Rapid Multi-sectoral Needs Assessment of populations affected by Deyr flooding

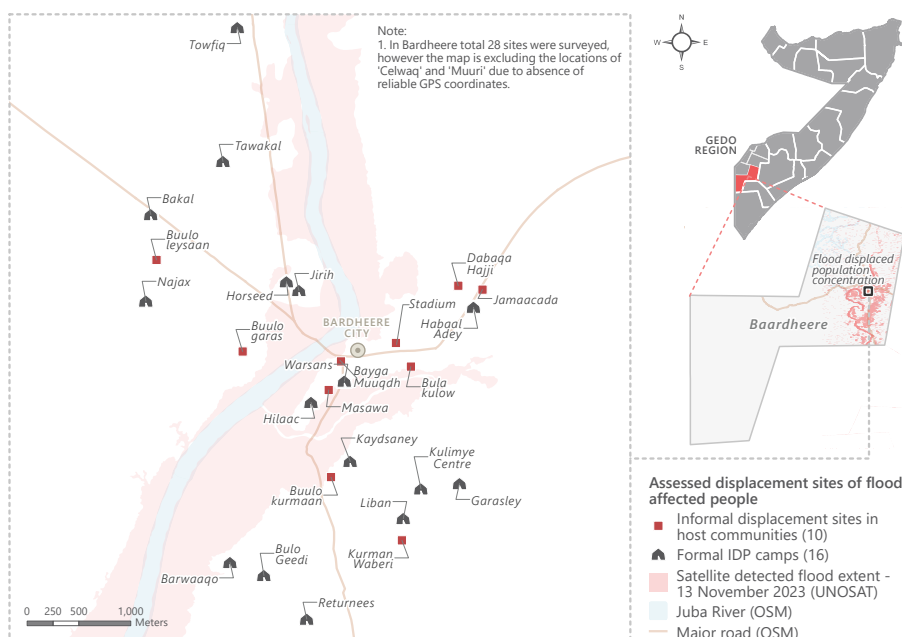Baardheere District, Somalia
November 2023

KEY MESSAGES

- **Shelter** was the most reported priority for flood-affected men, women, and children in evacuation sites. 22/28 sites* reported **tents** as urgent NFI needs; **tarpulin** and **rope** were priority building material needs.

- 18/28 sites* reported **local markets** as a main food source, yet for the majority of sites*, the nearest market was **>1 hour away**. Reportedly, there has been **sporadic food item availability** at nearby markets, as well as **drastic price increases** of main food commodities.

- High risk of waterborne disease outbreaks as 23/28 sites* reported **surface water** as the main drinking water source, while 22/28 sites* reported that **open defecation** is the most common latrine practice.

- 21/28 sites* reported **increased need for health services**, as flooding has **damaged health facilities** and **medical outreach is limited**.

40%
average proportion of flood-affected households in the community who live in **makeshift shelters (i.e. buuls**) or tents**

23
sites* (out of 28) reported that the nearest market was **partially or fully destroyed**, after flooding

Note:
1. In Bardheere total 28 sites were surveyed, however the map is excluding the locations of 'Celwaq' and 'Muuri' due to absence of reliable GPS coordinates.

GEDO REGION

Flood displaced population concentration

Baardheere

Assessed displacement sites of flood affected people
- Informal displacement sites in host communities (10)
- Formal IDP camps (16)
- Satellite detected flood extent - 13 November 2023 (UNOSAT)
- Juba River (OSM)
- Major road (OSM)

*evacuation sites
**temporary shelter made of materials like plastic bags, timber

CONTEXT & RATIONALE

IN MID-OCTOBER 2023, during the Deyr rainy season, southern Somalia experienced heavy rainfall driven by the El Niño climate cycle and a positive Indian Ocean Dipole (IOD), eventually resulting in large-scale riverine flooding from the Juba river. Baardheere district was heavily impacted by this "once in 100 years" rainfall. By November 14, an estimated 107.7K people had been affected in Baardheere, as flooding destroyed homes, properties, and livelihoods.[1] This number is expected to increase as flooding continue over the coming weeks.[2]

The crisis comes against the backdrop of multiple shocks experienced by Baardheere in recent years.[3] In 2022, Somalia experienced a historic drought which displaced 1.1 million, exacerbating vulnerability in the region.[4]

ASSESSMENT OVERVIEW

This assessment was carried out within 72 hours of large-scale river breakages that caused widespread flooding in Baardheere. The multi-sectoral needs assessment provides timely information on the initial emergency needs of flood-affected communities.

This assessment consists of 82 key informant (KI) interviews conducted at a site level from 14 to 16 November 2023, covering 28 evacuation sites in Baardheere. As described in the Methodology Overview, results are indicative.

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MOVEMENT INTENTIONS

Movement intentions of the majority of flood-affected persons, by site* (out of 28)

Leave once flooding stops or homes become accessible (undefined) 10

Stay in this location (current location is their final destination) 9

Are undecided 2

Note: 6 sites reported No consensus, and 1 site responded Don't know/no answer

PRIORITY NEEDS

Top 3 most commonly reported priority needs, by site* ** (out of 28)

Men	🏠 22/28	💵 18/28	⚕ 16/28
Women	🏠 23/28	💵 22/28	⚕ 14/28
Children	🏠 25/28	💧 21/28	🥛 19/28

SHELTER & NON-FOOD ITEMS (NFIs)

Proportion of flood-affected people staying in shelter types, by site*
including those staying with relatives, as estimated by KIs

Makeshift shelter (i.e. buul) or tent **40%**

Solid / finished house **20%**

Unfinished / non-enclosed building **11%**

Top 3 most urgent NFI needs, by site* **

28/28 Mosquito net

22/28 Tent

17/28 Blankets

21 sites* (out of 28) reported that NFIs were **not available** in sufficient quantities at the nearest market

16 sites* (out of 28) reported **major price increases** of NFIs

FOOD SECURITY & LIVELIHOODS

Most common sources of accessing food after the flooding, by site* **

22/28 Borrowing/debt

18/28 Work for food

16/28 Local market

Most common income sources for men and women before flooding, by site* **

	Men		Women
21/28		Local market commerce	20/28
19/28		Borrowing/debt	20/28
14/28		Humanitarian food or cash aid	16/28

Reported distance to the nearest physically accessible market after flooding, by site* (out of 28)
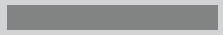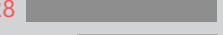
<1 hour 0

1-3 hours 20

3-6 hours 2

6+ hours 3
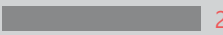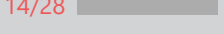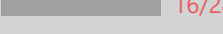
Note: No consensus was reached in 3 sites

This represents a large increase in distance, as 22/28 sites* reported that, **prior to the flooding,** the nearest physically accessible market was <1 hours away

*evacuation sites
**select multiple

23 sites* (out of 28) reported that the nearest market was **partially or fully destroyed**, after flooding

22 sites* (out of 28) reported that main food commodities (e.g. wheat flour, rice, oil, sugar) were **sporadically or not at all available** at the nearest market, after flooding

24 sites* (out of 28) reported **drastic price increases** of main food commodities, compared to prices before flooding

Average loss to livestock due to flooding, on a scale from 1-5
where 1 represents miminal loss

4

Average damage to current farming due to flooding, on a scale from 1-5
where 1 represents minimal damage

4

Access to sufficient drinking water per site reported by the majority respondents
- Nobody (0%)
- Few (1% - 25%)
- Half (26% - 50%)
- Most (51% - 75%)
- Everyone (76% - 100%)
- Not clear
- Satellite detected flood extent - 13 November 2023 (UNOSAT)
- Juba River (OSM)
- Major road (OSM)

Towfiq
Tawakal
Bakal
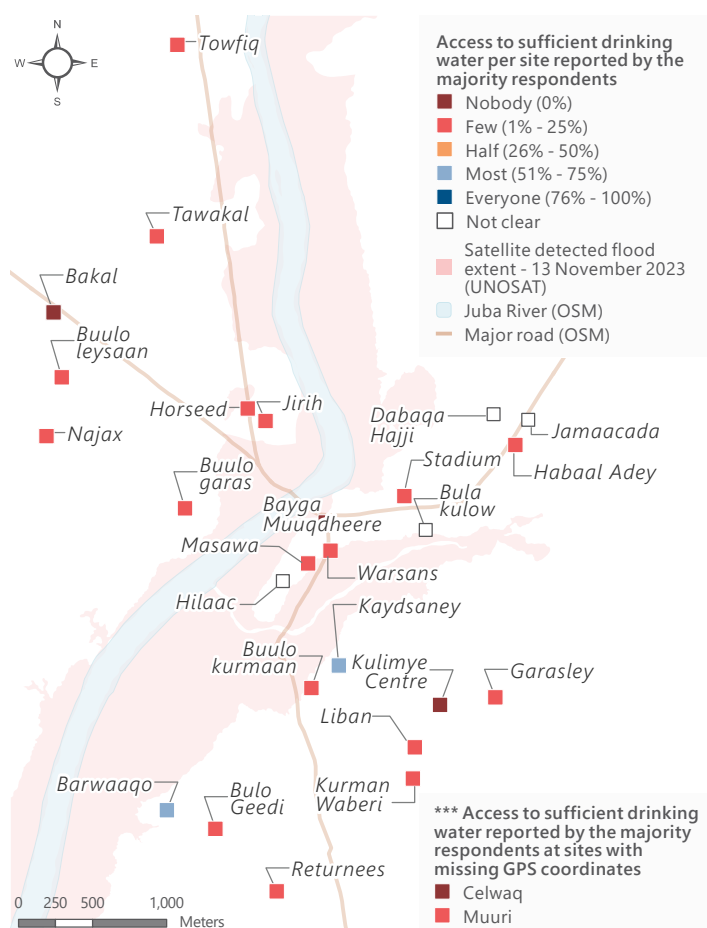Buulo leysaan
Horseed   Jirih
Najax
Buulo garas
Masawa
Hilaac
Buulo kurmaan   Kulimye Centre
Liban
Barwaaqo   Bulo Geedi   Kurman Waberi
Returnees
Dabaqa Hajji   Jamaacada
Stadium   Habaal Adey
Bayga Muuqdheere   Bula kulow
Warsans
Kaydsaney
Garasley

*** Access to sufficient drinking water reported by the majority respondents at sites with missing GPS coordinates
- Celwaq
- Muuri

0 250 500 1,000 Meters

A majority of sites* (18/28) reported that **only a few** flood-affected people have access to **sufficient quantities of drinking water,** while a further 4 sites reported that **nobody** has access.

WATER, HYGIENE, AND SANITATION

Most commonly reported primary source of drinking water, by site* (out of 28)

- Community borehole (paid) (1)
- No safe drinking water (1)
- No consensus (3)
- Surface water (23)
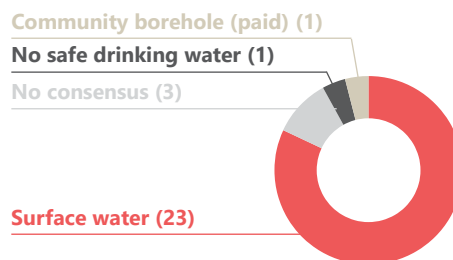
Most commonly reported issues with main water source, by site* **

22/28	Water is not available
18/28	Water tastes/smells/looks bad
15/28	Water volume is not enough

22

sites* (out of 28) reported that **open defecation** is the most common latrine practice by flood-affected people

Most common problems with sanitation facilities (bathing/latrine), by site* **

Not enough/too crowded	18/28
Unclean	17/28
Not functioning/full	16/28

The most common barriers to menstrual hygiene management, reported by sites* ** with female KIs, were that sanitation facilities are **not private** (13/22) **unclean** (10/22), and that there is **inadequate access to water** (11/22).
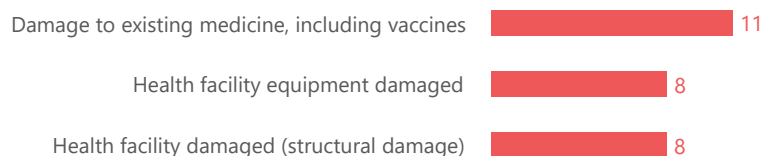
HEALTH

11 sites* (out of 28) reported that there is **no health facility/medical outreach team** in the community

21 sites* (out of 28) reported an **increased need** for health services in the community since the flooding
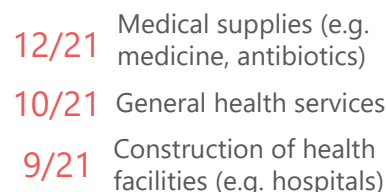
Most common flooding impacts on health facilities within 45 minutes/1km walking distance**
from the 13 sites which reported impacted health facilities*

Damage to existing medicine, including vaccines	11
Health facility equipment damaged	8
Health facility damaged (structural damage)	8

Most commonly reported health service needs
from the 21 sites reporting needs, captured through text response*

12/21	Medical supplies (e.g. medicine, antibiotics)
10/21	General health services
9/21	Construction of health facilities (e.g. hospitals)

Reported impact of flooding on nearby nutrition facilities or ongoing community-based nutrition activities**
from the 3 sites which reported impacted nutrition facilities/activities*

Nutrition facility and/or supplies damaged	3
Staff not able to access/arrive to health facility	3
Lack or inadequate nutrition supplies (e.g. RUTF)	2
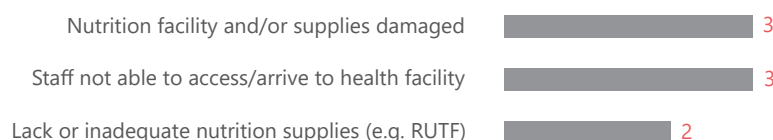
NUTRITION

21 sites* (out of 28) reported** that **no nutrition services** are available within the site or nearby (3km or 2 hour walk)

*evacuation sites
**select multiple

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EDUCATION

23 sites* (out of 28) reported that flooding **has impacted** children's school attendance

Most common ways in which attendance was impacted**
from the 23 sites which reported impacted school attendance*

20/23 Schools are used for affected population shelter

19/23 Schools are destroyed/damaged

16/23 Schools/learning spaces are not accessible due to mud

Most critical education needs of flood-affected persons, by site (out of 28)* **

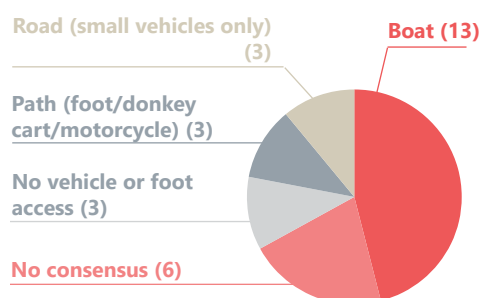|	
Rehabilitation of learning spaces	24
New learning materials	23
Safe drinking water	23

PROTECTION

Top five reported safety & security concerns for flood-affected populations, by site (out of 28)* **

Women & girls / **Men & boys**

Women & girls		Men & boys
19	Discrimination	11
15	Being threatened with violence	16
13	Suffering from (non-sexual) physical harassment or violence	11
12	Being robbed	10
11	Suffering from verbal harassment	12

INFRASTRUCTURE FUNCTIONALITY

Most commonly reported primary means of access to sites, by site* (out of 28)

Road (small vehicles only) (3)
Path (foot/donkey cart/motorcycle) (3)
No vehicle or foot access (3)
No consensus (6)
Boat (13)

Infrastructure functionality status in the community after flooding, by site* (out of 28)

	Not functional	Irregularly/ partially functional	Fully functional	Did not previously exist
Cell network	3	21	1	0
Electricity[1]	11	12	0	1

1 Electricity functionality defined as functional (8+ hours/day), irregular (1-7 hours/day), not functional (0 hours/day)

Note: No consensus reached in 3 sites on cell network functionality and in 4 sites on electricity functionality

HUMANITARIAN ACCESS

*This section was only asked to camp managers, gatekeepers, NGO staff, and community leaders among 19 sites**

The most commonly reported barrier to humanitarian access was **ongoing insecurity/hostilities** affecting the area, reported by 6/19 sites.* **

Most commonly reported actors with whom coordination is required for aid delivery, by site (out of 19)* **

Humanitarian relief office	17
Community leaders	10
Local civilian authority	8
Somali government	8

ACCOUNTABILITY TO AFFECTED POPULATIONS

10 sites* (out of 28) reported that **no affected households** have received humanitarian food and cash

*evacuation sites
**select multiple

Sites reported* ** that flood affected populations prefer receiving communication through **phone calls** (28/28), **SMS** (7/28), over a **loudspeaker** (6/28), and at **community events** (6/28).

Sites reported* ** that flood affected populations prefer providing feedback through a **hotline** (28/28), through **religious leaders** (9/28), and over **SMS** (8/28).

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METHODOLOGY OVERVIEW

From 14 to 16 November 2023, REACH conducted 82 quantitative, structured face-to-face key informant (KI) interviews across 28 evacuation sites in Baardheere district using a survey tool, co-owned by OCHA and deployed through KoBo software. This assessment was conceptualized within the framework of the REACH and OCHA co-led Assessment Working Group (AAWG). A team of 7 enumerators received a virtual 1-day training from the REACH assessment team.

The target population was defined as flood-affected communities, comprised of populations displaced due to flooding during the Deyr rainy season. Site selection was triangulated from IOM Somalia displacement tracker and Jubaland State Inter-Cluster Coordination group (S-ICCG) and targeted evacuation sites. The majority of interviews were held face-to-face, but where accessibility was limited, enumerators used phone interviews.

A minimum of 3 KIs were interviewed per site,* whose responses to each question were aggregated to obtain a single, triangulated response per site.* Due to access constraints, some (11) sites* had fewer than the minimum threshold; these were included in analysis and can be found in the clean dataset. For single-choice questions, responses of different KIs reporting on the same site* were aggregated by mode (most frequent response). For example, if for a given question 1 KI responds "no" and 2 KIs respond "yes", the aggregated response for the site* is "yes"). When there was no consensus between a majority of KIs, responses were coded as "No consensus" (NC). For single option indicators, results are presented as number of sites* and reported at district level. For select multiple, all KI responses are retained in the aggregated results. Results are presented as number of sites* where KIs reported X (X being the aggregated site* level result as described above). For integer responses, the median was reported at the site* level across the KIs, and at the district level, the average was aggregated across the sites.*

LIMITATIONS

Widespread riverine flooding, in addition to continously heavy rainfall encountered in the field during data collection, necessitated adaptations to the research design, which subsequently evolved to a hybrid data collection methodology, relying on phone interviews for inaccessible evacuation sites. Heavy rainfall drove temporary displacement in some evacuation sites, meaning that some key informants, reached through snowball sampling, had been displaced from the site on which they were reporting at the time of data collection, introducing the potential for recall bias. This also complicated efforts to plot GPS points in a reliable way; though OCHA spatial data were used for the majority of the sites, field coordinates supplemented information gaps for informal sites, where validated.
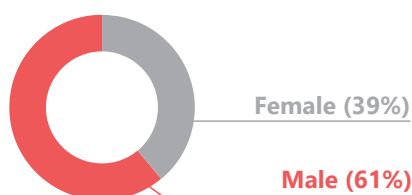
Results reflect the views of the KI and are indicative only. Analysis did not weight KI profiles, so some KIs may be more informed on certain subjects than others and the aggregated site-level results should therefore be contextualized with this limitation in mind. Due to the KI approach, results cannot be disaggregated by gender, age, or disability status of the respondent.

ENDNOTES

1 OCHA. Somalia: Deyr Rainy Season 2023 Flash Update No.7. 14 Nov 2023.
2 FAO SWALIM. Flood Advisory for Juba and Shabelle River Catchments, Somalia (Issued 20th November 2023) 20 Nov 2023.
3 CCCM, REACH. Detailed Site Assessment (DSA): Baardheere district, Gedo region, Somalia (March 2022). April 2022.
4 UNHCR. The Horn of Africa Drought Situation Appeal (January - December 2023). Feb 2023

ABOUT REACH

REACH Initiative facilitates the development of information tools and products that enhance the capacity of aid actors to make evidence-based decisions in emergency, recovery and development contexts. The methodologies used by REACH include primary data collection and in-depth analysis, and all activities are conducted through inter-agency aid coordination mechanisms. REACH is a joint initiative of IMPACT Initiatives, ACTED and the United Nations Institute for Training and Research - Operational Satellite Applications Programme (UNITAR-UNOSAT).

KI PROFILES

By gender

Female (39%)

Male (61%)

By type

7 Camp manager/gatekeepers
9 Community leaders (host community)
15 Community leaders (IDP)
3 Registration focal persons
2 Local relief committee members
23 Civil society group members
3 Religious leaders
3 School headmasters
13 Teachers
4 Women's group leaders

*evacuation sites

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