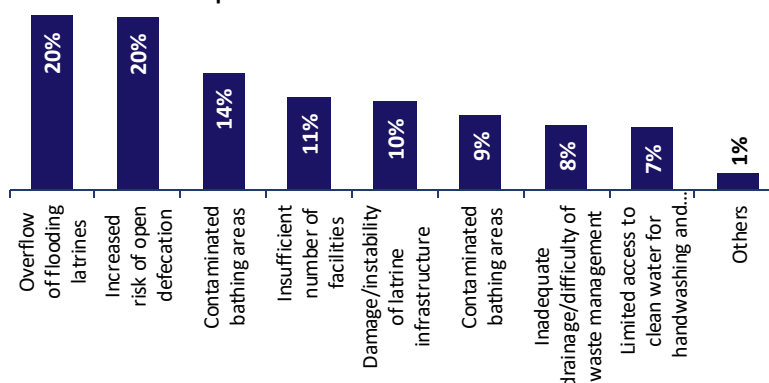
Overall, slightly more than half (56%) of the assessed households from the targeted location reported not to have access to functioning latrine facilities, predominantly in Tana River (93%), Mandera (78%), and Garissa (71%). A further 66% of the assessed households overall reported facing problems with sanitation facilities.

Nearly three-quarters (71%) of the respondents acknowledged that their community at large is facing sanitation problems as well. Graph 9 shows the types of sanitation facilities accessible with 44% of the assessed households reporting having access to sanitation facilities. From the assessed households, there are concerns about waterborne diseases, as nearly a quarter of the respondents (22%) overall reported cases of diarrhea and cholera in the last two weeks up to the date of this assessment. Other diseases reported include malaria, common flu, and typhoid. According to UN OCHA Flash updates on November 24, 2023, the Ministry of Health (MOH) warned of waterborne diseases as the ongoing rains pose a threat to an increase in these diseases and vector-borne illnesses like malaria.

Graph 9. Type of Sanitation Facilities Accessible.



Graph 10. Current Problem with Sanitation Facilities



Infrastructure damage, rendering roads impassable, has disrupted services in vital local institutions, including hospitals and dispensaries. Slightly below half (42%) of the respondents who have been residing in their current locations for less than a year up to the date of this assessment reported not having access to medical services in general. Similarly, more than half (68%) of the respondents who relocated to their current location of residence due to floods following the ongoing enhanced rains reported there being no health facility or medical outreach team at the point of relocation/evacuation.

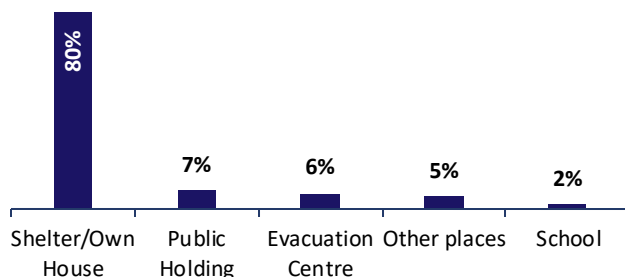
Shelter

Currently, the respondents reported residing in their own households/shelters (80%), public holdings (7%), evacuation centers (6%), and schools (1%). Higher grounds and within their neighborhoods were also reported as other (5%) places of residence, as shown in graph 11. The current places of residence were reported by more than half of the respondents not to be in good condition, as they were flooded (40%) and/or with damaged walls or with leaking roofs. Floodwaters (74%), strong winds (19%), and trees falling on the shelter (7%) were reported as the causes of the current places of residence damages.

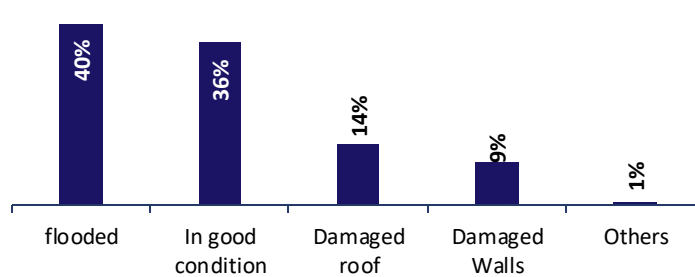
Nearly half (47%) of the respondents reported having stayed in their current place of residence for less than a year. 100% of respondents from Tana River, Wajir, and Mandera reported flooding as the primary reason for their relocation to the current places of residence. Apart from floods (91%), past drought impact (8%) was also reported as the reason for the relocation of some respondents, as shown in graph 15. More than half (65%) of the respondents reported being aware of someone in their location who has been displaced by floods following the enhanced rains in the past two weeks to the date of this assessment. Nearly all the respondents from Garissa (95%), Wajir (94%), and Tana River (87%) reported being aware of the same.

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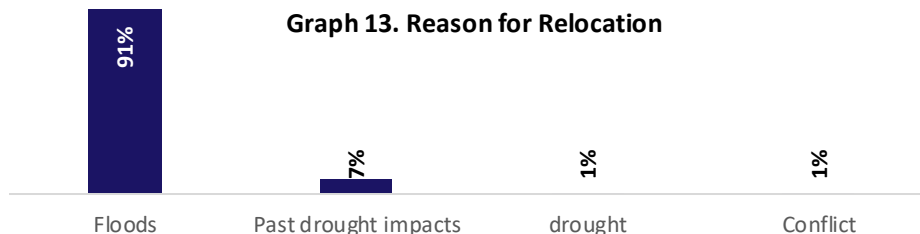
Graph 11. Current places of residence



Graph 12. Current Condition of the residence



Graph 13. Reason for Relocation



Livelihood & Economic Impacts

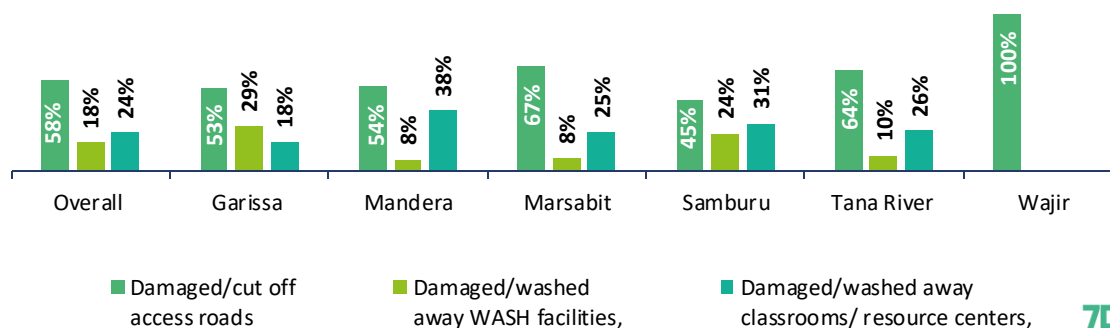
Employment opportunities for more than a quarter (37%) of the respondents were reported to have been affected by the ongoing enhanced rains in different ways, including:

- Disruption of transportation (Bridges washed away and roads cut off by the flooding waters) (46%),
- Disrupted access to markets for basic items, including food items (26%),
- Limited/no casual labor (20%),
- Continuous downpour of rains (4%), and
- Increased cost and limited supply of food items and other basic commodities (4%).

The assessment further informs that transportation and infrastructure in the assessed location are disrupted, as reported by more than three-quarters (85%) of the respondents overall. This was mainly through damaged or cut-off of key access roads (70%), damaged or washed-away classrooms and resource centers (15%), and damaged or washed-away WASH facilities (13%). Muddy and flooded access roads were the other (2%) forms of disruption to transportation and infrastructure reported following the ongoing enhanced rains.

From Garissa and Mandera, all (100%) the respondents reported disruption to transportation and infrastructure in these locations. According to UN OCHA November 8, 2023, flash updates, the heavy rains being experienced have rendered several roads impassable, with bridges being swept away, significantly disrupting transportation. This has resulted in a widespread impact, disrupting the provision of services and the supply of key commodities. Challenges were reported as well in accessing schools, resource centers, and other critical facilities across these locations, as shown in graph 14 below.

Graph 14. Challenges in Access Schools and other Critical Facilities



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Coping Mechanisms

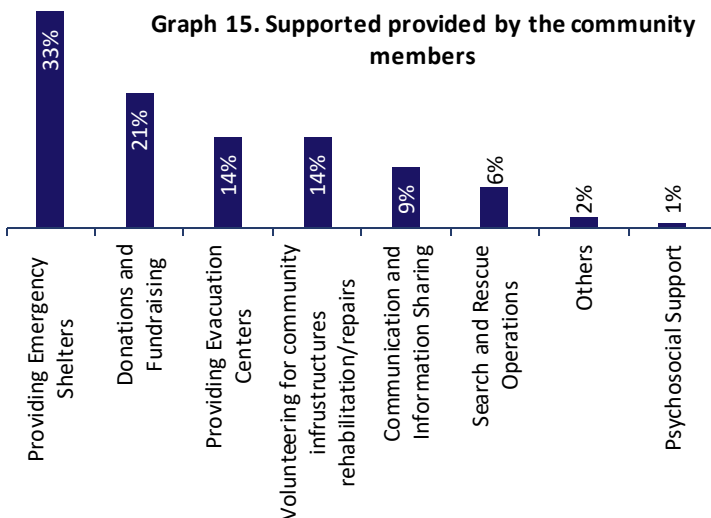
The assessment shows that communities from these locations are making efforts to provide support to their members who have been affected by the floods. This is mainly through the provision of emergency shelters (33%) and making donations/fundraising (21%), as shown in graph 15 below. The other support reported to be provided by community members is helping the affected households move to safer grounds.

Overall, food or cash assistance (27%), shelter (22%), and NFIs (16%) were reported as the topmost priority needs by the respondents from the assessed locations. Graph 16 shows further details on these priority needs from the respective assessed locations.

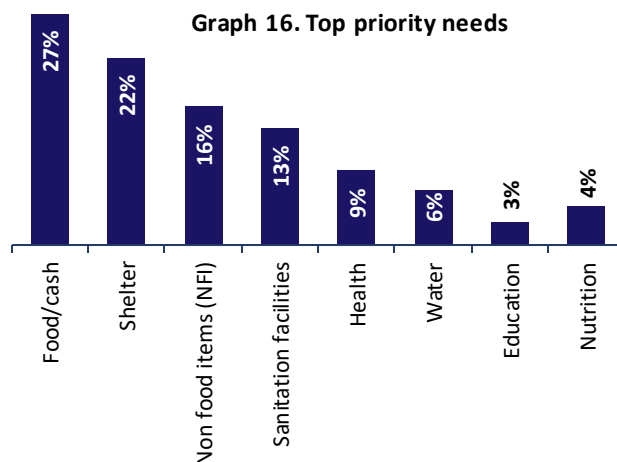
Overall, only 3% of the assessed households reported having received humanitarian assistance in the last two weeks up to the date of this assessment. Only 4% of the respondents overall who reported knowing a member within their communities having received humanitarian assistance.

Relief food and unconditional cash transfer were the main forms of humanitarian assistance reported to have been received at both household and community levels overall. Food items received from world food Programme (WFP) at household level were reported as the other (6%) form of humanitarian assistance.

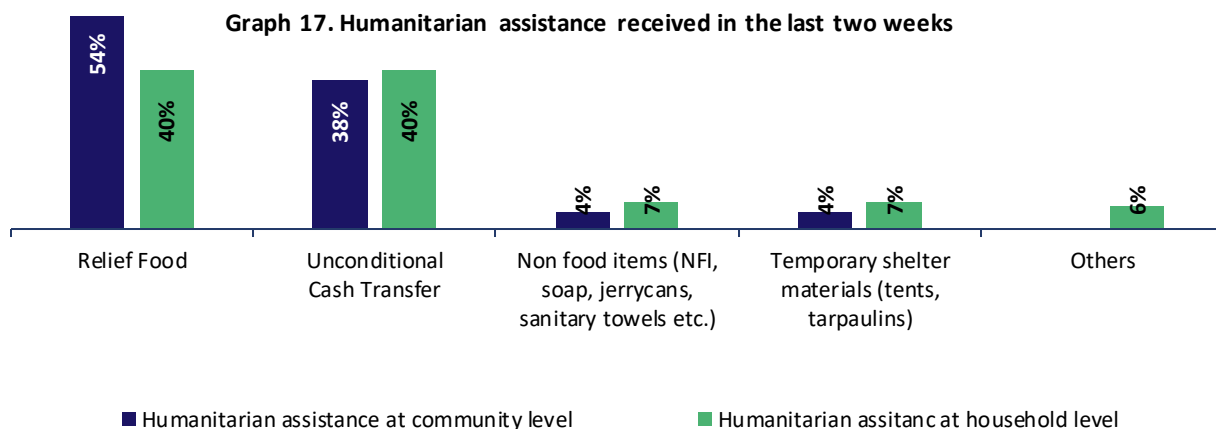
Graph 15. Supported provided by the community members



Graph 16. Top priority needs



Graph 17. Humanitarian assistance received in the last two weeks



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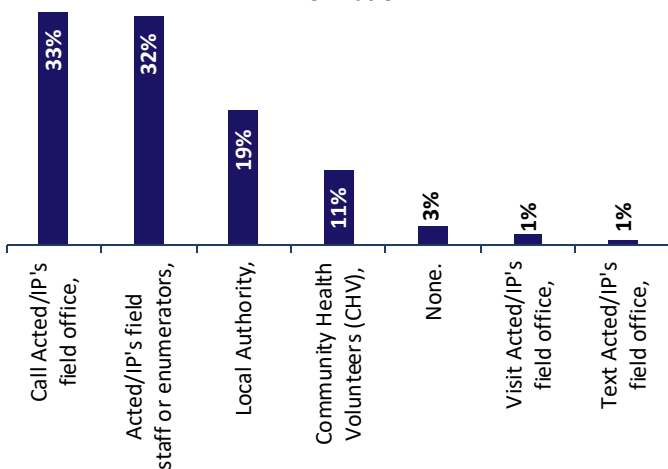
Adoption & Resilience

Overall, the assessment shows that more than a third (35%) of the assessed households were aware of the flood risks due to the enhanced rains, and they had received early warnings. More impressively, more than half (53%) of these households, aware of the flood risks, acted prior to the flooding by taking precaution measure e.g., moving to raised points and reconstructing/creating drainage pathways.

Marsabit and Samburu reported a significant number of households, 91% and 65%, respectively, who took action. On the other side, Wajir and Mandera reported a significantly high number of households, 100% and 60%, respectively, who took no action despite being aware of the flooding risks.

The survey further shows the use of NGOs or implementing partners' hotline (33%) and communication through NGOs or implementing partners' staff (32%) was the most preferred ways of receiving communication from aid providers. Similarly, these two channels remain the most preferred channels at 47% and 26%, respectively, for providing feedback or raising concerns to aid providers by the affected communities.

Graph 18. Preferred means of receiving information



Graph 19. Preferred means of Providing Feedback

