

# SOUTH SUDAN - VILLAGE ASSESSMENT SURVEY

## KEY FINDINGS

Akobo and Pibor  
VAS 2021

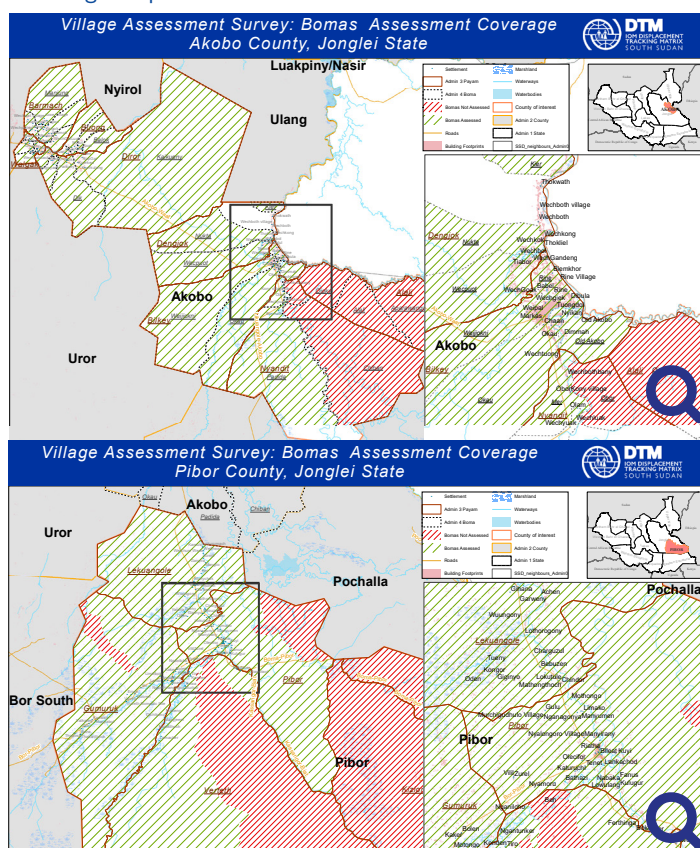
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### Introduction

IOM's Displacement Tracking Matrix (DTM) conducted the Village Assessment Survey (VAS) to facilitate planning for transition and recovery programs. Its main objectives are to map the availability of basic needs, services, infrastructure and to identify priority areas for intervention within selected counties in South Sudan. The assessment is funded by the Reconciliation, Stabilization and Resilience Trust Fund area based programming for Jonglei and Greater Pibor Administrative Area. Data collection and analysis was conducted as part of joint IOM and UNICEF-led program on strengthening education programs and infrastructure in targeted counties.

Data was collected between March and April 2021, with previously inaccessible facilities and settlements in Akobo assessed in May and June 2021. DTM assessed the counties of Akobo and Pibor in Jonglei state, covering 25 bomas in seven payams (83.3% coverage) and 34 bomas in four payams (54.8% coverage), respectively. Five bomas in Akobo could not be assessed due to insecurity and road inaccessibility. In Pibor, five bomas could not be assessed due to road inaccessibility.

### Coverage maps for Akobo and Pibor



**Disclaimer:** The Payam and Bomas are used as reference for data systems. Based on the agreement with OCHA and endorsement from RRC, the 10 state system of administrative divisions has been used for this exercise. As such, IOM on its own does not officialize any payam and boma boundaries. In this assessment, only Pibor County according to the 10 state system of administrative divisions was considered.

### Methodology

The sources of data used for VAS are derived from five complementary and integrated questionnaires: Boma Questionnaire, Payam Authorities Questionnaire, Health Technical Questionnaire, Education Technical Questionnaire and Facilities Infrastructure Services tool.

A mixed methods approach of key informants' interviews, focus group discussions and direct observations with geo-location tools were applied to collect and triangulate data throughout the data collection process. The data collection teams conducted the assessment in locations of interest by physically visiting all bomas, villages and facilities.

The team conducted a comprehensive four-day training of data enumerators. The first three days focused on effective data collection techniques and methods, an in-depth review of the questionnaires and technical training on GPS devices and facility mapping. On the fourth and final day, the enumerators applied learned theory and skills in a field simulation.

### Focus group discussion in Akobo



VAS is generously supported by:



**United Nations**  
**Multi-Partner Trust Fund**

Reconciliation | Stabilisation | Resilience

### Context

Akobo county is one of the eleven counties that form Jonglei state. It consists of eight payams, with its headquarters in Bilkey payam. Other counties include Nyandit, Alali and Dengjok in Akobo East, and Diror, Buong, Barmach and Walgak in Akobo West. Akobo West is inaccessible from Akobo East due to flooding and volatility of insecurity due to inter-communal clashes. Most humanitarian organizations are based in Akobo East with little access to the communities in Akobo West. The rainy season lasts from May to December while the dry season is from January to April. The only available mobile network is Zain, and only one of the assessed bomas reported to have electricity.

In 2021, the population of Akobo consisted of 15,392 internally displaced persons (IDPs), 20,353 returnees and 73,276 members of the host community ([Mobility Tracking Round 11](#)). A large proportion of these IDPs arrived in 2020 (2,456 IDPs) and 2021 (3,361 IDPs). While earlier arrivals came from neighbouring counties within Jonglei, later arrivals came from within Akobo, various counties in Upper Nile and Juba in Central Equatoria. Since 2016, there has been a steady increase in the number of returnees to Akobo, most of which were displaced within Akobo or neighbouring counties. Since 2019, some individuals also returned from displacement in Juba (Central Equatoria), Malakal and Ulang (Upper Nile).

The county is inhabited by mainly the Lou Nuer, with a small proportion of Anyuak ethnic groups as well. Most of the population is nomadic, sometimes migrating to other locations in search of water and pasture for their animals. Due to insecurity, some inhabitants of the county have sought refuge in neighbouring Ethiopia and other counties<sup>1</sup>. Most of those displaced in the Sudanese War had returned following the independence referendum in 2011. However, the South Sudanese Civil War and recurrent inter-communal clashes between Lou Nuer and Murle ethnic groups that included cattle raiding, land clashes, divorce between members of different communities and flooding have produced massive internal displacement and high levels of humanitarian needs. In December 2020, the [IPC Acute Food Insecurity & Acute Malnutrition Analysis report](#) projected 11,000 individuals in Akobo to be likely to reach IPC level 5 (Famine) by April 2021.

### Data Collection

Initial data collection occurred between 29 March and 12 April 2021, and additional data in previously inaccessible areas was collected between 14 May and 4 June, 2021. The teams covered seven payams, 25 bomas and 120 villages or settlements. Alali payam was not assessed because residents had deserted it due to insecurity. Nyandit, Diror, Barmach and Buong payams had several deserted villages due to insecurity and fear of attacks, leading to five bomas in total to not be assessed. Data collection efforts also faced some transportation challenges, with villages often being distant from waterways which increased travel on foot. Further, a total of 387 facilities, infrastructure and services were assessed: 43 administrative

<sup>1</sup> DTM's network of enumerators noted arrivals of Ethiopian nationals from Ethiopia (predominantly from the region of Tigray) due to conflict in their area of origin. These could not be adequately captured through existing monitoring networks due to their use of alternative routes in the early morning or late evening to avoid stringent border controls by Ethiopian authorities.

buildings, 44 education facilities, 15 healthcare facilities, 5 markets, 83 religious buildings, 7 transport hubs and 190 water points or facilities (see Table 1).

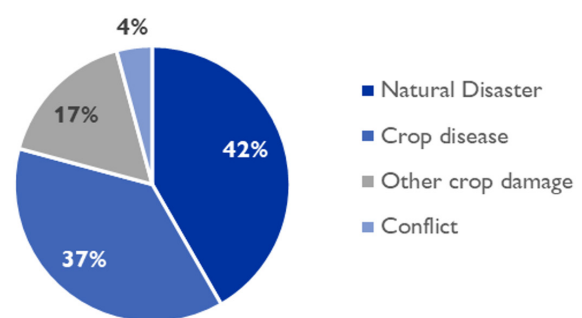
### Key Findings

**Housing, Land and Property:** The most common form of land ownership is ancestral land in 22 bomas and community-granted tenure or ownership in 3 bomas of the 25 assessed bomas. More than half of all assessed bomas (14) indicate that there are houses or land where people other than the owners are living, without paying rent or receiving permission from the owners. A smaller proportion (5 bomas) reports to be experiencing HLP disputes, such as boundary disputes, occupation, multiple land title claim and inheritance disputes.

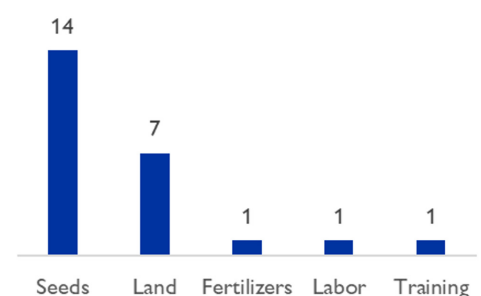
**Shelter/Non-Food Items:** The majority of bomas (23 of the 25 assessed bomas) state that the most common shelter type is a tukul (mud walls with thatched roofing), with five bomas reporting that most houses are severely damaged and three bomas (Wechjal, Balok and Matar bomas) indicating that most people live in makeshift shelters or that they are so destroyed that people cannot live in them. Other shelter types in Akobo include brick walls with thatched roofing and emergency or improvised shelters.

**Food security and livelihoods:** The main livelihood is farming (18 of 25 bomas), followed by cattle herding (4 bomas) and fishing (3 bomas). 20 of 24 assessed bomas that practice farming report that they are unable to sell their crops for a profit at the market. The remaining four bomas are only able to do so sometimes or rarely. Crops also suffer most commonly from natural disasters (10 of 24 bomas), crop disease (9 of 24 bomas) and other crop damage (4 of 24 bomas). The most needed inputs to produce food crops are

What is the main problem that affects the production of food crops?



What is the most needed input for the production of food crops?



# Akobo County - Key Findings

Akobo and Pibor  
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seeds (14 bomas) and land (7 bomas). In 14 of the 23 bomas with people who own livestock, livestock diseases have been the largest problem.

Other bomas also raised issues with conflict, drought or floods, raiding and water. In the 21 bomas that practice fishing, the most common problem is a lack of equipment (all bomas), followed by conflict (10 bomas) and lack of storage facilities (6 bomas). Further, 17 bomas experienced livelihood shocks due to floods, while livestock diseases interrupted the livelihoods of people in five bomas. Of these, eleven bomas coped with this shock by waiting for assistance.

Twenty-two of the 25 assessed bomas experience a period during the year when food is very scarce. During this time, most residents would reduce their meals (13 bomas), forest fruits and vegetables (6 bomas) or rely on food aid (3 bomas). Within the past two years, all bomas had experienced hunger.

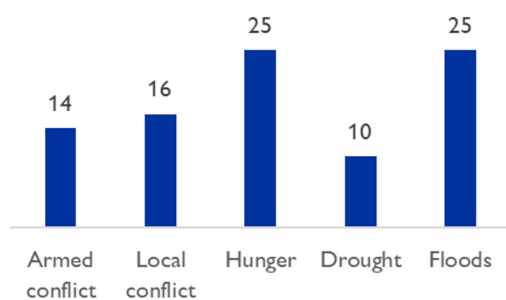
**Protection:** Eight bomas report that they had experienced violence from or between armed groups in the past 12 months, with seven of those bomas being very concerned with violence re-erupting. In

the past two years, 14 bomas had experienced armed conflict, and 16 bomas experienced local conflict.

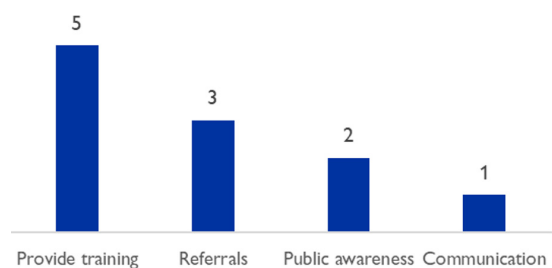
All bomas had experienced floods in the past two years. To cope with this, eleven bomas relied on humanitarian assistance, eight bomas temporarily migrated, five bomas reported it to the authorities while one boma sought support from a neighbouring boma.

**Health:** Eleven of the 25 assessed bomas reported to have a health facility, all within one hour by foot. However, ten of these bomas were unsatisfied with their facility, mostly due to a lack of medicines. Facility mapping found 15 health facilities, two of which were not operational. Among the 11 operational facilities that were further assessed with the technical questionnaire, five indicated that the most helpful way the facility could be assisted to cope better would be training, while three facilities indicated referrals. Further recommendations included public awareness (2 facilities) and communication (1 facility). They also reported that likely disease outbreaks included malaria upsurge (all facilities), cholera (3 facilities), yellow fever (1 facility), measles (1 facility), meningitis (1 facility), typhoid (1 facility) and visceral leishmaniasis (1 facility).

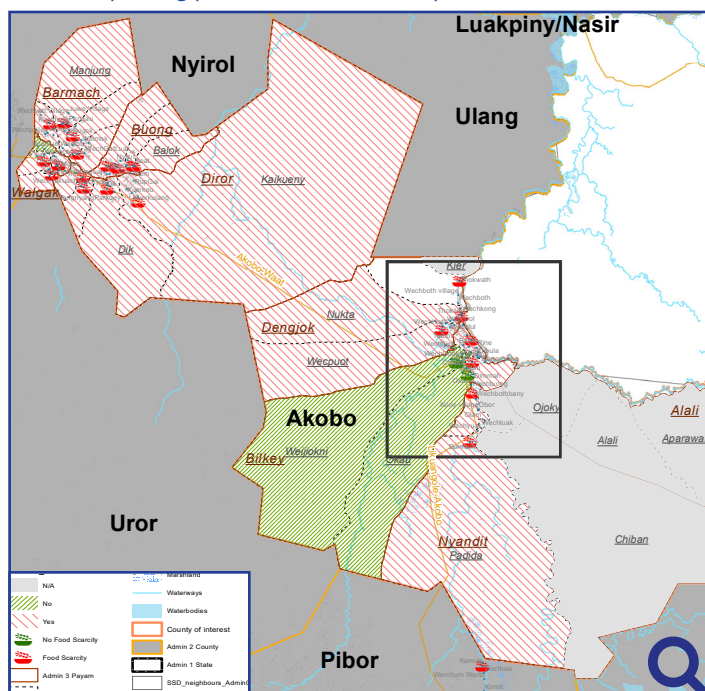
Which issues did the boma face in the last two years?



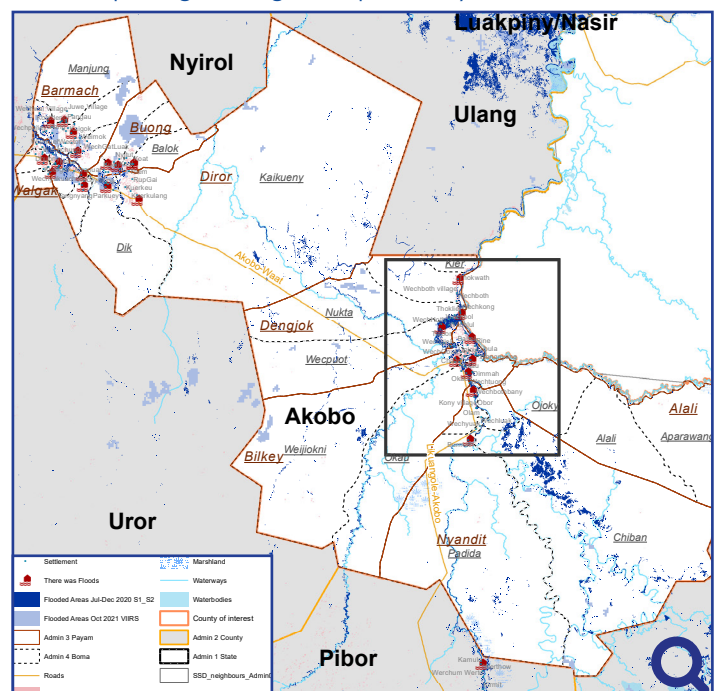
What is the most helpful way the health facility could be assisted to cope better?



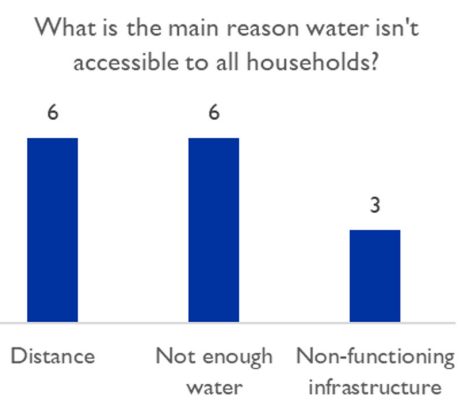
Bomas reporting periods of food scarcity in Akobo



Bomas reporting flooding in the past two years in Akobo

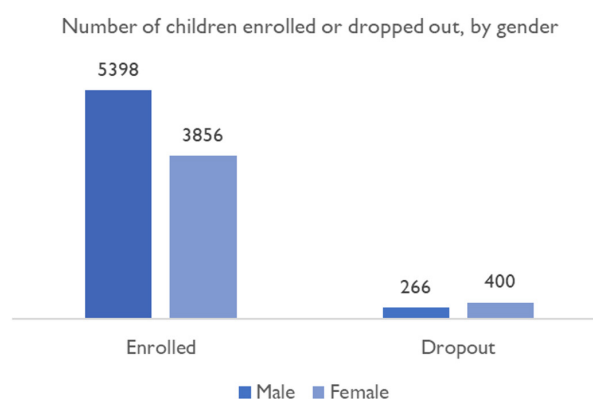


**WASH:** 22 out of 25 bomas indicated that their main source for drinking water are boreholes, while three bomas reported that their main source was the river. 17 bomas highlighted that their water access was insufficient, and 15 bomas reported that not all households had access to these water sources. The main issues hampering access were distance (6 bomas), the lack of sufficient water (6 bomas) and non-functioning infrastructure (3 bomas).



**Education:** Three bomas indicated to not have any education facilities, while only 9 out of the remaining 22 bomas indicated had functional facilities. Only one boma was satisfied with the standard of

education. Facility mapping found 44 education facilities in the county, 21 of which were not operational. All operational schools were primary schools, in which 9,254 children were enrolled (5,398 boys and 3,856 girls) and 666 children dropped out (266 boys and 400 girls). The schools also indicated that their most pressing needs were more classrooms or space (16 schools), provision of furniture (12 schools), water supply (8 schools), latrines or sanitation (7 schools) and building renovation or improvement (7 schools) among others.



**Table 1: Assessed bomas and facilities in Akobo**

Payam	Barmach	Bilkey	Buong	Dengjok	Diror	Nyandit	Walgak	Total
Number of bomas	4	4	4	3	4	2	4	25
Administrative buildings	6	8	6	4	9	4	6	43
Operational	6	8	6	4	9	4	6	43
Non-operational	0	0	0	0	0	0	0	0
Education facilities	5	15	3	7	4	5	5	44
Operational	0	13	0	7	0	2	1	23
Non-operational	5	2	3	0	4	3	4	21
Healthcare facilities	1	3	1	2	3	4	1	15
Operational	1	3	1	2	3	2	1	13
Non-operational	0	0	0	0	0	2	0	2
Markets	0	2	1	1	0	0	1	5
Operational	0	2	1	1	0	0	1	5
Non-operational	0	0	0	0	0	0	0	0
Religious buildings	10	38	5	10	7	7	6	83
Operational	8	36	5	9	7	5	6	76
Non-operational	2	2	0	1	0	2	0	7
Transport hubs	1	3	2	0	0	0	1	7
Operational	0	3	1	0	0	0	0	4
Non-operational	1	0	1	0	0	0	1	3
Water points / facilities	21	77	11	15	27	14	25	190
Operational	13	70	7	14	16	13	20	153
Non-operational	8	7	4	1	11	1	5	37
<b>Total operational</b>	<b>28</b>	<b>135</b>	<b>21</b>	<b>37</b>	<b>35</b>	<b>26</b>	<b>35</b>	<b>317</b>
<b>Total non-operational</b>	<b>16</b>	<b>11</b>	<b>8</b>	<b>2</b>	<b>15</b>	<b>8</b>	<b>10</b>	<b>70</b>

### Context

Also located in Jonglei state, Pibor county<sup>1</sup> is in the Eastern part of South Sudan and lies approximately 342 kilometers by road northeast of the capital, Juba. It borders Eastern Equatoria state to the South and Ethiopia to the East. Pibor county consists of eight payams: Pibor, Lekuango, Gumruk and Verteth payams are in the Western part, while Boma, Kizingora, Marow and Miwono payams are in the Eastern part. The county's administrative center is in Pibor town (Pibor payam). The lowlands of the Lotilla plain characterize the north-western part of the county, while the highlands and hills of the Boma plateau comprise the south-eastern part of the county. None of the assessed bomas had electricity or were in reach of a mobile network, except for Pibor boma (Pibor payam) that had access to MTN and Zain networks.

Pibor county is inhabited by the Murle, the Jie and a small proportion of the Anyuak. The main spoken language is Murle. Unlike the other nomadic tribes or ethnic groups in South Sudan, the Murle graze their animals mainly within the county. This is due to the long history of conflicts with the neighbouring communities.

Most communities in the county practice seasonal migration due to water shortages for cattle and domestic consumption during the dry season, between January and April. The rainy season in Pibor lasts from May to December. Most areas of Pibor are accessible by road only during dry season as roads are flooded during the rainy season. Floods are also a major contributor to displacement in the Western part of the county that is proximate to riverbanks.

Armed conflict in Pibor county has followed a diverse path. In 2010, an opposition armed group led by David Yau-Yau was formed to contest the leadership of Jonglei, which he felt was marginalizing the Murle community. The government of South Sudan and Yau-Yau signed a peace agreement in 2011, under which the opposition group was incorporated into the Sudan People's Liberation Army (SPLA). Within a year, Yau-Yau's group defected, forming the South Sudan Democratic Movement (SSDM) Cobra faction. The fighting between SPLA and the new SSDM-Cobra faction caused significant displacement of the Murle communities in 2012 and 2013.

When the civil war broke out in December 2013, the government sought to avoid fighting on two fronts in Jonglei, given parallel fighting with the Sudan People's Liberation Movement-in-Opposition (SPLA-IO) around Bor. Ceasefire negotiation between SSDM-Cobra and the SPLA were expedited and signed in 2014. With the second peace agreement signed, Greater Pibor Administrative Area was formed. This agreement prevented Pibor from becoming a battleground during the civil war.

Despite of absence of fighting between armed groups, Pibor continued to experience tension among communities and neighbouring counties. Historically, these clashes revolved around cattle raids, revenge killings and abduction of children. While previous outbreaks of violence between the communities have

tended towards selective targeting of livelihoods and combatants, more recent episodes involved more widespread destruction of infrastructure and targeting of civilians. The COVID-19 pandemic has exacerbated this tense environment.

In 2021, the population consisted of 35,541 IDPs, 45,557 returnees and 84,658 members of the host community ([Mobility Tracking Round 11](#)). The number of IDPs by year of arrival ranged between 1,170 and 1,966 until 2019 when there was a sharp increase in arrivals. 6,959 IDPs arrived in 2019, 8,894 IDPs in 2020 and 13,748 IDPs in 2021. Most IDPs were displaced within Pibor county. While the number of returnees by year of arrival increases with each year, there is a sharp increase in the proportion of returnees who arrived in 2021, with the number peaking at 33,773 returnees. Internal returnees came from within Pibor county while returnees from abroad came mostly from Ethiopia and Kenya.

### Data Collection

Data collection took place from 22 March to 9 April 2021 and targeted four of the seven payams: Gumruk, Lekuango, Pibor and Verteth. Following successful completion of the training, data collection teams covered all four payams, 34 bomas and 139 villages or settlements. Five bomas could not be covered due to inaccessibility as result of extremely poor road conditions and distance. Further, Gumruk and Pibor payams were partially inaccessible due to insecurity. A total of 221 facilities, infrastructure and services were assessed: 17 administrative buildings, 31 education facilities, 7 healthcare facilities, 9 markets, 30 religious buildings, 5 transportation hubs and 122 water points or facilities.

### Key Findings

**Housing, Land and Property:** The most common form of land ownership is ancestral land in 33 bomas and community-granted tenure or ownership in one of the 34 assessed bomas. Six bomas indicate that there are houses or land where people other than the owners are living, without paying rent or receiving permission from the owners. Two bomas report to experience HLP disputes, including boundary and inheritance disputes.

**Shelter/Non-Food Items:** Twenty bomas report that emergency or improvised shelters are the most common shelter type. Of these, most people are living in makeshift shelters in nine bomas, and most houses are either severely damaged or so destroyed that people cannot live in them in nine other bomas. 14 bomas state that the most common shelter type is a tukul, with three bomas reporting that most people live in makeshift tukuls and three bomas indicating that most are severely damaged or that they are so destroyed that people cannot live in them.

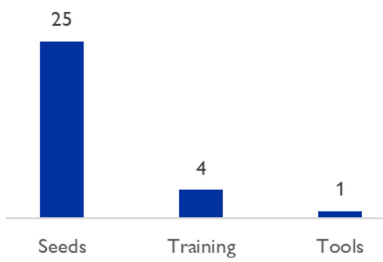
**Food security and livelihoods:** The main livelihood is cattle herding (19 of 34 bomas), followed by farming (11 bomas), trading (2 bomas) and fishing (2 bomas). Eleven of thirty assessed bomas that practice farming report to sell their crops for a profit at the market, although nine bomas are only able to do so sometimes. Crops also suffer

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# Pibor County - Key Findings

Akobo and Pibor  
VAS 2021

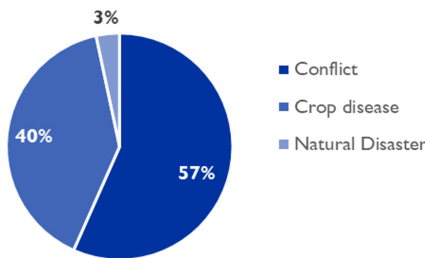
What is the most needed input for the production of food crops?



most commonly from conflict (17 of 30 bomas), crop disease (12 of 30 bomas) and natural disaster (1 of 30 bomas). The most needed inputs to produce food crops are seeds (25 bomas) and training (4 bomas). In 11 of the 30 bomas with people who own livestock, conflict has been the largest problem, and livestock diseases has been the main problem in 10 further bomas.

Other bomas also raised issues with grazing land availability, drought or floods, and lack of market facilities. In the 33 bomas that practice fishing, the most common problem is a lack of equipment (28 bomas), followed by conflict (8 bomas) and drought or floods (4 bomas). Further, 13 bomas experienced livelihood shocks due to floods, while conflict interrupted the livelihoods of people in 13 other bomas. Of these, 25 bomas coped with this shock by waiting for assistance, and people in five bomas migrated elsewhere.

What is the main problem that affects the production of food crops?

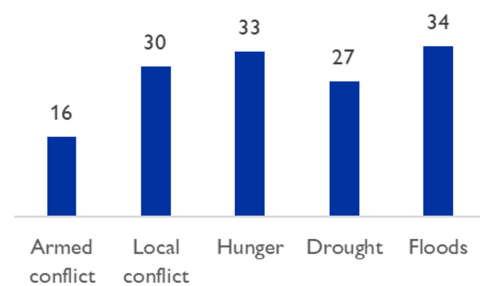


In 28 of the 34 assessed bomas, there is a period during the year when food is very scarce. During this time, most residents would reduce their meals (25 bomas), migrate temporarily (2 bomas) or forest fruits and vegetables (1 boma). Within the past two years, 33 bomas experienced hunger.

**Protection:** Nine bomas report that they had experienced violence from or between armed groups in the past 12 months, with four of those bomas being very concerned with violence re-erupting. In the past two years, 16 bomas had experienced armed conflict, and 30 bomas experienced local conflict.

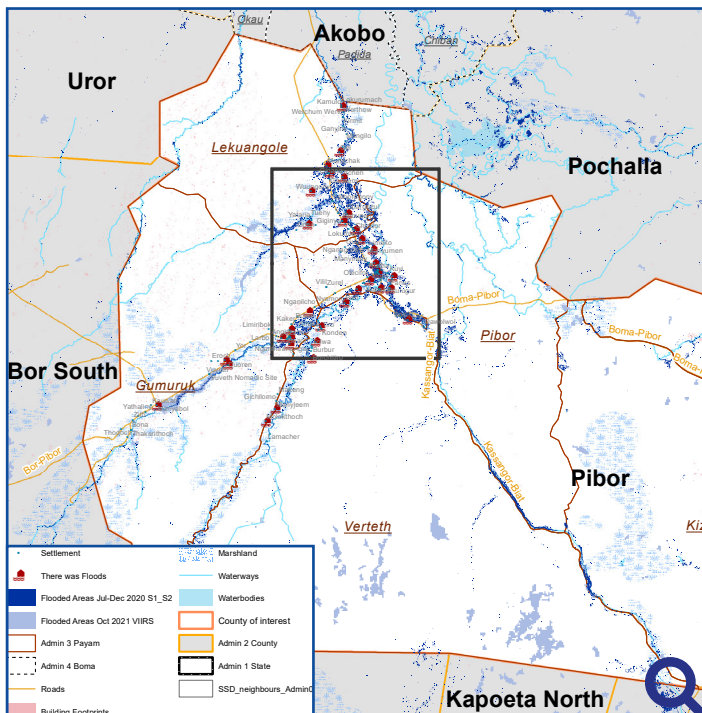
All bomas had experienced floods in the past two years. To cope with this, 24 bomas reported it to the authorities while ten bomas temporarily migrated.

Which issues did the boma face in the last two years?

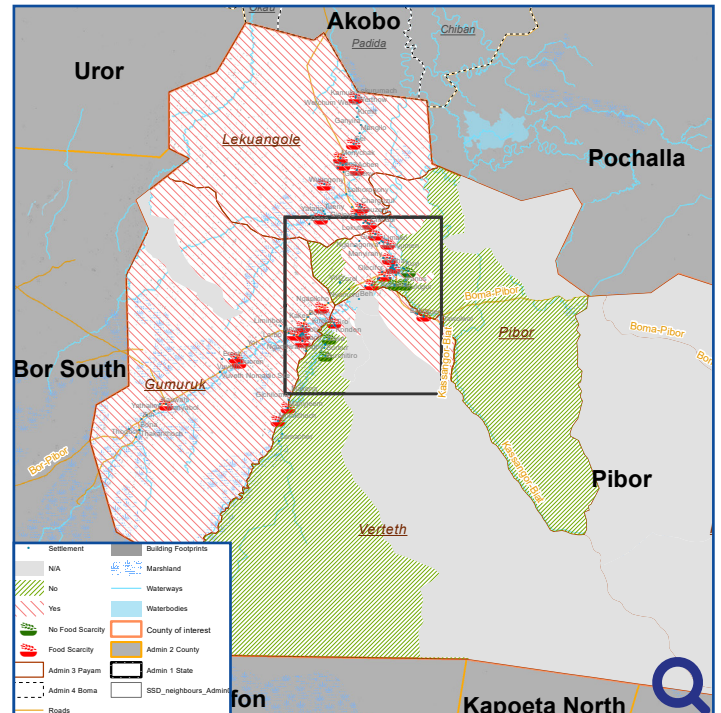


**Health:** Six of the 34 assessed bomas reported to have a health facility, half of which need more than two hours by foot. Four of these bomas were unsatisfied with their facility, mostly due to a lack of qualified personnel (2 bomas), a lack of drugs (1 boma) and inconsistent working hours (1 boma). Facility mapping found that there were seven health facilities in the county, two of which were

Bomas reporting flooding in the past two years in Pibor



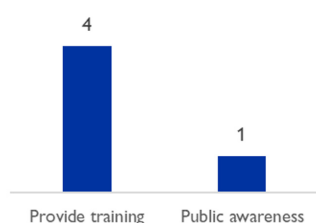
Bomas reporting periods of food scarcity in Pibor



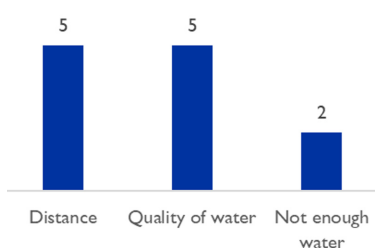
not operational. Among the five operational health facilities, four indicated that the most helpful way the facility could be assisted to cope better would be training, while one facility indicated better awareness. They also reported that likely disease outbreaks included yellow fever (5 facilities), cholera (3 facilities), malaria upsurge (3 facilities), measles (3 facilities) and meningitis (3 facilities).

**WASH:** Thirty out of 34 bomas indicated that their main source for drinking water is the river, while two bomas reported that their main source were boreholes. Two bomas indicated that lakes or ponds and streams were their main source. Thirteen bomas highlighted that water access was insufficient, and 12 bomas reported that not all households had

What is the most helpful way the health facility could be assisted to cope better?



What is the main reason water isn't accessible to all households?



access to these water sources. The main issues hampering access were distance (5 bomas), the quality of water (5 bomas) and the lack of sufficient water (2 bomas).

**Education:** Fourteen bomas indicated to have an education facility in the boma, although only two bomas had functional facilities. Only one boma was satisfied with the standard of education. Facility mapping found 31 education facilities in the county, 29 of which were not operational. The one operational school that was further assessed with the technical questionnaire was a nursery school, in which 270 children were enrolled (120 boys and 150 girls) and 56 children dropped out (20 boys and 36 girls). The school also indicated that its most pressing needs were more classrooms or space and building renovation or improvement.

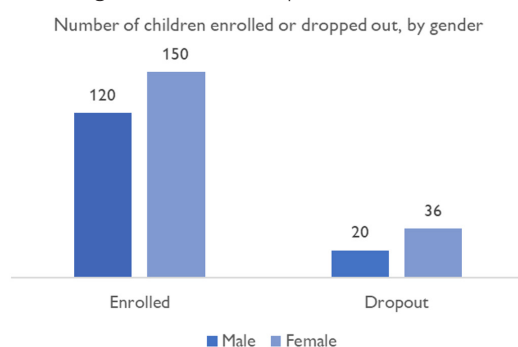


Table 2: Assessed bomas and facilities in Pibor

Payam	Gumruk	Lekuangole	Pibor	Verteth	Total
Number of bomas	10	10	10	4	34
Administrative buildings	5	3	9	0	17
Operational	5	3	9	0	17
Non-operational	0	0	0	0	0
Education facilities	8	6	16	1	31
Operational	0	1	1	0	2
Non-operational	8	5	15	1	29
Healthcare facilities	2	2	2	1	7
Operational	1	2	1	1	5
Non-operational	1	0	1	0	2
Markets	5	2	1	1	9
Operational	5	2	1	1	9
Non-operational	0	0	0	0	0
Religious buildings	10	6	12	2	30
Operational	9	3	8	2	22
Non-operational	1	3	4	0	8
Transport hubs	1	1	2	1	5
Operational	1	1	2	1	5
Non-operational	0	0	0	0	0
Water points / facilities	42	22	54	4	122
Operational	15	10	29	0	54
Non-operational	27	12	25	4	68
Total operational	36	22	51	5	114
Total non-operational	37	20	45	5	107



### Photo descriptions

Top left: "Focus group discussion in a boma", 23 March 2021

Top right top: "Children in Pibor pausing for a picture", 3 April 2021

Top right bottom: "Deserted village in Lekuangole", 26 March 2021

Bottom: "Girl gridding sorghum in Tangyang boma in Gumruk payam. Pibor county", 1 April 2021

Access the datasets:



Access the maps:

Akobo  
[Assessment Coverage](#)  
[Floods](#)  
[Food Scarcity](#)

Pibor  
[Assessment Coverage](#)  
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