



LUAKPINY/NASIR COUNTY - UPPER NILE STATE

Map 0.1. Location of Luakpiny/Nasir County in South Sudan, indicating boundaries, settlements and roads¹



About REACH

REACH is a leading humanitarian initiative that collects primary data and produces in-depth analysis to help aid actors make evidence-based decisions in support of crisis-affected people. With this in mind, our flagship research programmes aim to inform the prioritisation of aid according to levels of need - both crisis-level planning and targeted rapid response - as well as decisions around appropriate modalities of aid. Through our team of assessment, data, geospatial, and thematic specialists, we promote the design of people-centred research and set standards for collecting and analysing rigorous, high quality data in complex environments. Visit www.reach-initiative.org and follow us [@REACH_info](https://twitter.com/REACH_info).

LUAKPINY/NASIR - KEY FACTS

- **2023 National Bureau of Statistics (NBS) and United Nations Population Fund (UNFPA) population estimate: 71,780** (based on the 2008 census and the 2021 Population Estimation Survey)²
- **2024 United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) population estimate: 350,742** (based on the 2008 census, annual growth and attrition rates and displacement adjusted estimates)³
- **Area: 5,185 square kilometers**⁴
- **Population density: 68 persons per square kilometer**
- **County capital: Nasser**
- **Payams: Kiech Kuon, Roam, Mading, Dingkar, Nasir, Kuerenge-Ke, Jikmir, Maker**⁵

Luakpiny/Nasir County is situated within the Upper Nile State, bordered to the west by Baliet and Ulang Counties, to the east by Longochuk and Maiwut Counties, and to the south by Ethiopia.

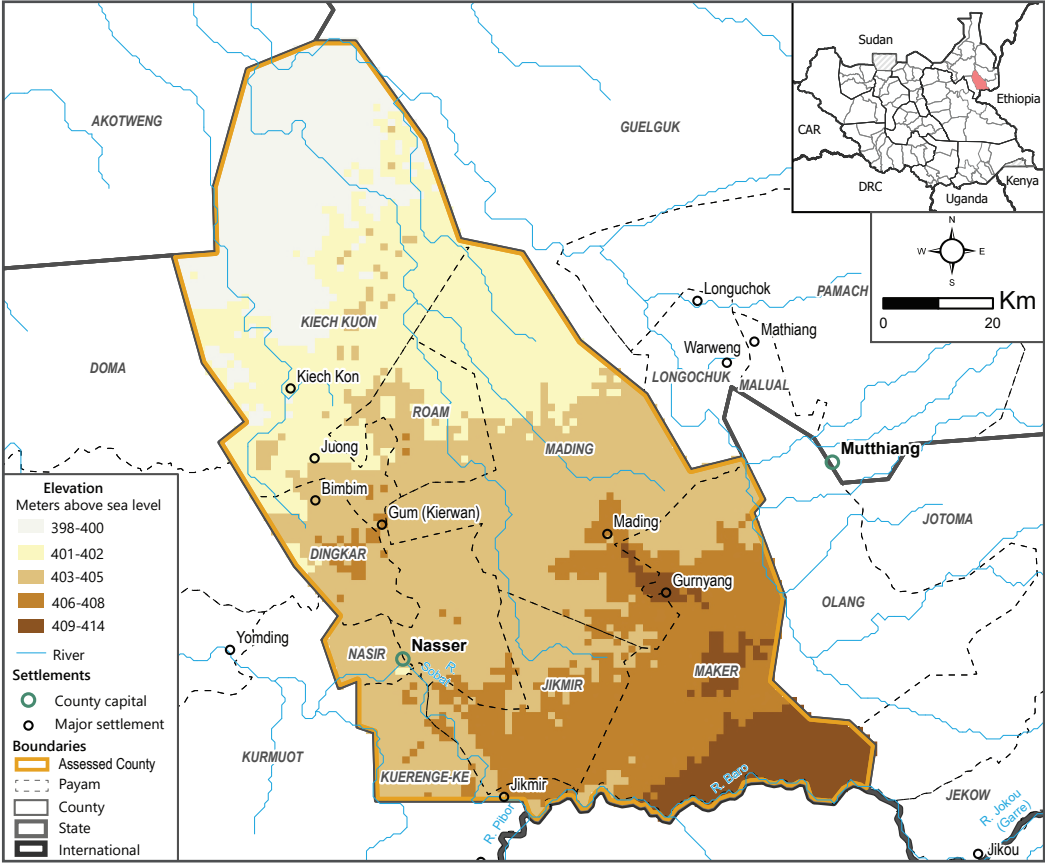
The County has been affected by cyclical waves of conflict since the 1980s, in the framework of a security setting that has consistently remained volatile. During the second Sudanese civil war (1983-2005), Luakpiny/Nasir was a major hotspot for both nationwide confrontations and localised conflicts fuelled by the proliferation of armed actors and inter-factional tensions.⁶ The signing of the 2005 Comprehensive Peace Agreement (CPA) was followed by local peacebuilding efforts that helped reduce violence for a while, before further escalation four years later when underlying intra-communal tensions prompted the disruption of food aid distributions.⁷ After the onset of South Sudan nationwide crisis in December 2013, Luakpiny/Nasir faced significant conflict-driven displacement of local population - many of whom fled to neighboring Ethiopia -⁸ while causing damage to community infrastructures.⁹ Despite the signing of the 2018 Revitalized Agreement on the Resolution of the Conflict in the Republic of South Sudan (R-ARCSS), the County has continued to face insecurity followed by massive outflows of displaced population, often coupled with the suspension of humanitarian movements and the disruption of planned distributions.^{10,11} While a considerable part of the security incidents in Luakpiny/Nasir have long been related to the nationwide conflict - as is the case with the renewed wave of insecurity that has been plaguing the County since mid-February 2025 -¹² localized incidents of violence have also been frequently associated with cattle raiding and competition over fishing resources.^{13,14}

With its predominantly flat topography, **Luakpiny/Nasir is affected by floods during the rainy season (May to October) unleashed by the combined effects of heavy rainfall and riverbank overflow**, as highlighted in 2021 and 2022 Inter-Agency Rapid Need Assessment (IRNA) reports.^{15,16} As of 5th December 2024, 13,800 people had been affected by floods in the County.¹⁷ **In January 2025, the Needs Analysis Working Group (NAWG) classified Luakpiny/Nasir as showing extreme humanitarian needs**, following significant internal displacements reportedly caused by food shortages.¹⁸

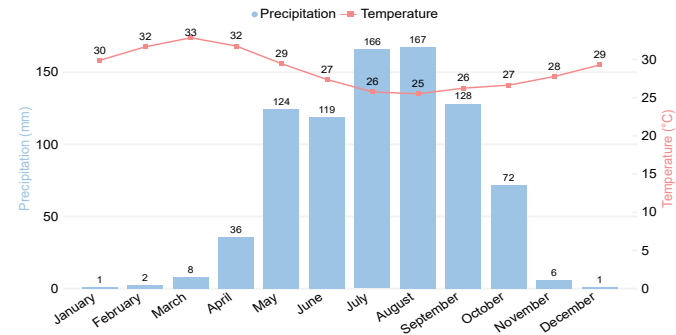
¹ Calculations using population figures in this County profile use the 2024 OCHA estimates.

1. CLIMATE AND ENVIRONMENT

Map 1.1. Elevation in Luakpiny/Nasir County¹⁹



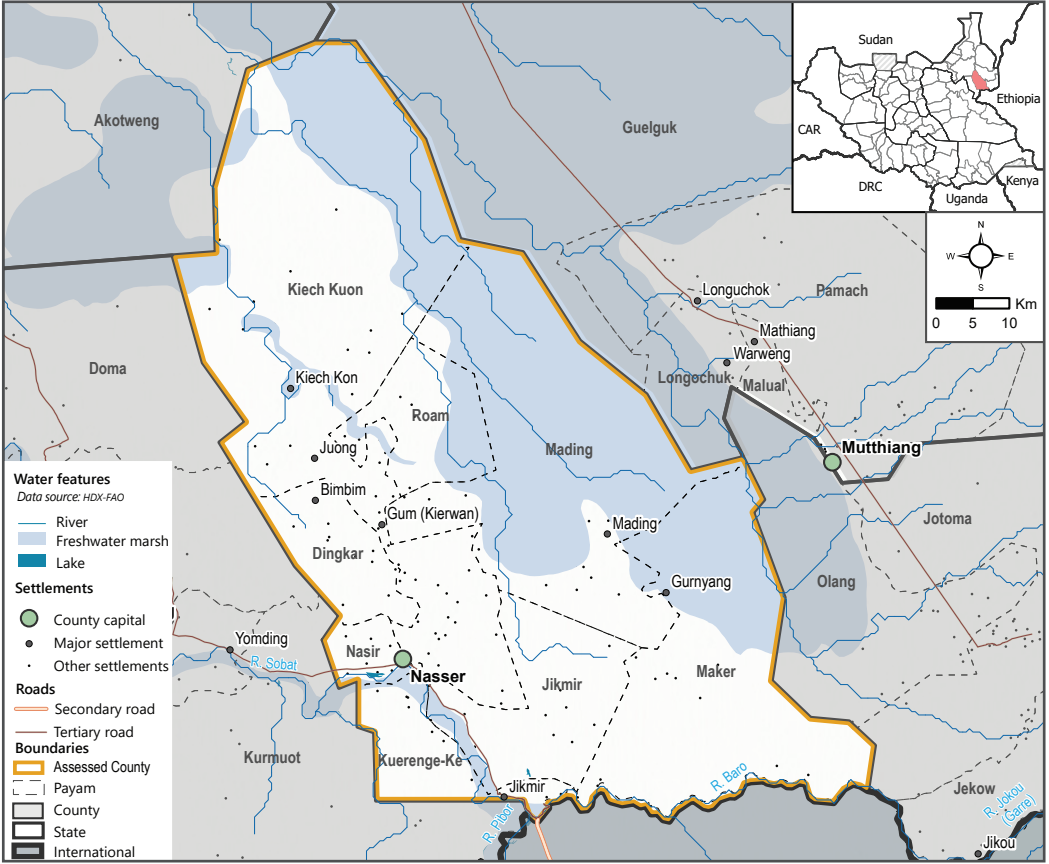
Graph 1.1. Average monthly precipitation and temperature, Luakpiny/Nasir (1981-2024)^{24,25}



Highest point 414 m **Elevation range** 16 m
Average elevation 406 m
Annual precipitation 830 mm/yr
Average temperature 29°C
Wettest months July-August
Driest months December-January

LUAKPINY/NASIR COUNTY

Map 1.2. Hydrological features including rivers, marshes and lakes in Luakpiny/Nasir^{20,21}

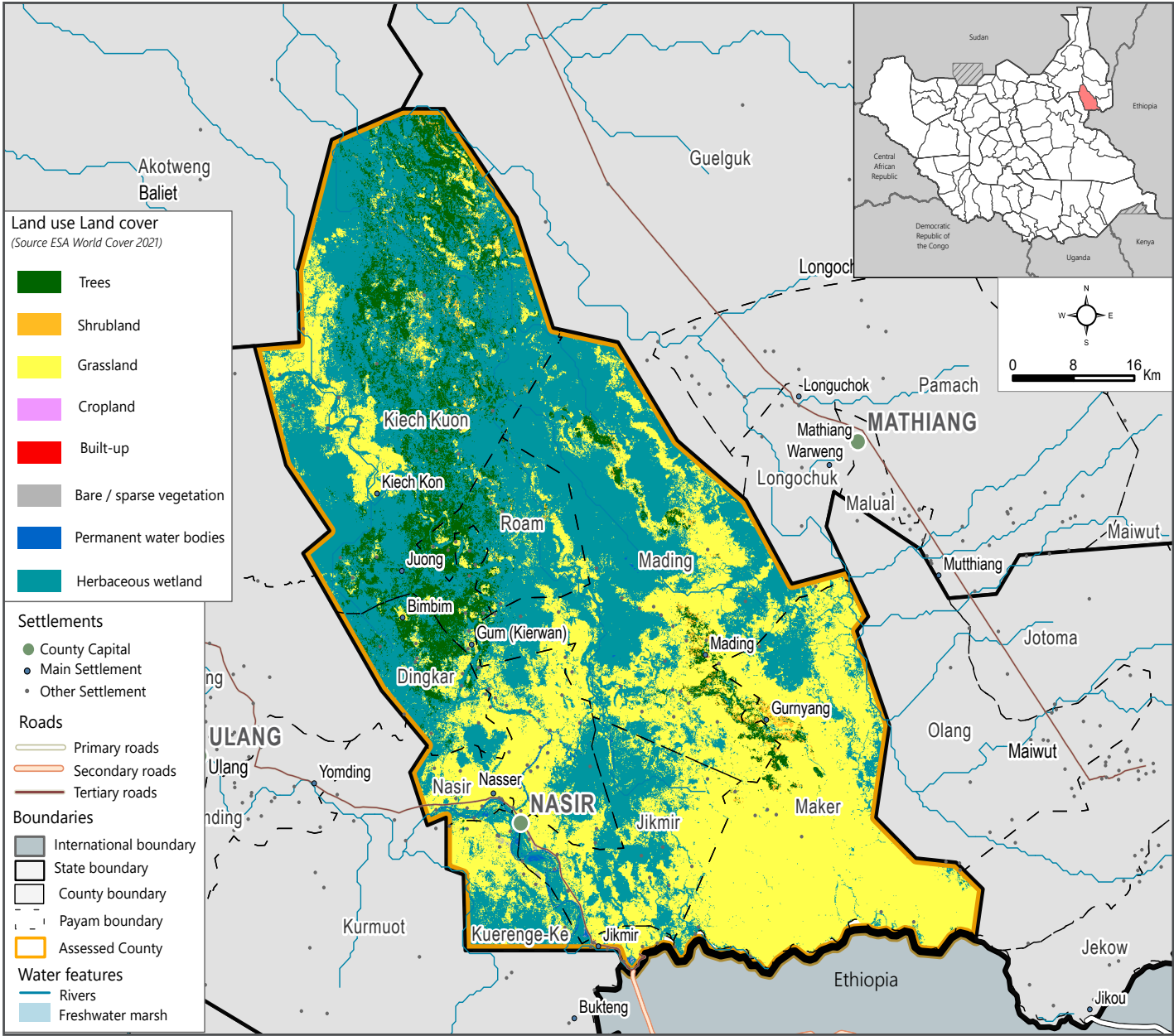


Luakpiny/Nasir features a predominantly flat topography, with an average elevation of 406 meters above sea level and an elevation range subject to a moderate variation of 16 meters (Map 1.1). Elevation is at its highest levels along the southern border with Ethiopia and gradually diminishes moving northward into Dingkar, Roam, Mading and Kiech Kuon payams. However, as shown in Map 3.1, diminishing elevation is associated with systematically recurring floods in Roam and Mading payams. **The natural landscape is defined by the characteristics of the Sobat River basin.** Its tributaries, the Pibor and Baro rivers, flow down from Ethiopia and along the County's southern border before converging in the Sobat River. Every rainy season (May to October), the flood plains around the basin are inundated and, as a result, the area is marked by the presence of freshwater marshes.²² **An extensive network of rivers and freshwater marshes also characterizes the eastern side of the County** – in addition to parts of the neighbouring Baliet, Longochuk and Maiwut Counties – and much of it feeds areas of flooded vegetation (Map 3.1). In addition to their importance for agriculture, fishing and dry season livestock rearing, rivers and streams constitute sources of drinking water for large sections of the County's population (Section 7).²³ An examination of rainfall data from 1981 to 2024 (Graph 1.1) shows that **the County has an annual average rainfall of 830 mm.** August and July have the highest precipitation average levels, while January and December typically represent the driest months. March usually records the highest temperature (33°C), while the rainy month of August normally has the lowest temperature (25°C).

2. LAND USE AND LAND COVER

LUAKPINY/NASIR COUNTY

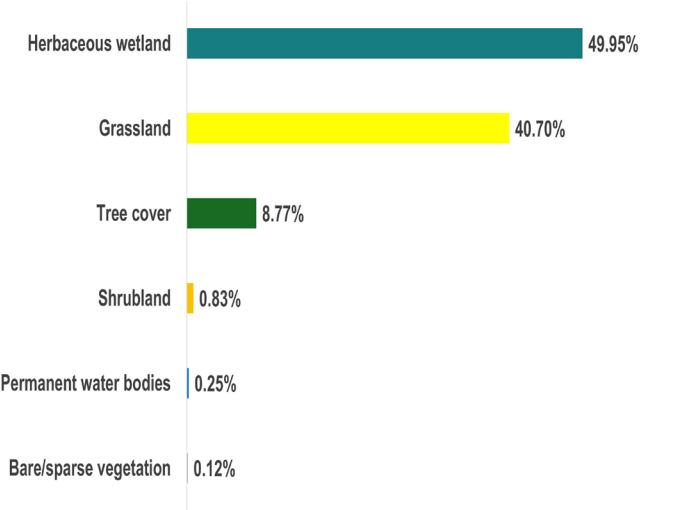
Map 2.1. Land use and land cover in Luakpiny/Nasir County²⁶



Consistent with the relatively large presence of freshwater marshes highlighted in Map 1.2, **the County's landscape predominantly features herbaceous wetlands**. As visually and numerically detailed in Map 2.1 and Graph 2.1, herbaceous wetlands make up for the composition of half of the County's territory. In parallel, **a significant proportion (41%) of Luakpiny/Nasir's landscape is covered by grassland**. More specifically, herbaceous wetland covers most of the County's northern and southwestern parts, including the flood-prone Sobat River basin, the entangled maze of marshes covering the eastern part of the County, as well as the freshwater marshes running along a strip starting from the western part of the Kiech Kuon payam and moving southward to the western side of the Roam payam. Grassland is primarily distributed in the southeastern part of the County.

Other minority landscape features include trees, which constitute 9% of the total land cover and are mainly concentrated in the north and central-western parts of the County. **Shrubland, permanent water bodies, bare vegetation, cropland and built areas together cover less than 2% of the County's land**. The distribution of built-up areas suggests that Nasser and Mading represent the two major settlements in terms of built-up extent.

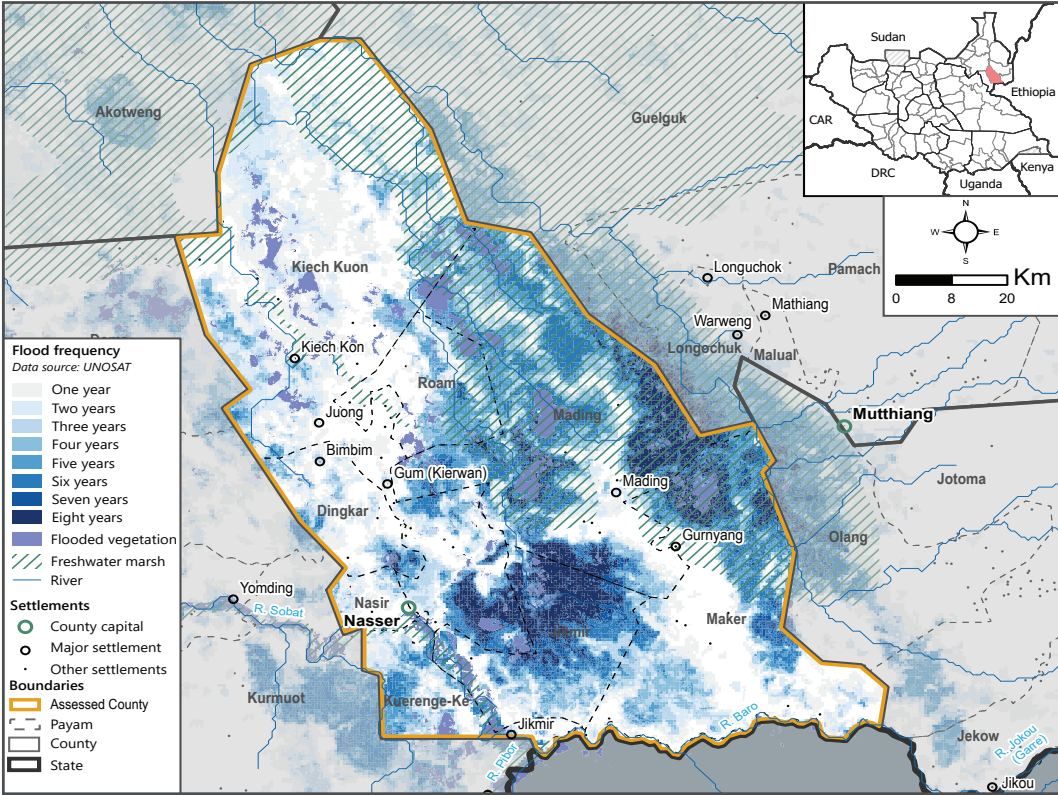
Graph 2.1. Main land cover features in Luakpiny/Nasir as proportions of its area²⁷



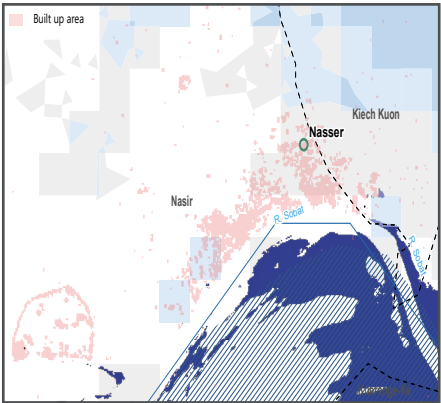
3. HYDROMETEOROLOGICAL HAZARDS - FLOODING

LUAKPINY/NASIR COUNTY

Map 3.1. Est. maximum annual flood extent (2017-2024) and affected settlements in Luakpiny/Nasirⁱ

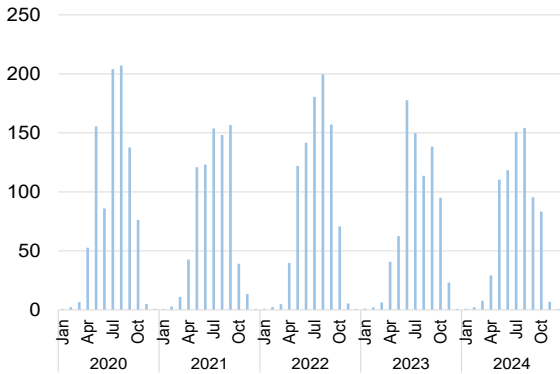


Map 3.2. A zoom-in on the town of Nasser, highlighting the built-up areaⁱ



ⁱ Estimated flood extent calculated based on analysis of UNOSAT, NOAA-20/VIIIRS. Data is indicative only and has not been validated in the field.

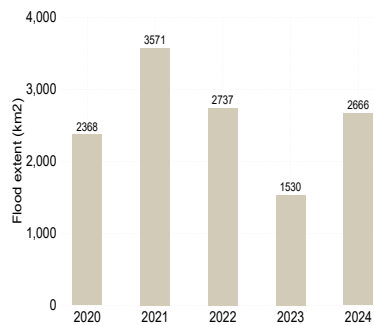
Graph 3.1. Rainfall from 2020 to 2024²⁸



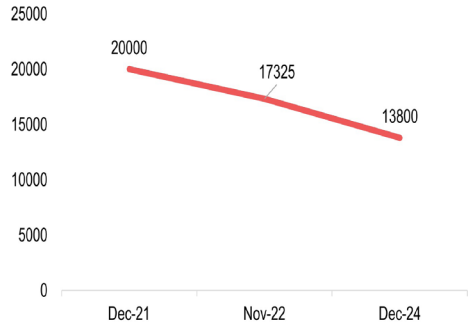
Over the last eight years, flooding has been a particularly recurrent event in Luakpiny/Nasir, affecting a large proportion of the County's territory. As highlighted in Map 3.1, the eastern flank of the County – and, specifically, in Mading and Maker payams – and the southern zone developing between Nasir and Jikmir payams constitute primary flood-prone areas. The Sobat River basin represents an additional hotspot with a high susceptibility not only to expected, productivity-enhancing flood events, but also to severe, damage-inducing flooding. **Floods are mainly triggered by the combination of overflowing rivers and heavy rainfall, against the backdrop of a relatively flat topography.** An examination of rainfall distribution from 2020 to 2024 (Graph 3.1) shows a reducing pattern in annual precipitation from 2020 (925 mm) to 2024 (760 mm), after a significant increase between 2021 (813 mm) and 2022 (925 mm).

In 2021 and 2022, severe flooding resulted from the overflowing of the Sobat and Gilo rivers and the occurrence of heavy precipitation. As shown in Graph 3.2, flood extent was particularly high in 2021 when floods affected approx. 69% of the County's area, roughly corresponding to Nasir, Dingkar, Maker and Jikmir payams as well as the settlements of Dhuording, Kierwan and Makak. With an estimated 20% of the affected population composed of returnees and IDPs, flood-displaced populations moved to areas with higher elevation and many of them found refuge in schools, churches and markets.³⁰ In 2022, floods affected a slightly narrower area but still equivalent to 53% of the Luakpiny/Nasir's territory, comprising all the payams located in the County's southern belt, alongside Roam and Dingkar payams in the central and western part.³¹ In both 2021 and 2022, flooding caused the disruption of agricultural and fishing activities, while also impairing access to educational and health services as well as road and market infrastructures, and imposing the displacement of livestock towards dry areas, which constrained local milk production.^{32,33} By 25 September 2024, Luakpiny/Nasir County was included among the 38 flood-affected counties within South Sudan,³⁴ with approximately 6,000 people found displaced following a rapid need assessment conducted on 30 August 2024.³⁵ As illustrated in Graph 3.3, **existing data on the number of people affected by floods on an annual basis in Luakpiny/Nasir show a downward trend over the period between 2021 and 2024**, with a reduction from 20,000 affected persons in 2021 to 13,800 in 2024 (data for 2023 were not available). **However, severe, annual flooding and its effects remain key concerns for the County's population.** In this sense, persistent flood water was identified by participants to FGDs conducted by REACH in late 2023 as one of the main reasons behind the increase in the cases of malaria documented in the second half of 2023, against the background of preexisting pressures on the local health system resulting from the measles outbreak declared in November 2023 and large population inflows.³⁶ Furthermore, consistent flooding in 2024 – and its negative effects on crop production – were identified as key contributing factors to the severe food shortages that led to massive displacements in the County during January 2025.³⁷

Graph 3.2. Maximum Flood extent (2019-2022)ⁱ



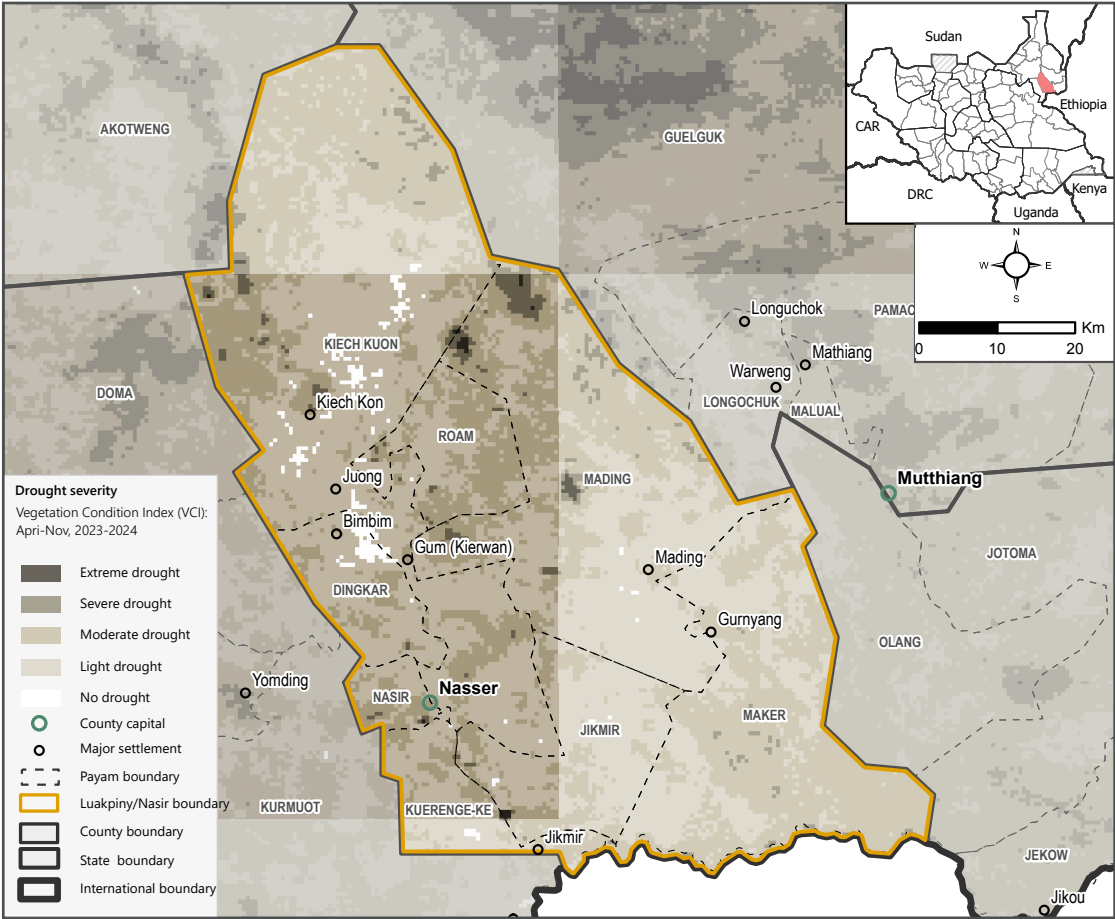
Graph 3.3. Number of flood-affected persons by year (2021-2024)²⁹



4. HYDROMETEOROLOGICAL HAZARDS - DROUGHT AND DRY SPELLS

LUAKPINY/NASIR COUNTY

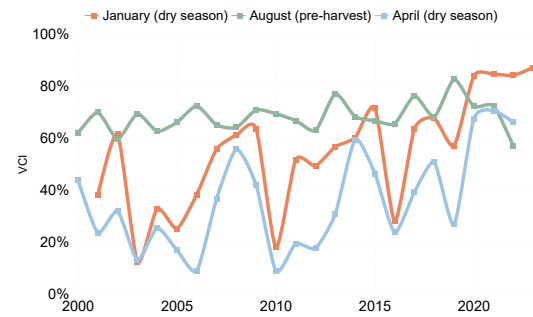
Map 4.1. Vegetation Condition Index (VCI), an indicator of drought severity, in Luakpiny/Nasir (2023-2024)ⁱ



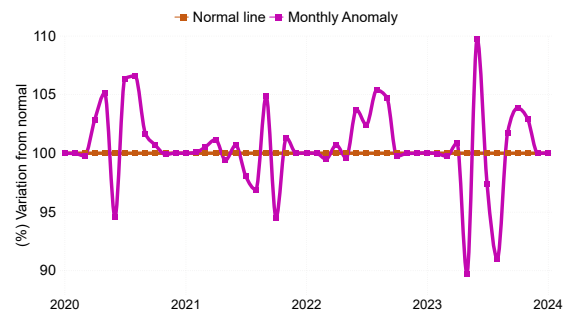
In 2018, Luakpiny/Nasir was identified among the Counties subjected to the highest compounded risk of floods and droughts/poor growing conditions.³⁸ Between April and November of both 2023 and 2024 (when vegetation is supposed to be healthier), the County faced light-to-moderate drought, with scattered pockets of severe drought and some areas of extreme drought mostly concentrated in the eastern part (Mading payam), and in the south-western part, on the border shared by Kuerenge-Ke and Jikmir payams (Map 4.1).

The comparison between the pre-harvest phase (August) and dry season peaking and ending months (January and April, respectively) using the Vegetation Condition Index (VCI) reveals that **vegetation health was relatively worse in April from 2000 to 2024**, with two major dips in 2006 and 2010, and most of its annual values being below 40% (drought conditions threshold). Although major dips were observed in 2003, 2010 and 2016, **vegetation health conditions in January show an improving pattern**, with values above those registered in August in 2002 and 2015, as well as from 2020 to 2023. This could partly be the result of persistent flood extents well after the end of the rainy season and the existence of a cultivation cycle nurtured by flood recession (Section 5). On the other hand, **lower-than-usual levels in vegetation health were documented in August 2022**. Graph 4.2 points out the occurrence of remarkable anomalies in rainfall over the period between 2020 and 2023, particularly during rainy seasons. While in 2022 precipitation levels were considerably higher-than-usual between June and September, in 2020, 2021 and 2023 rainfall patterns during the wet season were mostly characterised by sudden swings from below-average precipitation to above-average precipitation. A decreasing pattern in rainfall can be observed between January and April, moving from approximately 62 mm in 2020 to 40 mm in 2024 (-14% as compared to the 1981-2024 average). This suggests the occurrence of increasingly intense dry seasons, with possible negative implications on vegetation health. Overall, as shown by Graph 4.3, precipitation levels have been erratic between 1981 and 2024, with a peak in 1996 and major dips in 1993 and 2009, in conjunction with the occurrence of large-scale drought conditions.^{39,40} On the contrary, temperatures have only been subject to minor fluctuations within a generally rising pattern from approx. 28°C in 1981 to about 30°C in 2024. More generally, the comparison between future climate projections with the 1981-2024 averages suggests that **by 2060 precipitation in the wettest month (July) will increase by 33.5%**, while **the average temperature in the warmest month (March) will surge by +7.1°C**.

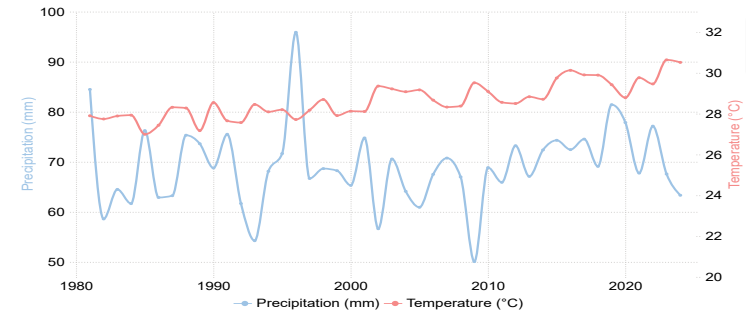
Graph 4.1. VCI (2000-2023) - drought indexⁱ



Graph 4.2. Percentage rainfall anomaly (2020-2024)^{ii,43}



Graph 4.3. Long-term climatic trends (1981-2024), Luakpiny/Nasir County^{41,42}



Projected climatic trends by 2060 based on SSP3-7.0 scenario,ⁱⁱⁱ Luakpiny/Nasir County

Projected change in precipitation in
wettest month by 2060
+55.9mm

Projected change in max temperature in
warmest month by 2060
+7.1°C

i. Vegetation condition index calculated in [Google Earth Engine based on MODIS Terra Daily EVI data](#)

ii. 100% is defined as the average value for the same month between 1981 and 2024

iii. 2060 projected climatic trends from 1995 - 2014 baseline with high green house gas emissions scenario based on Share Socio-economic Pathways (SSP) 3-7.0

5A. LIVELIHOODS AND SOCIOECONOMIC CONDITIONS

LUAKPINY/NASIR COUNTY

Map 5.1. Livelihood zones in Luakpiny/Nasir County⁴⁴

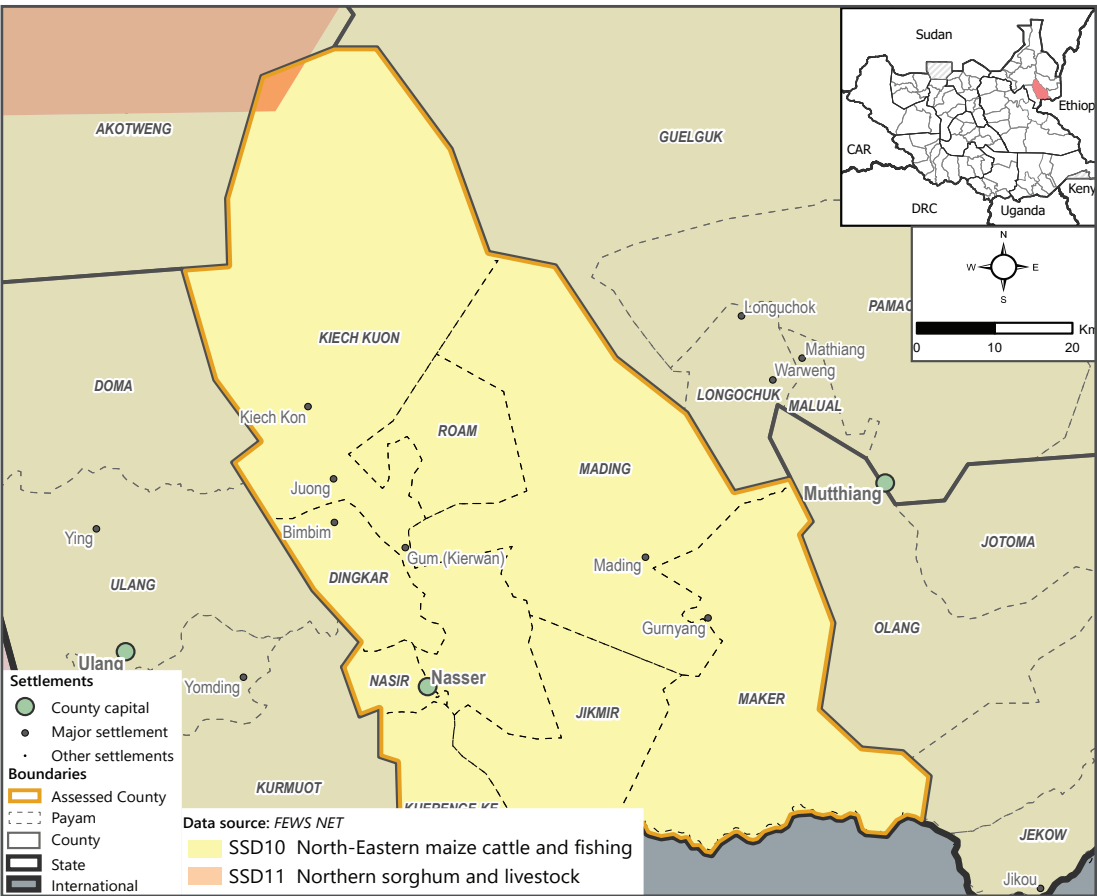
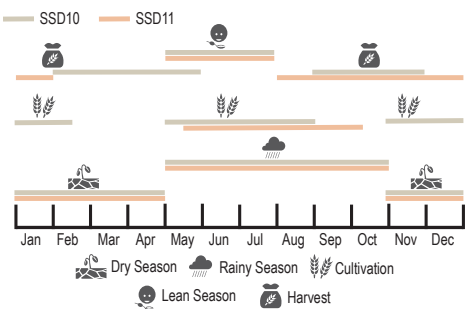
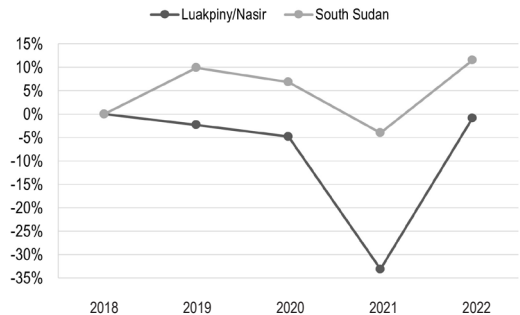


Figure 5.1. Cultivation calendar for livelihood zones SSD10 and SSD11⁵⁸



Graph 5.1. Relative yearly change in net cereal production (2018-2022)⁵⁷



As illustrated in Map 5.1, the County is mostly located within the “North-eastern maize, cattle and fishing” livelihood zone (SSD10), while a smaller section of the northwestern part of Kiech Kuon payam falls within the “Northern sorghum and livestock” livelihood zone (SSD11). SSD10 is characterised by the overflowing of the waters of the Sobat River and its tributaries, the Pibor and Baro rivers, towards surrounding floodplains during the rainy season. This seasonal phenomenon is considered as a predictable and expected phase of the local production ecosystem, boosting agricultural, livestock and fishing activities.⁴⁵ In this zone, the extent of arable land owned, the size and type of livestock herded, and access to fishing equipment constitute essential productive assets and determinants of different levels of wealth at the household level. Agriculture, small livestock rearing and sale, and the construction sector represent key sources of labour and income for poorer households, alongside brewing and the sale of natural products, wild food and fish.⁴⁶ Better-off households can rely on surpluses from crop and livestock (including cattle) sales, in addition to retail trade.⁴⁷ SSD11 is characterized by low-lying flat plains and an important riverine network. In this zone, agriculture and livestock rearing constitute the main pillars of the local economic system.⁴⁸ Poorer households depend on labour done for better-off households during most of the cultivation phase to meet their basic needs, while better-off households can cultivate using this labour force.⁴⁹ Similarly, poorer households mostly raise and sell small livestock, whereas better-off households are able to raise and sell both small livestock and cattle.⁵⁰ Fishing and labour migration are also important sources of income for poorer and middle-income households, while retail trade is mainly practiced by better-off households.⁵¹

In SSD10, maize is the main staple crop followed by sorghum, beans and vegetables, with two cultivation seasons, a prevailing, rain-fed one from May to August and an additional one from November to mid-February based on water recession in areas flooded during the rainy season. In SSD11, sorghum is the predominant crop, followed by maize, cowpeas, sesame, vegetables and sweet potatoes, with one main cultivation cycle during the rainy season (Figure 5.1). In 2022, 50% of the County’s households were reportedly operating in the agriculture sector.⁵² While this proportion has been relatively stable over the period from 2018 to 2022 (with only a peak of 55% documented in 2020), net cereal production went through a major dip in 2021 (-33%), as shown in Graph 5.1. Overall, the cereal deficit has steadily increased from 73% to 85% of the yearly cereal requirement for respectively 2019 and 2022.⁵³ Vulnerability to natural hazards seems to play a major role in shaping the negative performance of cereal production in the County. In this sense, the compounded effects of delayed or reduced rainfall during the sowing phase at the beginning of the rainy season and the sudden onset of heavy rainfall associated with floods negatively affected crops in 2021.⁵⁴ As shown by Graphs 1.1 and 3.1, at the onset of the 2021 rainy season, precipitation levels were below the 1981-2024 average during the month of May (-3%) – meaning at the onset of the planting phase for the main cultivation season in SSD10 – and remained so during the months of July (-7%) and August (-11%). The January 2025 IRNA highlighted that communities in the Greater Malow area (including Kiech-Kun, Dingkar and Roam payams and the areas of Gai-Reng and Kierwan) have been dealing with multiple, consecutive bad harvests in the last seven years, mainly because of flooding and, more generally, climate changes in the form of sudden swings from low to heavy precipitation.⁵⁵ Conflict and insecurity are also considered to be key contributing factors to reducing both agricultural productivity and availability of food at the household level. According to the FEWS NET, in the broader SSD10 zone, the occurrence of conflicts was a key driver not only of the reduction of the area under cultivation, but also of a more rapid depletion of households’ food stocks resulting from previous harvests.⁵⁶



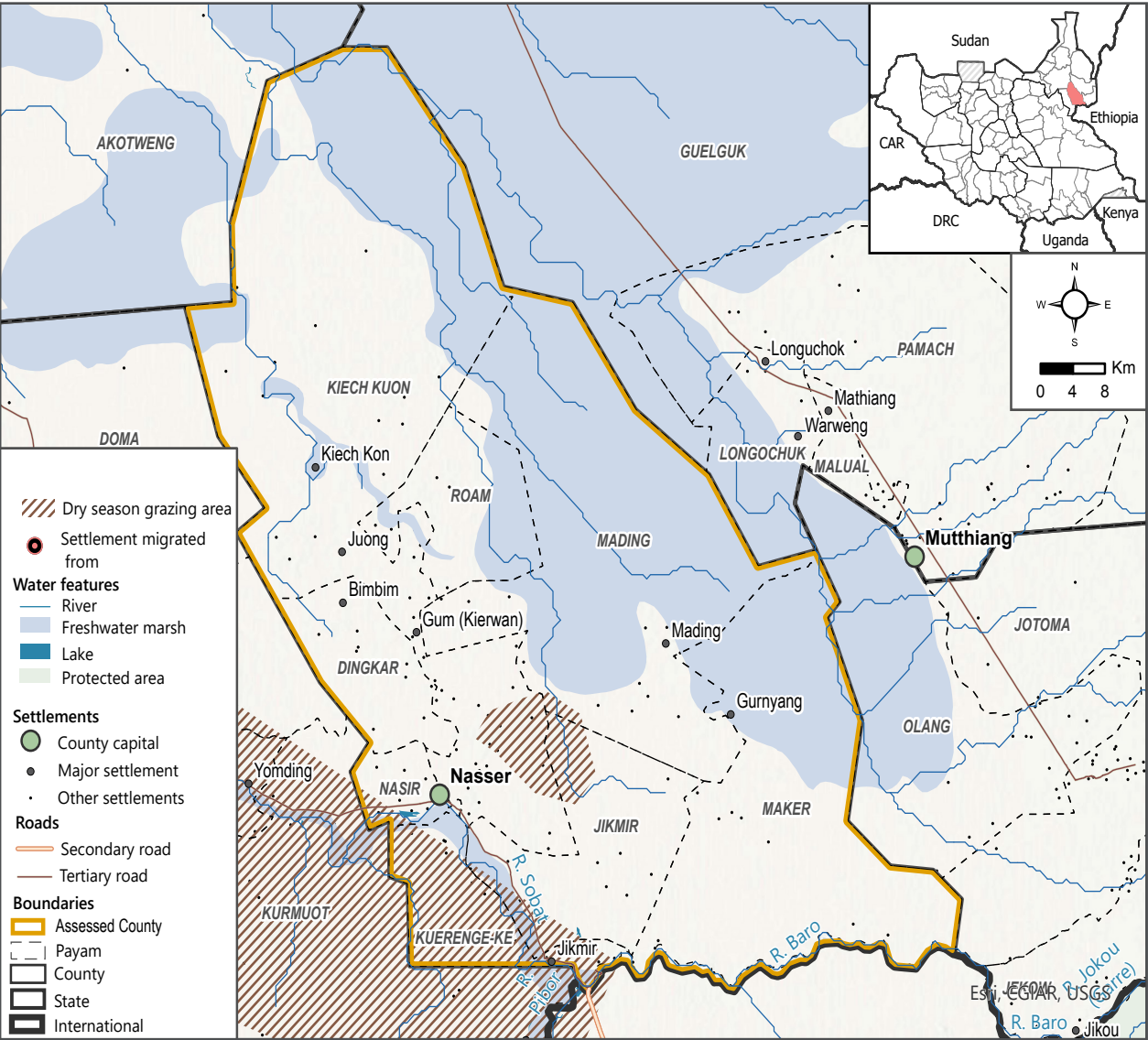
71% of households declared having access to land.

Among those, 44% reported owning land or property used for livelihood activities without any official documentation.

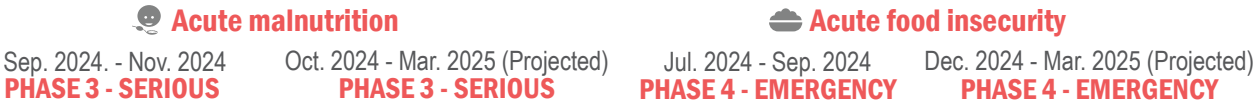
5B. LIVELIHOODS AND SOCIOECONOMIC CONDITIONS

LUAKPINY/NASIR COUNTY

Map 5.2. Dry season grazing areas in Luakpiny/Nasir County^{60,61}



IPC Scores - 2024/2025⁷⁶



In Luakpiny/Nasir, small livestock including goats and sheep are among the main livestock reared for both consumption and sale by both poorer and better-off households, whereas cattle is mostly herded by better-off households only.⁶² Cattle and goats also constitute some of the main commodities sold at local and export markets.⁶³ As shown in Map 5.2, the Sobat River Basin – and, more generally, the southwestern part of the county moving toward the neighbouring Ulang County – represent key large grazing areas during the dry season. Another important grazing hotspot is the riverine zone situated at the intersection of Nasir, Jikmir and Mading payams. Indeed, seasonal flooding from the riverbanks sustains the definition of important pasture areas during the dry season. This has traditionally encouraged pastoralists from Sudan to seasonally migrate into Luakpiny/Nasir in search of grazing areas for their livestock.⁶⁴ However, **the productive system based on livestock rearing has frequently been disrupted by the occurrence of severe flooding events.** Indeed, as highlighted in the 2021 and 2022 IRNA reports, the heavy floods occurred in those years imposed the displacement of livestock to dry, higher-lying areas. This, in turn, jeopardised the production of milk – a key commodity for both consumption and sale – as access to markets from the higher-lying areas was limited or severely impaired.^{65,66} Additionally, **cattle raids have historically affected Luakpiny/Nasir and neighbouring Counties**, the Sobat River basin being among the major hotspots of violence triggered by competition over land and water resources.⁶⁷ As per the November 2023 Food Security Outlook by the FEWS NET, Luakpiny/Nasir was among the Counties experiencing a slow but steady decline in livestock ownership, based on trend analysis of the data by the Food Security and Nutrition Monitoring System (FSNMS) over the previous five years.⁶⁸

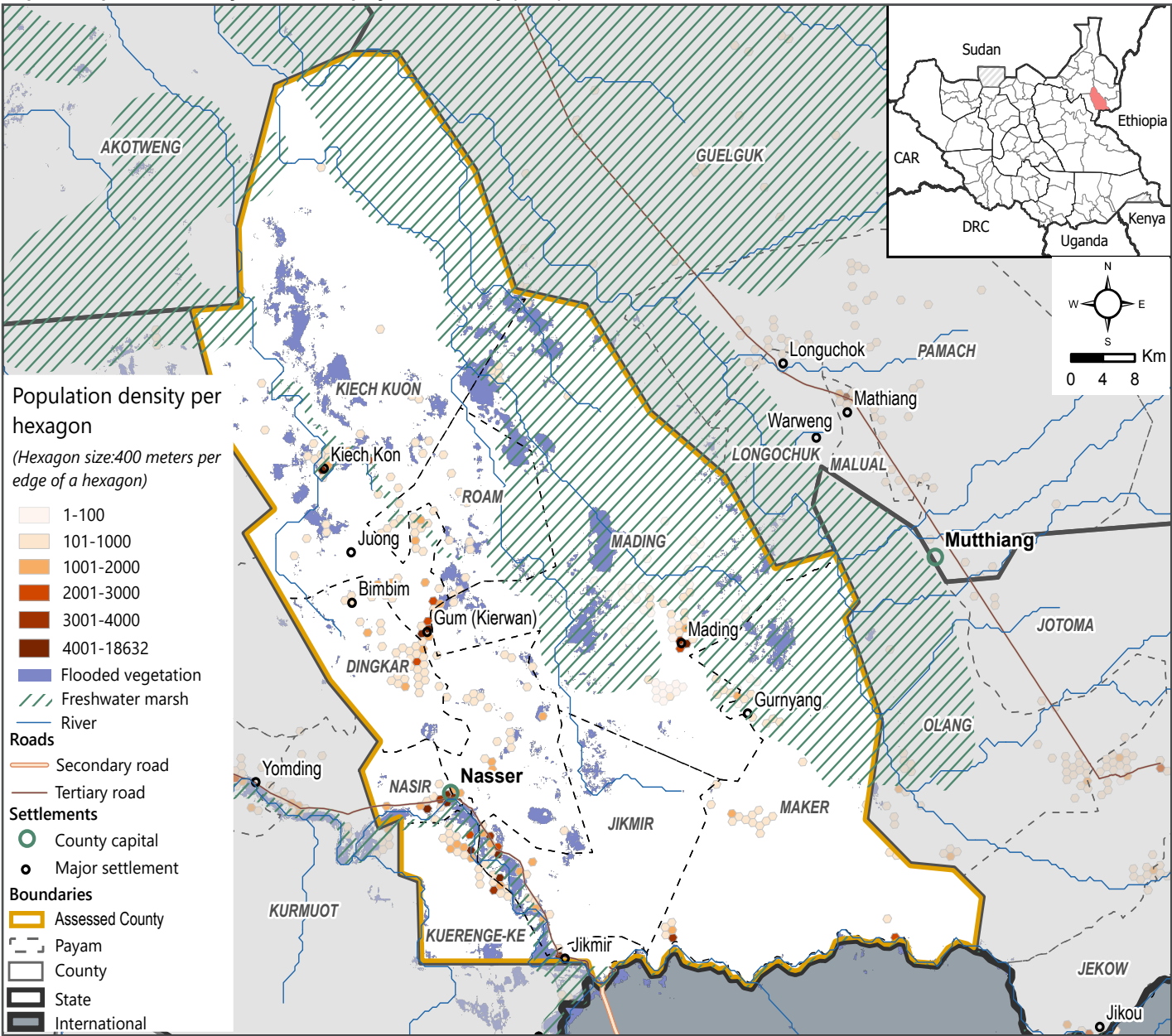
Existing water resources make fishing from the Sobat River, its tributaries and other rivers provide a significant contribution to local livelihoods, both as a food and a cash source.⁶⁹ As a productive and subsistence activity, it is practiced in a seasonal fashion, starting from the final months of the rainy season (September and October) throughout the whole dry season (from November to April), thanks to the river flows fed during the wet season and the large marshes resulting from flooded plains.⁷⁰

Increased reliance on migration, foraging for wild foods, charcoal-making and selling, as well as livestock sales and/or inter-communal solidarity acts as a set of key livelihood coping mechanisms in times of distress, as was the case in the immediate aftermath of the severe flood events occurred in 2021 and 2022,^{71,72} as well as in the context of the massive population displacement occurred in January 2025 due to food shortages (see also Section 6).⁷³

The compounded effects of conflicts and natural hazards on livelihoods have resulted in Luakpiny/Nasir becoming a hotspot for food insecurity and acute malnutrition. Recent data by the Integrated Food Security Phase Classification (IPC) point out that, as of November 2024, the County experiences acute food insecurity at Emergency level (IPC – Phase 4) and acute malnutrition at Serious level (IPC – Phase 3), with with over 25% of households depending on assistance to meet between 25% and 50% of their caloric needs.⁷⁴ Overall, approx. 197,000 individuals were considered to be food insecure in Luakpiny/Nasir between September and November 2024 (136,000 in IPC Phase 3 and 61,000 in IPC Phase 4).⁷⁵

6A. POPULATION AND DISPLACEMENT

Map 6.1. Population density across Luakpiny/Nasir County (2023)^{77,78,79}



LUAKPINY/NASIR COUNTY

A closer look at the spatial distribution of population (Map 6.1) shows that **population density follows a scattered pattern, with human settlements being unevenly distributed within the County's boundaries and mostly concentrated around major settlements.**

Proximity to major urban agglomerations and key natural resources appears to be among the primary pull factors for human settlement. Indeed, the capital city, Nasser, and major settlements like Jikmir, Gum, Kiech Kon and Mading have higher levels of population concentration. The Sobat and Baro rivers – flowing respectively near and along the border with Ethiopia – and, to a lesser extent, some flooded vegetation areas are also characterised by the presence of higher levels of population density. The juxtaposition of Map 6.1 and Map 3.1 reveal that **many of these densely inhabited areas also correspond to those which have showed higher susceptibility to flooding over the last eight years.** Overall, large pockets of the County's territory – away from the largest urban agglomerates and essential waterbodies – are mostly uninhabited.

Multiple factors seem to play a role in shaping this pattern of population distribution. Infrastructure coverage appears to be part of them, as many of the major settlements concerned by higher population density – especially those located in the eastern part of the County – also integrate a greater number of key infrastructures and services, including essential road infrastructures (Map 7.1). Additionally, **the inherent link between natural resources and livelihoods** is likely to be one of the main drivers of the development of human settlements around key water bodies, in light of their importance for key food and income-generating activities such as agriculture, livestock rearing and fishing, but also in consideration of the primary role they play in in-County and cross-border trade (Section 9).



Estimated population in areas with high population density (2023)⁸⁰

Nasser Town
16,459 individuals

Mading Town
22,946 individuals

6B. POPULATION AND DISPLACEMENT

LUAKPINY/NASIR COUNTY

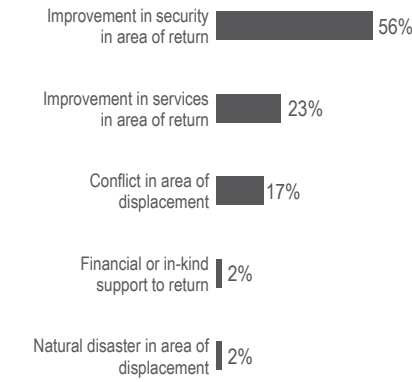
Map 6.2. Key insecurity-driven population movements in Luakpiny/Nasir County (2017-2023)⁸¹



Table 6.1. Est. number of displaced persons by location (2024)⁸²

Location	IDPs		Returnees		Relocated		Total	
	n.	%	n.	%	n.	%	n.	%
Dhording	0	0%	10880	6%	1608	7%	12488	6%
Dingkar	0	0%	8797	5%	1668	8%	10465	5%
Jikmir	0	0%	20238	10%	3174	14%	23412	11%
Kiech Kuon	0	0%	6546	3%	1620	7%	8166	4%
Koat	0	0%	2304	1%	414	2%	2718	1%
Kuerenge-Ke	0	0%	45380	23%	1734	8%	47114	21%
Mading	0	0%	1917	1%	1068	5%	2985	1%
Maker	0	0%	4662	2%	2592	12%	7254	3%
Nasir	0	0%	30805	16%	2208	10%	33013	15%
Roam	3200	100%	30322	16%	4470	20%	37992	17%
Wanding	0	0%	32212	17%	1536	7%	33748	15%
Total	3200	100%	194063	100%	22092	100%	219355	100%

Graph 6.2. Main factors shaping households' decision of returning to Luakpiny/Nasir (Oct. 2024)¹⁰⁷



As of September 2024, the County registered the presence of 3,200 Internally Displaced Persons (IDPs), 194,063 returnees, and 22,092 relocated individuals (Table 6.1).⁸³ Concerning the IDPs, most of them were displaced in 2024 because of a natural disaster.⁸⁴ With respect to the returnees, Luakpiny/Nasir ranked as the County with the second highest number of returnees of South Sudan as of September 2024.⁸⁵ Returnee population in the County substantially increased between 2023 and 2024, given that in 2023 they accounted for 75,908 individuals.⁸⁶ Most of the assessed returnee population is composed of internal returnees (60%), mainly arrived in 2024 (64%).⁸⁷

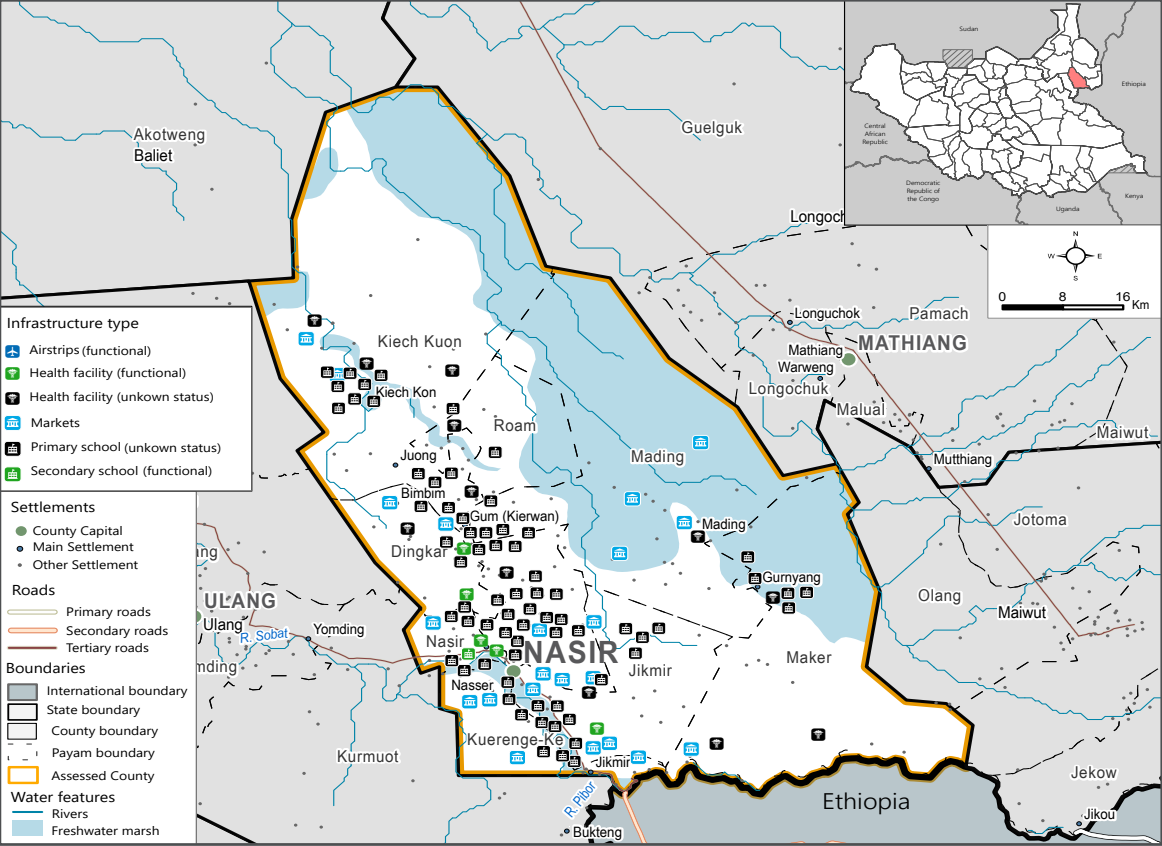
Given the high volatility of the County's security environment, **conflict and insecurity have consistently constituted major triggers of population movements.** As shown in Map 6.2, instances of forced movements of population occurred in early 2017 when about 33,000 people were displaced within Luakpiny/Nasir, towards neighbouring Counties (Ulang and Longochuk) and outside of South Sudan, following an escalation of conflict in the southeastern part of the County.⁸⁸ Map 6.2 provides for a visual representation of some documented forced movements induced by insecurity, although not in an exhaustive way. Other instances of population movements include influx of displaced people from Luakpiny/Nasir to Ulang County as a consequence of episodes of violence occurred in early 2018.⁸⁹ Despite the signing of the R-ARCSS in September 2018, sustained tensions continued to prompt displacement in Luakpiny/Nasir in late 2018.⁹⁰ The effects of the causal relation between violence and displacement have been visible throughout the following years, especially in conjunction with episodes of renewed tensions triggered by the complex interplay of local grievances and nationwide conflict, as was the case in 2024 and early 2025 in Nasser Town.^{91,92}

Severe flooding and food insecurity have also constituted key drivers of population movements. Internal displacement of individuals due to flooding was reported in the 2021 and 2022 IRNA.^{93,94} **As of the second half of November 2024, 4,377 individuals were found to be displaced in Luakpiny/Nasir following flood events.**⁹⁵ In late January 2025, massive displacement of approximately 25,000 individuals was detected from the Greater Malow area in Luakpiny/Nasir, due to food shortages.⁹⁶ Displaced people fled to other locations mostly in the central and southern parts of the County, as well as to neighbouring Counties such as Longochuk.⁹⁷

As of September 2024, 40% of the identified returnee population came from abroad, with conflict and communal clashes being the most widely reported reasons for movement. Returnees from abroad mainly arrived in 2023 (41%) and 2024 (37%).⁹⁸ Specifically, **78% of those arrived in 2023 were from Sudan.**⁹⁹ Indeed, following the eruption of the crisis in Sudan in April 2023, the County has received significant influx of returnees fleeing the war-torn Country. At the same time, **72% of those who arrived in 2024 came from Ethiopia.**¹⁰⁰ In general, proximity to Ethiopia acts as a determining factor in structuring the trajectories of displaced populations from and to Luakpiny/Nasir. Following the eruption of fighting in the town of Nasser in May 2014, an estimated number of over 20,000 people fled to Ethiopia.¹⁰¹ Violence erupted in early 2017 in the southeastern part of the County also resulted in population outflows towards Ethiopia, notably to the area of Burebiey near the Gilo River.¹⁰² In early 2024, severe humanitarian conditions and widespread violence in Gambella (Ethiopia) prompted South Sudanese refugees to return from Ethiopia to South Sudan.¹⁰³ At that time, many returnees interviewed at Points of Entry (PoEs) reported Luakpiny/Nasir as their area of origin and their intention to settle there.¹⁰⁴ The choice of Ethiopia as a destination for displaced populations was also influenced by the disrupting effects of conflict on internal routes within South Sudan. In this sense, FGDs conducted by REACH in the framework of its 2020 Population Movement Baseline highlighted that the blockage of the route to Malakal County, as a result of offensives in 2014, contributed to the rerouting of displaced populations from Luakpiny/Nasir and other Counties in southern Upper Nile State to Ethiopia.¹⁰⁵ Overall, **the influx of a significant number of returnees poses considerable challenges to existing services in the County.** Community consultations conducted in Luakpiny/Nasir from December 2023 to October 2024 in the framework of the Humanitarian Needs and Response Plan indicate that the large influx of returnees from Ethiopia and Sudan between 2023 and 2024 resulted in increased pressure on existing health facilities and medical supplies.¹⁰⁶

7. COMMUNITY INFRASTRUCTURE AND SERVICES

Map 7.1. Key infrastructures in Luakpiny/Nasir County as of 2024^{108,109}



WASH indicators¹¹⁸

49% of households indicated **rivers or streams as their main source of drinking water**

33% of households **felt unsafe while collecting water** in the 2 weeks preceding data collection

36% of households **practice open defecation**

77% of households (with children < 5 y.o.) reported **open defecation as a sanitation strategy for their children < 5 y.o.**

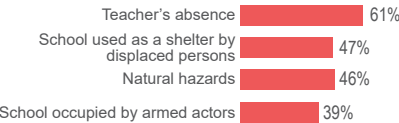
Education indicators¹¹⁹

48% of children in Luakpiny/Nasir experienced **disruptions in their education** during the 2023-2024 school year

Health indicators¹²⁰

88% of households reported **barriers to healthcare** in the 3 months prior to the ISNA data collection

Graph 7.1. Main disruptive events in children's education during the 2023-2024 school year (among the 48% of children affected)

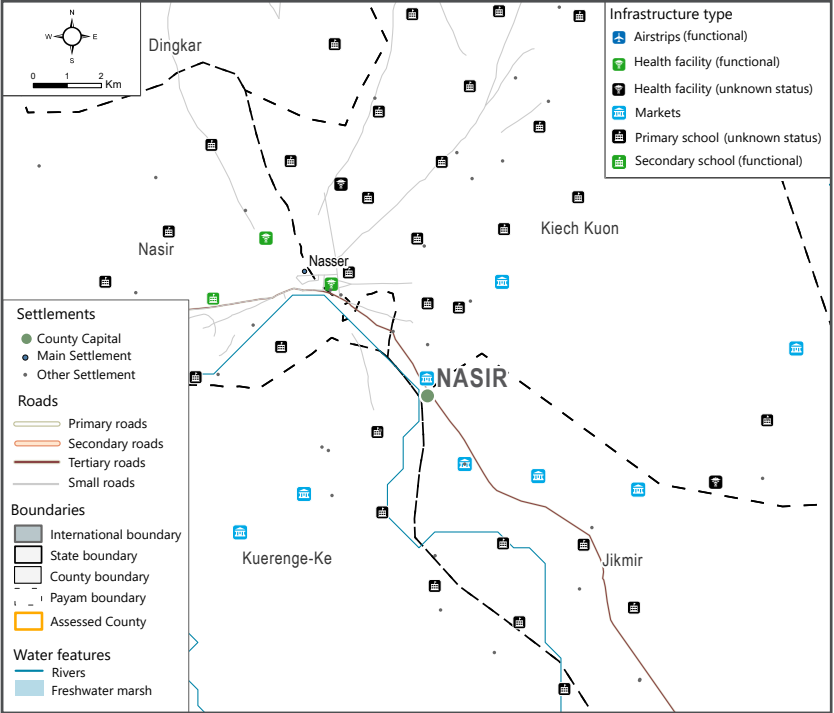


Graph 7.2. Main barriers to health care reported (by the 88% of households affected)



LUAKPINY/NASIR COUNTY

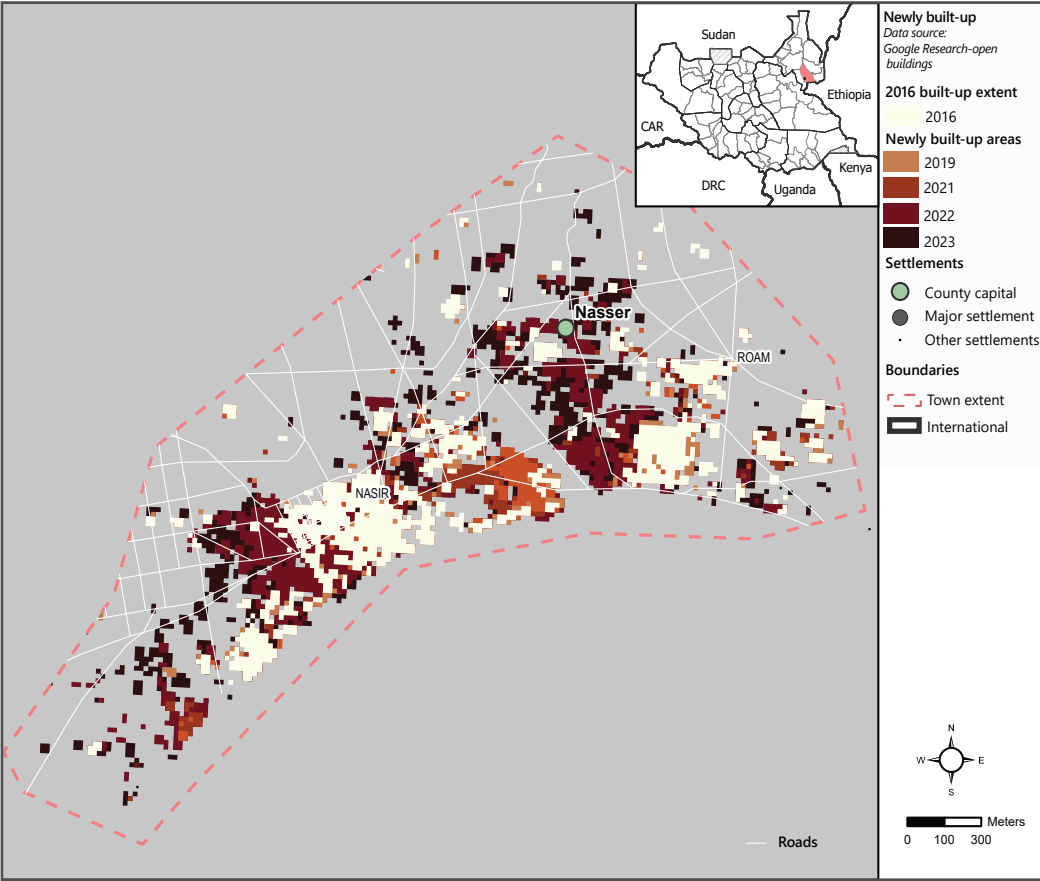
Map 7.2. Key infrastructures in Nasser as of 2024^{110,111}



Infrastructures in Luakpiny/Nasir are concentrated in its central western and southwestern parts, where population density is at its highest levels (Map 6.1). **The County has a total of 71 educational facilities**, including 70 primary schools whose functional status is unknown, and 1 secondary school which is reportedly functional and located in Nasser town.¹¹² According to the 2024 ISNA, 49% of school-aged children did not attend formal education programs during the 2023-2024 school year.¹¹³ **The County has 17 health facilities**, of which 13 are Primary Health Care Units, 3 are Primary Health Care Centers and 1 is a Hospital. As of 2024, 5 health facilities the Hospital, 3 PHCCs and 1 PHCU are functional, while for the others no information on their functionality is available.¹¹⁴ **Functionality of existing educational facilities and health services has been jeopardised by severe flood events in recent years.** Indeed, the County's educational and health infrastructure network was highly affected by the 2021 and 2022 floods. Some schools were left inundated and others served as shelters for displaced populations, while disruptions to health services overlapped with preexisting vulnerabilities in availability of medical equipment and supplies.^{115,116} **Access to services has constituted a considerable pull factor in shaping households' decision to move towards Ethiopia.** To illustrate this, following the eruption of violence in Gambella (Ethiopia) in late 2023, a great number of South Sudanese previously fled to Ethiopia were returning to Luakpiny/Nasir and other areas of origin, while substantial outflows of population towards Gambella were also documented, reportedly seeking healthcare, education services as well as humanitarian assistance.¹¹⁷

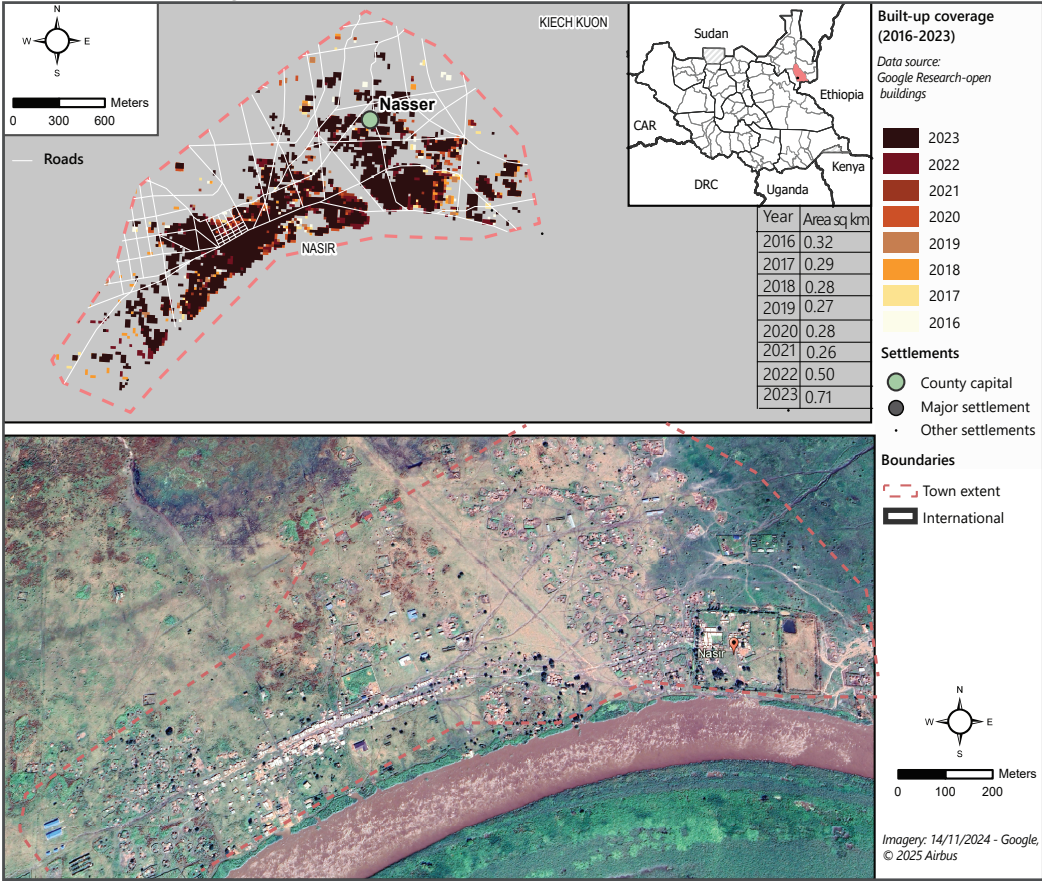
8. SETTLEMENT

Map 8.1. Built-up extent in 2016 and newly built-up areas in the town of Nasser (2017-2023)¹²¹



LUAKPINY/NASIR COUNTY

Map 8.2. Built-up coverage in the town of Nasser (2016-2023)¹²²



SHELTER

According to the 2024 ISNA, **tukuls were the main type of shelter where most of the households (78%) lived**, followed by communal shelters (11%) usually hosting several households. **Most of the shelters either had minor damage (50%) or were completely damaged (27%)**. The main reported reasons of shelter damage were ascribed to the effects of **natural climate events** such as flooding, landslides or storms (66%), its occupation by other groups or individuals (15%) or violent incidents (9%).¹²³

SETTLEMENT CHANGE: NASSER TOWN

Situated along the Sobat River as well as the major route to Ulang County, Nasser serves as the capital of Luakpiny/Nasir. The town and its immediate environs correspond to one of the most densely populated areas within the County (Map 6.1) and comprises the largest built-up extent within the County.

Maps 8.1 and 8.2 show the evolution of the built-up area in Nasser between 2016 and 2023. On one hand,

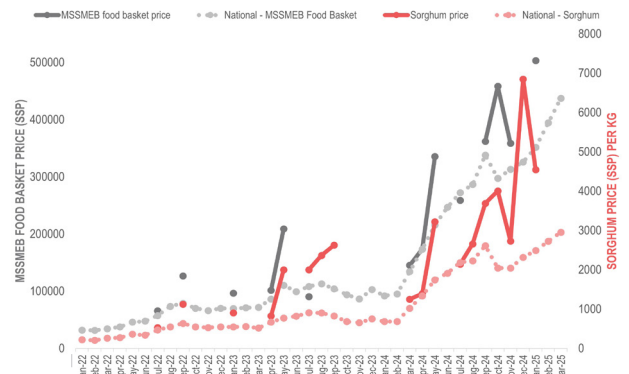
map 8.1 shows the extent of the building footprint in 2016 (lighter colour) and the progressive incorporation of newly built-up areas along its peripheral outskirts in the following years up to 2023 (darker colours). As illustrated by the table in Map 8.2, **Nasser has more than doubled its built-up area, from 0.32 km² in 2016 – following the signing of the Agreement on Resolution of the Conflict in South Sudan (ARCSS) – to 0.71 km² in 2023**. The town mostly expanded around two major poles on its eastern and western flanks. A significant expansion was documented between 2022 and 2023. Possible contributing factors to this dynamic can include the significant increase in the number of returnees in Luakpiny/Nasir (49,529 as of June 2022, 75,908 as of September 2023, 194,063 as of September 2024),¹²⁴ and a decrease in the number of documented violent events at the County level from 18 in 2021 to 7 in 2023, although in the context of a consistently volatile security setting.¹²⁵ On the other hand, map 8.2 highlights the last year buildings were seen in Nasser on satellite imagery, thus providing a visual display of the destruction of a few scattered pockets of buildings in the outskirts of the city. However, the substantial growth of the town's built-up area suggests that this loss has been progressively compensated by the expansion of the city's building footprint, which massively occurred between 2022 and 2023.

9. MARKETS, TRANSPORT AND ACCESSIBILITY

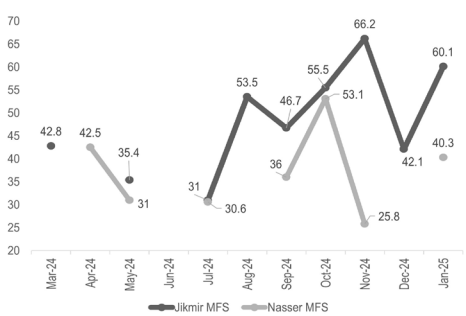
Map 9.1. Primary markets in Luakpiny/Nasir, with key supply routes and major roads, as of January 2025¹²⁶



Graph 9.1. Market price trends for sorghum and Multi-Sector Survival Minimum Expenditure Food Basket (MSSMEB)¹⁴⁴



Graph 9.2. JMMI Market Functionality Scores for Jikmir and Nasser markets¹⁴⁵



The JMMI MFS classifies markets according to their level of functionality and based on five dimensions, each having a different weighting: accessibility (25%) in terms of physical and social access to markets; availability (30%) capturing the ability of markets to consistently supply core commodities; affordability (15%) considering financial access to markets and price volatility; resilience (20%) of supply chains and restocking processes; infrastructure (10%) taking into account markets' physical and financial infrastructure.

LUAKPINY/NASIR COUNTY

MARKETS

As shown in Map 9.1, the County has two major marketplaces in Jikmir and Nasser towns,¹²⁷ the former being a hub from which commodities are transported to a network of satellite markets.¹²⁸ Key supply routes include the riverine and road routes that nurture both cross-border trade with Gambella (Ethiopia) and in-County trade between Nasser and Jikmir. According to REACH's Joint Market Monitoring Initiative (JMMI), as of January 2025, Jikmir and Nasser markets were both functional, albeit confronted with significant challenges.¹²⁹ A closer look at the JMMI Market Functionality Score (MFS)¹³⁰ shows that Jikmir was functional, but characterised by insufficiencies in availability of food items and issues of goods affordability and resilience of the supply chains and restocking processes, while Nasser market was operating at limited functionality.¹³⁰ These findings fall within the framework of a prevailing record of (not-full) functionality for Jikmir market and of limited or reduced functionality for Nasser market (Graph 9.2). Multiple IRNAs suggest the vulnerability of value chains and market accessibility to flooding. Both in 2021 and 2022, the availability of livestock produces – particularly milk – was constrained by the need for flood-affected herders to move their livestock to dry areas with limited or no access to markets.^{131,132} In early 2025, persisting floods impaired communities' access to Nasser market.¹³³ The negative effects of floods on market functionality could partly explain the particularly low score for Nasser market in November 2024, after the end of the rainy season. Persisting insecurity has also played a major role in disrupting market functionality in Luakpiny/Nasir. In late February 2025, Nasser market was closed due to escalating violence since mid-February.¹³⁴ At a broader level, the precarious macro-economic situation in South Sudan, partly induced by the disruption of oil production following the eruption of the conflict in Sudan in April 2023, has led to sustained depreciation of the national currency which, in turn, has increased market prices and negatively affected affordability of goods on sale and traders' capacity to restock. In April 2024, the FEWS NET highlighted the link between worsened macro-economic conditions and rising prices for imports, food and fuel.¹³⁵ At the County-level, JMMI data on food prices between 2022 and early 2025 show the prevalence of values above the national ones.¹³⁶ Significant peaks were documented between April and May in 2023 and 2024, as well as for most of the last quarter of 2024. However, May usually marks the onset of the lean season when households' dependency on market purchases typically increases and market reliance on imports from Ethiopia becomes more significant due to the depletion of locally produced food stocks, and this contributes to the surge in commodities' prices. As of January 2025, the cost of sorghum per kg in Nasser market was 83% higher than the national median.¹³⁷ As of the same period, the Multi-Sector Survival Minimum Expenditure Basket (MSSMEB) was 35% higher than the national median, and Nasser market was among those that recorded the highest MSSMEB prices within South Sudan.¹³⁸ At the household level, the 2024 ISNA shows that a 65% of households in the County needed to walk 30 mins or more to reach the nearest functional market by foot (of which 31% reported needing more than 2 hours).¹³⁹

TRANSPORT

The Pibor, Baro and Sobat rivers, together with the Jokou River, constitute major waterway transportation routes in the County.¹⁴⁰ However, as of January 2025, movements along the Jokou River were reportedly subject to irregularities due to insecurity.¹⁴¹ The road infrastructure network is relatively poor in the County, with the only main road being the one in its southwestern part connecting Jikmir Town to Ulang County via Nasser Town. As of January 2025, this road was regularly open.¹⁴² Consequently, the north and eastern banks of the County have no major roads. However, existing sources point out to documented constraints in road accessibility resulting from severe flood events during the rainy season. To illustrate this, road inaccessibility due to flooding or high-water levels was reported as a constraint to access local markets by 9% of the households surveyed during the Data in Emergencies Monitoring conducted by the FAO between July and September 2023.¹⁴³

- 1 HDX/UN OCHA. [South Sudan - Subnational Administrative Boundaries](#). Sept. 2023.
- 2 HDX/UN OCHA. [2023 South Sudan Population Estimation Survey: admin level 2 population figure estimates by the National Bureau of Statistics \(NBS\) and UNFPA](#). 2023.
- 3 HDX/UN OCHA. [2024 South Sudanese population based on the 2008 census and annual natural growth and attrition rates with displacement adjusted estimates](#). 2024.
- 4 HDX/UN OCHA. [South Sudan - Subnational Administrative Boundaries](#). Sept. 2023.
- 5 Ibid.
- 6 Conflict Sensitivity Resource Facility. [Luakpiny/Nasir County, Upper Nile State](#). 2024.
- 7 International Crisis Group (ICG). [Jonglei's Tribal Conflicts: Countering Insecurity in South Sudan](#). Dec. 2009.
- 8 Small Arms Survey. [The Conflict in Upper Nile State. Describes events through 9 October 2014](#). Oct. 2014.
- 9 Small Arms Survey. [The Conflict in Upper Nile State. Describes events through 9 April 2015](#). Apr. 2015.
- 10 UN OCHA. [South Sudan: Humanitarian Snapshot \(February 2024\)](#). Mar. 2024.
- 11 Radio Tamazuj. [Citizens flee Nasser after clashes with SSPDF](#). July 2024.
- 12 Radio Tamazuj. [Fighting grips Nasir County, civilians flee](#). Mar. 2025.
- 13 Conflict Sensitivity Resource Facility. [Luakpiny/Nasir County, Upper Nile State](#). 2024.
- 14 Saferworld. [Troubled waters: how two communities in South Sudan made peace over fishing rights](#). 2024.
- 15 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir Area](#). 2021.
- 16 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir County](#). 2022.
- 17 HDX/UN OCHA. [South Sudan: Flood Data](#). Dec. 2024
- 18 Needs Analysis Working Group. December 2024 – January 2025 Analysis. 2025.
- 19 Google Earth Engine. [NASA SRTM Digital Elevation Model 30m](#). 2000.
- 20 HDX/UN OCHA/FAO. [South Sudan – Water Bodies](#). 2018.
- 21 HDX/UN OCHA/FAO. [South Sudan - Rivers](#). 2018.
- 22 Famine Early Warning System Network (FEWSNET). [Livelihoods Zone Map and Descriptions for the Republic of South Sudan \(Updated\)](#). 2018.
- 23 REACH. [Humanitarian Situation Overview: Ethiopia - South Sudan Cross-Border Displacement](#). Feb. 2024.
- 24 Google Earth Engine. [CHIRPS Daily Rainfall Data](#). 1981-2024.
- 25 Google Earth Engine. [ERA5-Land Monthly Aggregated - ECMWF Climate Reanalysis](#). 1981-2024.
- 26 European Space Agency (ESA). [WorldCover 10m v100](#). 2021.
- 27 Ibid.
- 28 Google Earth Engine. [CHIRPS Daily Rainfall Data](#). 1981-2024.
- 29 UN OCHA. [South Sudan Flood Data](#). 2021 to 2024.
- 30 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir Area](#). 2021.
- 31 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir County](#). 2022.
- 32 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir Area](#). 2021.
- 33 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir County](#). 2022.
- 34 UN OCHA. [South Sudan: Flooding Situation Flash Update No. 5 \(As of 25 September 2024\)](#). Sept. 2024.
- 35 UN OCHA. [South Sudan: Flooding Situation. Flash Update No.4](#). Sept. 2024.
- 36 REACH. [Humanitarian Situation Overview: Ethiopia - South Sudan Cross-Border Displacement](#). Feb. 2024.
- 37 Inter-Agency Rapid Need Assessment (IRNA). Greater Malow Areas Inter-Agency Rapid Needs Assessment (IRNA) for Severe Food Shortages and Displacement. Jan. 2025.
- 38 WFP. [South Sudan - Integrated Context Analysis](#). 2018.
- 39 Haile G. et al. [Droughts in East Africa: Causes, impacts and resilience](#). Apr. 2019.

- 40 ACT Alliance. [ACT Alert South Sudan No. 23/2009: Drought](#). Sept. 2009.
- 41 Google Earth Engine. [ERA5-Land Monthly Aggregated - ECMWF Climate Reanalysis](#). 1981-2024.
- 42 Google Earth Engine. [CHIRPS Daily Rainfall Data](#). 1981-2024.
- 43 Ibid.
- 44 Famine Early Warning System Network (FEWSNET). [Livelihoods Zones Polygon Shapefile](#). 2018.
- 45 Ibid.
- 46 Ibid.
- 47 Ibid.
- 48 Ibid.
- 49 Ibid.
- 50 Ibid.
- 51 Ibid.
- 52 FAO/WFP. [2023 Crop and Food Security Assessment Mission \(CFSAM\) to the Republic of South Sudan](#). May 2024.
- 53 Ibid.
- 54 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir Area](#). 2021.
- 55 Inter-Agency Rapid Need Assessment (IRNA). Greater Malow Areas Inter-Agency Rapid Needs Assessment (IRNA) for Severe Food Shortages and Displacement. Jan. 2025.
- 56 Famine Early Warning System Network (FEWSNET). [Livelihoods Zone Map and Descriptions for the Republic of South Sudan \(Updated\)](#). 2018.
- 57 FAO/WFP. [Crop and Food Security Assessment Mission \(CFSAM\) to South Sudan](#). Multiple reports from 2019 to 2024.
- 58 Famine Early Warning System Network (FEWSNET). [Livelihoods Zone Map and Descriptions for the Republic of South Sudan \(Updated\)](#). 2018.
- 59 IOM, Inter-Sectoral Needs Assessment (ISNA). 2024.
- 60 REACH. [South Sudan: Seasonal cattle grazing areas and migration](#). Dec. 2020.
- 61 IOM DTM. [South Sudan - Jonglei Cattle Migration Outlook 2023-2024](#). Nov. 2023.
- 62 Famine Early Warning System Network (FEWSNET). [Livelihoods Zone Map and Descriptions for the Republic of South Sudan \(Updated\)](#). 2018.
- 63 Ibid.
- 64 Conflict Sensitivity Resource Facility. [Luakpiny/Nasir County, Upper Nile State](#). 2024.
- 65 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir Area](#). 2021.
- 66 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir County](#). 2022.
- 67 UNMIS. [Resident Coordinator Support Office, Upper Nile State Briefing Pack](#). 2010.
- 68 FEWS NET. [South Sudan: Food Security Outlook](#). Nov. 2023.
- 69 Famine Early Warning System Network (FEWSNET). [Livelihoods Zone Map and Descriptions for the Republic of South Sudan \(Updated\)](#). 2018.
- 70 Ibid.
- 71 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir Area](#). 2021.
- 72 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir County](#). 2022.
- 73 Inter-Agency Rapid Need Assessment (IRNA). Greater Malow Areas Inter-Agency Rapid Needs Assessment (IRNA) for Severe Food Shortages and Displacement. Jan. 2025.
- 74 Integrated Food Security Phase Classification (IPC). [South Sudan IPC Acute Food Insecurity and Malnutrition Analysis](#). Nov. 2024.
- 75 Ibid. Note that population figures given by the IPC are based on the 2023 NBS and UNFPA population esti

mates.

76 Ibid.

77 Kontur. [South Sudan: Population Density for 400m H3 Hexagons](#). 2023.

78 HDX/UN OCHA/FAO. [South Sudan - Rivers](#). 2018.

79 HDX/UN OCHA/FAO. [South Sudan – Water Bodies](#). 2018.

80 Kontur. [South Sudan: Population Density for 400m H3 Hexagons. Interactive data](#). 2023.

81 REACH. Population Movements Baseline Dataset. 2024.

82 IOM DTM. [South Sudan Displacement Baseline Assessment Round 15](#). 2024.

83 Ibid.

84 Ibid.

85 IOM DTM. [Mobility Tracking Round 15 - Initial Data Release](#). Nov. 2024.

86 IOM DTM. [South Sudan Displacement Baseline Assessment Round 14](#). 2023.

87 IOM DTM. [South Sudan Displacement Baseline Assessment Round 15](#). 2024.

88 Inter-Agency Rapid Need Assessment (IRNA). [Jikmir, Upper Nile](#). Jan. 2017.

89 REACH. [Situation Overview: Ulang and Nasir Counties, Upper Nile State, South Sudan](#). Mar. 2018.

90 REACH. [Situation Overview: Upper Nile State, South Sudan](#). Dec. 2018.

91 Sudans Post. [Fresh clashes erupt in Nasir, displacing thousands](#). Jul. 2024.

92 Radio Tamazuj. [Fighting grips Nasir County, civilians flee](#). Mar. 2025.

93 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir Area](#). 2021.

94 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir County](#). 2022.

95 IOM DTM. [South Sudan. Event Tracking Report \(Flood Displacements\)](#). 16-30 Nov. 2024.

96 Inter-Agency Rapid Need Assessment (IRNA). Greater Malow Areas Inter-Agency Rapid Needs Assessment (IRNA) for Severe Food Shortages and Displacement. Jan. 2025.

97 Ibid.

98 IOM DTM. [South Sudan Displacement Baseline Assessment Round 15](#). 2024.

99 Ibid.

100 Ibid.

101 Inter-Agency Rapid Need Assessment (IRNA). [Jikmir, Upper Nile](#). Jan. 2017.

102 Ibid.

103 REACH. [Humanitarian Situation Overview: Ethiopia - South Sudan Cross-Border Displacement](#). Feb. 2024.

104 Ibid.

105 REACH. [Population Movement Baseline Report](#). Sept. 2020.

106 UN OCHA. [South Sudan: Humanitarian Needs and Response Plan 2025](#). Dec. 2024.

107 IOM, Inter-Sectoral Needs Assessment (ISNA) Dataset. 2024.

108 WHO. South Sudan Health Centers. 2024.

109 IOM. South Sudan Education Facilities. 2024.

110 WHO. South Sudan Health Centers. 2024.

111 IOM. South Sudan Education Facilities. 2024.

112 Ibid.

113 IOM, Inter-Sectoral Needs Assessment (ISNA). 2024.

114 WHO. South Sudan Health Centers. 2024.

115 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir Area](#). 2021.

116 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir County](#). 2022.

117 REACH. [Humanitarian Situation Overview: Ethiopia - South Sudan Cross-Border Displacement](#). Feb. 2024.

118 Ibid.

119 IOM, Inter-Sectoral Needs Assessment (ISNA). 2024.

120 Ibid.

121 Google Research. [Open Buildings](#). 2023.

122 Ibid.

123 IOM, Inter-Sectoral Needs Assessment (ISNA) Dataset. 2024.

124 HDX/IOM DTM. [South Sudan Displacement - \[IDPs, Returnees\] - Baseline Assessment](#). Rounds 12 to 15.

125 Armed Conflict Location & Event Data (ACLED). Political Violence Events and Fatalities by Month Dataset. As of Jan. 2025.

126 REACH. [JMMI Dashboard](#). As of Jan. 2025.

127 REACH. JMMI analysis. Mar. 2024 to Jan. 2025.

128 Famine Early Warning System Network (FEWSNET). [Livelihoods Zone Map and Descriptions for the Republic of South Sudan \(Updated\)](#). 2018.

129 REACH. [Analysis Joint Market Monitoring Initiative \(JMMI\)](#). Jan. 2025.

130 Ibid.

131 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir Area](#). 2021.

132 Inter-Agency Rapid Need Assessment (IRNA) to the Flood Affected Areas in [Greater Nasir County](#). 2022.

133 Inter-Agency Rapid Need Assessment (IRNA). Greater Malow Areas Inter-Agency Rapid Needs Assessment (IRNA) for Severe Food Shortages and Displacement. Jan. 2025.

134 Radio Tamazuj. [Nasir market shut after gunfire incident](#). Feb. 2025.

135 FEWS NET. [South Sudan: Food Security Outlook Update: Widespread Emergency \(IPC Phase 4\) amid high cost of assistance delivery](#). Apr. 2024.

136 REACH. [JMMI Dashboard](#). As of Jan. 2025.

137 Ibid.

138 Ibid.

139 IOM, Inter-Sectoral Needs Assessment (ISNA) Dataset. 2024.

140 Conflict Sensitivity Resource Facility. [Luakpiny/Nasir County, Upper Nile State](#). 2024.

141 REACH. [Analysis Joint Market Monitoring Initiative \(JMMI\)](#). Jan. 2025.

142 Ibid.

143 FAO. [Data in Emergencies Monitoring Brief: Round 4](#). Mar. 2024.

144 REACH. [JMMI Dashboard](#). As of Jan. 2025.

145 REACH. JMMI analysis. Mar. 2024 to Jan. 2025.

PROJECT BACKGROUND

Building on outreach of previously realized county profiles,¹ IMPACT produced three area-based outputs focusing on Luakpiny/Nasir, Akobo and Lafon/Lopa Counties, based on pre-identified information gaps and humanitarian partners' needs, as well as return patterns and exposure to natural hazards. By means of secondary data review, the outputs highlight key features of the targeted areas, namely their climatic conditions, hydro-meteorological hazards, population and displacement patterns, existing infrastructures and services, as well as key socio-economic characteristics supported by IMPACT's JMMI in South Sudan.

¹In 2024, IMPACT produced five County profiles in South Sudan. You can refer for example to [Aweil South County Profile \(March 2024\)](#).