



# Mayom County: Populations, FSL, & Services

Unity State, South Sudan, Dec 2017 - Feb 2018

# of KI interviews conducted: 78

# of assessed settlements: 62

# of FGDs conducted: 4

# of partner interviews: 6

## Introduction

In late 2017 and early 2018, Mayom County experienced a precipitous decline in food security. Only 6% of assessed settlements reported adequate access to food in February 2018, compared to 86% just five months prior and 85% in the same month last year. At the same time, assessed settlements in the county continued to report low access to services. Only half of assessed settlements reported access to safe drinking water, while a third reported traveling half a day or more to access health facilities. The sudden deterioration in food security is poorly understood and the long-standing gap in service provision has drawn increasing attention.

To inform the existing as well as potential future humanitarian efforts in the county, the following presents multi-sector data on population trends, food security and livelihood dynamics, and reported access to services in Mayom. Findings are based on primary data collected from 78 key informants covering 62 settlements from December 2017 to February 2018. Surveys were triangulated with 4 focus group discussions with recent arrivals from Mayom County to the Bentiu Protection of Civilians (PoC) site; 6 interviews with humanitarian partners operating in Mayom; and secondary data sources.

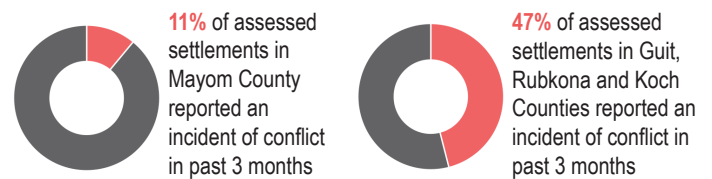
## Populations & Displacements

Population movements within Mayom County occurred at lower levels than in neighboring counties; however, populations did shift locations to access food, livelihoods and services, and in response to conflict dynamics. Seventy-one percent (71%) of assessed settlements reported the presence of returnees in February. This is consistent with IOM's reporting that of the 73 individuals crossing the Sudan border in one week in February, the largest proportion (40%) were en route to Mayom, seeking to reunite with family.<sup>1</sup> Other partners' assessment missions to the county similarly report the presence of returnees, and attribute returns to the relatively stable security situation.<sup>2</sup>

Population movements reflect, in part, conflict dynamics in the county. Relatively distinct conflict dynamics in Mayom compared to the rest of northern Unity State mean that the primary source of violence stems from cattle raiding. Violent incidents did occur in Mayom in

early 2018 but less frequently than in other parts of the state. In February, only 11% of assessed settlements in Mayom reported an incident of conflict in the previous month, while nearly half (47%) of assessed settlements in Guit, Rubkona and Koch Counties reported the same (see Figure 1). Nonetheless, focus group participants and partners reported continued fears of local conflict, cattle raiding and forced recruitment in Mayom.<sup>3</sup> Such dynamics can lead to the particular displacement of men; indeed, 48% of assessed settlements in February reported that more women than men remained among the local community. Focus group participants explained that the lack of male labour can subsequently lead to the displacement of women, if the burden of solo household responsibilities becomes too great.<sup>4</sup>

**Figure 1: Percentage of assessed settlements reporting an incident of conflict in past three months, February 2018**



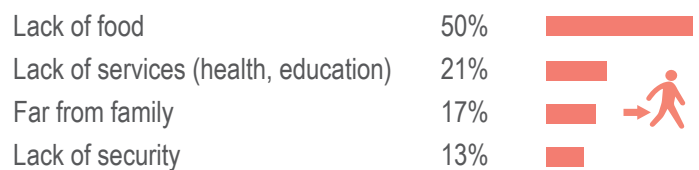
At the same time, environmental shocks and stressed livelihoods appear to have displaced parts of Mayom's population. All assessed settlements from December to February reported that at least some members of the local community continue to remain in the settlement; however, the reported percentage that remained decreased over this period (see Figure 2). By February 2018, 47% of assessed settlements reported that less than half of the local population remained.

Among new arrivals to the Bentiu PoC from Mayom County, the primary reported reason for displacement was a lack of food, followed

**Figure 2: Percentage of assessed settlements reporting size of remaining host community, Mayom County**

	Dec 17	Jan 18	Feb 18
"What proportion of the population remains in the settlement?"			
All	62%	43%	0%
More than half	24%	43%	35%
Half	7%	13%	18%
Less than half	7%	0%	47%

**Figure 3: Main reported reason for displacement of new arrivals to Bentiu PoC from Mayom County, February 2018<sup>5</sup>**



## METHODOLOGY

To provide an overview of the situation in largely inaccessible areas of Unity State, REACH uses primary data provided by key informants who have recently arrived, or receive regular information, from a location or "Area of Knowledge" (AoK).

Information for this report was collected from key informants in the Bentiu Protection of Civilians (PoC) site and Nyal in Unity State from December 2017 to February 2018.

In-depth interviews were then conducted with selected participants using a standardised survey tool comprising questions on displacement, food security, and livelihood trends. After data collection was completed, all data was examined at the settlement level, and settlements were assigned the modal response. Descriptive statistics and geospatial analysis were then used to analyse the data.

1 IOM, Sudan-South Sudan Flow Monitoring, 16-22 Feb 2018.  
 2 UNMISS RRP Field Mission, Feb 2017. UNHCR/DRC mission report, ICWG meeting, March 2018.  
 3 Focus Group Discussions (FGD), FSL and Displacement, March 2018. See also DRC,

Protection Assessment Report: Mankien, May 2017.  
 4 FGDs, FSL, February and March 2018.  
 5 Not aggregated. Individual level. 25 interviews in Bentiu PoC in February 2018.



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by distance from family and a lack of services such as health and education (see Figure 3). Focus group participants especially cited environmental factors - including shortfalls in rain and localized flooding - to explain shortages in food and subsequent displacement.<sup>6</sup>

Available information on displaced persons within Mayom is contradictory. Few assessed settlements (less than 10%) reported the presence of IDPs since December 2017. Focus group discussions, however, suggest that this number may not be reflective of the number of IDPs in Mayom County.<sup>7</sup> FGD participants reported that IDPs in Mayom and Mankien towns - both situated on main displacement routes in Mayom - are well integrated into the communities, staying with relatives or provided with shelter in abandoned houses by the local authorities. Partner interviews also highlighted the presence of a high number of returnees and IDPs in Wangkia, which is perceived to be a relatively secure area in Mayom. More research is needed to determine the accuracy of conflicting reports.

Population movements in Mayom thus reflect a number of competing dynamics. While the county's relative stability has reportedly drawn returnees back into the county, small incidents of violence, environmental shocks, and livelihood challenges simultaneously appear to be causing displacement among other populations.

## Food Security & Livelihoods

### Typical Livelihoods

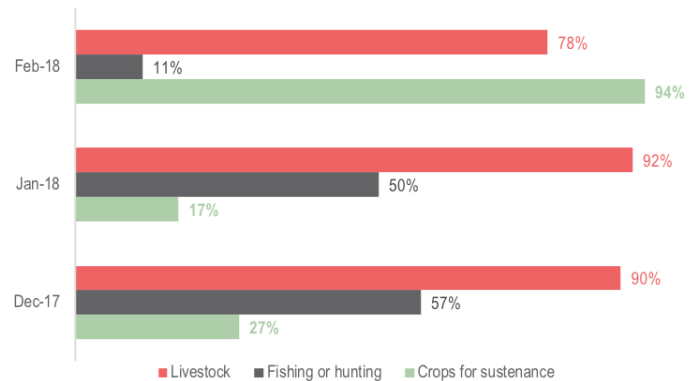
Mayom has a distinct and comparatively diverse livelihood profile, compared to other northern Unity State counties. Prior to the 2013 crisis, livelihoods in Mayom County were traditionally characterised by agriculture, rearing of livestock, and fishing. Main crops grown were maize and sorghum, which were harvested from August until October. Vegetables, including cowpeas, pumpkin and okra were cultivated on a smaller scale with harvests starting from late January. In poorer households, maize harvests usually lasted until February, after which they relied on market purchases of staple food and vegetables.<sup>8</sup>

The main livestock raised in Mayom Country was cattle, goat, and sheep. In a normal year, cattle were moved towards the Nile River from February to April and return to homesteads from May to June.<sup>9</sup> Families might keep 3 to 4 cows at home throughout the year, for milk products.<sup>10</sup> Cattle might be sold occasionally throughout the year for diverse reasons, including for capital to start a trading business or as a coping mechanism in lean years.<sup>11</sup>

Supplemental sources of income included the sale of firewood, charcoal, fish, and wild foods. Mayom town hosted one of Unity State's two main markets, benefiting from its proximity to Sudan. Access to markets from rural areas, however, was periodically limited due to poor roads, flooding, and insecurity.

While cultivation, rearing of livestock, and fishing have remained pillars of the Mayom County livelihood profile (see Figure 4), a compounding number of hazards have imperilled food security in the three reporting months.

**Figure 4: Most commonly livelihood activities in Mayom County, and proportion of assessed settlements reporting engagement**



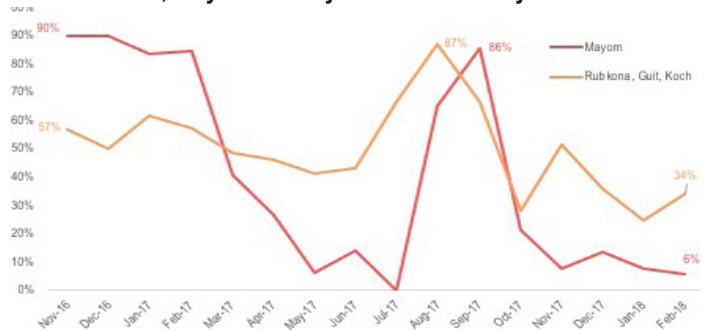
### Hazards (Shocks)

- **Environmental:** Prolonged dry spells in 2016 and 2017 reduced both crop production and the availability of wild food, while localized flooding destroyed crops in numerous settlements.
- **Market:** High food prices, disruptions along main trading routes and continued inflation reduced meaningful access to markets.
- **Livestock:** Settlements continued to suffer from cattle disease outbreak that led to high cattle mortality in 2015.
- **Conflict:** Local conflict, cattle raiding, and threat of forced recruitment continued to displace some populations to bush, nearby towns, and Bentiu PoC site.

### Access to Food & Coping Strategies

A compounding number of shocks to the various livelihood activities and coping mechanisms imperilled access to food in the county in late 2017 and early 2018. The proportion of assessed settlements reporting adequate access to food in Mayom dropped drastically in the past 5 months, from 86% in September 2017 to 6% in February 2018 (see Figure 5). Seasonal variation alone cannot explain the deterioration. Eighty-five percent of assessed settlements in Mayom reported adequate access to food in February of the previous year. The 80% decline is also more extreme than that reported in other parts of northern Unity State. Conversely, 34% of assessed settlements in Rubkona, Guit and Koch Counties reported adequate access to food in February 2018.

**Figure 5: Proportion of assessed settlements reporting adequate access to food, Mayom County & Northern Unity**



6 FGD, FSL and Displacement, February and March 2018.

7 FGD, Displacement, March 2018.

8 Fewsnet, South Sudan Livelihood Zone and Description, August 2013.

9 Ibid

10 FGD, FSL and Displacement, February and March 2018.

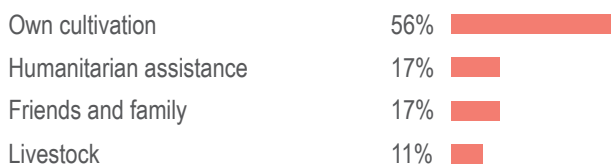
11 REACH, Mayom County: FSL Profile, May-July 2017.



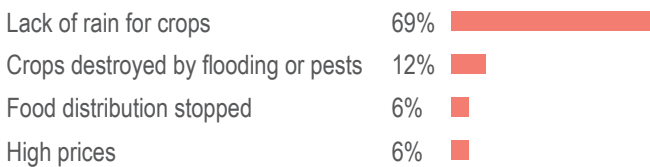
# Mayom County Profile: Populations, FSL, and Services

About half of assessed settlements (56%) in Mayom reported that cultivation was the main source of food in February 2018 (see Figure 6); however, environmental factors severely hampered overall crop production. Sixty-nine percent of assessed settlements without adequate access to food reported that a lack of rain for crops was the main reason for the lack of food (see Figure 7). Focus group participants explained that the lack of rain also reduced access to vital coping strategies, including fishing and foraging water lilies.<sup>12</sup> In other parts of Mayom, unusual flooding - from heavy downpours, rather than rising rivers - reportedly further destroyed harvests.

**Figure 6: Main reported sources of food and percentage of assessed settlements reliant on each source, Feb 2018<sup>13</sup>**



**Figure 7: Main reported reason for inadequate access to food and percentage of assessed settlements reporting each, Feb 2018**



In prior months, markets featured more prominently among the reported main sources of food in Mayom. More than half of assessed settlements in January (58%) and December (52%) reported “purchase”<sup>14</sup> as their main source of food, and nearly all assessed settlements (more than 90%) reported access to functioning markets. In contrast, an average of only 34% and 29% of assessed settlements in the other three assessed Northern Unity counties reported access to markets in December and January. In February, however, no assessed settlements in Mayom reported “purchase” as the main source of food for the community, and only 56% reported access to markets. On the one hand, the arrival of the second harvest season provided an alternative source of food. At the same time, however, the temporary closure of a main trading route to Sudan and nationally increasing market prices likely reduced populations ability to purchase food in markets. In February, 80% of assessed settlements with access to markets reported an increase in the price of cereals in the prior month, and nearly a third (29%) responded that the increasing prices had resulted in the preception that “hunger is bad [with] limited options to cope with the reduced access to food.”

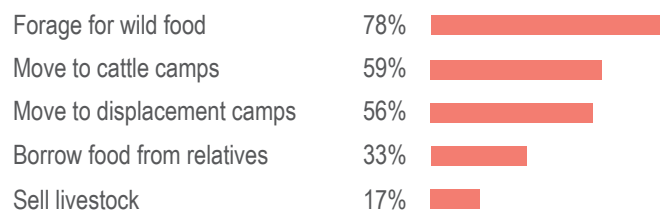
Cattle continued to account for a large portion of livelihood activities in Mayom. In February 2018, 78% of assessed settlements in Mayom reported that community members engaged in livestock as a livelihood (see Figure 4). This is more prevalent than that reported in other northern Unity counties; 67% reporting the same in Guit, but 38% in Rubkona and 31% in Koch. In Mayom, livestock also featured prominently among the coping strategies for stressed communities. In February, 59% of assessed settlements reported moving to cattle camps and 17% reported selling livestock to cope with a

lack of food. The former was only reported by 4% of of assessed settlements in Koch, 13% in Guit, and 38% in Rubkona.

At the same time, many in Mayom appear yet unable to fully recover from the 2015 cattle crisis, during which an estimated 93% of households in the county lost an average of 12 cattle to disease.<sup>15</sup> Focus group participants repeatedly referenced the 2015 losses to explain current food shortages.<sup>16</sup> While AoK proxy indicators suggest that livestock presence in Mayom generally remained high throughout 2017 and 2018 compared to other assessed Unity State counties, household-level decreases in the number of livestock would negatively affect the ability of individuals to mitigate food consumption gaps.

Likely as a result of low cultivation levels, high market prices, and reduced livestock ownership, assessed communities reported reliance on a number of moderate to severe coping strategies in Mayom. A related common coping strategy is borrowing food from relatives, which was reportedly practised in 33% of assessed settlements in Mayom in February 2018 (see Figure 9). According to FGDs, women reportedly travelled as far as Bentiu PoC site, often a day and a half walk, to receive food from relatives there, which reportedly exposed them to gender-based violence and looting along the travel route. Moving more permanently to displacement camps was another, more extreme, coping strategy reported by 56% of assessed settlements in Mayom in February (see Figure 11). This is a substantial increase from the 8% reporting this in January, and 7% in December 2017. The increase brings Mayom more in line with the rest of assessed settlements in northern Unity counties -- in February, 38% of assessed settlements in both Guit and Koch and 72% in Rubkona reported that people in the settlement had moved to cattle camps to cope with a lack of food.

**Figure 9: Main livelihood-based coping strategies and proportion of assessed settlements reporting each, February 2018<sup>17</sup>**



Noteably, reliance on humanitarian aid has also increased in Mayom County. Seventeen percent of assessed settlements in February reported that humanitarian assistance was the main source of food in the settlement (see Figure 6), which is double the percentage reporting the same in prior months (8% in January, 7% in December). This is a new dynamic as assessed settlements in Mayom have historically reported lower levels of access to and reliance upon humanitarian assistance compared to other parts of Unity State (see Figure 12).

Humanitarian provision to the county is increasing, including WFP food distributions in multiple sites in Mayom; however, a May 2017 DRC assessment reported community perceptions that the registration did not adequately encompass the expanding population size.<sup>18</sup> In focus group discussions and partner interviews, similar concerns

12 Focus Group Discussions, FSL, February 2018.

13 The main sources of food does add up to 100%, but not all of the percentages were integers and have been rounded up.

14 The exact phrasing of the survey option is “bought with money”

15 ACTED, RNA Mayom county, March 2017.

16 Focus Group Discussions, FSL, February and March 2018.

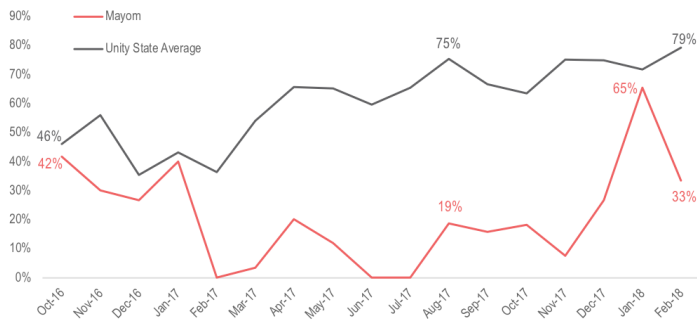
17 KIIs could select multiple livelihood-based coping strategies.

18 DRC, Protection Assessment Report: Mankien, Mayom, May 2017.



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**Figure 12: Proportion of assessed settlements reporting GFD in past three months, Mayom County and Northern Unity**



were raised that the amounts distributed were insufficient as it was subsequently shared among relatives and wider social networks, and that information about food distributions did not reach more remote settlements.<sup>19</sup> The January 2018 IPC report projected that, with humanitarian aid, Mayom would likely face crisis levels (Phase 3) of food insecurity; in the absence of humanitarian assistance, the status was expected to increase to emergency levels.<sup>20</sup>

The compounding number of food security and livelihood challenges - low cultivation, environmental shocks, market disruption, and cattle crises - combine to help explain the reported decline in food security in Mayom. As coping strategies are already strained, reversing this trend will likely require sustained humanitarian assistance.

## Access to Services

Like much of Unity State, access to services, including WASH, health and education, continued to be a challenge in Mayom County. Twenty-one percent of key informants from Mayom, who were interviewed in Bentiu PoC in February, reported that the lack of services was a contributing factor to their displacement (see Figure 2).

Available services are largely concentrated in the main population centres, especially Mayom and Mankien towns. Partners operating in the area repeatedly emphasized the discrepancies in the services available in main population centres as compared to the rural areas.<sup>21</sup> As elsewhere, the poor road system in Mayom can make access to more rural areas -- and to Mayom itself, for the many humanitarian partners based elsewhere in northern Unity State -- difficult, especially in rainy season. Overall, a relatively modest number of aid organizations currently operate in Mayom County, especially compared to neighboring Rubkona.<sup>22</sup>

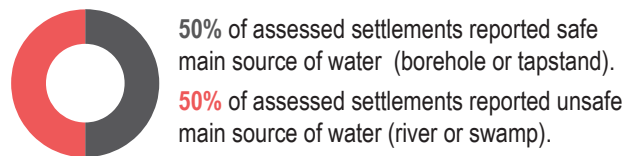
## WASH

Water, sanitation and hygiene indicators remained poor in Mayom County. The identified needs combined with the relatively stable security situation may present partners with opportunities for future interventions; indeed, the WASH Cluster called on partners to develop a longer-term approach towards WASH programming in early 2018.

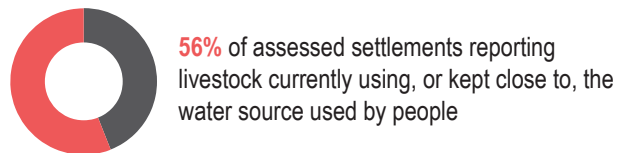
Access to improved water sources remains low in Mayom. In February, only 50% of assessed settlements reported a safe main source of water (borehole or tapstand, though only the former was

reported in Mayom) for people living in settlement, while the remain 50% reported that water was primarily obtained from an unsafe source (river or swamp) (see Figure 13). More than half (56%) of assessed settlements reported that livestock, or other animals, currently used the same water source as people, or were kept close by (see Figure 14). Such practices increase the potential transmission of parasitic water-borne diseases. Further, while 50% of assessed settlements reported the presence of a borehole, only 17% reported that boreholes were functional (see Figure 15). A January 2018 WASH Cluster assessment found that while partners have trained water mechanics in Mayom and Mankien towns and community leaders have expressed willingness to pay for repairs, maintenance was hindered by a lack of spare parts and tools.<sup>23</sup>

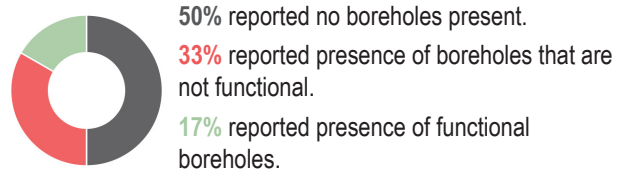
**Figure 13: Main source of water, February 2018**



**Figure 14: Shared water source, February 2018**



**Figure 15: Presence of boreholes, February 2018**



Access to water differs between populations in the main towns compared to more rural settlements. The WASH Cluster reported that most of the populations in Mankien and Mayom towns have access to boreholes and water yards, although overcrowding has resulted in overuse, leading some to use the nearby river instead.<sup>24</sup> Outlying villages, conversely, were reported to rely on hand dug wells and, in the rainy season, surface water.

Contributing to poor hygiene and sanitation condition in the county and consistent with previous months, 88% of assessed settlements in February Mayom reported that open defecation remained a common practice. Partner reports confirm that, in visited locations, no household or public latrines exist.<sup>25</sup> Community members cited a lack of materials - particularly slabs - as a limiting factor. Overall, given Mayom's relative stability yet poor access to adequate WASH facilities, there is the need for more long-term WASH programming.

## Health

As of February 2018, access to health facilities in Mayom County remains high relative to other assessed counties in Northern Unity,

19 FGD, FSL, February and March 2018. Partner interview, Protection, February 2018.

20 IPC Factsheet, January 2018.

21 Partner interviews, education, protection, WASH, February and March 2018.

22 OCHA, Operational Presence (3W): County-Level, February 2018. 5 humnaintarian

partners reported operating in Mayom (in service clusters), compared to 14 in Rubkona.

23 WASH Cluster and Concern WASH assessment: Greater Mayom, January 2018.

24 Ibid.

25 Ibid. Partner interviews, education, February and March 2018.

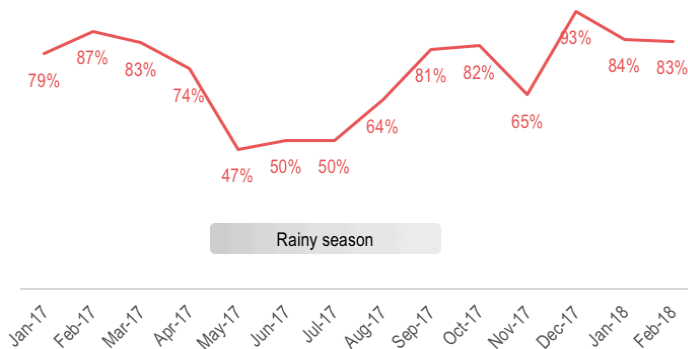


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although facilities are often distant and basic. Eighty-three percent (83%) of assessed settlements in Mayom reported having access to health facilities (see Figure 16). This is similar to the 92% of assessed settlements reporting the same in Guit, but higher than the 52% reporting the same in Koch and 26% in Rubkona.

Distance from health facilities, however, remained a challenge in Mayom. For those assessed settlements lacking access, the majority consistently reported distance as the main inhibiting factor in January (100%) and February (67%). Among assessed settlements who do report access, almost a third reported that it takes half a day to travel to health facilities. Only 4% of assessed settlements in Guit and Rubkona, and 7% in Koch reported the same. Furthermore, access to facilities appears to be seasonal. In 2017, more than 70% of assessed settlements reported access to facilities from January to April, but only 50% or less reported access in May, June and July, coinciding with the rainy season (see Figure 17). In a January 2018 assessment conducted by health partners, the Wangkai commissioner emphasized the importance of prepositioning health supplies, as the area will be cut off during the rainy season.<sup>26</sup> The assessment also emphasized the importance of improving WASH facilities among existing health facilities.

**Figure 16: Proportion of assessed settlements reporting access to health facilities, Mayom County**



**Figure 17: Distance from health facilities and proportion of assessed settlements so reporting, February 2018**

Under 30 min	12%	<div style="width: 12%;"></div>
30 min - 1 hour	18%	<div style="width: 18%;"></div>
1 hour - half day	24%	<div style="width: 24%;"></div>
Half day	29%	<div style="width: 29%;"></div>
No facility	18%	<div style="width: 18%;"></div>

## Education

Finally, education indicators are also poor in Mayom County. In February 2018, only 33% of assessed settlements report that children are able to access education facilities (see Figure 18). Among those reporting a lack of access to education, 33% of assessed settlements explained that facilities had never been present, 33% that existing facilities were too far, and 17% that facilities had been destroyed in past conflict.

Gender disparities among attendance rates were stark. Among those reporting access to education, the majority of assessed settlements (84%) report that half or fewer than half of all girls attended school, while all assessed settlements reported that more than half or all boys attend school. The main reasons given for girls not attending school included school fees (25% of assessed settlements), the need to work (25%), and cultural beliefs (25%) (see Figure 19).

Humanitarian partners active in supporting education in Mayom are primarily focused on delivering school supplies to and supporting protection efforts in schools throughout the county. Partners highlighted additional access challenges, including the rainy season and the impact of a lack of WASH facilities, and emphasized the general need as an opportunity for expanded partner engagement in education writ large.<sup>27</sup>

**Figure 18: Access to education, February 2018**



**Figure 19: Primary reason reported for boys and girls who are not attending school, Mayom, February 2018**



## Conclusion

In the past, Mayom's relative stability compared to neighbouring counties and diverse coping mechanisms have led humanitarian actors to focus on other areas of crisis in Unity State. In late 2017 and early 2018, however, reports of a precipitous decline in food security and compounding challenges to livelihood activities and coping strategies are reason for concern. Increased humanitarian assistance will be required to both address immediate gaps and reverse concerning trends. Simultaneously, access to services in Mayom remains low relative to neighboring counties, especially in remote areas. In areas of relative calm such as Wangkai - where populations remain, IDPs are present, and returnees have arrived - there appear to be opportunities for both rapid service provision and long-term programming to have an impact.

### About REACH

REACH 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. All REACH activities are conducted through inter-agency aid coordination mechanisms.

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<sup>26</sup> SMOH, WHO, UNICEF, HPF, and Nile Hope, Mayom Trip Report, March 2019. Partner interview, education, March 2018.

<sup>27</sup> Partner interviews, education, March 2018.