HUMANITARIAN NEEDS OVERVIEW

SOUTH SUDAN

HUMANITARIAN PROGRAMME CYCLE
2020

ISSUED NOVEMBER 2019

About

This document is consolidated by OCHA on behalf of the Humanitarian Country Team and partners. It provides a shared understanding of the crisis, including the most pressing humanitarian need and the estimated number of people who need assistance. It represents a consolidated evidence base and helps inform joint strategic response planning.

The administrative boundaries and names shown and designations used on this map and subsequent maps and tables in the document do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determimed. Final status of Abyei area is not determined.

COVER PHOTO: UPPER NILE, SOUTH SUDAN

Sandy Chuol, 10 years old, carries a jerry can of water for her family in Malakal town, Upper Nile. She walks about 30 minutes from home to collect water twice a day. ©UNICEF South Sudan

Table of Contents

Summary of Humanitarian Needs

TOTAL POPULATION

11.7M

PEOPLE IN NEED

7.5M

WESTERN BAHR EL GHAZAL, SOUTH SUDAN
A group of displaced children play at Wau PoC site, Western Bahr el Ghazal. ©OCHA South Sudan

Context and impact of the crisis

A year after the signing of the Revitalized Agreement on the Resolution of the Conflict in South Sudan (R-ARCSS),[1] the ceasefire holds in most parts of the country. Armed conflict between State security forces and opposition armed groups has been contained to a small number of areas in the Equatorias where Government forces continue to clash with non-signatories to the agreement. Many areas are seeing intra- and inter-communal violence, enabled by small-arms proliferation and weak rule of law. This is often driven by resource scarcity in areas that have experienced years of severe food insecurity.

Overall progress on the implementation of the R-ARCSS has been modest. The deadline for the parties to the agreement to form a transitional government of national unity has been extended twice, most recently until early 2020, following regional mediation efforts aimed at preventing the country from slipping back into conflict.

Delayed cantonment of former fighters, full integration of forces, decisions concerning the number of states and their boundaries, and unresolved issues between R-ARCSS signatories around security arrangements for the opposition are among the sources of uncertainty concerning the country's short-term future.

This can affect displaced people's decisions about returning to their places of origin or habitual residence. Although an estimated 1 million people have returned from displacement inside South Sudan or from countries of asylum since November 2017,[2] nearly 4 million people remain displaced by the humanitarian crisis: 1.5 million internally[3] and more than 2.2 million as refugees. Recent interviews with internally displaced people (IDPs) found that beyond the continued threat of conflict, potential barriers to return included lack of safety, services and livelihood opportunities in areas of return; the destruction or occupation of former homes; and lack of accountability for human rights violations committed during the war, including sexual violence.[4] Intention surveys with refugees found lack of livelihoods; inadequate basic services; lack of political solutions; safety and security; and lack of education opportunities as key reasons for not returning.[5]

Scope of analysis

Since no part of the country has been spared from the humanitarian crisis, the Humanitarian Needs Overview (HNO) analysis covers all 78 counties of South Sudan. All segments of the population apart from the wealthiest quintile in each county were considered to be affected by the crisis.[6] Specifically, the analysis considered the needs of four segments of the population: IDPs, returnees from within South Sudan and from countries of asylum, host community members and people who are otherwise affected but not displaced, and some 300,000 refugees from neighbouring countries in South Sudan.

The severity analysis and calculations of people in need focused on two main humanitarian consequences of the crisis: physical and mental well-being, and living standards. As South Sudan remains in a protection crisis, protection-related needs were prominently integrated within the analysis of these two humanitarian consequences. Resilience and recovery needs were also considered in the analysis.

The severity levels used for the HNO were adjusted to needs that are most related to sustaining and improving physical and mental well-being, and living standards. The thresholds of calculating the people in need are higher than in many other emergencies. This is in a context where the level of development remains compromised and fragile: South Sudan ranked third last out of 189 countries in the 2018 Human Development Index.[7] It is a setting where, two years into the country's independence, basic services were limited or absent in many areas, even before the conflict broke out in 2013.

Humanitarian consequences

South Sudan and its people continue to reel from the impacts of years of conflict, violence and limited of development investment. Some 7.3 million people are facing problems related to their physical and mental well-being. Almost half of all counties have a convergence of high needs related to food insecurity, protection, and water, sanitation and hygiene (WASH).

Food insecurity is the main driver behind the number of people in need. Nearly 6.4 million people or 54 per cent of the population were acutely food insecure in August 2019, according to the Integrated Food Security Phase Classification (IPC) analysis. The prevalence of global acute malnutrition (GAM) among children increased from 13 per cent in 2018 to 16 per cent in 2019, exceeding the global emergency threshold of 15 per cent. In 2020, more than 1.3 million under-five children are projected to be acutely malnourished. Needs are closely interrelated across sectors. For example, acute malnutrition is attributed to the persistent high food insecurity, poor quality and diversity of food, low water quality as well as high morbidity due to a weak health system.

Forty-four per cent of the population are at risk of communicable and non-communicable diseases. At any one time, every other child is sick with fever or malaria, and every fourth child with diarrhoea. Around 75 per cent of all child deaths in South Sudan are due to preventable diseases, such as diarrhoea, malaria and pneumonia.[8] Applying the latest prevalence estimates of mental disorders in conflict settings to South Sudan, approximately 2.5 million people might have a mental disorder at any point in time.[9] Up to 900,000 children are afflicted with psychological trauma as a result of witnessing violence or experiencing it directly during attacks on schools or similar violent incidents.[10] Vaccination coverage is low, with 43 per cent coverage of one of the most critical vaccinations for children under 1 year, PENTA 3 (diphtheria, pertussis, tetanus, hepatitis B and haemophilus influenza).

An estimated 5.2 million people are facing severe issues with their living conditions. Two thirds of the counties have a convergence of high WASH, protection and education-related needs. Lack of basic services is one of the main drivers of need and one of the main obstacles for people to begin recovering from the years of conflict and violence. More than 40 per cent of the population have no access to primary health care services. An estimated 60 per cent of the total population either rely on unimproved or surface water sources; or have to walk more than 30 minutes to reach the improved water sources or face protection risks even if they could access the improved sources. In some parts of the country, three in four children are out of school. Only 20 per cent of at-risk women and girls have access to services related to gender-based violence (GBV). Only 6.5 per cent of at-risk children—those below the age of 18 years with likelihood that violation of and threats to their rights will manifest and cause harm to them—can access psychosocial support and other child protection services.

Displaced people and spontaneous returnees face specific challenges with their living conditions. This includes IDPs and refugee returnees in IDP-like situations living in overcrowded conditions in camps and spontaneous settlements, without access to safe shelter, and returnees without access to accountable legal remedies related to housing, land and property.

While a marked increase in displaced people deciding to return would be an indication of greater stability and prospects for prosperity and potentially reinforce these in the long term, high volumes of returns could in the short to medium term worsen vulnerable people's well-being and living conditions, and erode community resilience. This could be due to greater competition over limited food and livelihoods, pressures put on already stretched basic services, or problems related to housing, land and property. The current level of service provision in areas of return is estimated to be unsustainable for higher rates of return.

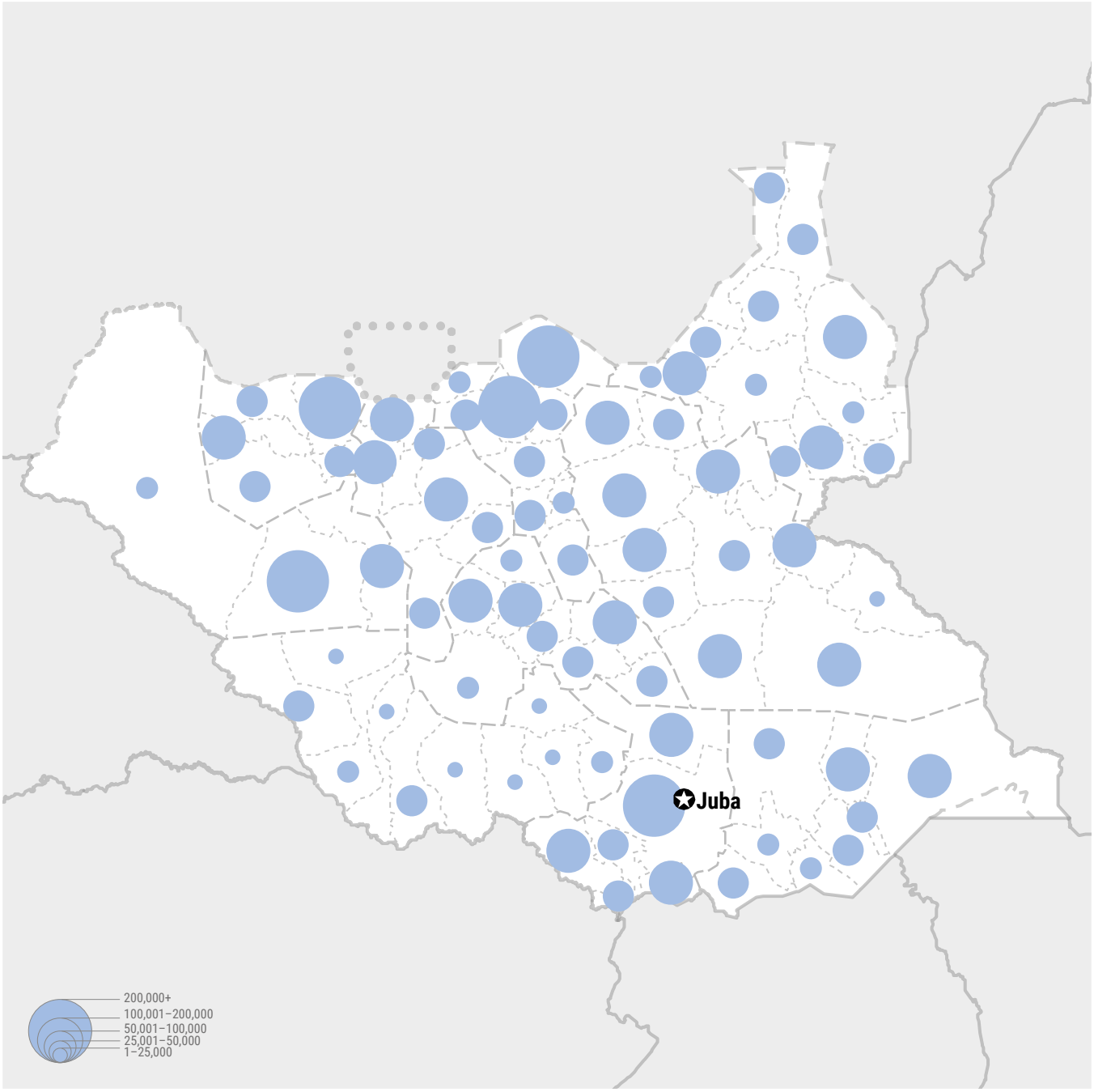
People in need and severity of needs

In total, nearly 7.5 million people are in need of some type of humanitarian assistance or protection. Of the 78 counties in South Sudan, 45 are in severe need and 33 are in extreme need.

Of these 33 counties, people in 23 of them have faced extreme need for at least two consecutive years. Some 30 per cent of the counties in extreme need are located in Upper Nile, followed by 21 per cent in Jonglei and 15 per cent in Eastern Equatoria. Some 5.2 million of the people in need are host community members or people who are otherwise affected but not displaced, while 1.4 million are IDPs, nearly 600,000 are returnees and about 300,000 are refugees. Within these population groups, some of the vulnerable groups that may have specific needs include children, women at risk, the elderly, people with disabilities, single-headed household members, and the extremely poor.

Overview Map

The map below presents the number of people in need across the 78 counties in South Sudan. As described further in Part 1.6, on analysis of people in need, no county in South Sudan has been spared from the humanitarian crisis.



Key Findings

PEOPLE IN NEED	TREND (2015–2020)	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY
7.5M		50%	54%	13%

By humanitarian consequence

CONSEQUENCE	PEOPLE IN NEED	% PIN
Critical problems related to physical and mental well-being	**7.3M**	**97%**
Critical problems related to living standards	**5.2M**	**69%**

By gender

GENDER	PEOPLE IN NEED	% PIN
Girls	**2.0M**	26%
Boys	**2.0M**	27%
Women	**1.8M**	24%
Men	**1.7M**	23%

By age

AGE	PEOPLE IN NEED	% PIN
Children (0-17)	**4.0M**	54%
Adult (18-60)	**2.9M**	39%
Elders (60+)	**600K**	7%

With physical disability

AGE	PEOPLE IN NEED	% PIN
Persons with disabilities	**975K**	13%

By population group

POPULATION GROUP	PEOPLE IN NEED		% PIN
Host communities and other non-displaced		**5.3M**	71%
Internally displaced people		**1.3M**	18%
Returnees from within South Sudan	**445K**	**562K** (returnees)	7%
Spontaneous refugee returnees in IDP-like situations	**63K**		
Spontaneous refugee returnees in places of return	**54K**		
Refugees in South Sudan		**297K**	4%

Summary of Humanitarian Consequences

Critical problems related to physical and mental well-being

PEOPLE IN NEED	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY
7.3M	50%	54%	13%

HUMANITARIAN CONSEQUENCE	PEOPLE IN NEED
Host communities and non-displaced	**5.3M**
IDPs	**1.4M**
Returnees	**386K**

Critical problems related to living standards

PEOPLE IN NEED	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY
7.3M	50%	54%	13%

HUMANITARIAN CONSEQUENCE	PEOPLE IN NEED
Host communities and non-displaced	**3.6M**
IDPs	**1.1M**
Returnees	**488K**

Part 1

Impact of the Crisis and Humanitarian Consequences

JONGLEI, SOUTH SUDAN
Tarir Chol, 25 years old, holds her baby in Padding, in Jonglei.
©OCHA South Sudan

1.1 Context of the Crisis

Political and security environment

Progress on the implementation of the 2018 R-ARCSS has been limited in 2019. The pre-transitional period leading to the formation of a three-year transitional government of unity and the return of opposition leader, Riek Machar, as the First Vice-President was first extended from May to November 2019, and again by 100 days into early 2020 following regional mediation efforts. Lack of political consensus and resource constraints continue to undermine completion of critical tasks to stabilize the country.[11] Political and technical negotiations are ongoing regarding the definition of state and county boundaries, the scale of federalism and the de-centralization of authority from national ministries.

The ceasefire has held in most parts of the country, with an overall reduction in political violence between the signatories to the R-ARCSS, particularly the South Sudan People's Defence Force (SSPDF), formerly known as Sudan People's Liberation Army (SPLA) loyal to President Kiir, and SPLA-in-Opposition loyal to Riek Machar. However, the revitalized agreement did not include every armed group and the non-signature from National Salvation Front (NAS), led by former military official Thomas Cirillo, has caused political unrest and localized conflict in Central Equatoria between NAS, SSPDF and SPLA-in-Opposition.

At the same time, localized inter- and intra-communal violence has been perpetrated by community-based militias and other armed elements, primarily in Eastern Equatoria, Jonglei, Lakes, Unity, Warrap and Western Bahr el Ghazal. Such incidents rose sharply during the dry season in late 2018 and early 2019 before decreasing again when the rainy season arrived in May 2019.[12] Inter and intra-communal violence has become increasingly militarized, with small arms being widely available. Civilian disarmament efforts in South Sudan over past years have been largely unsuccessful due to the lack of rule of law and social norms that normalize the use of weapons and violence to resolve disputes.[13]

Cattle raiding and related inter-communal violence is a deeply rooted widespread practice in South Sudan, but one that is increasingly politicized and linked to the broader conflict and insecurity. With the transitional government yet to form and positions not assigned, some political leaders are reported to instigate inter-communal violence and mobilize armed herders to destabilize potential appointees in favour of others. Armed forces and armed groups have also tactically used the defence, acquisition and recovery of cattle to mobilize youth throughout the years of conflict. The militarization of cattle raiding both tactically and in the types of weapons used has contributed to the lethality of attacks.[14] Other drivers for the intensification of inter-communal violence include resource stress due to the interplay of a continued perception of insecurity affecting ability to access land and food, inhibited livelihoods and coping capacities, and climatic events affecting crops.[15] All of these factors continue to further drive humanitarian needs.

A key issue affecting security is the future of former fighters. R-ARCSS requires soldiers from the signatory armed groups to be integrated into the country's military or police. All signatory parties have agreed to commence cantonment of opposition forces in 25 sites and SSPDF in 10 major barracks. As of October 2019, as many as 45,000 soldiers from SPLA-in-Opposition were gathering in 25 cantonment sites, while SSPDF troops were supposed to be gathering at existing barracks. The security and protection risks associated with the cantonment process include GBV; forced and child recruitment; loss of civilian character in areas surrounding cantonment sites; housing, land and property rights violations; humanitarian access and bureaucratic impediments; access to services; the occupation of civilian infrastructure, like schools and hospitals; and the proliferation and diversion of weapons.[16] Protection actors have been working together to visit communities near the cantonment sites, and to assess and address the related protection issues.

Other security concerns affecting the civilian population include mines and explosive remnants of war, largely concentrated in the Equatorias,[17] and criminality, driven by challenges arising out of the fragile economy and fluctuating inflation over time. Extensive flooding seen in mid-to-late 2019 may have caused mines and other explosive remnants of war to become more apparent as the earth previously covering them has washed away.

Interviews with people affected by the crisis found that although violence and conflict have reduced in many areas, civilians do not yet feel secure. Although the proportion of assessed settlements across more than 50 counties reporting incidents of fatal conflict reduced from 22 per cent in July 2018 to 8 per cent in July 2019, the proportion reporting that residents felt safe most of the time remained relatively low at 47 per cent, similar to 43 per cent in July 2019. In Greater Bahr el Ghazal, contrary to trends in the rest of the country, perceptions of security even decreased, from 32 per cent in July 2018 to 16 per cent in July 2019. This is likely due to the continued communal and localized violence in the region.[18]

Demographic and sociocultural profile

Latest population estimates suggest that more than 53 per cent of the 11.7 million people in South Sudan are under 15 years old and 70 per cent are younger than 30 years old.[19] Life expectancy stands

JONGLEI, SOUTH SUDAN

Women affected by devastating flooding in Pibor, Jonglei wait for a distribution of blankets, tarpaulin and household supplies. ©UNICEF South Sudan

at 57 years, well below regional and global averages.[20] South Sudan has 99 under-five child deaths per 1,000 live births,[21] higher than the Sub Saharan regional rate of 78 per 1,000 live births. The rate in South Sudan translates to 1 in 10 children dying before his or her fifth birthday and is among the highest under-five mortality rates in the world. The majority are among infants aged under 1 year (infant mortality rate of 64 deaths per 1,000 live births under 1 year), with most dying from common but preventable childhood conditions such as malaria, pneumonia or diarrhoea.

Maternal mortality has reached and sustained a high of 789 deaths per 100,000 live births, according to 2018 estimates. The population of the country comprises about 60 ethnic groups, the Dinka and the Nuer being the largest. The ethnic composition of different areas in South Sudan has changed due to several decades of conflict, mass displacement, rural-to-urban migration, and shifting migratory patterns of pastoralist communities.

Traditional gender norms guide everyday life for most South Sudanese. Men are responsible for providing financially for their families, and for assets such as cattle and land. Women control the homestead and household items, as well as small animals. Conflict has changed some practices, and in many cases, women have had to take care of their families alone. Inheritance rights are largely clan specific, and most women are not able to inherit the land and other significant assets of their deceased husbands unless they have a male child.[22] Household chores are near exclusively the woman's responsibility. Women fetch water in 86 per cent of households, followed by any daughters below 15 years. Children generally assist their same-gendered parent.[23]

Harmful traditional practices are present across the country. They include early and forced marriage, including marriage following cattle raids or age set fights; wife inheritance; abduction of girls for household chores; polygamy; and denial of education for girls due to societal expectations. Men and women alike have been socialized to tolerate domestic violence and it is widely viewed as acceptable within families. Intimate partner violence regularly comprises at least half of all reported GBV incidents.[24] Structural gender inequality and unequal power relations between men and women are the root cause of GBV.[25] Retribution is a concept deeply engrained in the country's culture and traditions. When individual suspects are not punished, their families or communities are left to blame—making them proxy targets for vengeance.[26]

Economic profile

The ongoing macroeconomic crisis underlies South Sudan's multiple crises. South Sudan is the most oil-dependent country in the world, with oil accounting for almost the totality of exports, and around 60 per cent of its gross domestic product.[27] However, despite its dominance in the economy, oil has not generated the jobs needed for social and political stability. Livelihoods are concentrated in low productivity, unpaid agriculture and pastoralist work. As much as 85 per cent of the working population are engaged in non-wage work, chiefly in subsistence agriculture and livestock rearing.[28]

Government expenditures continue to be targeted towards defence, security and infrastructure at the expense of humanitarian assistance and basic services. The combined allocations on health and education made up 6 per cent[29] of the total 2019–2020 national budget.[30] The projection for total expenditure of the proposed 2019–2020 national budget is 155 per cent higher than the previous year, with total revenues up by 59 per cent, partly on the back of assumed higher oil production and lower payments to Sudan.[31] South Sudan's economy is projected to grow by 1.8 per cent in 2019 if peace holds and by 0.3 per cent if the peace agreement falters.[32]

The year-on-year annual Consumer Price Index, which measures inflation, increased by 89 per cent between June 2017 and June 2018.[33] Resulting high food prices erode income and purchasing power for the urban population who depend on imported food. More people are slipping into poverty. Over 80 per cent of the population currently lives below the absolute poverty line.[34] Although poverty is higher in rural than urban areas, it has grown faster in urban areas since 2009.

Basic services

The Government's ability to provide basic services to its people is low and inconsistent across the country. Even prior to the crisis, total health sector staffing stood at 10 per cent of actual need. Out of approximately 2,300 health facilities that provide health care services to the entire population, more than 1,300 facilities are non-functional. Currently, four in five health facilities in South Sudan are managed by non-governmental organizations (NGOs). Only one in five childbirths involves a skilled health care worker.

Health facilities are poorly equipped and staffed, making them unprepared for health risks, such as Ebola (see more under Part 2: Risk Analysis). The first year since the signing of the R-ARCSS saw at least 24 incidents in which health facilities were looted or staff threatened, and this data may only reflect part of the incidents affecting health structures and workers.[35] Although violence still affects people's access to services, explanations provided by key informants for lack of access to health care in 2019 were increasingly less connected with political violence, compared to a year ago. Now a larger proportion of assessed settlements report that the main reason why health services are unavailable is because they simply never existed in the area.[36]

The protracted humanitarian and political crisis has negatively affected the already poor access to basic water, sanitation and hygiene services. Households able to access a borehole or tapstand in under 30 minutes, without facing protection concerns, is very low, at 34 per cent coverage.[37] This is a condition which affects the safety of women and girls disproportionately, as they are called upon uniquely to source water for the family. Across the country, while access to improved sanitation infrastructure has improved slightly since 2013, an estimated 13 per cent in 2013, around 80 per cent of the country did not have access to any kind of sanitation facility in 2018.[38] However, customary practices associated with defecation vary from region to region, with many areas traditionally actively discouraging the use of improved sanitation facilities and promoting open defecation.[39]

Forty-six per cent of schools in South Sudan are partially damaged and 13 per cent are fully damaged. At least 2.2 million school-aged girls and boys are estimated to be out of school, with thousands more at risk of dropping out.[40] Girls are especially adversely affected by this situation and are less likely to be allowed return to school when the opportunity arises, particularly given the incidence of early marriage and the burden they bear of carrying out household duties.

Legal and policy environment

Despite capacity building efforts by the United Nations and others, South Sudan largely lacks efficient and independent justice institutions committed to upholding the rule of law and safeguarding fundamental human rights. The police, prosecutors, courts and prisons are under-resourced in terms of national spending and capacity. The absence of accountability is both a root cause of and a factor in prolonging insecurity and violence.[41] Weak rule of law institutions have incapacitated access to restitution for an increased number of housing land and property claims, and resulted in new protection and living standards related needs (see more under Part 1.4 on humanitarian consequences).

The United Nations Commission on Human Rights in South Sudan noted in August 2019 the lack of progress in establishing transitional justice mechanisms, including the Hybrid Court; the commission for truth, reconciliation and healing; and the compensation and reparation authority, which are to be complemented by customary and other community-centred

mechanisms. It argued that this would delay accountability and reparation for crimes, including those related to conflict-related sexual violence and sexual and gender-based crimes.[42]

Customary courts—covering issues like marriage, divorce, childcare and property rights—hear up to 90 per cent of cases in South Sudan. However, the chiefs who preside over these courts are generally older men, with deeply ingrained patriarchal views that are reflected in their decisions in favour of men.[43]

At the same time, South Sudan has seen progress regarding certain legal instruments, especially related for forced displacement. South Sudan ratified the 1951 Convention relating to the Status of Refugees and its 1967 Protocol in 2018, and these instruments came into force in 2019. Also, in 2019, South Sudan acceded to the African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa, also known as the Kampala Convention. It is the world's first and only regional legally binding instrument for the protection and assistance of IDPs.

Infrastructure

South Sudan's road networks are among the most underdeveloped in the world, although the United Nations and private sector actors have made gains in the past year to improve road movement, enabled by greater security. Currently, only one international road, the 192 km stretch between Juba and Nimule on the Ugandan border, is sealed. Most other sealed roads are within the capital city Juba. All other national, interstate and urban roads consist of badly or non-maintained dirt roads. Approximately 60 per cent of the limited road network becomes inaccessible during the long rainy season, affecting especially Jonglei, Unity and Upper Nile.[44] Consequently, humanitarian organizations revert to the use of air transport as a last resort to reach people in need. The country's airstrips are poor quality, however, and the availability of fuel, aircraft maintenance facilities and handling services is low, especially in remote areas.[45] If the Government's commitment to improve road infrastructure in 2019/2020 materializes, this could make a significant positive impact for people and humanitarian organizations serving them. South Sudan counts more than 20 ports located along the Nile River between Bor and Renk. Waterways have become a more reliable means of transportation for commercial goods and humanitarian cargo along the Nile, El Zharaf and Sobat rivers.

Only some 25 per cent of the country's population have access to electricity.[46] There is no formal landline telephone network and telecommunications services are provided through satellite and mobile communications networks.[47] Only 30 per cent of the population has access to mobile networks and/or use mobile phones. Few households have televisions, computers or internet access, and print media is only distributed in the capital. Some media outlets, including Sudan Tribune, United Nations-run Radio Miraya, and Radio Tamazuj, have been blocked from time to time. Radio has long been a popular source of information for people across the country, including South Sudan Broadcasting Corporation, Eye Radio and Radio Miraya.

Environmental profile

The country's climate is characterized by extremes with localized droughts, torrential rains and seasonal flooding. Erratic rainfall patterns delay planting seasons, decrease pasture, disrupt people's agricultural and livestock activities, and temporarily[48] displace communities. Latest climate projections agree that South Sudan will get warmer with the less certain rainfall patterns.[49] South Sudan is ranked among the five most affected countries in the world according to the Climate Change Vulnerability Index.[50]

Forests and woodlands cover a large proportion of South Sudan's vast territory, but are fast disappearing by over-extraction, as more than 90 per cent of the population directly depends on forests for fuel wood and charcoal production, timber for construction, and non-timber forest products for food and nutrition security.[51] The influx of refugees and IDPs have been identified as one of the important drivers of inappropriate land use and over-exploitation of natural resources, putting more pressure on the already scarce environmental resources.[52]

Other environmental problems affecting the population include soil degradation, pollution environment due to oil drilling and other mining activities, over-exploitation of fisheries, and conflicts over diminishing resources such as rangelands and water sources for livestock.[53] In fast-growing urban areas, waste management has become an increasing strain on infrastructure and treatment facilities, and can directly impact the environment and subsequently human health.[54]

The seasonal forecast of the National Meteorological Department of South Sudan reported above normal rainfall in 2019. Heavy rains and flooding since June 2019 have affected large areas of South Sudan, leaving the people more vulnerable with increased humanitarian needs. Some 908,000 people in 30 counties are estimated to have been affected by floods, according to authorities. Affected areas include Jonglei, Upper Nile, Warrap, Eastern Equatoria, Northern Bahr el Ghazal, Unity and Lakes, where flooding displaced people and damaged crops, livestock, houses, bridges and airstrips, affecting people's movement and living conditions. Some of the affected areas have been cut-off due to impassable road conditions and high water levels, constraining people's access to basic services and restricting humanitarians' ability to assess and respond to needs. Reduced access to basic services has increased the vulnerability of people in these locations which are classified in extreme and emergency phases of food insecurity.

1.2 Impact of the Crisis

Impact on people

Years of conflict, violence and human rights violations have taken an enormous toll on the country's people. Women and girls have been raped, children separated from their families, homes destroyed and property looted. The conflict is estimated to have led to nearly 400,000 excess deaths in South Sudan's population between late 2013 and 2018, with around half of the lives lost estimated to be through violence.[55] Up to 900,000 South Sudanese children are afflicted with psychological trauma as a result of witnessing violence or experiencing it directly during attacks on schools or similar violent incidents.[56]

Some 6.4 million people were acutely food insecure in August 2019, according to the IPC analysis released in August.[57] Conflict remains the main driver of food insecurity. Annual crop production has reduced during the conflict, with the 2018 deficit being the lowest since the conflict broke out in 2013. This is likely attributable to lower engagement by households in agriculture and reported erratic rain patterns, as well as continued disruption by insecurity of crop planting in the Equatorias, "bread basket" part of the country.[58]

In 2019, the country saw an upsurge in measles, the leading killer among vaccine-preventable diseases.[59] Every third school has been damaged, destroyed, occupied or closed since the conflict broke out in 2013.[60] Years of eroded livelihoods and prolonged humanitarian assistance have increased aid dependency and people's capacity to cope with new shocks. The specific consequences on people's physical and mental well-being and living standards are detailed in Part 1.4, followed by sectoral analysis in Part 3.

Forced displacement

One year into the R-ARCSS, more than 2.3 million South Sudanese remained displaced as refugees in six neighbouring countries: Sudan (858,000), Uganda (838,000), Ethiopia (422,000), Kenya (119,000), Democratic Republic of the Congo (102,000) and Central African Republic (2,000). At a varying rate, South Sudanese continue to flee to neighbouring countries seeking asylum. Between January and July 2019, some 54,000 South Sudanese individuals arrived and sought asylum in other countries in the region, mostly in Sudan, Uganda, Ethiopia and Kenya, followed by the DRC and CAR.

JONGLEI, SOUTH SUDAN

A young baby sits strapped to his mother's back, as they wait in line for a distribution of blankets, tarpaulin and household supplies following devastating flooding in Pibor, Jonglei. ©UNICEF South Sudan

Another 1.5 million South Sudanese remain displaced internally. IDPs are seeking safety and assistance in all the 78 counties, with more than half hosted in Unity (some 247,000 IDPs), Central Equatoria (210,000), Jonglei (185,000) and Upper Nile (181,000).[61] Over 430,000 people or 30 per cent of all IDPs are sheltering in camps or camp-like settings.[62] About 214,000 of them–less than 15 per cent of all IDPs–are in Protection of Civilians (PoC) sites in, Bentiu, Bor, Juba, Malakal and Wau. The sites are protected by UNMISS per its Security Council mandate and serviced by humanitarian organizations. According to protection profiling exercises conducted in 2018 and 2019, an average of 63 per cent of the IDPs living inside PoC sites did not consider or even discuss leaving the sites and returning home.[63] The vast majority cite security concerns as the main reason for not considering or discussing leaving the displacement sites, followed by scarcity of food (Bentiu, Bor and Juba PoC site populations) and houses having been destroyed (particularly IDPs in Wau PoC site). The lack of basic services in many areas of potential return offers limited options for accessing services outside the sites, both rural and more urban areas, and perpetuates a situation in which people's opportunities to improve livelihoods and living standards remain diminished, posing obstacles to recovery from the crisis.

Internal displacements continue to be driven primarily by conflict and communal clashes. In 2019, there was a reduction in displacement caused by conflict involving government actors and an increase in displacement due to communal clashes.[64] Insecurity remains a key concern for many displaced people. More than half of the IDP population in Eastern Equatoria, Lakes and Western Bahr el Ghazal live in settlements with reports of conflict-related incidents in 2019.[65]

Communal clashes, including those related to cattle raiding, were increasingly prominent in 2018 and early 2019. In 2018, Jonglei and Lakes saw especially high numbers of individuals having moved due to communal violence. For the first quarter of 2019, the proportion was especially high for Western Bahr el Ghazal. Conflict and inter- and intra-communal tensions resulted in a displacement of more than 162,900 individuals during the first six months of 2019.[66] The evolution in the nature of inter-communal violence toward greater targeting of women and children, stripping of assets and use of heavy weaponry has changed displacement patterns. For example, inter-communal violence and cattle raiding in western Lakes reportedly caused minimal displacement prior to 2013, but in recent years, with the increased targeting of households, inter-communal violence has become a key driver of repeated episodes of displacement in communities that had previously experienced minimal displacement.[67] Out of the over 12,000 individuals who fled conflict to Wau Protection of Civilians site and collective sites in 2019, 65 per cent were children, 24 per cent were women and only 11 per cent were men.[68]

Return movements

At the same time, many South Sudanese people are cautiously exploring options to return home from being displaced internally and in countries of asylum. Some are returning with the intention to stay, while others come to assess the security and livelihood options, and may return to their places of displacement. Many areas of early returns are not safe. In early 2019, more than half of the IDP and refugee returnee population in Lakes, Jonglei, Western Bahr el Ghazal and Western Equatoria lived in settlements with reports of conflict-related incidents.[69] Many of the returns are partial households or households doing phased returns, for example sending the head of household first to scope or prepare land for cultivation, followed by the children, elderly and other more vulnerable household members. Current return patterns bear similarities with the returns seen after the 2015 peace agreement, when returns also took place in a climate of uncertainty about security and access to food and services in areas of return.[70]

While returns are reported in various parts of the country, the geographical scope has not increased significantly since September 2018, suggesting that many locations that are receiving returnees were already seeing returns prior to the revitalized peace agreement.[71] The trend in overall numbers of returns has also tapered in relative terms since the start of 2019 and following the peace agreement and the dry season, indicating an increase that is sustained but very gradual to date.

By July 2019, more than 855,000 individuals had returned to their areas of habitual residence since 2016 after being displaced within South Sudan only.[72] Of them, more than 128,000 returned to Wau County in Western Bahr el Ghazal, nearly 48,000 to Rumbek North in Lakes, almost 46,000 to Bor South in Jonglei and some 45,000 to the capital Juba in Central Equatoria.[73] Recent interviews with IDPs found that beyond the continued threat of conflict, potential barriers to return included a lack of safety, services and livelihood opportunities in areas of return; the destruction or occupation of former homes; and lack of accountability for human rights violations committed during the war, including sexual violence.[74]

A cumulative 193,000 South Sudanese refugees had spontaneously returned to South Sudan from November 2017 to July 2019 due to a mix of push and pull factors. The highest concentrations of refugee returnees are in Magwi, bordering

JONGLEI, SOUTH SUDAN
Conflict-affected women waiting with their cash-based transfer cards in Bor town, Jonglei. ©WFP South Sudan

Uganda in Eastern Equatoria (61,000), Pibor by the Ethiopian border in Jonglei (39,000) and Rubkona near Sudan in Unity (17,000).[75] Forty-six per cent of the refugees returned from Uganda, 25 per cent from Ethiopia, and 23 per cent from Sudan and others from neighbouring countries. Less than half of the refugee returnees, or 91,000 individuals, have been able to return safely to their homes, while some 102,000 individuals have been unable to access their intended place of return and require humanitarian assistance. The UN refugee agency's (UNHCR) advisory to not facilitate refugee returns was reaffirmed in April 2019 due to the unsustainable conditions for voluntary returns in safety and dignity.[76]

In 2019 alone, over 57,000 spontaneous refugee returns were reported. The majority, some 39,000 people, arrived between April and July, mostly from Khartoum at the height of political unrest in Sudan. Household surveys conducted at mid-year in refugee return locations across the country showed general insecurity, lack of livelihood opportunities and lack of basic services in countries of asylum as push factors. In South Sudan, improvement in the security situation and family reunification were major pull factors amongst others.[77]

An intention survey conducted in countries of asylum in 2019 found that most South Sudanese refugees are cautious of the current implementation of the R-ARCSS. South Sudanese refugees expressed that they want to be assured that the return is durable and sustainable. Refugees identified lack of livelihoods; inadequate basic services; lack of political solutions; safety and security; and lack of education opportunities as key reasons for not returning.[78] Many areas seeing spontaneous IDP and refugee returns are already areas of high vulnerabilities, as per August 2019 IPC findings. They are also frequently on the close monitoring list for the inter-agency Needs Analysis Working Group (NAWG) for having high lifesaving needs, meaning that there may be a risk of further exacerbating high needs.

In line with the annual patterns, it is expected that the upcoming late 2019–early 2020 dry season could see changes in the volume of returns, with mobility becoming more feasible as ground conditions improve. Each year, this has depended to a large extent on conditions and perceptions of security, and such considerations will remain paramount in people's decisions to move. Between January and March 2019, 64 per cent of people who were displaced internally were displaced within same state and same county.[79]

Impact on traditional seasonal migration

Years of conflict and violence have led to increased humanitarian needs among many of South Sudan's nomadic or seasonal migratory populations. According to recent population baseline study, repeated episodes of conflict and environmental shocks have shaped traditional seasonal migration routes over the last three decades, consequently blocking pastoralist communities' access to preferred migration patterns and exposing them to new vulnerabilities.[80] These

include protection concerns, exposure to health risks, changes in diet and reliance on negative coping strategies.

Sociocultural impact

Some harmful cultural practices have intensified during the conflict and humanitarian crisis. For example, a recent study found that conflict-fuelled poverty and food insecurity were the most common reasons for early marriage, with girls displaced by conflict at particular risk. In Nyal, Panyijiar County, community members spoke of how the drivers behind the practice have changed since the conflict started in 2013 and estimated that some 70 per cent of girls were married before turning 18, a significantly higher rate than the national pre-conflict average of 45 per cent.[81]

The crisis has furthered entrenched many traditional gender roles, with a heightened impact on women in displaced and separated families. Displaced and returnee women bear greater responsibility for food collection and participation in food for assets programmes, compared to families in host communities where men and women divide food security related responsibilities more evenly.[82] In many households, men or boys have joined armed groups and forces, adding to protection concerns they face, while forcing women take on additional responsibilities in looking after the family.

Refugees in South Sudan

As of July 2019, South Sudan hosted about 297,000 refugees, primarily in Upper Nile and Unity. Women and children represent 83 per cent of the total refugee population. More than 90 per cent are from Sudan, followed by the DRC, Ethiopia and Central African Republic. In addition, the number of asylum-seekers stood at some 3,000. The years of conflict in South Sudan have adversely affected the overall protection environment for refugees, the majority of which reside in areas most affected by conflicts in the past. This has created a fragile environment for refugees, as host communities are themselves affected by violence and crisis, and are also contending with the added burden of IDP populations and instability, leading to the potential for increased tension between communities in this pressurized environment.

Impact on humanitarian access

Humanitarian organizations' analysis of the severity of humanitarian access constraints between June and September 2019[83] suggests that humanitarian actors had reached an estimated 2.3 million people or 60 per cent of South Sudanese people targeted with assistance in 44 counties classified as areas with low level[84] access constraints. This illustrates a significant access improvement compared to the situation over the same period in last year, when there were only 22 counties being feasibly accessible for partners at previous analysis. Similarly, humanitarian actors have managed to reach the majority of some 2 million people in 31 counties which were categorized as locations with medium-level access constraints due to bureaucratic impediments, operational interference, and violence against humanitarian personnel and assets.

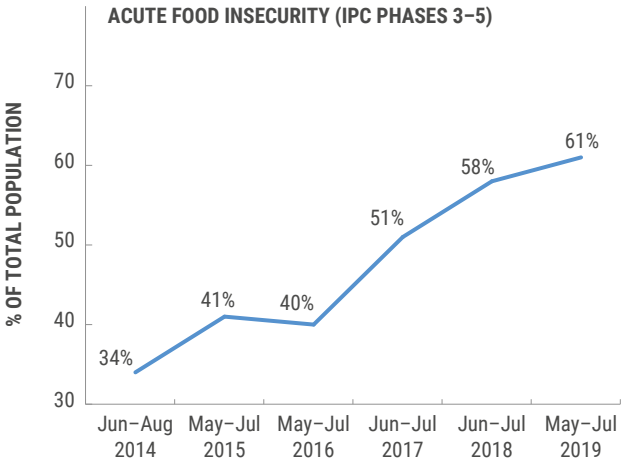
However, three counties–Maiwut and Panyikang in Upper Nile, and Mundri East in Western Equatoria–have remained with high-level access constraints. Nearly 65,000 people in these three counties were not accessible in 2019 due to active hostilities, constant violence against humanitarian personnel and assets, and the physical environment. In previous months, approximately 19 counties were classified as areas with high-level access constraints. Overall, this could be seen as an improvement in the humanitarian access situation as a result of the revitalized peace agreement, compared to previous years.

Decreased routine checkpoint difficulties and reduced impediments to humanitarian operations have been reported. Noting the positive changes, challenges remain to further improve humanitarian access across the country. Administrative restrictions are the most prevalent access difficulties faced by humanitarian actors. Operational interference, movement restrictions, extortion at checkpoints, and violence against humanitarian personnel and assets continue. In addition, active hostilities, criminality and overall insecurity affect the ability of all humanitarian actors to reach people in need.

Communal violence and cattle raiding also interrupt relief operations. Although humanitarians had not been targeted by the violence for most of 2019, the death of three humanitarian volunteers caught in crossfire in Morobo County, Central Equatoria, in November 2019 is a reminder that threats to conducting aid work remain in some areas due to insecurity. Communal clashes continue to create insecurity in affected areas, and have been the main cause of aid worker relocations in 2019. Some 110 humanitarians were relocated due to insecurity between January and September 2019, primarily in opposition-controlled areas, including Maiwut and Ulang, both in Upper Nile, and Fangak in northern Jonglei.

Evolution of food insecurity

Percentage of population in severe food insecurity during mid-year hunger season, per IPC



1.3 Scope of Analysis

The HNO analysis covers all 78 counties of South Sudan. This broad geographic scope was maintained from previous years' analysis, since the humanitarian crisis has impacted the whole country, with every county hosting displaced people and witnessing high humanitarian needs.

Regional workshops were convened in eight locations across the country to ensure depth of analysis and local validation and calibration of information provided at the national level.

Similarly, as the clear majority of the South Sudanese population has felt the impacts of the crisis, no major population group was excluded from the analysis. Specifically, the analysis considered the needs of the following four groups: host community members and people who have not been displaced but are otherwise affected; IDPs; IDP and refugee returnees; and refugees in South Sudan. For the returnee group, initial analysis considered the specific needs of three sub-groups: people who have returned to their places of origin or habitual residence from internal displacement, spontaneous refugee returnees in areas of return, and spontaneous refugee returnees living in IDP-like situations. The analysis presented in the HNO combines these three sub-groups of returnees for the purpose of practical analysis, since sufficient data was not available to analyse each returnee sub-group's specific needs. Even with the four remaining population groups, the particular needs of each group and vulnerable people within them were difficult to articulate in some instances.

The HNO uses an IDP baseline of 1.83 million, per data available at the time of conducting the analysis for people in need. South Sudan's IDP baseline has very recently been reset at 1.47 million, following the culmination of an 18-month-long data review and rationalization exercise between IDP data sets maintained by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and the International Organization for Migration (IOM).

To set boundaries for the population baseline around people most affected by the humanitarian crisis, the wealthiest quintile was removed from each county's host community and non-displaced population. This was done using the wealth index, which divides each county population into five groups from the poorest to the wealthiest (see Annex for more detail).

UNITY, SOUTH SUDAN

Nyapuor, 9 years old, carries an empty food tin to sit on at school in the Bentiu PoC site in Unity. ©UNICEF South Sudan

JONGLEI, SOUTH SUDAN
Women collect water from the flood water in Pibor, Jonglei. All boreholes have been contaminated, and women must dive under the water to access the pumps. ©UNICEF South Sudan

1.4

Humanitarian Consequences of the Crisis

Physical and mental well-being

PEOPLE IN NEED	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY
7.3M	50%	54%	13%

Living standards

PEOPLE IN NEED	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY
5.2M	50%	54%	13%

Physical and mental well-being

According to the enhanced analytical framework used for the HNO, physical and mental well-being consequences are those humanitarian consequences that have a direct effect on people's mental and physical integrity and/or dignity in the short term (within the next six months), recognizing they also have longer term effects. While they are, by definition, severe, the urgency of the response can differ based on the timeframe of their effect (short term versus longer term survival) and their degree of irreversibility in the absence of response.[85]

The contextual factors described in Part 1.1 and the humanitarian impacts narrated in Part 1.2 have caused some 7.3 million people to face problems related to their physical and mental well-being. More than 40 per cent all counties have a convergence of high needs related to food insecurity, protection and health. Of these counties, 8 (24 per cent) are in Greater Equatoria, 17 (52 per cent) in Greater Upper Nile and 8 (24 per cent) are in Greater Bahr el Ghazal.

High levels of acute food insecurity, driven by conflict and insecurity, population displacement and economic decline, explain the high numbers of people in need in about two thirds of all counties. In August 2019, nearly 6.4 million people or 54 per cent of the population were classified in Crisis (IPC Phase 3) or worse acute food insecurity. Among them, an estimated 1.7 million people faced Emergency (IPC Phase 4) acute food insecurity while 10,000 people were in Catastrophe (IPC Phase 5). The incidence of GAM among children increased from 13 per cent in 2018 to 16 per cent in 2019, exceeding the global emergency threshold of 15 per cent. Forty-two out of 78 counties—more than half—showed rates of above 15 per cent GAM. Renk County in Upper Nile recorded extremely critical acute malnutrition rates with GAM at 32 per cent. Most counties in Unity, Upper Nile, Jonglei and Warrap and parts of Eastern Equatoria and Lakes faced critical malnutrition. This signals a worsening of the nutrition situation across the country. In 2020, more than 1.3 million under-five children are projected to be acutely malnourished, per the IPC.

Needs are closely interrelated across sectors. For example, acute malnutrition is attributed to the persistent high food insecurity, poor quality and diversity of food, low water quality as well as high morbidity due to a weak health system. Many areas that have experienced years of severe food insecurity are seeing intra- and inter-communal violence. This creates additional protection risks.

The South Sudanese population is highly vulnerable to epidemic-prone diseases, such as malaria, diarrhoea, acute respiratory infections and measles, due to low immunisation coverage, weak health system and poor hygiene and sanitation, among other reasons. Forty-four per cent of the population are at risk of communicable and non-communicable diseases. Every other child is sick with fever or malaria, and every fourth child with diarrhoea. Around 75 per cent of all child deaths in South Sudan are due to preventable diseases.[86] Elevated case fatality rate and incidence rates for most common diseases drove the number of people in need in about a tenth of all counties.

Although the ceasefire has largely held across the country in 2019, the number of patients with injuries from violence admitted to the International Committee of the Red Cross surgical units has increased since the signing of the R-ARCSS. From October 2017 to June 2018, 526 patients were admitted, mostly with gunshot wounds. In the October 2018 to June 2019 period, the Committee admitted 688 patients, an increase of nearly 25 per cent.[87]

The years of conflict, instability and lack of services has affected the population's mental health. Applying the latest prevalence estimates of mental disorders in conflict settings to South Sudan, approximately 2.5 million people or every fifth South Sudanese might have a mental disorder at any point in time. This includes mild (4 per cent), moderate (13 per cent) and severe (5 per cent) mental disorders.[88] Up to 900,000 children are afflicted with psychological trauma as a result of witnessing violence or experiencing it directly during attacks on schools or similar violent incidents.[89] Women-headed households and women who have been exposed to conflict-related, gender-based or domestic violence are particularly vulnerable. This is especially the case for those lacking family and social support, for example if displaced far from home. An increase of suicide and suicide attempts has been recorded especially among young adults between 19 and 35 years in the Malakal PoC site and Malakal town, Upper Nile, due to lack of socioeconomic opportunities and feelings of helplessness and hopelessness.[90] Mental health care services remain scare and specialized services are mainly located in the capital, Juba, where the Juba Teaching Hospital is the only public medical facility offering inpatient psychiatric care in the country.

The graphics below present what indicators of need are determining the number of people facing problems related to their physical and mental well-being across South Sudan's 78 counties, for people who have not been displaced but are otherwise affected by the crisis, and for IDPs. The first graph shows that for the majority of the people in need, high levels of acute food insecurity determine the maximum number of people in need in 60 counties. While food insecurity is a driving factor for overall needs for all population groups, the IDP analysis below shows that displaced people face a different set of risks than those who have been otherwise affected by crises, especially with regard to needs caused by violence.

According to the HNO framework, living standards consequences are those humanitarian consequences that have a direct effect on people's ability to pursue their normal productive and social activities and meet their basic needs in an autonomous manner. They manifest in different types of deficit and the use of various coping mechanisms to meet basic self-sustenance needs.[91]

An estimated 5.2 million people are facing severe issues with their living conditions, according to intersectoral analysis conducted using 11 key indicators. Sixty-six counties have a high convergence of high WASH, protection and education-related needs. Of these, 19 (29 per cent) are in Greater Equatoria, 26 (40 per cent) in Greater Upper Nile and 21 (31 per cent) in Greater Bahr el Ghazal.

Lack of basic services is one of the main obstacles for people to begin recovering from the years of conflict and violence, and in the medium term, contribute to increased well-being-related needs, morbidity and mortality. More than 40 per cent of the population have no access to primary health care services.[92] The ratio of skilled health personnel to people who need medical services stands at 1 to 65,574, and the situation is even more dire for mental health services. Only some 11.5 per cent of births are assisted by skilled birth attendants. Few survivors have access to clinical management of rape. Despite recent progress on mass vaccination campaigns, vaccination coverage remains low.

Access to water and sanitation is extremely low. Some 60 per cent of the total population either rely on unimproved or surface water sources, take more than 30 minutes to reach the improved water sources or face protection risks if they could access the sources in less than 30 minutes. The highest proportion of households relying on surface water are in Greater Upper Nile (59 per cent). Access to sanitation remains low. Only 19 per cent of households use improved sanitation facilities, including shared facilities.[93] Even after adjusting the thresholds of water and sanitation-related indicators to the South Sudanese context–expecting less access than in a more developed emergency context–WASH-related needs drove upward the number of people in need in at least a fifth of all counties.

The education system and infrastructure in South Sudan are fragile. Some 60 per cent of primary and secondary schools and classrooms are either partially or completely damaged.[94] Insecurity has been the major cause behind school closure in recent years, with 20 per cent of schools non-functional.[95] In some parts of the country, three in four children are out of school. Only 6.5 per cent of at-risk children can access psychosocial support and other child protection services.

Displaced people face specific challenges with their living conditions. IDPs and refugees living in overcrowded conditions in camps and spontaneous settlements frequently lack safe shelter and essential household items. They may face additional challenges in accessing basic services due to their distance from the services or lack of documentation. IDP families have to borrow cumulative amounts of money to meet their basic needs due to lack of service provision. This could lead families to adapt negative coping mechanisms, and expose women, children, older persons, youth and persons with disabilities to increased protection risks.

Households face both social, legal and physical constraints when attempting to return. Lack of identity documentation and land registration documents creates difficulties for IDP and refugee returnees to claim their housing, land and property, when trying to return to their places of origin or habitual concern. Victims of land grabbing and housing occupation, especially vulnerable persons such as women, child- and elderly-headed households, and persons with disabilities, are at risk of violence, GBV, exploitation, threats and harassment by those occupying their assets, which may include persons associated with armed groups. A survey conducted in four locations across South Sudan found that only 31 per cent of women victims of land grabbing were able to even attempt to negotiate with the occupier, compared to 58 per cent of men in a similar situation. This demonstrates women's increased vulnerability in trying to advocate for their rights with perpetrators. Overall, only 8 per cent of the total surveyed population who had experienced land grabbing were able to successfully negotiate directly with the occupier.[96] The potential for seeking recourse through the justice system for this, both through government and customary structures, is limited, and disproportionately affects women. Physically, mines and explosive remnants of war also inhibit people from returning to their areas of origin, especially in the Equatorias.

In a study conducted on violence against women and girls in three geographical areas of South Sudan that have known war and conflict for many years, the findings indicated that violence against women and girls is pervasive in these conflict zones, with up to 65 per cent of women and girls experiencing physical and/or sexual violence in their lifetime. The research results showed that up to 33 per cent of women in these areas experienced sexual violence from a non-partner and many of the incidents were directly related to a raid, displacement or abduction.[97]

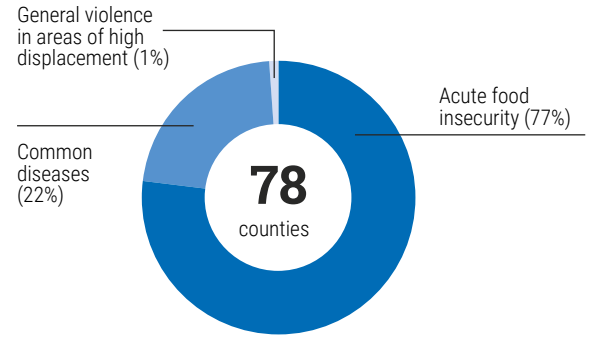
Despite the peace deal and ceasefire, continued localized violence and perceived insecurity has been restricting mobility and the movement of populations, which limits access to food, water, life-saving goods and services, and livelihoods. In South Sudan, mobility is a resource and a key coping strategy, so this would be a major impact of the crisis on the people.

The graphics on page 20 present which indicators of need are determining the number of people facing problems related to their living standards across the 78 counties, for people who have not been displaced but are otherwise affected by the crisis, and for IDPs. WASH-related needs are the driving factor in most locations: specifically, access to an improved water source and to WASH-related items such as soap. Access to services, particularly child protection, is a determining cause of needs for both population groups.

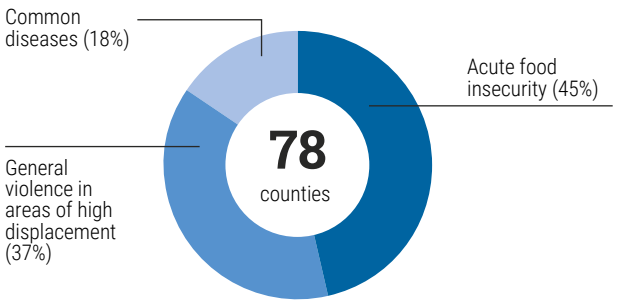
Most Common Needs for IDPs and Non-displaced People

The below graphs draw on the intersectoral indicators selected for the HNO analysis and present the most common well-being and living standard related needs for two of the four population groups used for the HNO analysis: non-displaced and host communities, and IDPs. They show what is the single most prevalent need per county for each population group .

Main well-being consequence for non-displaced per county

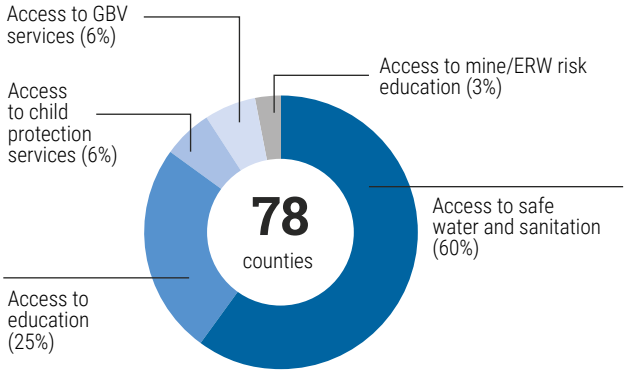


Main well-being consequence for IDPs per county

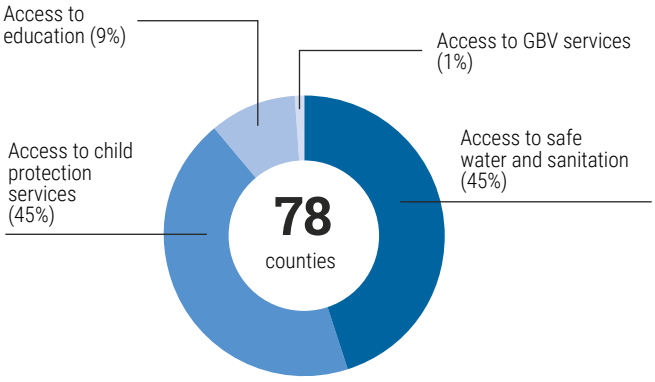


Regarding well-being consequences, the graphs reveal that acute food insecurity is the most common explanation for the number of people in need for both IDPs and non-displaced people. In 77 per cent of the counties (60 counties), acute food insecurity is the most common need for the non-displaced, while the same is true for IDPs in 45 per cent of South Sudan's counties (35 counties). This can be explained by drivers of food insecurity–explained earlier in the HNO–affecting most people, indifferent of their displacement status. According to the data provided for the analysis, IDPs face more violence than host community members. While general violence was the most common need for the non-displaced in only one county, it was the case for IDPs in 37 per cent of the counties (29 counties).

Main living standards consequence for non-displaced per county



Main living standards consequence for IDPs per county



When it comes to living standards, the two groups share a common problem: poor access to safe water, hygiene and sanitation. For the non-displaced, poor access to WASH services explains the high numbers of people in need in 60 per cent of counties (47 counties), while the same applies for IDPs in 45 per cent of the counties (35 counties). As with well-being consequences, IDPs have higher protection-related living standard needs. Poor access to child protection services explains the number of IDPs in need in 45 per cent of counties (34 counties). Although the availability of child protection services is low for everyone in South Sudan, the analysis suggests that IDP children are more in need of such services than non-displaced boys and girls.

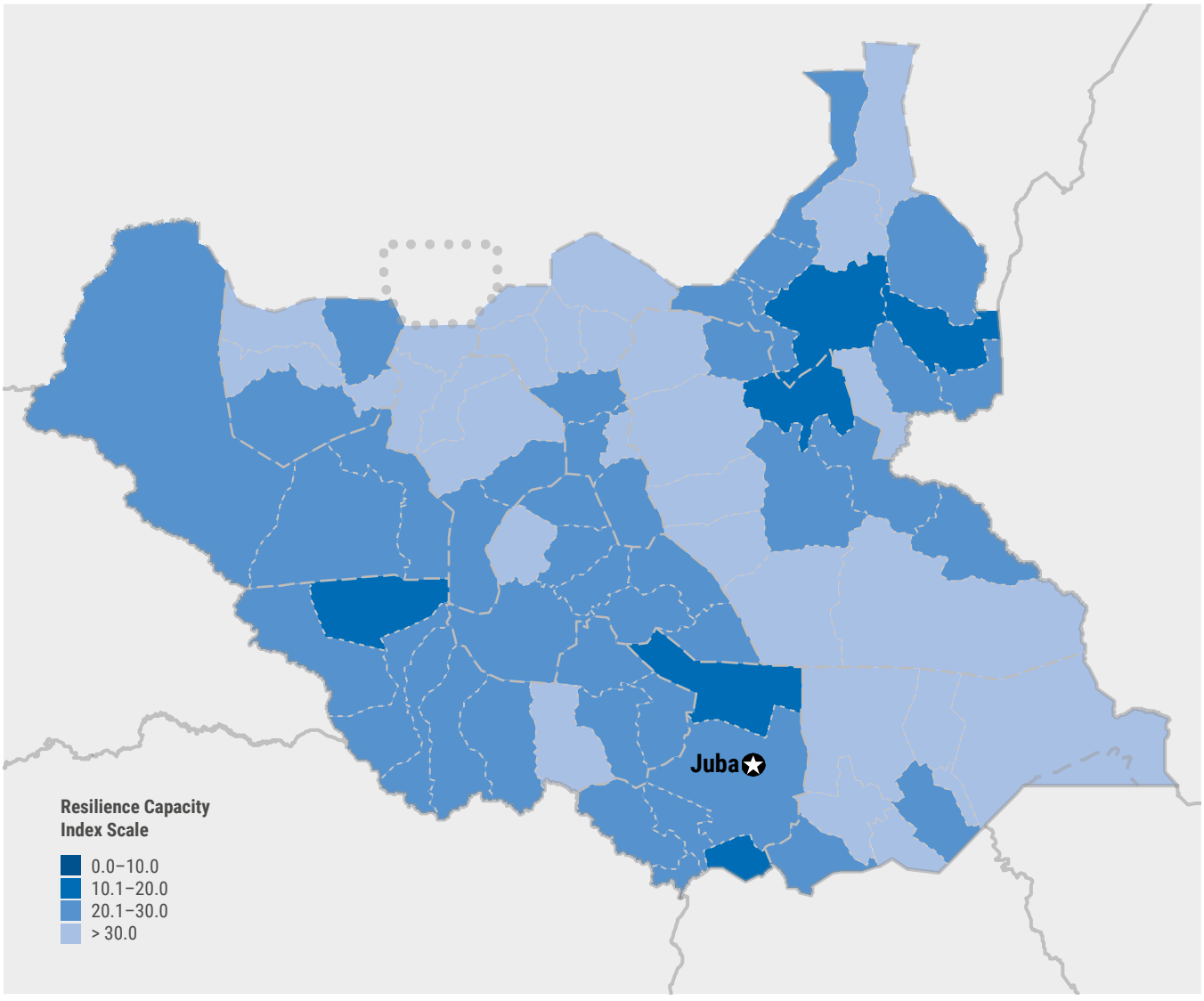
Resilience and recovery

South Sudanese people's resilience continues to be tested by multiple humanitarian crises. A Resilience Index Measurement and Analysis methodology was applied in the country in 2019 to understand how South Sudanese households cope with shocks and stressors. Access to assets and adaptive capacity are the key drivers of household resilience, followed by social safety nets and access to basic services.[98]

While the analysis shows that households' asset holdings and adaptive capacities are the main drivers of resilience, the counties with the least resilience capacities are characterized by relatively low household and productive assets holdings, low numbers of livestock and relatively low access to both formal and informal transfers. According to the Resilience Capacity Index, Nyirol, Kajo-Keji, Nagero, Terekeka, Baliet and Longochuk counties have the lowest resilience capacities. Humanitarian needs are high in these counties: in Nyirol, 80 per cent of the county population is in need; in Longochuk, that is the case for 75 per cent of the population; and in Baliet, 65 per cent of the county population are in need. Terekeka, Kajo-Keji and Nagero have 55 per cent, 54 per cent and 44 per cent of county populations in need respectively. On the other extreme, Mayom, Kapoeta South, Renk, Pariang, Kapoeta North, Aweil West, Gogrial East and Gogrial West counties have the highest resilience capacities. Even in these counties, however, humanitarian needs are relatively high, ranging from 50 per cent of the Mayom population in need to 75 per cent of the Kapoeta North population in need.

Access to safe and improved water sources, assets holding, livestock ownership, income diversification, access to various trainings, formal and informal transfers, and participation in social groups are important for resilience in South Sudan. The most prevalent shocks experienced by the households, such as unusually high food prices, irregular rains, prolonged dry spells, reduce income for the household members, and insecurity or violence, have a negative and statistically significant effect on resilience. Further analysis is still ongoing to provide more insights

Resilience Capacity Index map

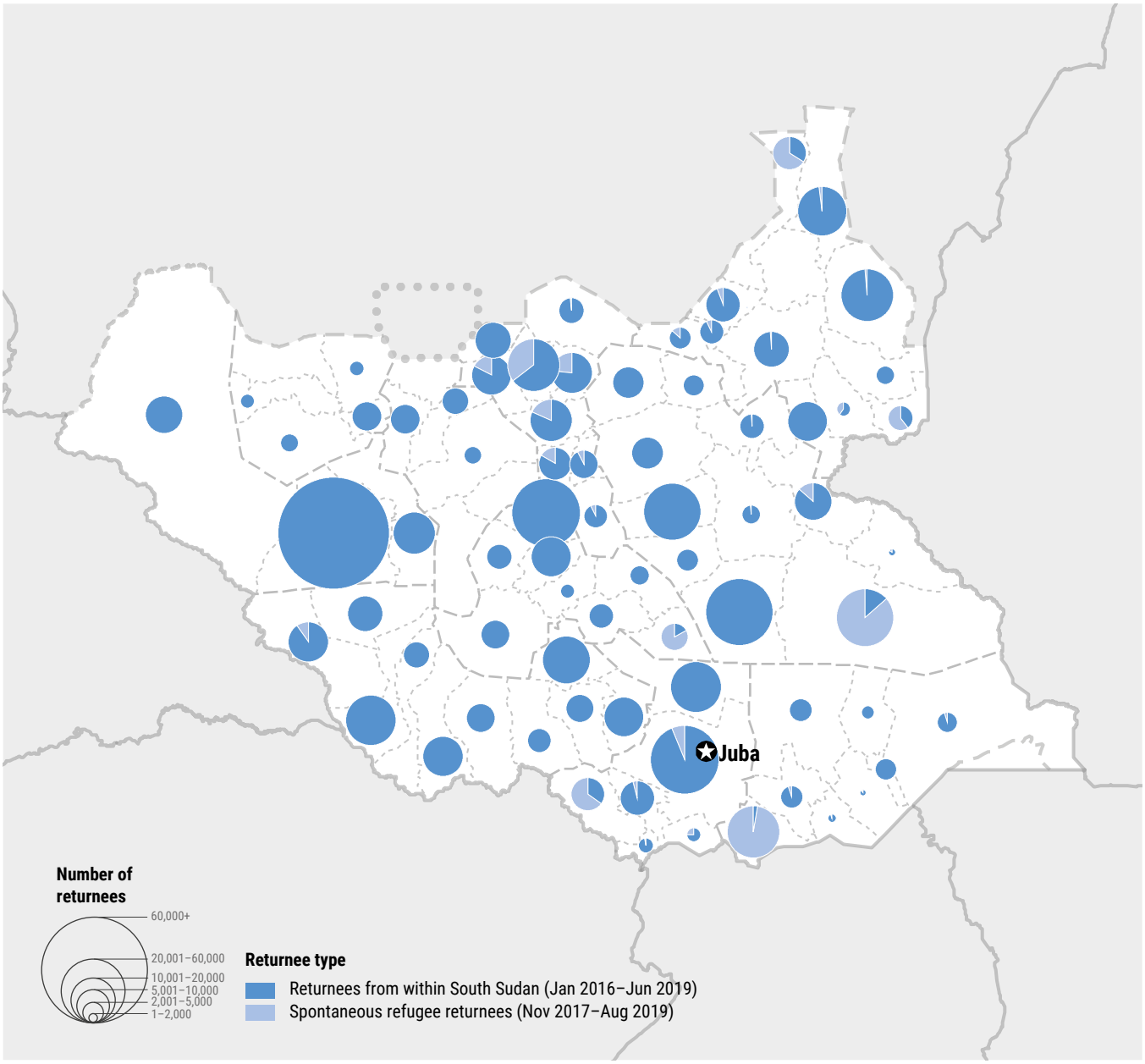


on the state of the various aspects of resilience and the extent to which households with low resilience capacity face well-being or living standards consequences.

Returnees' and their host communities' resilience is tested in the current context, especially in areas that could receive high numbers of spontaneous returnees. This is the case particularly when access to basic services, such as health, education or safe drinking water, is already extremely stretched before the arrival of returnee populations. Returns will create more pressure on the existing services and infrastructure, increasing demands on temporary learning spaces, health and nutrition services, and water and sanitation facilities.

Other factors contributing to communities' ability to recover from crisis in areas of return include competition over limited food and livelihood opportunities, people's ability to recover assets such as livestock, and problems related to housing, land and property. Most IDPs are displaced within their counties of origin and some may therefore find it easier to resume their lives after return, while others may face inhibiting factors, for example, illegal occupation of property or their homes being located in areas of internal boundary disputes. Returnees from within South Sudan may have also been subjected to protracted or multiple displacements over the course of the conflict and therefore have extensive challenges to their recovery and protection when attempting to return.

Spontaneous refugee returnees and returnees from within South Sudan



JONGLEI, SOUTH SUDAN

An elderly woman wades through flood water as she brings back collected firewood to her makeshift home, now displaced due to flooding in Pibor, Jonglei. ©UNICEF South Sudan

Spontaneous refugee returnees can face additional challenges when returning to their places of origin, due to their prolonged absence from their homesteads. Women-, elderly- and child-headed households, as well as persons with disabilities, in IDP and spontaneous refugee returnee communities are in many cases especially vulnerable and less resilient.

Although we cannot necessarily assume that people would return to their place of origin, the fact that most people have remained close by to their area of origin provides an indication for planning purposes of where most displaced people are located, where there might be most continued pressure on host communities, and where access to services may be most needed.

Perceptions of affected people

Research piloted in 2019 in South Sudan captures community perceptions of humanitarian needs and service delivery in relation to key areas of accountability to affected populations (AAP), including awareness, relevance and fairness of humanitarian interventions, as well as respect of affected people.[99]

Approximately 23 per cent of assessed settlements reported food as their most-needed form of assistance, followed by health (16 per cent), WASH (12 per cent), non-food items (NFIs) (11 per cent) and education (8 per cent).[100] Among settlements that reported receiving humanitarian assistance in the six months prior to the assessment, some 54 per cent indicated that the assistance received was of the type most relevant to their needs.

While this presents an overview of the population's key priorities, the needs of affected communities vary by location. In Lainya County where no humanitarian partners on the ground supported education activities, almost half of the affected population–comprised of IDPs, spontaneous refugee returnees and the host community–identified education as the key priority.[101] In an assessment covering over 60 counties, all assessed settlements without access to assistance reported that they were in need. Of the settlements reporting dissatisfaction with assistance received, 30 per cent stated insufficiency, 23 per cent reported that the assistance period was too short and 10 per cent reported that the physical distance to the distribution point was too far.

Community engagement is also used to specify sector-specific priorities among affected communities. Through 1,289 meetings between communities and health committees in 2019, the Health Cluster identified three key needs for in-kind assistance.[102] The population called for the consistent provision of drugs and medical supplies; free access to blood tests, drugs and medical supplies; and a proper emergency referral mechanism with functional ambulance, driver and fuel. Communities noted that the emergency system would be particularly helpful for pregnant women and individuals with serious medical conditions.

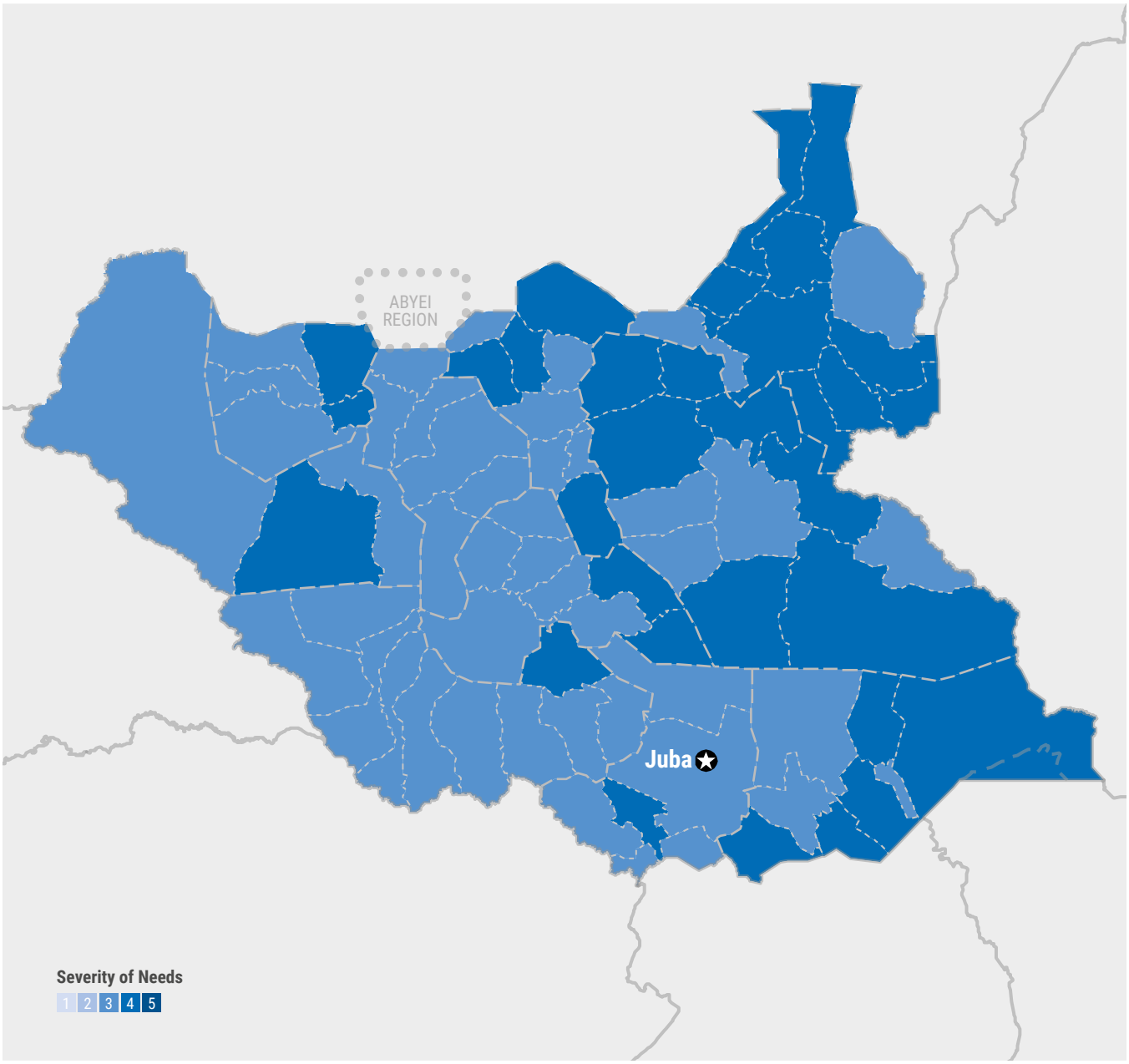
1.5

Intersectoral Severity of Needs

The map below presents the intersectoral severity of needs by administrative area (county). Of the 78 counties in South Sudan, 45 are in extreme need (level 4) and 33 are in severe need (level 3). Some 30 per cent of the counties in extreme need are in Upper Nile, followed by 21 per cent in Jonglei and 15 per cent in Eastern Equatoria. Other parts of the country also have counties in extreme need.

Out of the 33 counties at severity level 4 in 2020, 23 counties were also at level 4 in 2019, per the 2019 HNO analysis. The 23 counties that appeared in level 4 in 2019 were Budi, Kapoeta East and Kapoeta North in Eastern Equatoria; Ayod, Bor South, Canal/Pigi, Fangak, Nyirol and Pibor in Jonglei; Awerial and Yirol East in Lakes; Aweil East and Aweil South in Northern Bahr el Ghazal; Mayom, Panyijiar, Pariang and Rubkona in Unity; Baliet, Luakpiny/Nasir,

Intersectoral severity of needs



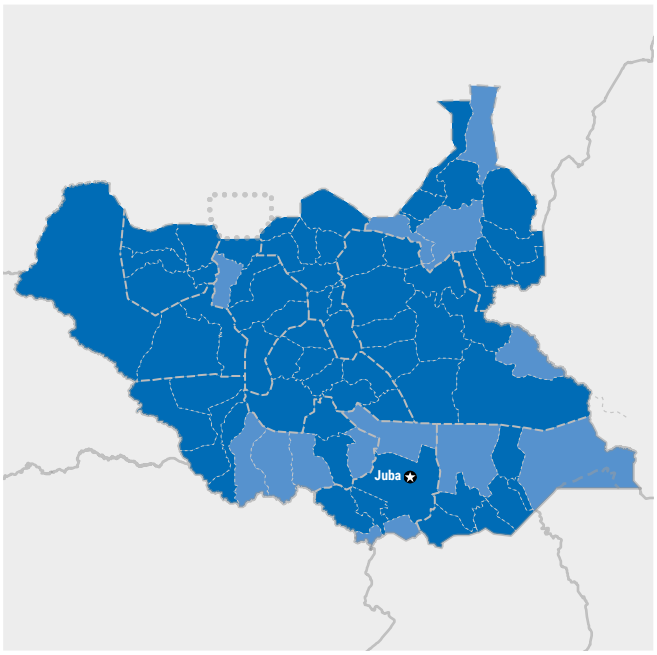
Maiwut, Malakal and Ulang in Upper Nile; and Wau in Western Bahr el Ghazal. Of the remaining 10 counties, Lainya in Central Equatoria was at level 2 in 2019 but now at level 4 in 2020, while the 9 counties were at severity level 3 in 2019 but now in level 4. These are Ikotos and Magwi in Eastern Equatoria; Akobo in Jonglei; Fashoda, Longochuk, Manyo, Melut and Renk in Upper Nile; and Mvolo in Western Equatoria.

While the intersectoral severity is limited to extreme and severe, some counties are facing catastrophic needs (level 5) related to specific intersectoral indicators, such as GAM rates or access to an improved water source.

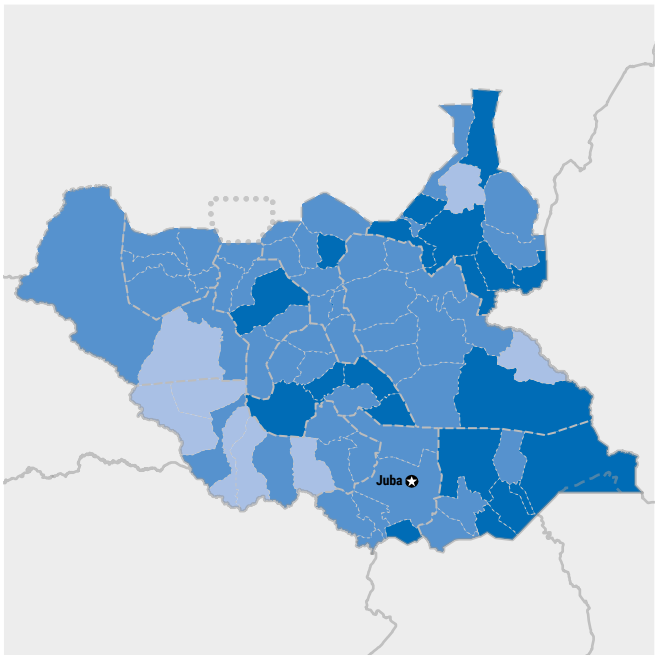
According to the severity analysis conducted for the two humanitarian consequences and per the two severity maps presented here, needs related to physical and mental well-being are generally more severe than those related to living standards. This can be explained by well-being issues having a higher degree of time-criticality to address, as they represent needs that have progressed beyond a deprivation of a good or a service—measured in the quality of living standards—to have a measurable effect on a person's condition. In other words, lack of access to health care, poor sanitation, food shortages and lack of safe shelter can lead to increased morbidity, case fatality rates for common diseases, growing acute food insecurity, or urgent protection risks. In addition, cumulative periods of deprivation of basic goods, services, livelihoods and other aspects of living standards have led to a high degree of severity of physical and mental well-being.

Some exceptions exist, however, with few counties presenting more severe needs related to living standards than well-being, particularly in Upper Nile and Eastern Equatoria. More than 80 per cent of counties are in extreme severity in relation to well-being, while a lower proportion, approximately 25 per cent of counties, face extreme living standards related needs. Whereas well-being needs are limited to severe and extreme, there is a broader range of severity of needs related to living standards, with10 per cent of all counties in stress (level 2), mainly in Western Equatoria.

Severity of needs: Well-being



Severity of needs: Living standards



1.6

People in Need

A total of 7.5 million women, men, girls and boys are expected to be in need in 2020, across all South Sudan's 78 counties. This is a slight increase in absolute numbers from the 7.1 million people estimated to be in need in the 2019 Humanitarian Needs Overview and the 7.2 million presented in the Periodic Monitoring Report after the first quarter of 2019. Accounting for an increase in the population baseline from 11.4 million in 2019 to 11.7 million in 2020, however, the proportion of South Sudanese people in need remains two thirds.

People in need by county

COUNTY	TOTAL POPULATION *Thousands*	PEOPLE IN NEED *Thousands*	COUNTY SEVERITY	BY GENDER *Female / male (%)*
CENTRAL EQUATORIA				
Juba	499.5	**243.7**	3	52 / 48
Kajo-keji	221.9	**119.3**	3	47 / 53
Lainya	110.3	**65.3**	4	47 / 53
Morobo	104.1	**81.2**	3	49 / 51
Terekeka	246.5	**136.6**	3	52 / 48
Yei	271.2	**224.1**	3	53 / 47
EASTERN EQUATORIA				
Budi	102.0	**79.4**	4	53 / 47
Ikotos	161.0	**47.6**	4	53 / 47
Kapoeta East	152.4	**112.8**	4	48 / 52
Kapoeta North	96.0	**114.3**	4	48 / 52
Kapoeta South	149.8	**64.4**	3	50 / 50
Lafon	248.1	**67.4**	3	54 / 46
Magwi	58.6	**83.8**	4	49 / 51
Torit	225.4	**36.9**	3	54 / 46
JONGLEI				
Akobo	327.6	**170.7**	4	51 / 49
Ayod	99.8	**129.7**	4	50 / 50
Bor South	190.0	**196.9**	4	49 / 51
Canal/Pigi	193.1	**85.3**	4	51 / 49
Duk	132.3	**142.6**	3	50 / 50
Fangak	204.9	**142.1**	4	47 / 53
Nyirol	75.2	**105.9**	4	50 / 50
Pibor	119.0	**173.4**	4	52 / 48
Pochalla	182.0	**20.9**	3	56 / 44
Twic East	132.9	**83.3**	3	55 / 45
Uror	173.7	**89.3**	3	52 / 48
LAKES				
Awerial	167.5	**71.8**	4	51 / 49
Cueibet	70.2	**104.2**	3	47 / 53
Rumbek Centre	82.4	**111.7**	3	49 / 51
Rumbek East	150.2	**92.2**	3	51 / 49
Rumbek North	157.7	**42.1**	3	52 / 48
Wulu	79.1	**37.1**	3	48 / 52
Yirol East	335.2	**120.2**	4	50 / 50
Yirol West	158.9	**86.7**	3	50 / 50

Some 5.2 million of the people in need are host community members or people who are otherwise affected but not displaced, while 1.4 million are IDPs, some 560,000 are IDP and refugee returnees, and about 300,000 are refugees in South Sudan. Within these population groups, some of the vulnerable groups that may have specific needs include children, women at risk, the elderly, people with disabilities, single-headed household members, and the extremely poor.

People in need are present in all the 78 counties of South Sudan. The table below presents the 7.5 million people by administrative area (county), sex, age and disability, as well as by the four population groups selected for the analysis.

BY AGE *Children / adults / elderly (%)*	**WITH PHYSICAL DISABILITY (%)**	**HOST COMMUNITIES AND NON-DISPLACED**	**IDPS**	**RETURNEES**	**REFUGEES IN SOUTH SUDAN**
48 / 47 / 4	19%	154.2	56.8	27.1	5.6
16 / 65 / 19	8%	107.3	9.5	2.5	–
42 / 52 / 6	14%	43.8	17.0	4.5	–
53 / 42 / 5	13%	76.6	2.6	1.7	0.3
52 / 42 / 6	6%	92.5	30.8	13.3	–
55 / 37 / 8	18%	179.1	26.3	8.4	10.3
56 / 38 / 6	8%	77.2	2.0	0.2	–
54 / 39 / 8	6%	45.4	1.6	0.7	–
56 / 40 / 4	10%	100.6	8.9	3.3	–
60 / 33 / 7	11%	94.5	18.2	1.6	–
62 / 37 / 1	5%	54.2	5.8	4.4	–
59 / 38 / 3	13%	60.6	5.0	1.8	–
53 / 39 / 8	18%	41.8	14.0	27.9	–
56 / 41 / 4	5%	26.3	4.2	6.4	–
51 / 39 / 11	13%	130.5	23.7	16.6	–
50 / 42 / 8	24%	103.2	2–	6.6	–
54 / 40 / 6	10%	146.1	23.9	26.9	–
45 / 45 / 10	34%	76.8	6.1	2.3	–
54 / 40 / 6	15%	80.5	38.5	23.7	–
58 / 34 / 8	23%	105.2	28.8	8.1	–
58 / 35 / 8	3%	72.8	29.1	4.0	–
55 / 37 / 9	24%	119.5	19.9	34.0	–
61 / 38 / 1	3%	16.8	1.6	0.4	2.0
48 / 44 / 8	11%	72.1	3.1	8.1	–
59 / 38 / 3	2%	78.2	9.1	2.0	–
59 / 37 / 4	6%	3.9	61.3	6.6	–
55 / 34 / 11	9%	85.8	13.0	5.4	–
58 / 39 / 3	0%	97.7	5.5	8.5	–
56 / 40 / 4	7%	87.0	4.2	1.0	–
61 / 32 / 7	2%	25.8	7.0	9.4	–
55 / 39 / 6	8%	24.9	8.9	3.3	–
53 / 40 / 7	6%	86.9	27.8	5.4	–
54 / 38 / 8	15%	76.5	8.4	1.8	–

COUNTY	TOTAL POPULATION *Thousands*	PEOPLE IN NEED *Thousands*	COUNTY SEVERITY	BY GENDER *Female / male (%)*
NORTHERN BAHR EL GHAZAL				
Aweil Centre	235.3	**63.9**	3	50 / 50
Aweil East	54.2	**201.1**	4	53 / 47
Aweil North	66.3	**87.4**	3	53 / 47
Aweil South	105.5	**83.1**	4	52 / 48
Aweil West	59.1	**141.2**	3	51 / 49
UNITY				
Abiemnhom	151.7	**27.1**	3	50 / 50
Guit	109.5	**56.9**	3	51 / 49
Koch	127.5	**71.1**	3	55 / 45
Leer	319.7	**35.8**	3	53 / 47
Mayendit	54.1	**51.2**	3	49 / 51
Mayom	73.5	**76.4**	4	51 / 49
Panyijiar	57.3	**82.4**	4	50 / 50
Pariang	260.7	**203.9**	4	50 / 50
Rubkona	55.2	**211.1**	4	51 / 49
UPPER NILE				
Baliet	183.5	**35.3**	4	46 / 54
Fashoda	76.3	**54.8**	4	53 / 47
Longochuk	125.5	**43.0**	4	51 / 49
Luakpiny/Nasir	64.9	**182.5**	4	53 / 47
Maban	188.6	**199.5**	3	50 / 50
Maiwut	115.6	**96.6**	4	47 / 53
Malakal	0.0	**121.5**	4	40 / 60
Manyo	127.0	**52.1**	4	49 / 51
Melut	314.4	**69.0**	4	50 / 50
Panyikang	146.9	**39.6**	3	42 / 58
Renk	262.3	**94.3**	4	47 / 53
Ulang	109.3	**94.3**	4	52 / 48
WARRAP				
Gogrial East	58.2	**82.5**	3	49 / 51
Gogrial West	314.9	**172.9**	3	48 / 52
Tonj East	119.5	**88.1**	3	45 / 55
Tonj North	62.9	**131.2**	3	51 / 49
Tonj South	92.2	**90.2**	3	48 / 52
Twic	95.9	**170.7**	3	51 / 49
WESTERN BAHR EL GHAZAL				
Jur River	71.6	**191.2**	3	53 / 47
Raga	22.1	**40.7**	3	49 / 51
Wau	81.1	**204.7**	4	53 / 47
WESTERN EQUATORIA				
Ezo	159.0	**38.8**	3	53 / 47
Ibba	62.88	**22.0**	3	46 / 54
Maridi	92.20	**24.1**	3	54 / 46
Mundri East	95.87	**43.1**	3	47 / 53
Mundri West	46.76	**21.0**	3	48 / 52
Mvolo	71.59	**21.5**	4	49 / 51
Nagero	22.07	**9.8**	3	52 / 48
Nzara	81.08	**24.3**	3	52 / 48
Tambura	110.43	**52.9**	3	53 / 48
Yambio	158.96	**68.5**	3	49 / 51
TOTAL	**11.7**	**7.5**		

BY AGE *Children / adults / elderly (%)*	WITH PHYSICAL DISABILITY (%)	HOST COMMUNITIES AND NON-DISPLACED	IDPS	RETURNEES	REFUGEES IN SOUTH SUDAN
59 / 32 / 9	9%	51.1	9.4	3.5	–
59 / 34 / 7	5%	190.8	10.1	0.3	–
59 / 34 / 7	15%	85.6	1.8	–	–
54 / 42 / 3	17%	71.3	8.1	3.6	–
60 / 35 / 4	11%	133.3	5.0	2.9	–
53 / 43 / 4	2%	16.5	4.0	6.6	–
59 / 30 / 10	8%	33.4	3.7	19.8	–
53 / 34 / 13	14%	54.9	4.5	11.6	–
52 / 42 / 5	8%	23.0	11.2	1.6	–
55 / 35 / 9	36%	30.4	15.7	5.1	–
57 / 27 / 16	21%	57.5	10.7	8.1	–
58 / 38 / 4	5%	28.8	49.6	4.1	–
56 / 37 / 8	32%	45.3	31.5	8.2	118.9
53 / 38 / 9	9%	95.2	95.4	20.5	–
61 / 29 / 10	24%	21.5	5.9	7.8	–
55 / 30 / 16	31%	23.6	20.8	10.3	–
55 / 39 / 6	8%	39.7	1.6	1.6	–
58 / 35 / 7	5%	117.7	59.6	5.2	–
58 / 36 / 6	4%	37.1	11.4	0.7	150.3
55 / 38 / 8	7%	59.0	31.9	5.7	–
23 / 56 / 21	14%	81.8	36.7	3.0	–
42 / 51 / 7	15%	33.5	8.6	9.9	–
62 / 34 / 4	17%	43.6	25.3	0.1	–
24 / 49 / 27	26%	29.4	8.4	1.8	–
58 / 35 / 7	5%	66.7	18.0	9.6	–
51 / 40 / 8	12%	64.2	27.9	2.3	–
56 / 36 / 8	5%	70.6	10.4	1.5	–
56 / 38 / 7	6%	157.2	13.2	2.5	–
57 / 36 / 7	5%	85.7	2.5	–	–
51 / 37 / 12	9%	97.8	32.2	1.2	–
54 / 39 / 7	8%	89.0	1.2	–	–
57 / 36 / 7	16%	150.3	20.3	–	–
59 / 36 / 5	5%	122.2	43.9	25.1	–
56 / 39 / 5	15%	26.3	12.5	1.9	–
57 / 41 / 2	12%	86.1	70.1	48.5	–
50 / 41 / 9	24%	20.1	4.6	11.2	2.9
53 / 43 / 4	11%	17.1	2.1	2.8	–
51 / 43 / 6	14%	11.4	11.6	0.9	0.2
47 / 46 / 7	27%	17.7	19.5	5.9	–
57 / 40 / 4	15%	11.4	5.3	4.3	–
56 / 37 / 7	40%	12.8	3.1	5.6	–
44 / 53 / 3	6%	5.3	1.1	3.4	–
54 / 40 / 6	19%	19.0	4.5	0.8	–
52 / 44 / 4	13%	41.1	0.8	9.2	1.8
52 / 45 / 3	8%	45.2	13.2	5.2	4.9
	13%	**5.3**	**1.3**	**561.8**	**297.2**

Part 2

Risk Analysis and Monitoring of Situation and Needs

CENTRAL EQUATORIA, SOUTH SUDAN

Roda Altaib, 12 years old, practices hand-washing during an awareness event in Juba, Central Equatoria. Access to hygiene and sanitation is limited, especially for women and girls who also face protection risks. ©UNICEF South Sudan

2.1

Risk Analysis and Projected Evolution of Needs

Risk of Ebola virus disease

As of October 2019, the DRC is still dealing with the world's second-largest outbreak of Ebola, with more than 3,200 Ebola virus disease (EVD) cases reported, of which 2,152 died (case fatality ratio 66.6 per cent), since the beginning of the outbreak in August 2018. On recommendation by the International Health Regulations Emergency Committee, World Health Organization declared the Ebola outbreak in the DRC a Public Health Emergency of International Concern in July 2019. Neighbouring Uganda has also seen isolated Ebola cases in June 2019, but no outbreak has been confirmed in the country.

South Sudan shares borders with the DRC and Uganda, with significant cross-border movement of people, goods and services. Between January and September 2019, nearly 230,0000 group surveys were conducted with arrivals to South Sudan at 25 flow monitoring points along the border with the DRC, Uganda and Central African Republic, as part of Ebola preparedness.[103] These surveys accounted for some 850,000 individual movements. Participation is voluntary and these figures should be considered only as indications of the flow. Proximity to the DRC and Uganda combined with a weak national health system means that the risk of Ebola for South Sudan is assessed as very high.

Ebola prevention and preparedness work in South Sudan since the onset of the outbreak in the DRC in August 2018 has been organized under two successive National Ebola Preparedness Plans. Activities are focused in seven highest risk locations along the borders with the DRC and Uganda with an estimated 2.9 million inhabitants. Amongst other achievements, 80 verified alerts have been investigated, 3.4 million screenings have been conducted at 32 active border points of entry, almost 3,000 front line health workers have been vaccinated, four isolation units and six holding units have been established,118 prioritized frontline health facilities supported with essential WASH services, 13 burial teams trained on safe burials and 2,277 key community influencers engaged in EVD prevention and response. They have mobilized around 1 million people through household and community meetings and broadcasted 23,300 radio spots with public messaging, and generated evidence through two EVD research studies on communities' knowledge, attitudes and practices. During the second half of 2019, preparedness efforts continued to focus on three key areas: strengthening coordination at sub-national levels, ensuring early detection and reporting of suspected Ebola cases, and effective and efficient response to any confirmed cases. Key activities include risk communication, community engagement and social mobilization, screening at border points of entry, improvement of surveillance capabilities at community and health facility levels, sustaining WASH and infection prevention and control services at existing isolation units, improvement of WASH infection prevention and control at health facility levels and prioritized public places (schools, markets and churches/mosques) and the activation and coordination of a 72-hour rapid response plan and case management of a confirmed case at the state and national level.

Impacts of the 2019 floods emergency

At the time of releasing the HNO, abnormally heavy seasonal flooding had been devastating large areas of South Sudan since July 2019, with an estimated 908,000 people affected. At least 620,000 people were estimated to need immediate assistance. These included IDPs, returnees, refugees and their host communities across some 30 counties in Jonglei, Upper Nile, Warrap, Northern Bahr el Ghazal, Unity, Lakes, and Central and Eastern Equatoria. The rains were likely to continue until December 2019 and put more people at risk. The Government of South Sudan declared a state of emergency in the flooded areas on 27 October 2019.

The floods affected areas already experiencing high levels of vulnerability due to the legacy of years of conflict and access constraints, placing affected people at a greater humanitarian risk. Across the flooded counties, more than 3 million people needed assistance even before the rains. More than 60 per cent of the flood-affected counties were classified as facing extreme levels of acute malnutrition in 2019. The flooding submerged entire communities and rendered basic services and markets destroyed or inaccessible. An estimated 42 nutrition centres suspended their services. Countless health facilities and schools were filled with water. People became extremely vulnerable to malaria and water-borne disease outbreaks, such as cholera, as a result of the flooding. Displaced people were especially at risk, being exposed to the elements without shelter or household items such as mosquito nets. Access to hygiene and sanitation is limited, especially for women and girls who also face additional protection risks.

The impacts of the 2019 floods emergency on needs through 2020 were being analysed at the time of releasing the HNO. Preliminary forecasts show that large areas of cultivated land have been damaged due to the flooding and waterlogging, which is expected to significantly reduce food production in the affected areas. Livestock health has also been affected. On average, vulnerable households in South Sudan need support to fill the hunger gap–defined as the period when households run out of stored food and the next harvest–typically between March and August. The impact of the flooding could result in a lean season starting as early as January 2020. The increased food production gap in heavily flooded areas could increase needs throughout the year and thus require more food commodities to be delivered, just-in-time before the rains begin again after the first quarter of 2020. Additionally, as the scale and extent of the flooding has critically impacted physical access across the country, and the water is likely to take months to disperse, the window for prepositioning of food commodities throughout the country will drastically shorten.

Projected evolution of needs

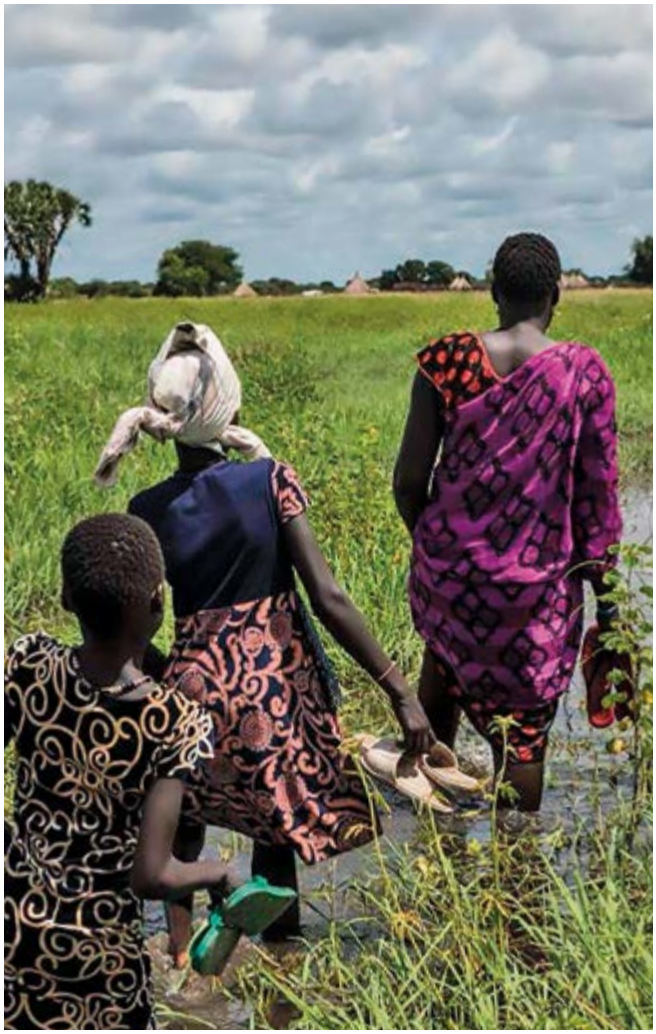
In addition to the abovementioned factors related to the risk of Ebola and the effects of the 2019 floods, it is expected that 2020 will be characterized by a level of fluidity in the political and security environment, with uncertain impacts on the evolution of humanitarian needs. A key question will be the likely volume of returns, both internally and from countries of asylum. Large return flows would put additional pressures on people's well-being, living standards and resilience capacity, especially in locations where a high proportion of the population is already in severe or extreme need. Returns to areas of high needs could add additional strain on the peaceful coexistence of displaced, non-displaced and returnee populations, depending on factors ranging from resource availability to land use, and from basic service provision to the extent of shared customary laws. Assuming that authorities' provision of basic services is not likely to increase drastically anywhere in the country in 2020, humanitarian organizations will face high expectations to meet people's needs, in order to avert a situation where people fall deeper into crisis and are unable to recover from shocks and longer-term stresses.

Seasonality will affect needs through 2020. If rainfall patterns are normal, there will be a seasonal increase in morbidity, especially from water- and vector-borne disease, increased GAM prevalence, and limited physical access. At the same time, people's seasonal access to wild foods and livestock products would increase. If rainfall is above average, these trends can be expected to be exacerbated, with likely decrease in livestock products due to increased livestock diseases. If the rains fail, a decrease in morbidity related to water- and vector-borne diseases would be likely. However, the level of needs would remain similar as wild foods would not be seasonally available; market prices would remain high due to likely increases in demand linked to unavailability of seasonal food sources; and GAM would likely still remain at high levels as the reduction in morbidity would likely be countered by an even higher seasonal decrease in kilocalorie consumption. More households would also migrate to cattle camps which are further away and typically have lower access to services, especially those related to shelter and WASH.

Additional needs projections are detailed in Part 3: Sectoral Analysis.

Index for Risk Management

According to the 2020 Index for Risk Management (INFORM) which identifies the countries at a high risk of humanitarian crisis, South Sudan is a country at a very high risk (INFORM Global Risk Index–8.1 out of 10), standing at third place among 191 countries.[104] The INFORM Global Risk Index model is based on risk concepts and envisages three dimensions of risk: hazards and exposure, vulnerability and lack of coping capacity. Low adult literacy rates, significantly poor access to water, sanitation and health care services, and high maternal and child mortality ratios contribute to the country's lack of coping capacity, at 9.5 on a scale of 10. Vulnerability is also high at 8.8 out of 10, while the score for hazard and exposure is 6.4.



UPPER NILE, SOUTH SUDAN

Women and child walk through flood water to access basic services in Maban, Upper Nile. ©WFP South Sudan

Timeline of Events
January-December 2019

JANUARY–APRIL 2019

Inter-communal violence
Inter-communal violence in Akobo, Pibor, Abiemnhom, Leer, Magwi, Mayom, Panyijiar, Rubkona, Tonj North, Tonj South and Wau counties displaced thousands of civilians.

FEBRUARY 2019

Access constraint
Humanitarian organizations were unable to reach about 23,000 displaced people around Yei, Central Equatoria due to fighting and government security operations.

MARCH 2019

Increased needs
Review of needs found 7.2 million people in need of assistance or protection, up from 7.1 million estimated in the 2019 Humanitarian Needs Overview.

JANUARY–JUNE 2019

Malaria outbreak
Malaria cases in the first six months exceeded the number of cases recorded between 2013 and 2017 and accounted for 68 per cent of illness and 72 per cent of deaths reported across the country.

FEBRUARY–JUNE 2019

Displacement
Between February and June 2019, an estimated 28,000 people fled their villages in Jur River County to Wau town and other locations, including Tonj in Warrap.

JULY 2019

Refugee returns
Nearly 26,000 spontaneous refugee returnees, mainly women and children, arrived in Unity and Upper Nile from Sudan due to political unrest and insecurity in the northern neighbour.

AUGUST 2019

Displacement
About 33,000 people, mainly women and children, were displaced and 10 aid workers relocated from Maiwut County due to active hostilities between armed opposition elements.

AUGUST 2019

Food insecurity
The Integrated Food Security Phase Classification analysis estimated that 6.35 million people faced cris-is levels of food insecurity or worse in August, end of lean season.

JULY–NOVEMBER 2019

Heavy flooding
Unusually heavy seasonal flooding affected nearly 1 million people in some 30 counties, and damaged homes, crops and basic service infrastructure.

2.2
Monitoring of Situation and Needs

Humanitarian organizations will monitor the humanitarian situation and needs on a regular basis. This will build on progress made in 2019, particularly the review of needs conducted after the first quarter of 2019, which resulted in a revised number of people in need and related severity of needs.

The Needs Analysis Working Group (NAWG) will continue to meet every two weeks to conduct situation and needs reviews, and identify priority locations for close monitoring and response scale-up. The NAWG will also organize three or four analysis workshops that will include analysis of current needs, as well as horizon scanning for potential changes in the needs landscape.

Once a month, OCHA will publish a Humanitarian Snapshot, with narrative and infographic analysis of the main changes in needs over the past month, such as changes in population movements, conflict and violence, food security, food prices, and key figures related to people in need. It will also continue to release regular analysis of the humanitarian access situation impacting people's ability to access assistance. OCHA will use its Digital Situation Report to publish several updates per month on the humanitarian situation and needs, often focusing on the local level or specific population groups.

Given the likely population movements in 2020, the Population Working Group will meet on a monthly basis to review trends in displacement and returns. The group will also come together four times a year to revise the number of IDPs in South Sudan, after each round of IOM's displacement tracking. Smaller fluctuations in the IDP count will not be reflected in the monthly information products, unless the situation changes radically.

After the first quarter, the Inter-Cluster Working Group (ICWG) and Information Management Working Group (IMWG) will review the number of people in need, using the intersectoral indicators used for the 2020 HNO, based on the latest information available. This will include a new data set from the Food Security and Nutrition Monitoring System (FSNMS), which will be used to inform the IPC

UPPER NILE, SOUTH SUDAN

A displaced woman takes care of a baby at a school building in Malakal town in Upper Nile. ©OCHA South Sudan

analysis for food security and acute malnutrition. The analysis will also take into consideration population movements tracked between the release of the 2020 HNO and the quarterly monitoring report, including information on new displacements, IDP and refugee returns, and other population dynamics recorded by partners including IOM and UNHCR. The table below presents the indicators tentatively agreed to monitor needs after the first quarter.

Monitoring process and indicators selected for response monitoring are outlined in the 2020 Humanitarian Response Plan.

Indicators

PHYSICAL AND MENTAL WELL-BEING

#	INDICATORS		SECTORS	SOURCE
x01	Malnutrition	Prevalence of GAM among children aged 6–59 months	Nutrition	FSNMS, SMART Surveys
x02	Diseases	Cholera hotspots	WASH	District Health Information System (DHIS) 2, EWARS
x03		% of HH with one or more members affected by self-reported water- or vector-borne disease in the two weeks prior to data collection	Health/WASH	FSNMS, EWARS
		Incidence rates for five common diseases	Health	EWARS
x04		Case fatality rate for most common diseases	Health	EWARS
x05	Violence against civilians	% of communities reporting general violence with high areas of displacement	Protection	ACLED, DTM
x06	Food insecurity	IPC Phase	FSL	FSNMS

LIVING STANDARDS

#	INDICATORS		SECTORS	SOURCE
x07	Water quality	% of HHs with access to an improved water source	WASH	FSNMS
x08	Access to WASH NFIs	% of HHs with access to WASH NFIs (unbroken jerry can/bucket with lids, every member of the HH slept under a mosquito net, access to soap)	WASH	FSNMS, DTM
x09	Access to protection services	% of at-risk women and girls with access to core GBV services	Protection	Assessments
		% of at-risk children without access to psychosocial support and other child protection services	Protection	Assessments
		% of people without access risk education in mine/explosive remnants of war affected counties	Protection	
x010	Living conditions in displacement sites	# of site populations in unmanaged sites	CCCM	IOM DTM
x011	Access to health services	PENTA 3 coverage in children <1 year old	Health	DHIS 2
		% of births unassisted by skilled attendants	Health	DHIS 2

Part 3

Sectoral Analysis

UNITY, SOUTH SUDAN

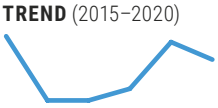
Nyapot, 16 years old, holds palm tree roots after digging them out of the ground outside her temporary shelter in Turiel Island, 3 km east of Thonyor, Unity. ©UNHCR South Sudan

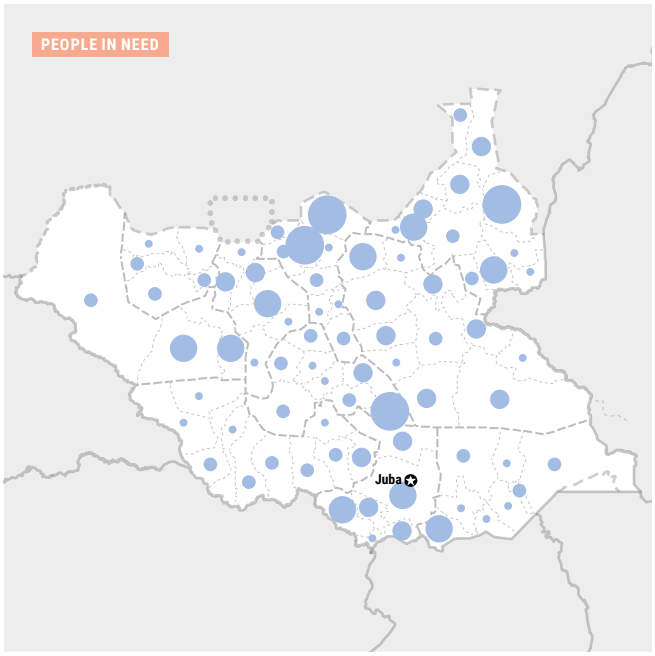
3.1 **Camp Coordination and Camp Management**

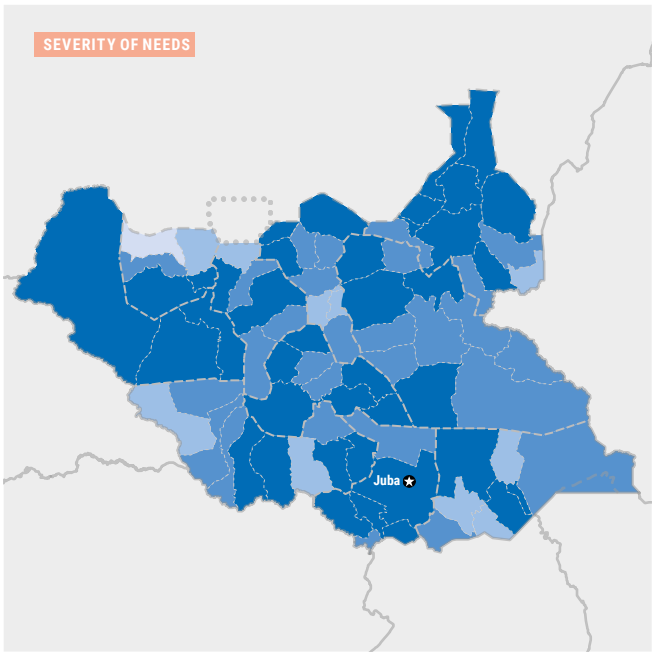
PEOPLE IN NEED

1.6M

TREND (2015–2020)





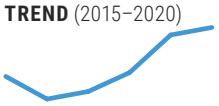


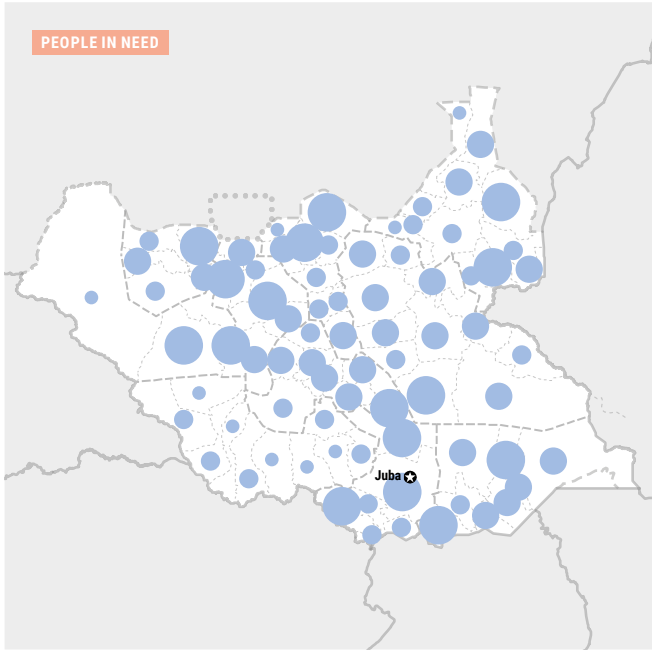
3.2 **Education**

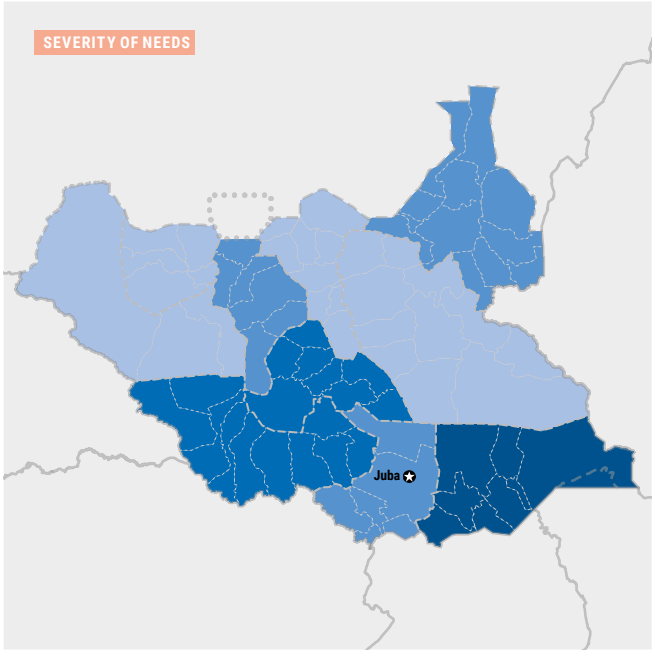
PEOPLE IN NEED

3.1M

TREND (2015–2020)





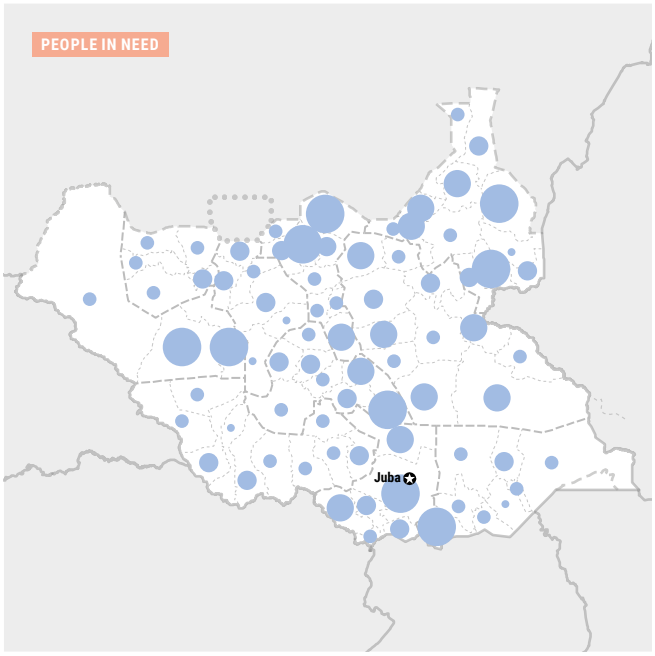


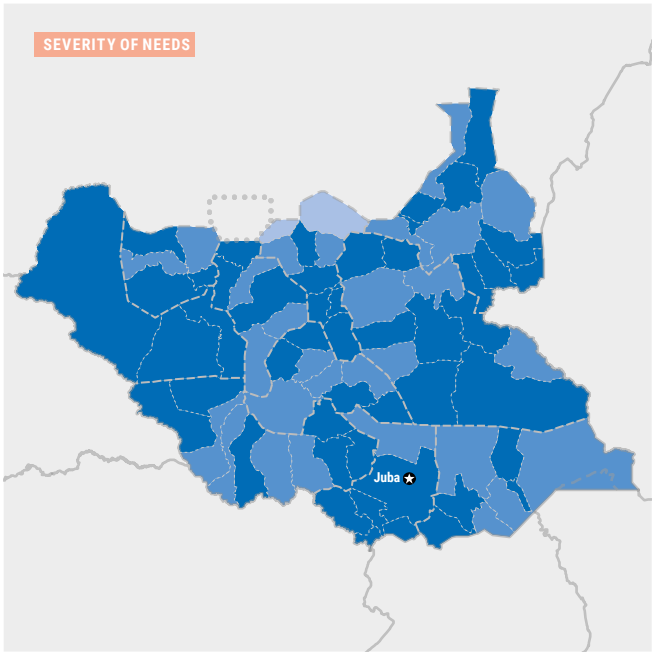
3.3 **Emergency Shelter and Non-Food Items**

PEOPLE IN NEED

2.3M

TREND (2015–2020)



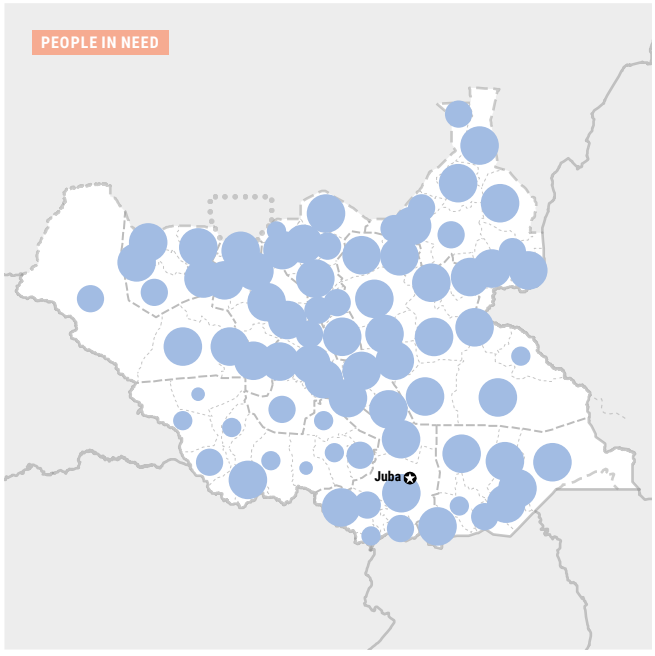


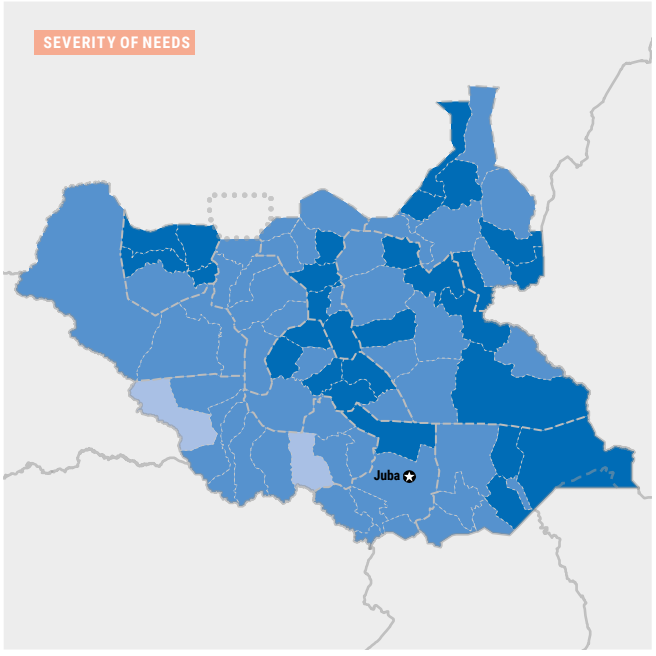
3.4 **Food Security and Livelihoods**

PEOPLE IN NEED

6.6M

TREND (2015–2020)



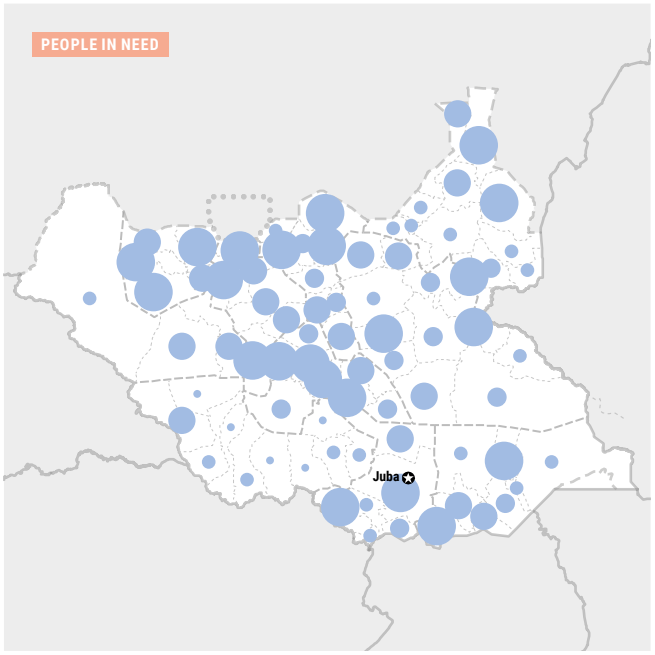


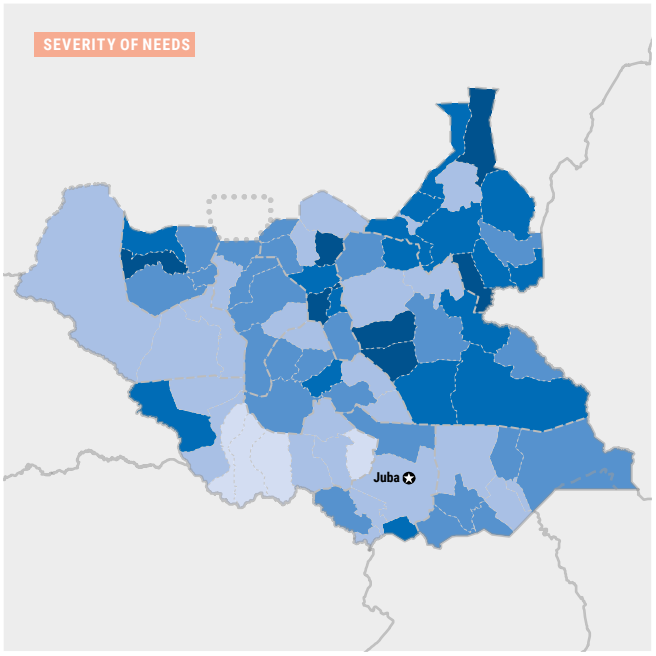
3.5 **Health**

PEOPLE IN NEED

3.6M

TREND (2015–2020)



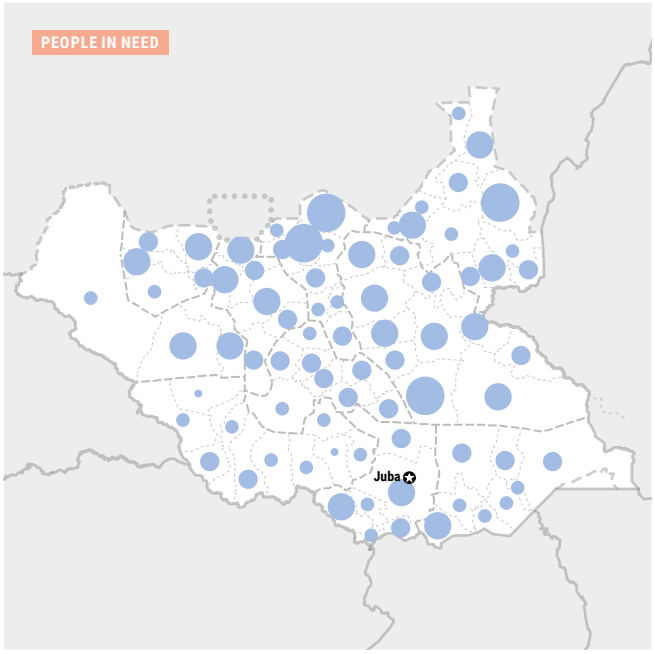


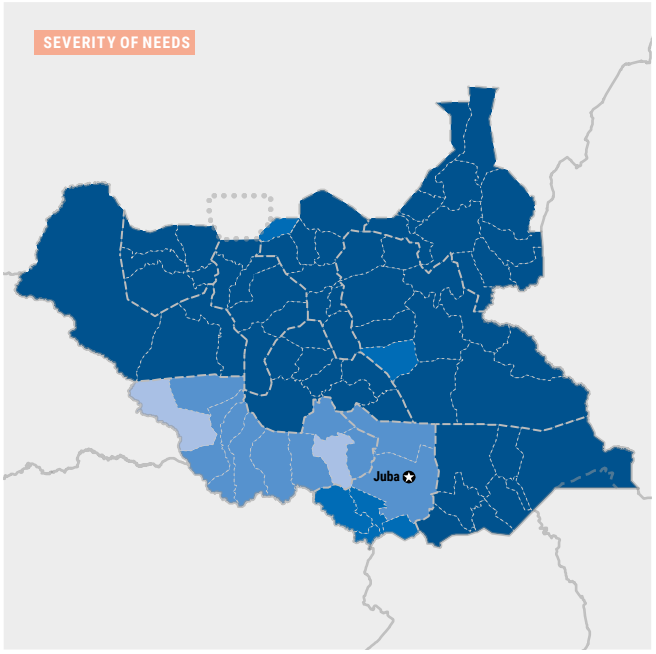
3.6 **Nutrition**

PEOPLE IN NEED

2.0M

TREND (2015–2020)



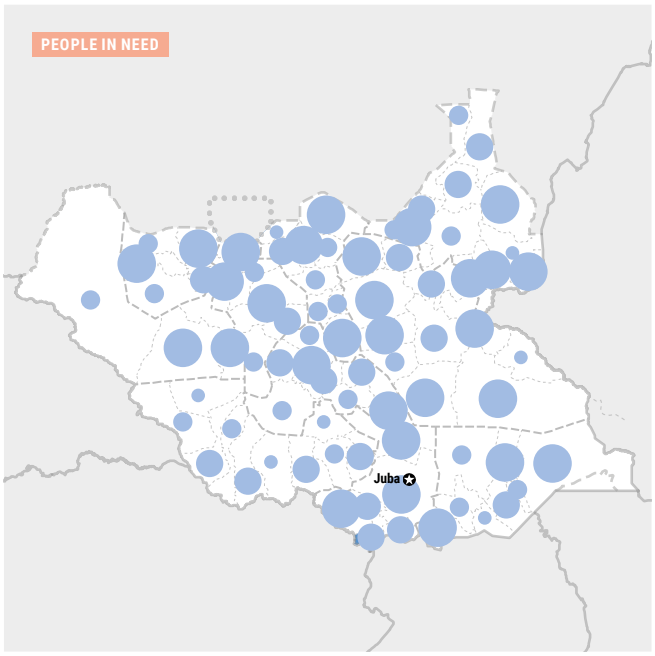


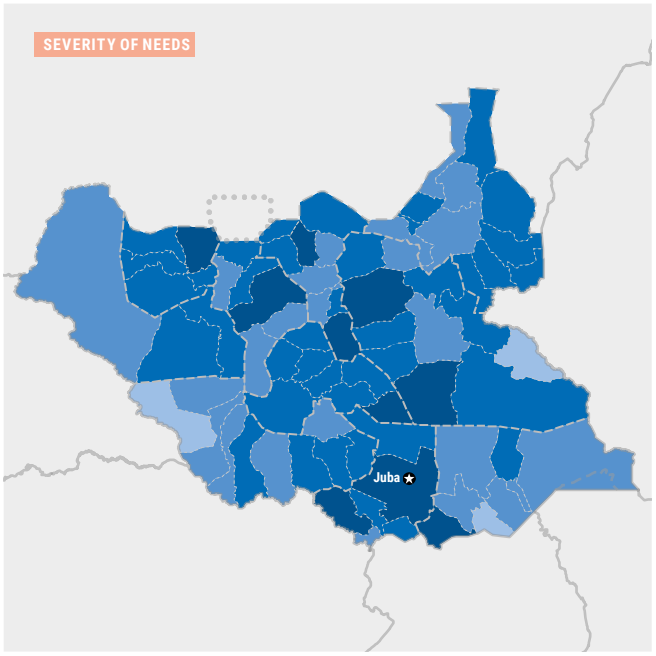
3.7 **Protection**

PEOPLE IN NEED

4.8M

TREND (2015–2020)

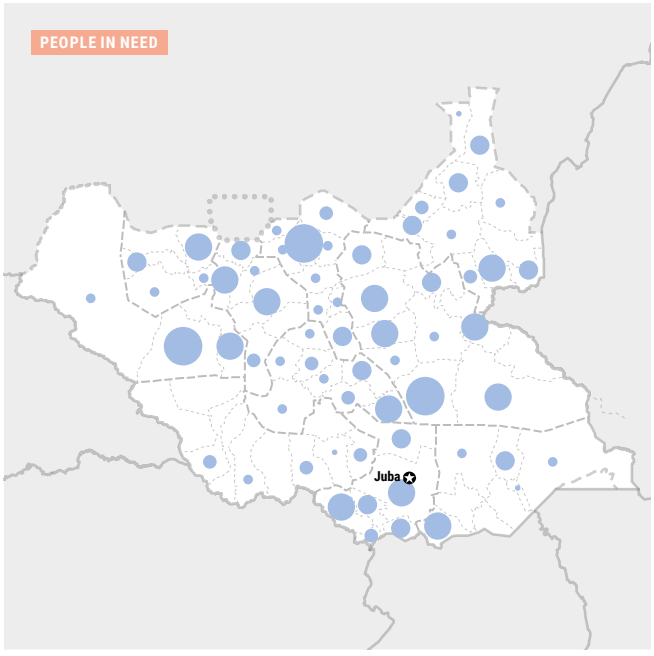


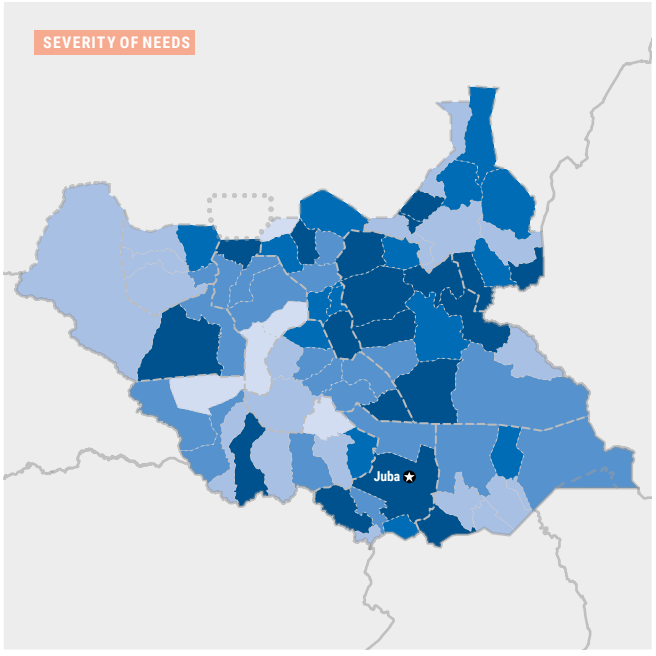


3.7.1 **Protection: Child Protection**

PEOPLE IN NEED

2.5M

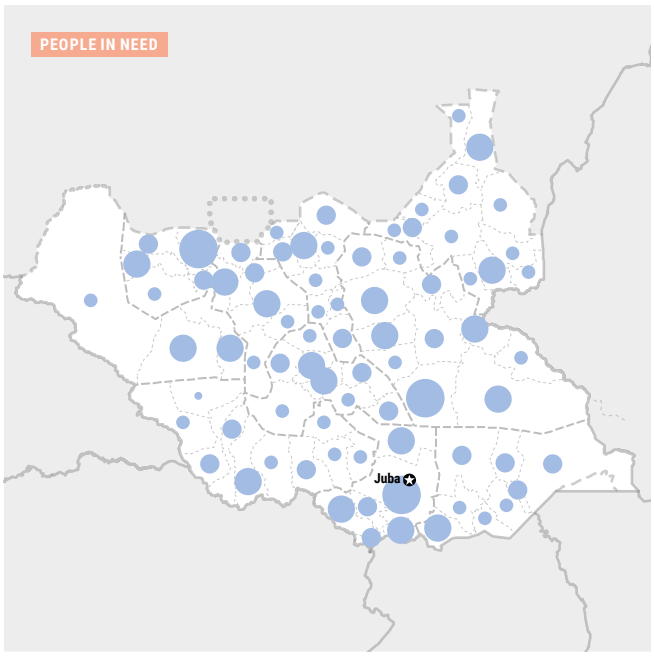


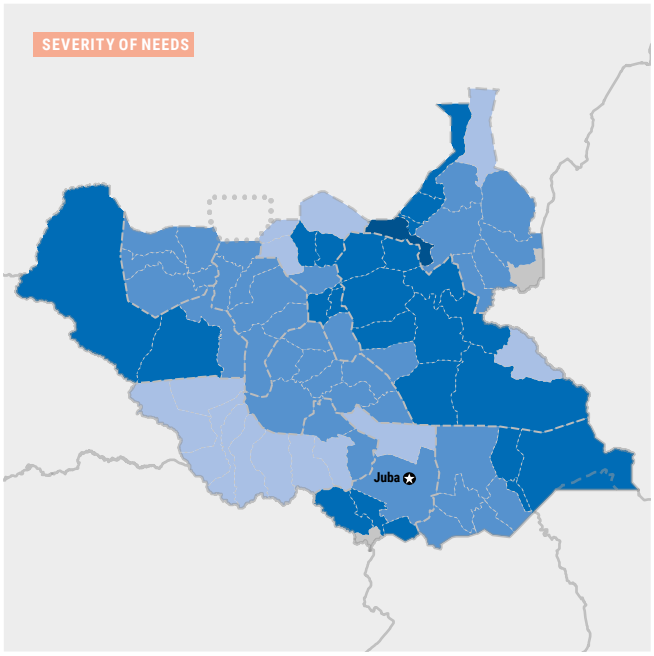


3.7.2 **Protection: Gender-Based Violence**

PEOPLE IN NEED

1.9M

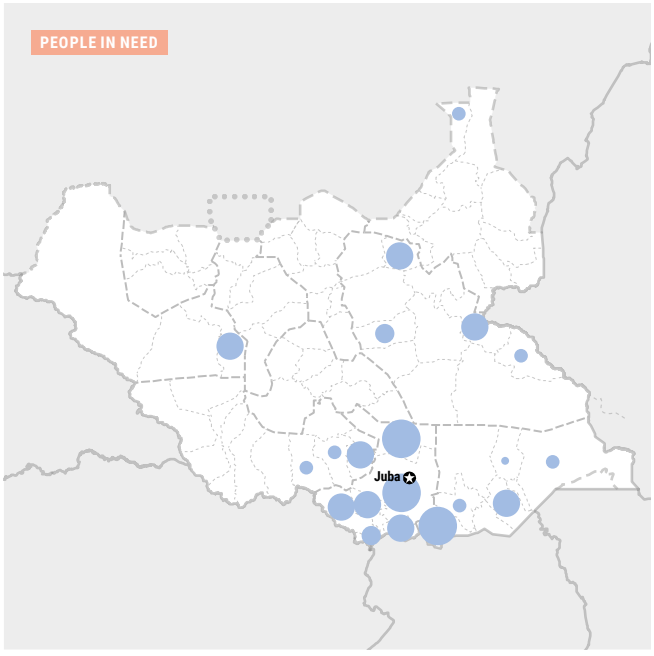


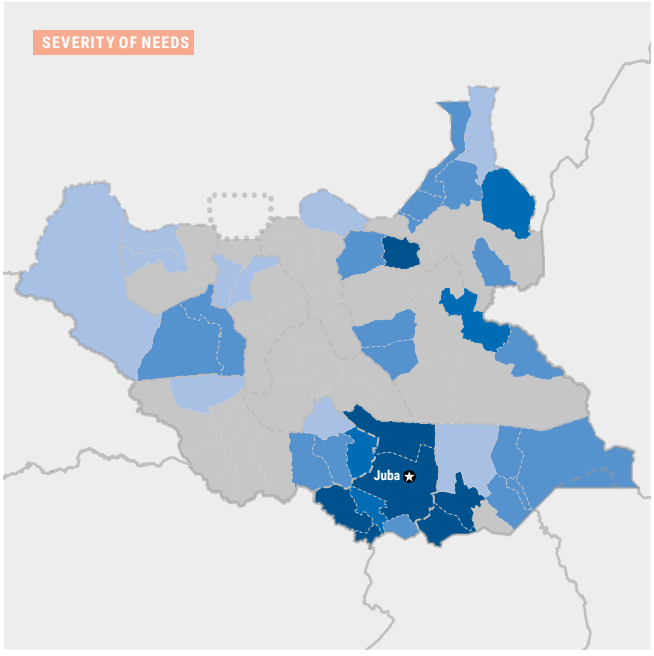


3.7.3 **Protection: Mine Action**

PEOPLE IN NEED

685K



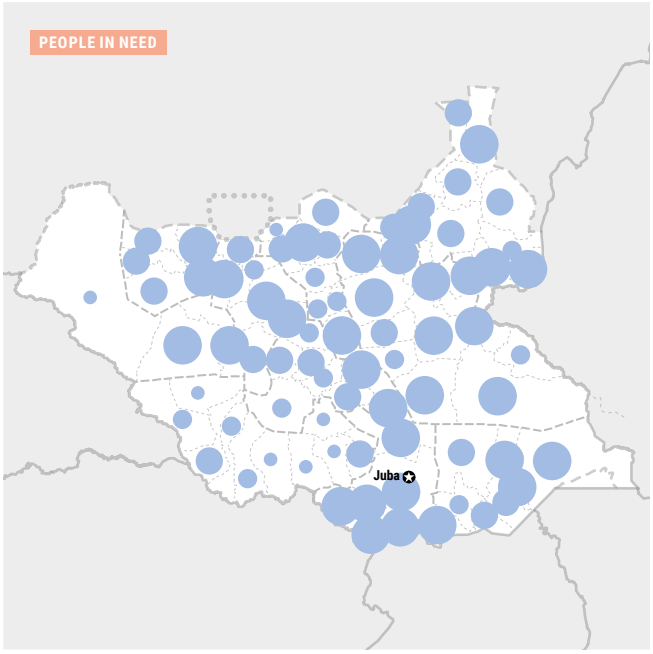


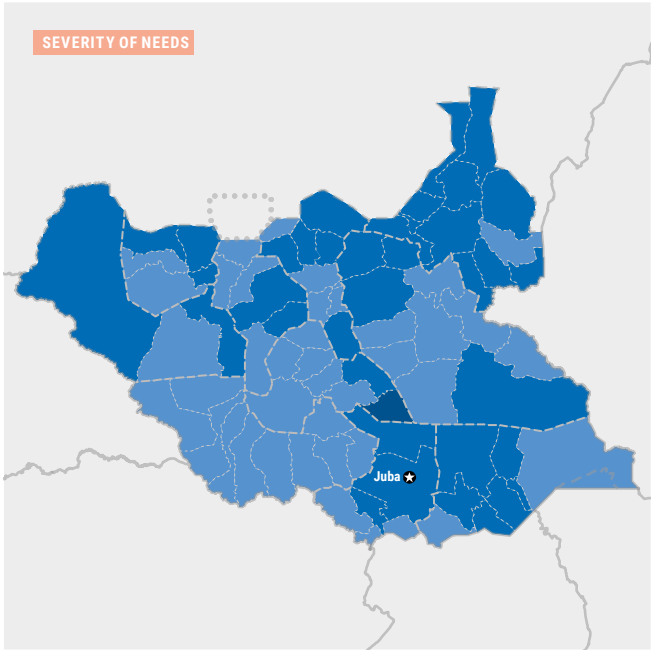
3.8 **Water, Sanitation and Hygiene**

PEOPLE IN NEED

5.5M

TREND (2015–2020)





3.1

Camp Coordination and Camp Management

PEOPLE IN NEED	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY	IDPS IN POC AND COLLECTIVE SITES	IDPS IN CAMP-LIKE SETTING AND SPONTANEOUS SETTLEMENTS
1.6M	50%	54%	13%	241K	1.1M

Overview

An estimated 1.6 million people will need Camp Coordination and Camp Management services in 2020. This includes 1.28 million IDPs in the PoC and collective sites as well as in spontaneous and camp-like settlements who will continue relying on humanitarian assistance throughout 2020 despite significant efforts by the humanitarian community to address their needs. In addition, more than 300,000 refugees do not have sufficient CCCM support.

Out of the nearly 1.5 million IDPs in South Sudan, around 182,000 IDPs live in PoC sites, more than 59,000 IDPs in collective sites[105] and an estimated 1.07 million IDPs in spontaneous settlements countrywide.[106] Due to inter-communal conflict in Lakes and sporadic clashes in Central Equatoria and Warrap, it is predicted that IDPs will continue to remain in displacement for the unforeseen future as the conditions for voluntary returns remain elusive and unknown. However, in some parts of the country like Panyijar, Rubkona and Akobo, some return movements have been taking place. Approximately 80 per cent of the IDP population living in camp-like settings or informal settlements are in critical need of humanitarian assistance.

The population in PoC sites has slightly decreased by 16,000 individuals compared to the previous year. Nevertheless, IDPs in the sites continue to rely on humanitarian assistance for several reasons, including limited access to livelihood opportunities and basic services, which have consequently forced them to adopt negative coping mechanisms like suicide and early marriage, that have exacerbated their vulnerability. Camp management and coordination services, including setting up an inclusive representative governance structure, need to be scaled up and improved to meet minimum standards in the provision of services to the displaced people.

Affected population

The CCCM Cluster analysis on population data indicates that 1.28 million IDPs are in dire need of camp coordination and management services. An estimated 182,000 or 14 per cent of this population group live in PoC sites, where they have received some level of humanitarian service, but they are unable to return to their homes due to security concerns or because their houses have been damaged or occupied due to long years of displacement. An estimated 59,000 IDPs remain in collective sites and are severely underserved. A further 1.07 million IDPs are in spontaneous settlements or with host communities, mainly located in hard-to-reach areas. They are highly underserved with no access to services and as a result are dependent on humanitarian assistance. Refugees are also in need, and participation of women in refugee committees' decision-making processes is still low, despite efforts by all stakeholders to encourage their involvement.

Women and girls continue to be amongst the most vulnerable groups, which also include people living with disabilities. An estimated 54 per cent of the IDPs in camps, collective sites, camp-like settings and spontaneous settlements continue to face threats to their safety and security. According to a recent assessment conducted by the CCCM partners on service provision inside PoC sites and reports from collective sites, women and girls face the risk of sexual violence not only within the displacement sites but also when they move outside for livelihood activities. In Mahad collective site,[107] located in the business district of Juba city and Malakal PoC site, a significant number of girls are reported to experience psychosocial distress. IDP families are using negative coping mechanisms to address their most basic needs, including forcing their young children into early/child marriage. In addition, during 2019, there were increased incidents of suicide attempts by youth and teenagers, both male and female, in the PoC and collective sites due to sexual violence or socioeconomic stress.

Analysis of humanitarian needs

IDPs in protracted displacement situations, who are unable to return home due to insecurity or houses and properties being destroyed in their places of origin will continue to require humanitarian assistance. Forced displacement, poor living conditions, below-standard services, and exhausted financial resources contribute to increasing psychosocial trauma, affecting

the physical and mental well-being of people, and socioeconomic vulnerability. According to the CCCM Cluster site profiling for the PoC sites, overall minimum service standards have not improved since the initial emergency phase. The protracted nature of displacement, as well as the overcrowded camps, are the main factors contributing to this situation. In addition, the existence of informal settlements without coordination and management structures has led to a lack of service provision for approximately 1.07 million IDPs. Unless these service gaps in camps and camp-like settings are urgently addressed, the protective environment of the camps and camp-like settings will continue to deteriorate.

Financial stress among IDP families can increase exposure to protection risks, particularly for women and girls. A recent assessment on collective sites indicated that due to lack of service provision, IDPs borrowed money to meet their daily basic needs. Their inability to pay the debt led them to adopt negative coping mechanisms such as forcing their young daughters into early marriage. These factors further increase gender-based violence risks, and the use of negative coping mechanisms, as psychosocial trauma and frustration rises. Therefore, the current camp management services must continue in 2020 to enable the identification and prevention of the safety and security risks displaced persons face and ensure people's equitable access to protection, services and assistance throughout their displacement.

Juba County continues to have a very high concentration of IDPs in severe need. Counties in Upper Nile, Jonglei, Unity and Western Bahr el Ghazal were also identified to have very high needs in 2019 with the arrival of newly displaced persons as a result of persistent inter-communal conflict and the return of individuals from neighbouring countries, who remain displaced within South Sudan from their areas of origin or former places of residence.

Monitoring

The Cluster and partners will continue to coordinate and conduct intention surveys to inform programming on PoC and collective sites. The Cluster will also conduct household satisfaction surveys in PoC sites to monitor the levels of satisfaction of the IDPs on camp management and services. In addition, the Cluster has introduced a new tool on service assessment to identify how the partners address the needs of the IDPs in all the sectors. The CCCM mobile teams will continue to conduct scoping assessments in hard-to-reach areas that have been identified through the Inter-cluster Working Group, Need Analysis Working Group or other forums due to recent or protracted displacement. The mobile teams will conduct these assessments in collaboration with other clusters and by participating in Inter-cluster Rapid Needs Assessment missions by OCHA.

The Cluster will continue to collect population data, including on movement tracking, on a monthly basis in PoC sites. Furthermore, the CCCM Cluster will make sure that reporting and monitoring mechanisms (including displacement site profiles, dashboards and the 3Ws (Who does What, Where) are in place and harmonized across IDP sites. Feedback mechanisms will also be designed and upgraded, taking accountability to affected populations into consideration, in collaboration with IDPs and camp management agencies. Identified camp management focal persons will be trained on how to identify and report needs, gaps and protection risks.

In addition, the Cluster will standardize individual household surveys across IDP sites and carry out these surveys on a quarterly basis.

Indicators

#	INDICATORS	SECTORS	SOURCE	FREQUENCY
x01	The number of site populations without access to basic goods and services	CCCM	DTM mobility tracking round and CCCM satisfaction survey	2–4 times a year
x02	The number of site populations in unmanaged sites	CCCM	DTM mobility tracking and CCCM partner data	2–4 times a year
x03	The number of sites without community representation established	CCCM	CCCM partner data	4 times a year

3.2 Education

PEOPLE IN NEED	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY	FEMALE TEACHERS	TEACHING PERSONNEL
3.1M	52%	99%	13%	12K	60K

Overview

The education system and infrastructure in South Sudan are fragile, with limited equitable access to quality education for children and youth (aged 3–17), who represent 45 per cent of the population. This has major negative consequences on people's living conditions and mental well-being. A total of 3.1 million children will need access to education services in 2020. This includes an estimated 3 million South Sudanese girls and boys who are estimated to be out of school and have no access to pre-school, primary and secondary education in 2020. Among the children in need, IDPs, returnees from within South Sudan, refugees and refugee returnees are identified as the most vulnerable groups. Eastern Equatoria, Lakes and Upper Nile, areas with ongoing conflict, acute food crisis and large caseloads of IDPs and refugees, have the largest percentage of children without access to education. About 22 per cent of school-aged refugee children are out of school.

Some 60 per cent of primary and secondary schools and classrooms are either partially or completely damaged.[108] Insecurity has been the major cause behind school closure in recent years, with 20 per cent of schools non-functional.[109] Years of conflict, displacement, insecurity and economic challenges have exacerbated the education needs in the country. Many schools have inadequate or no basic teaching, learning and recreational supplies. Delayed or lack of payments to teachers has also affected services by causing high employee turnover.

Food insecurity is the main reason for children to drop out or to miss school, as families have no option but to engage their children in livelihood activities over education. This increases the likelihood of exposure to protection risks, including abduction, sexual violence, forced recruitment, child labour and early marriage. Long walking distance to school is one of the risk factors of gender-based violence against girls and boys.

Affected population

Access to education for returnee, IDP and host community children who have been affected by multiple facets of deprivation, conflict and displacement, is severely limited. Many out-of-school children can be found in these groups as a result of multiple intersecting exclusionary factors, including early marriage, forced recruitment to armed groups, and physical and other disabilities.

Internally displaced families and those returning to their places of origin often have no means to support the education of their children. With the return of South Sudanese refugees from Sudan and other neighbouring countries following relative calm in some areas, increased population in the northern parts of South Sudan has created more pressure on those schools that are functional and demand for temporary learning spaces.

Limited disability-, gender- or conflict-sensitive education infrastructure is a barrier for children to access education services. Available assessments and data paint a dire picture of deeper exclusion, particularly for children with disabilities, pastoralist children and children in conflict-affected areas. Lack of basic services and infrastructure has disproportionate impacts on girls who face specific challenges due to lack of WASH facilities at schools, poor accommodation in classrooms and long walking distances to schools. The needs are greatest in areas with significant IDP or returnee presence, areas facing an acute food insecurity crisis, and rural areas. In addition, about 22 per cent of school-aged refugee children are still out of school. Some 55,000 teachers and members of school management committees are included in the estimated number of people in need.

Analysis of humanitarian needs

An estimated 3.2 million boys and girls will not have access to education in 2020. This is a slight increase from the estimation of 2.9 million people in need of education services in 2019. Education service delivery is severely hampered by successive years of conflict in addition to political and economic instability–the majority of out-of-school children remain in remote rural areas with little or no school coverage. Other reasons include the deterioration in the resilience of households to cope with the economic downturn, increased ethnic tensions and intracommunal conflicts in Equatoria, Upper Nile, Unity, Jonglei and Lakes, acute food crisis and large caseloads of IDPs and refugees. About 20 per cent of schools across the country are non-functional, overwhelmingly due to years of insecurity in and around schools and the departure of teachers and students.

A complex set of issues bedevil teacher supply, quality and attendance that are at the core of the challenge of delivering quality education in South Sudan. These include irregular or inadequate remuneration, lack of access to support and well-

being services and professional development opportunities. It is estimated that only 17 per cent of teachers currently teaching in primary schools are trained.[110] Additionally, there is a significant gender gap: male teachers represent 86 per cent of the teaching workforce, while the representation of female teachers is extremely low. This can affect girl student participation and it is a significant factor in girls' education, as female teachers increase perceptions of safety, raise expectations and provide role models for girls.

Inadequate or lack of infrastructure is also a barrier to continuity of education. Approximately 31 per cent of schools have a permanent structure, 21 per cent are semi-permanent, and 39 per cent are open-air or under the trees. Much of the school infrastructure in the country has been damaged during the crises and conflicts endured over the years, or occupied by armed actors. Approximately 70 per cent of primary schools and 47 per cent of secondary schools are either partially or completely damaged. Lack of basic infrastructure, including WASH facilities, has impacted girl students disproportionately. Some 40 per cent of primary schools in South Sudan have no toilets. Fewer than half of the schools visited in 2018 were found to have access to a functioning water source within or near the school compound. A study found that girls do not feel safe going to latrines in schools as many lack doors and are not segregated by sex.[111]

School drop-out is a major challenge in the current context. Insecurity, displacement, children engaging in livelihood activities, lack of schools in the area, long walking distances to schools or physical barriers at schools for children with disabilities are the main factors for children dropping out of school.[112] In 2018, at least 2.2 million children in South Sudan were estimated to be out of school. This number could increase to 2.4 million in 2020 unless the South Sudanese Government and development partners are able to implement innovative programmes to effectively reach the out-of-school child population.

When determining the number of learners in need of education services, IDPs, IDP returnees, refugee returnees and host communities are the most vulnerable groups with the greatest needs. In addition, an estimated 18,000 refugee children are out of school. The total number of school-aged refugee children is 98,500.

Monitoring

In 2020, the Education Cluster will conduct a nationwide assessment or participate in an inter-cluster survey to close the current data gaps and limitations, and to better inform humanitarian needs analysis. Additionally, the Cluster will endeavour to include education questions in assessments conducted by other partners. The number of learners enrolled in pre-primary, primary and secondary school and the number of teachers, parent-teacher associations and school management committees benefiting from capacity development training is collected monthly through the 5Ws (Who does What, Where, When and for Whom). Using the same template, the Cluster collects other data, including on establishment and rehabilitation of classrooms, WASH facilities, and distribution of school materials.

The Cluster collects monthly data on two main indicators: the number of children and adolescents provided with access to education in emergencies and the number of trained teachers and members of parent-teacher associations and school management committees. Indicators in the table below address the affected population's physical and mental well-being and living standards. Due to a lack of reliable data in previous years, earlier measured attacks on schools was replaced with 'out-of-school children' for the calculation of people in need.

Indicators

#	INDICATORS	SECTORS	SOURCE	FREQUENCY
x01	**Functionality of schools** (% of non-functional learning spaces)	Education	Nationwide assessment	Annual
x02	**Out-of-school children** (% of children not attending school)	Education	Out-of-school children (OoSC) study 2018	
x03	**WASH in school** (% of schools without access to drinking water, % of schools without access to latrines)	Education, WASH	Nationwide assessment and EMIS 2018	Once every two years
x04	**Drop-out** (% of children who have dropped out)	Education	EMIS 2018	Once every two years
x05	**Condition of classrooms** (student:classroom ratio)	Education	EMIS 2018	Once every two years

3.3

Emergency Shelter and Non-Food Items

PEOPLE IN NEED	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY	IDPS	RETURNEES
2.3M	50%	54%	13%	1.3M	489K

Overview

An estimated 2.3 million people are in need of emergency shelter and non-food items (NFIs) in 2020. These include IDPs, returnees and host communities, as well as an estimated 300,000 refugees in South Sudan. People in need are found in three different contexts: in camps, including PoC sites and other collective centres, outside of camps, including host communities who share scarce resources, and in relatively stable locations where people are returning to their places of origin. Inside the PoC and collective sites, where displaced populations have sheltered for safety and security, the entire population is estimated to have need of emergency shelters and NFIs.

Shelter and NFI needs of returnees from within South Sudan and refugee returnees are relatively significant in areas of return, since coping mechanisms have been eroded due to the protracted nature of the conflict, and they return to no shelter or NFIs. Outside PoC and other collective sites, an estimated 70 per cent of the displaced population are living with inadequate shelters and NFIs. Being unable to support themselves through communal connections and without coping mechanisms from other resources, people who are outside camps have very limited or no access to essential life-saving shelter or NFIs. Between September 2016 and September 2017, an assessment covering over 50 counties found that an average of 7 per cent of assessed settlements each month reported experiencing shelter damage due to conflict.

Affected population

Approximately 2.3 million men, women, boys, girls and older people are living with inadequate shelter and NFIs. In comparison to the 2019 analysis, the number of people in need is estimated to increase by 400,000 in 2020 because of increased mobility amongst IDPs and spontaneous return of refugees, creating

UNITY, SOUTH SUDAN

Families in emergency shelter in Bentiu PoC site, Unity. ©UNICEF South Sudan

more vulnerabilities for the affected populations. In addition, continued pockets of insecurity in Central Equatoria have led to new displacements in the Yei area, creating new vulnerabilities. Shelter and NFI need is greatest in Bentiu, Juba, Malakal and Wau PoC sites. Other locations with high shelter and NFI needs are Luakpiny/Nasir, Tonj North, Duk, Bor South, Awerial, Magwi, Terekeka and Jur River counties.

It is estimated that more than 70 per cent of the newly displaced population outside PoC sites and other collective centres are unable to meet their basic household needs and will require interventions. Additionally, more than 50 per cent of the returnees (returnees from within South Sudan and refugee returnees) are in need due to the limited access to services. Among the IDP population, women and children will remain especially vulnerable due to their roles in society and the protection risks inherent in being without shelter or social support networks. A small number of host community members, probably less than 2.5 per cent, will also require assistance as they use their already limited resources to provide for the displaced population.

The needs of people will be varied depending on where they are. Living in the PoC and other sites, people's access to naturally-grown shelter materials will be limited. On the other hand, IDPs outside of camps have better access to shelter materials. And in some cases, in and out of PoC sites, functional and accessible markets will define the level of need in a given community. Even some functional markets lack essential household items, which is particularly difficult for IDPs that have been subject to multiple displacements.

Analysis of humanitarian needs

In both protracted and new displacements, people are forced to leave behind basic household items and shelter materials as a result of conflict compounded by food insecurity and economic deterioration. Further, new outbreaks of violence could prevent people from moving out of PoC sites or could create additional influxes into collective sites that will also require assistance.

Since the conflict broke out in 2013, and again in 2016, most IDPs have experienced multiple displacements that have led to loss of shelter and livelihoods. Trends show that people who are displaced multiple times tend to move along certain routes because they have grown accustomed to the environment and receiving humanitarian services at certain points along the way. The use of targeting technology such as biometric registration would help the Emergency Shelter and NFI Cluster partners analyse the needs by geographical location. By understanding where host communities have provided support and where other services are available the need for shelters and NFIs may decrease.

Returnees are expected to increase in 2020, according to projections based on the 2019 trends. Data shows that the majority of IDPs were displaced within the same counties or sub-counties. Returnees from other countries are also projected to increase in 2020 with the expectation that the situation at home will have normalized. Many return to burnt or looted homes, without resources to support themselves. However, in some cases, returnees can be encouraged and guided in utilizing natural resources, such as bundling grass, building relationships with suppliers, and improving the economic participation of their local communities. Forms of cash transfer programming will be more relevant in such locations. Additionally, returnees need more support in understanding their rights for housing, land and property in cases where their land has been given away or reused. In many cases, the local system is not efficient enough to support returnees on housing, land and property matters. Humanitarians should work quickly to support local authorities on resolving outstanding land issues since they are key drivers of conflict.

Monitoring

The Cluster will regularly monitor the needs of the affected population by working closely with the NAWG and will use the recommendations of the forum in addressing the needs. The Cluster will also regularly conduct comprehensive needs analysis (assessment and verification procedures) based on the Cluster standard.

Indicators

#	INDICATORS	SECTORS	SOURCE	FREQUENCY
x01	The number of people with access to safe emergency shelter	ES/NFI	DTM mobility tracking, monthly Cluster 3W reports	Quarterly, monthly
x02	The number of people with access to safe life-saving NFIs	ES/NFI	DTM mobility tracking, monthly Cluster 3W reports	Quarterly, monthly

3.4 Food Security and Livelihoods

PEOPLE IN NEED	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY
6.7M	50%	54%	13%

Overview

An estimated 6.7 million will be in need of food and livelihood support in 2020. Some 6.35 million people, or 54 per cent of the total population, were severely food insecure (IPC Phases 3, 4 and 5) in August 2019. This included an estimated 1.7 million people who are facing emergency acute food insecurity (IPC Phase 4) and 10,000 people in a catastrophic situation (IPC Phase 5). In addition, an estimated 300,000 refugees in South Sudan are vulnerable and in need of assistance. The majority of people classified as being in catastrophe were in Yirol East of Lakes, while people in IPC Phases 3 and 4 are in Jonglei and Upper Nile. The proportion of people facing acute food insecurity decreased from 6.1 million, or 59 per cent of the whole population, the number of people with severe food insecurity that was recorded at the same time last year, to 54 per cent. It is noteworthy that in 2018 four counties were not classified due to access issues, so the actual number of people with food insecurity could be higher than the number recorded. In absolute numbers, there has been an increase in the population recorded as being severely food insecure but proportionally there has been a reduction.

Reduced insecurity and improved humanitarian access enabling more humanitarian food assistance to reach beneficiaries has resulted in a reduction in the severity of food insecurity: the number of counties with populations in IPC Phase 5 has reduced from seven in 2018 (total of 47,000 people) to one in 2019 (total of 10,000 people), and counties classified at IPC Phase 4 have reduced from 32 in 2018 to 28 in 2019. Counties with IPC Phase 3 classification remain widespread and the numbers have increased to 4.65 million in 2019 as compared to 4.32 million in 2018.

In the projection period of September to December 2019, emergency acute food insecurity (IPC Phase 4) is expected to persist in four counties: Duk in Jonglei, and Longochuk, Maiwut and Ulang in Upper Nile. Between January and April 2020, 14 counties are projected to be in emergency (IPC Phase 4). Jonglei is expected to have the highest number of people estimated to face crisis (IPC Phase 3) or worse acute food insecurity at 1.18 million, followed by Upper Nile, with 765,000.

It is anticipated that production in 2019–2020, starting in September, will be better than in 2018–2019, though still below pre-crisis levels. Seasonally lower food prices will improve food access compared to the lean season, though cost will continue to restrict normal food access across the country. In early 2020, widespread crisis (IPC Phase 3) outcomes are still probable, with several areas of greatest concern likely to remain in emergency (IPC Phase 4). Additionally, more widespread emergency (IPC Phase 4) outcomes will be possible, even during this post-harvest period, in the absence of the assistance that is expected to be delivered throughout the projection period. A risk of famine (IPC Phase 5) will persist in South Sudan, especially in the event that conflict shifts and severely limits household movement and humanitarian access.[113]

Affected population

IDPs, non-displaced and host communities, returnees from within South Sudan and refugee returnees are in need according to the FSNMS round 24 assessment. The FSNMS randomly samples households in rural South Sudan that are likely to include a selection of each of the five population groups. The data collected for various food consumption and livelihood change indicators is representative of the rural population in that specific county but not necessarily of the specific population group. In addition, people who will be displaced by conflict or disasters, as well as South Sudanese refugees who will return from countries of asylum, are also vulnerable to severe food insecurity. Most of the approximately 300,000 refugees seeking safety in South Sudan rely on food assistance and approximately 60 per cent of refugee households employ emergency livelihood coping strategies.

People with intersectional needs are particularly vulnerable to food and nutritional issues. Households headed by women, children, older people or single males could be more vulnerable in severe food insecurity situations.

Analysis of humanitarian needs

In August 2019, some 6.35 million people (54 per cent of the population) were estimated to be acutely food insecure (IPC Phase 3 or worse). There is a slight reduction in the proportion of people facing crisis or worse acute food insecurity compared to the same period in 2018. Approximately 4.65 million people are experiencing high food consumption gaps or are marginally able to meet food consumption needs through coping strategies (IPC Phase 3). Concurrently, 1.7 million people are experiencing large consumption gaps, reflected by malnutrition and excess mortality, or are able to mitigate these but only through emergency livelihood coping and asset liquidation (IPC Phase 4). Ten thousand

people are in catastrophe (IPC Phase 5), 8,000 of whom are in Yirol County in Lakes. These households have an extreme lack of food (or other basic needs) after exhausting all coping strategies, which can result in starvation, death, destitution extremely critical levels of acute malnutrition. Jonglei has the highest number of people estimated to be in crisis (IPC Phase 3) or worse acute food insecurity, with 1.25 million people, followed by Upper Nile with 845,000 people. Twenty-eight counties are classified as being in emergency (IPC Phase 4).

Compared to the same period in 2018, there is a slight reduction in the proportion of people facing crisis (IPC Phase 3) or worse acute food insecurity by an estimated 5 per cent.[114] The slight improvement in the food security situation in the 2019 lean season compared to the same period in 2018 is attributed to increased access for humanitarian actors after the signing of the R-ARCSS in September 2018, which has also led to people's better access to livelihoods and markets.

However, acute food insecurity persists, driven by localized conflict, climatic shocks, pests and diseases, slow recovery from prolonged asset depletion, poor macroeconomic conditions and suboptimal market functionality.

Projection of needs

In the post-harvest period of January to April 2020, the food security situation will deteriorate as household food stocks start depleting and an estimated 5.5 million people (47 per cent of the total population) are likely to face crisis (IPC Phase 3) or worse acute food insecurity. The projection analyses have factored in the presence of likely humanitarian food assistance and the seasonality of livelihoods, grain stocks, prices, climate, movement of livestock, nutrition status of the population, ongoing conflict, planned, funded and likely levels of humanitarian food assistance. Between January and April 2020, 14 counties are projected to be in emergency (IPC Phase 4) acute food insecurity. Jonglei is expected to have the highest number of people estimated to face crisis (IPC Phase 3) or worse acute food insecurity at 1.18 million, followed by Upper Nile, at 765,000.

Monitoring

The indicators will be monitored twice per year using the FSNMS, which is conducted ahead of the post-harvest period, and depth of the lean season IPC workshops. The national survey covers 8,500 households with approximately 110 households per county across nine separate survey clusters per county. In scale, this is too big for the Cluster to mobilize partners to join the data collection teams, especially in hard-to-reach locations, and support the capacity-building of enumerators. The surveys are analysed by partners that include World Food Programme, REACH, UNICEF, UN Food and Agricultural Organization, and the Famine Early Warning System Network, to support key products for the IPC: key messages and population tables, as well as data that is used for sectoral and intersectoral analysis.

In addition, between IPC events, the Cluster will update on changes in context and new crisis events that may impact on food and nutrition security through the NAWG. This would also include the quarterly NAWG workshops that provide situational analysis and review, between IPC workshops, across the three main regions: Greater Equatoria, Greater Bahr el Ghazal and Greater Upper Nile.

Indicators

#	INDICATORS	SECTORS	SOURCE	FREQUENCY
x01	Food consumption indicators: food consumption score (FCS), household diet diversity score (HDDS), reduced coping strategy index (rCSI) and household hunger scale	FSL	FSNMS rounds 25 and 26	Twice per year
x02	Livelihood coping index	FSL	FSNMS rounds 25 and 26	Twice per year
x03	Data on household assets and livelihoods for the calculation of the wealth index (see methodological note for more details)	FSL	FSNMS rounds 25 and 26	Twice per year
x04	Data on basic services, assets, social safety nets and adaptive capacity for the resilience capacity index (see methodological note for more details)	FSL	FSNMS rounds 25 and 26	Twice per year

3.5 Health

PEOPLE IN NEED	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY	NON-DISPLACED AND HOST COMMUNITIES	IDPS
3.6M	50%	54%	13%	2.5M	521K

Overview

South Sudan has inadequate access to and utilization of health care services, leaving 56 per cent of the whole population without access to primary health care services.[115] Out of approximately 2,300 health facilities that provide health care services to the entire population of 11.7 million, more than 1,300 facilities are non-functional.[116] An estimated 3.6 million people will be in need of health care services in 2020, including 300,000 refugees.

The greatest need is found in Jonglei, Upper Nile, Unity, Northern Bahr el Ghazal and Central Equatoria. Nine counties (Aweil Centre, Aweil South, Aweil East, Duk, Guit, Ikotos, Mayendit, Renk and Ulang) located in these areas are in dire need, as shown by the public health parameters analysis, which covered: incidence rates for common diseases, case fatality rates for five common diseases, coverage of measles vaccination (children from 6 months to 15 years of age), coverage of PENTA 3 for children under 1 year of age and percentage of births assisted by skilled attendants.

The Service Availability Readiness Assessment (SARA) conducted across the country in 2019 shows that service availability

CENTRAL EQUATORIA, SOUTH SUDAN

A nurse gives a polio vaccination to a baby during an immunization campaign at Kator Primary Health Care Unit, Juba, Central Equatoria. ©UNICEF South Sudan

readiness stands at 37 per cent with suboptimal implementation of the basic package of health and nutrition. There is also a high disease burden resulting from communicable, non-communicable and neglected diseases, as well as diseases with epidemic and pandemic potential. Multiple outbreaks prevail in 20 counties with the cases of measles, hepatitis E and yellow fever increasing, while malaria, acute respiratory infection and acute watery diarrhoea sporadically exceed thresholds.

Major health system gaps have resulted in persistent weak facility and community disease surveillance, low immunization coverage and weak referral pathways for maternal and child health emergency including sexual and gender-based violence (SGBV) survivors. The facility surveillance gap is at 40 per cent. WASH infection prevention and control is at 7 per cent. With only 14 per cent of pharmaceutical commodities available, the already insufficient essential medicine supply chain is ineffective in the face of preventable disease outbreaks. The ratio of skilled health personnel to people who need services stands at 1:65,574. The situation is exacerbated by attacks on health facilities, with the closure of 20 per cent of them. The influx of 214,000 refugee returnees and returnees from within South Sudan with unknown immunity status poses a further challenge for increased disease burdens, including potential cross-border transmission of diseases like Ebola and cholera.

Affected population

In comparison to the 2019 analysis, the estimated number of people in need decreased by 7.5 per cent in 2020 because of the methodology used for 2020 HNO process which is harmonized with the global humanitarian programme cycle (HPC) framework. The majority of the Cluster people in need (PiN) are from non-displaced host communities because they are hosting other vulnerable groups of unknown immunity status, coupled by a weak health system and low coverage of access to health care services.

IDPs and refugee returnees are also in a vulnerable situation with limited or lack of services. Peace-building negotiations have led to the movement of 91,000 returnees from within South Sudan to their places of origin, while 21,000 spontaneous refugee returnees returned to their homes and 102,000 refugee returnees stayed in the IDP settlements.[117] While all of these people need health care services, the existing health services need to be expanded. In addition, an estimated 3.05 million non-displaced host communities must continue to have access to health services.[118]

Greater needs are found in the refugee returnee groups due to their unknown immune status, which is also a threat to the host community for transmission of highly infectious communicable diseases and an increase in disease burden. To prevent outbreaks and mitigate the disease burden, there is a need for immunization of all antigens against vaccine-preventable diseases and the availability of health services for this population.

With the high existing maternal mortality rate (789 per 100,000), which is the fifth-highest in the world, pregnant women are specifically in need of basic emergency obstetric care and referral mechanisms for obstructed deliveries and pregnancy-related complications.[119] The prolonged conflict and an under-resourced health system have not fully prioritized disability care for the physically and mentally challenged. The under-five mortality rate is one of the highest in the world, with 90.7 child deaths per 1,000 live births.[120] The malnutrition rate is also high with an estimated 1.3 million children aged 6–59 months being acutely malnourished and requiring treatment for medical complications of SAM.[121] Malaria, diarrhoea and respiratory tract infections are the top three causes of child morbidity and mortality in South Sudan.

Analysis of humanitarian needs

The diversity and increased population groups that are in need of health care services with unknown immunity status have put pressure on the existing poor health care system. People's critical as well as time-bound need for health care access underline the importance of strengthening the existing health services in the various locations. These different vulnerable groups (returnees and IDPs) need the provision of integrated emergency primary health care services.

Nine counties, namely Aweil Centre, South and East, Duk, Guit, Ikotos, Mayendit, Renk and Ulang, have catastrophic levels of severity of needs. These counties are located in parts of Central Equatoria, Jonglei, Northern Bahr el Ghazal, Unity, and Upper Nile. Four out of 39 counties that have been ranked as having extreme needs border the catastrophic zones in Northern Bahr el Ghazal. The rest are mostly concentrated in areas that correspond to food insecurity crisis locations (IPC Phase 4). Twenty-seven counties constitute the third-highest level of severity, mostly distributed in western and central regions, including Yirol East, a county with 10,000 individuals with catastrophic levels of food insecurity (IPC Phase 5). The remaining five counties fall under stressed and minimum levels of severity but two of them are in the Ebola risk zone. Five counties that are at risk of Ebola are in the top three levels of severity in need of increased operational presence.

Morbidity data for five common diseases—malaria, acute watery diarrhoea, respiratory tract infections, acute bloody diarrhoea and measles—was used to calculate the disease burden. The proportion of under-five children with moderate and acute severe malnutrition detected in the health facilities highlights the malnutrition burden on the population. Vaccine-preventable diseases are analysed through vaccination coverage for measles and five common childhood diseases, while the need for maternal and neonatal services is derived from the percentage of births assisted by skilled birth attendants. Case fatality from the five diseases directly reflects the inadequate and suboptimal quality of service provision. The outpatient consultation rate also indicates health service utilization in the country.

Health facilities are inadequate to provide quality basic emergency obstetric and newborn care (BeMonc), comprehensive emergency obstetric, neonatal care (CeMonc) per 50,000 people, clinical management of rape survivors and emergency contraceptive services. With a significant under-five mortality rate and maternal

mortality rate all these factors depict the suboptimal performance of primary health care services.

Monitoring

The Cluster uses a stringent variety of databases to create and analyse alerts periodically for early warning disease concerns as well as health response implementation. These mechanisms create public health profiles at county levels and monitor health responses down to the facility level. Contextual technical judgment from partner assessments is also used to monitor implementation. Data collection modalities include Integrated Disease Surveillance and Response (IDSR), Early Warning, Alert and Response System (EWARS), Health Management Information Systems (HMIS), Initial Rapid Need Assessment (RNA), 5Ws matrix and partner investigation studies. EWARS data for health is collected and analysed weekly while the majority of data, HMIS and 5Ws, is collected and analysed monthly.

A set of indicators that are used to monitor the living standards and physical and mental well-being on a monthly basis includes incidence rates of five common diseases (malaria, acute watery diarrhoea, respiratory tract infections, acute bloody diarrhoea and measles); number of persons receiving mental health and psychosocial support services (MHPSS); number of health facilities providing clinical management of rape (CMR) and MHPSS services; outpatient consultation rate; measles vaccination coverage; PENTA 3, a combination vaccine for five common childhood diseases coverage; percentage of births assisted by skilled birth attendants; case fatality of five common diseases; proportion of under-five children with moderate acute malnutrition (MAM) and severe acute malnutrition (SAM) detected in the health facilities; number of health facilities providing clinical management of rape and emergency contraception; average population per functioning health facility; number of health facilities providing basic emergency obstetric care per 50,000 population; and under-five mortality rate. The other indicators that are monitored on a monthly basis are the number of uncomplicated malaria cases treated, the number of persons who have received MHPSS services, the amount of training provided on IDSR, EWARS, and infection prevention and control. Data verification sources are EWARS, SMART Survey, HMIS, SARA survey, health service functionality data and the Health Cluster database.

Indicators

#	INDICATORS	SECTORS	SOURCE	FREQUENCY
x01	Incidence rates for common diseases	Health	EWARS/OCHA	Weekly
x02	Case fatality rates for common diseases	Health	EWARS	Weekly
x03	Measles coverage (6 months–15 years)	Health	WHO/DHIS 2	Quarterly/6 months
x04	PENTA 3 coverage (<1 year old)	Health	WHO/DHIS 2	Quarterly/6 months
x05	Percentage of births assisted by a skilled attendant	Health	DHIS 2	Available by month

3.6 Nutrition

PEOPLE IN NEED	CHILDREN	WOMEN	WITH PHYSICAL DISABILITY
2.0M	73%	27%	13%

Overview

Acute malnutrition has been a protracted problem in South Sudan with the death of some 17,000 under-five children in 2018 attributable to undernutrition.[122] A total of 2.1 million people, including an estimated 300,000 refugees in South Sudan, are in need of nutrition services. These include an estimated 1.8 million South Sudanese, of whom 1.3 million are children and half a million are pregnant and lactating women. In 2019, it was estimated that more than 860,000 under-five children and nearly 600,000 pregnant and lactating women suffered from acute malnutrition. The FSNMS round 24 conducted in the lean season of 2019 reported that among under-five children the prevalence of GAM was 16.2 per cent, increasing from the 13.3 per cent reported in FSNMS round 22 conducted at the peak of the 2018 lean season. Coverage of vitamin A supplementation is reported at 76.5 per cent. High prevalence of malnutrition among pregnant and lactating women was noted from FSNMS round 24, with the malnutrition rate above 20 per cent in three out of 10 states and over 10 per cent in eight out of 10 states (80 per cent). The needs are greatest in Jonglei, Unity, Upper Nile, Western Bahr el Ghazal and Warrap, with the prevalence of GAM passing the emergency threshold of 15 per cent.[123] Young children, adolescent girls, pregnant and lactating women, older people, people who are ill or immuno-compromised, indigenous people and people in poverty are among the most vulnerable groups.

Affected population

Out of 1.8 million South Sudanese who are in need of nutrition services, some 77 per cent are from the non-displaced and host communities, while 16 per cent represent IDPs and smaller numbers are returnees. Refugees in South Sudan are also vulnerable to malnutrition and only 59 per cent of refugee children had timely complementary feeding.

While anyone can experience malnutrition, people who are particularly vulnerable include young children, adolescent girls, pregnant and lactating women, older people, people who are ill or immuno-compromised, indigenous people and people in extreme poverty. Groups that are displaced or migrate to other locations due to conflicts, droughts, floods and other natural disasters, famines or land tenure issues are also at acute risk and are vulnerable to malnutrition.[124] Other groups that are at risk of malnutrition and with limited access to services include persons with disabilities or limited mobility, unaccompanied children, minority ethnic groups or those who are marginalized. Additionally, households and communities that host returnees are also exposed to malnutrition aggravating factors including food insecurity, lack or limited access to WASH services, and morbidity due to overstretching of basic services. Families affected by humanitarian crises often have challenges that include limited access to food, water and sanitation, loss of housing or shelter and risk of infectious diseases, while the existing health infrastructure is poor. These factors negatively affect the nutritional status of children.[125]

Analysis of humanitarian needs

With a prevalence of GAM at 16.2 per cent, the country has crossed the emergency threshold of 15 per cent. The highest nutrition needs are observed in Jonglei, Unity, Upper Nile and Warrap. Five of the 10 states show a prevalence of 15 per cent or more.

Consistent data in 2019 indicates a substantial aggravation of food insecurity which is one of the main drivers of malnutrition. Net cereal production at approximately 745,000 tons was reported in the 2018–2019 production season, 15.5 per cent below the five-year average and 2.5 per cent lower than 2017–2018 production,[126] and staple food prices remain very high due to below-average production. The drivers of malnutrition, namely food insecurity, suboptimal childcare and feeding practices, morbidity, lack of safe water and sanitation, internal displacement and conflict continued to worsen in 2019 and are expected to reflect the same trend in the first quarter of 2020.[127]

Maternal, infant and young child nutrition practices, particularly complementary feeding, continue to be suboptimal. The incidence of malnutrition rises sharply among children aged 6–23 months as exclusively breastfed infants transition to complementary foods. The proportion of children who receive a minimum acceptable diet remains extremely low at 7 per cent. Morbidity further compounds the situation, with more than one third of children reported to have been sick—nearly one in two of the sick children reported to have had a fever/malaria and a quarter of the children have suffered from diarrhoea. Both have a direct negative impact on the nutrition status of young children.

Projection of needs

The high-level prevalence of acute malnutrition translates into an estimated 1.8 million South Sudanese and more refugees will be in need of treatment for acute malnutrition in 2020. These include more than 290,000 children who are suffering from SAM, some 1 million children with MAM and nearly 470,000 pregnant and lactating women suffering from acute malnutrition.

The projections for the number of people in need has been calculated by using the globally accepted formula, which includes both prevalent and incident cases.[128] Given the importance of prevalence being estimated for the programme's admitting case-definition,[129] a definition of acute malnutrition that combines weight-for-height (WFH), mid-upper-arm circumference (MUAC) measurement and oedema was considered. Indeed, in South Sudan, the use of WFH alone would capture only 74 per cent of cases for comparison and the use of WFH alone would capture only 60 per cent of cases in Afghanistan.[130] An incidence correction factor of 2.9 was used for South Sudan based on the finding of a global study conducted by UNICEF and Harvard University.[131] The change of methodology used in the PiN calculation has resulted in a slight increase of about 158,000 of the number of children under 5 years compared to the previous years.

Monitoring

The Nutrition Cluster will employ various forms of monitoring for overseeing and following up on needs. Firstly, at facility level, data will be collected monthly through the Nutrition Information System (NIS) database to monitor admissions of children and women with acute malnutrition, as well as the outcome of the treatment.

Secondly, at population level, Standardized Monitoring and Assessment of Relief and Transitions (SMART) surveys, FSNMS surveys, mass MUAC screenings, and inter-cluster multi-sectoral rapid assessments will be conducted as part of the surveillance system.

For SMART surveys, selected/prioritized states/counties will be used to determine the prevalence of acute malnutrition among children and women, as well as factors affecting malnutrition. The FSNMS that is already in place in South Sudan with bi-annual assessments will also be used to determine the prevalence of acute malnutrition for children, pregnant and lactating women, vitamin A and deworming supplementation coverage and maternal, infant and young child nutrition practices, as well as data on drivers of acute malnutrition, including morbidity and status of food security, water, sanitation and hygiene. The data from mass MUAC screening can also be used to understand the nutrition situation for the respective locations. Partners also conduct mass MUAC screening to facilitate identification of malnourished children for referral and treatment. The use of MUAC screening on emergency populations and routine community screening, where proper nutrition surveys cannot be done due to time and fund limitations, insecurity or other reasons, is acceptable and recommended when appropriate.

The Nutrition Cluster will also participate in the inter-cluster multi-sectoral assessments organized by OCHA and the NAWG at both national and subnational level to monitor evolving needs. Supervision and monitoring visits will also be conducted to monitor the programme and engage the community and other stakeholders to understand evolving needs.

Indicators

#	INDICATORS	SECTORS	SOURCE	FREQUENCY
x01	Prevalence of GAM for children aged 6–59 months	Nutrition	FSNMS	Twice a year
x02	Proportion of pregnant and lactating women with acute malnutrition (MUAC of <23cm)	Nutrition	FSNMS	Twice a year
x03	Proportion of children aged 6–23 months receiving minimum acceptable diet	Nutrition	FSNMS	Twice a year
x04	Number of children aged 6–59 months with SAM admitted for treatment	Nutrition	NIS database	Monthly
x05	Number of children aged 6–59 months with MAM admitted for treatment	Nutrition	NIS database	Monthly
x06	Number of pregnant and lactating women with acute malnutrition admitted for treatment	Nutrition	NIS database	Monthly

3.7

Protection

PEOPLE IN NEED	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY
4.8M	50%	54%	13%

In 2020, an estimated 4.8 million women, girls, men, and boys will face protection risks and violations. These include over 300,000 refugees in South Sudan who are in need of protection services.

People who are lacking or unable to access services are vulnerable to various forms of violence, including SGBV, human rights violations, displacement and erosion of coping mechanisms and social cohesion. Women, children, the elderly, youth and persons with disabilities are among the most vulnerable groups, facing even higher risks. They are exposed to SGBV, child recruitment, psychosocial distress, targeted and indiscriminate killings, mines and explosive remnants of war (ERW) and denial of basic housing, land and property rights, amongst others. IDPs, returnees and host communities are also among those who are in the highest need of protection. For many communities, dire living standards and threats to physical and mental well-being demand life-saving protection services. The cumulative severity of the protection situation is especially prominent in Akobo, Awerial, Canal/Pigi, Bor South, Duk, Jur River, Lainya, Luakpiny/Nasir, Maiwut, Mundri East, Panyijiar, Pibor, Rubkona, Ulang and Wau, counties with more than 50 per cent of their total population in need of protection. Meanwhile, IDPs seeking solutions need safety, security and protection, especially including support for housing, land and property issues and social cohesion. Various counties in Central Equatoria, Jonglei, Unity and Upper Nile are expected to see the greatest return-related needs.

Grave violations against children's rights remain a critical concern in South Sudan. Boys and girls continue to endure multiple protection risks and rights violations, including family separation, widespread recruitment and use of children by armed forces and

LAKES, SOUTH SUDAN
A young girl displaced by fighting holding her baby sister in Mingkaman, Lakes. ©UNICEF South Sudan

groups, psychosocial distress, GBV and exploitation. This situation is exacerbated by limited availability of basic services, weak governance and negative social norms. In 2018, 102 incidents of recruitment or use by armed forces and groups were reported, affecting 453 children (365 boys, 88 girls), 14 per cent of whom were under 15 years of age at the time of their recruitment.[132] A total of 5,988 verified cases of children recruited and used in armed forces and armed groups have been recorded formally from 2014 to the second quarter of 2019 and are creating a high need for disarmament, demobilization and reintegration support. More than 3,200 released children have received support through a community-based reintegration programme.

GBV is pervasive in South Sudan. Women and girls are exposed to violence in their homes and while undertaking life-sustaining activities, such as fetching water and collecting firewood. The breakdown of traditional protection mechanisms due to conflict-related violence and displacement has significantly increased their vulnerability to various forms of GBV, including rape. Among reported GBV incidents in 2019, 98 per cent of the survivors were women and girls. Among incidents, physical assault perpetrated by an intimate partner accounted for 37 per cent, sexual violence 18 per cent and emotional abuse 25 per cent. Increased risks, coupled with gaps in GBV service provision, necessitates the urgent need for strengthened GBV prevention, risk mitigation and services.

More than 23.1 million square metres, or 49 per cent of counties, are contaminated with landmines and ERW. These explosive hazards threaten the physical safety of the civilian population, regardless of demographic status. The highest level of contamination is predominantly located in six counties in the Equatorias (Juba, Magwi, Morobo, Terekeka, Torit and Yei), which is projected to be one of the main routes and areas for returnees from Uganda. Furthermore, these explosive hazards inhibit civilians from collecting water or firewood, cultivating land, attending school and receiving health care, amongst other daily needs.

Analysis of humanitarian needs

Due to the crisis and underdevelopment, communities' capacities to protect themselves are eroded, leading to multi-layered consequences, including exposure to SGBV and other protection risks. With compounded effects due to the lack of basic public services, people's exposure to protection threats has increased as they seek limited resources and resort to negative coping mechanisms. This situation is exacerbated by a lack of resources for national NGOs, which are key to first-line response in hard-to-reach communities.

Protection needs are at catastrophic levels in 10 counties: Aweil East, Awerial, Ayod, Bor South, Juba, Magwi, Panyijar, Rubkona, Tonj North and Yei. Emergency mobile response, community-based protection, social cohesion programming, case management, individual protection assistance, legal services, psychosocial support, and awareness raising on rights and services, are essential to communities in need.

Meanwhile, GBV needs are highest in 14 counties: Akobo, Aweil East, Ayod, Bor South, Gogrial West, Juba, Jur River, Pibor, Rubkona, Terekeka, Tonj North, Wau, Yambio and Yei. The provision of medical care, psychosocial support services, safety, legal aid, and strengthening of referral pathways remain critical interventions for women and girls. Dignity kits and livelihood support are also a high priority. Child Protection needs are enormous in 11 counties of Akobo, Awerial, Ayod, Bor South, Fashoda, Juba, Magwi, Malakal, Panyijiar, Rubkona and Wau. The continued provision of comprehensive child protection services including family tracing and reunification, reintegration support, case management and psychosocial support is critical for the most vulnerable children, including unaccompanied and separated children and those associated with armed forces and groups.

Seven counties have the highest level of recorded landmine and ERW contamination: Canal, Juba, Magwi, Morobo, Terekeka, Torit and Yei. Moreover, 22 additional counties are contaminated with five or more hazardous areas. The majority of these counties are arrival points and/or primary access routes for IDP and refugee returnees. Survey and clearance facilitate the release of land for all community members to enable the resumption of daily activities and access to services, while reducing tension between or within communities around natural resources and land availability. Mine risk education is also critical to reduce risks for IDPs and returnees in unfamiliar terrain.

If returns and local integration accelerate in 2020, the need to assess, provide services and monitor these areas will also increase. This would also create greater social cohesion, as well as housing, land and property service needs for many of the displaced whose housing, land and property assets have been seized, destroyed or occupied.

Projection of needs

The outcomes of the ongoing peace process, Independent Boundary Commission determination, and the formation of the Transitional Government of National Unity will likely influence the returns process, as well as the pace of inter/intra communal clashes, proxy fighting, and cattle raiding in the coming year. The incidence of these will dictate the resulting needs of protection services discussed in the previous section. If progress towards peace is stalled, or even defaults, we are likely to witness continued displacement necessitating ongoing support, with low levels of return. In any case, pockets of conflict, intercommunal clashes, proxy fighting, and cattle raiding will likely continue in the coming year, resulting in new or protracted displacements.

Overview and affected population

An estimated 4.5 million South Sudanese people will be in need of protection from violence, displacement, and human rights violations in 2020. Similarly, over 300,000 refugees in South Sudan are in need of protection services. Counties hosting the highest numbers of people in need (over 100,000) include Wau, Rubkona, Bor South, Jur River, Aweil East, Luakpiny/Nasir, Akobo, Pibor Juba, Gogrial West, Awerial, Twic and Tonj North. These host communities experience high levels of violence in addition to other safety and security risks, including their proximity to cantonment sites. Armed conflict, proxy

fighting, intercommunal violence and cattle raiding have resulted in displacements. Mixed populations of host community, IDPs and returnees often face similar levels of need due to the protracted nature of the crisis, ongoing high levels of violence in some areas, a lack of services, and competition over scarce resources, putting the most vulnerable in all populations at the highest risk of protection threats. Counties with the highest levels of host community in need and IDPs include Rubkona, Bor South, Luakpiny/Nasir, Wau, Akobo, Jur River, Pibor, Twic and Awerial while counties seeing the highest number of returnees from within South Sudan so far include Wau, Bor South, Juba, Jur River, Duk, Terekeka and Ezo.

Host communities as well as displaced and returnee communities are in need of community-based protection, as well as social cohesion, and community-based dispute resolution mechanisms.

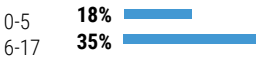
Female-headed households, unaccompanied and separated children, persons with disabilities, older persons, and other vulnerable groups require individual protection assistance, psychosocial support, and assistance in accessing services via referral pathways. Returnees and host communities in areas affected by border and other land disputes or illegal occupation/eviction would be the primary groups in need of housing, land and property interventions.

Women, children, youth, the elderly, and persons with disabilities (PWD) are particularly affected and in need of tailored services. For example, female-, PWD-, elderly- and child-headed households are in need of focused support in terms of returns and housing, land and property issues. Meanwhile, youth programming is needed to support peacebuilding and social cohesion.

Sub-Sector
Child Protection

PEOPLE IN NEED	CHILDREN	WITH PHYSICAL DISABILITY
2.5M	79%	13%

AGE (BY YEARS)



CAREGIVERS

21%

Overview and affected population

An estimated 2.5 million children and caregivers in South Sudan are most at risk of violence, exploitation and abuse, requiring sustained child protection services. Children make up 80 per cent of the people in need in 12 counties of Juba, Wau, Rubkona, Bor South, Jur River, Luakpiny/Nasir, Tonj North, Pibor, Aweil East, Yei, Awerial, and Ayod. Similarly, children from displaced communities and those from conflict-affected areas are particularly vulnerable as they are exposed to multiple protection risks including violence, recruitment, family separation, psychosocial distress, and exploitation. The number of unaccompanied and separated children (UASC) continues to rise with more than 19,000 UASC since 2013. Of the registered UASC, more than 8,400 remain as active cases and are waiting to be reunified with their families and communities through family tracing and reunification services. Furthermore over 19,000 associations of children to armed forces and groups have been reported through verified and unverified sources since the start of the conflict. All the children formerly associated with armed groups will require highly specialized services and reintegration support. This situation is compounded by the lack of critical child protection services, reduced community capacity to protect children and protracted violence.

Sub-Sector
Gender-based Violence

PEOPLE IN NEED	FEMALE	WITH PHYSICAL DISABILITY
1.9M	69%	13%

CHILDREN

35%

Overview and affected population

Women and girls, particularly those who are internally displaced and living near cantonment sites, are most at risk to GBV. A breakdown of traditional protection mechanisms coupled with changing roles within the family and the increased exposure to groups with differential power to commit violence have made these groups more vulnerable. Similarly, lack of livelihoods forces female household heads among IDPs and returnees to fall into exploitive relationships, such as survival-driven transactional sex, indicating the need for more livelihoods support. The GBV risk factors considered for the analysis included distance travelled by households more than 30 minutes to fetch water, status of food insecurity, an incident of armed conflict and proximity of cantonment to civilian sites and access to GBV services. Fourteen counties, namely Aweil East, Aweil North, Ayod, Balliet, Bor South, Cueibet, Gogrial East, Ibba, Longochuk, Maridi, Tonj East, Tonj North, Twic and Wulu, fall under the extreme category. While the provision of medical care, psychosocial support, safety, legal aid, and strengthening of GBV referral pathway remain critical interventions, provision of dignity kits and livelihood support also continue to be a high priority. Prevention and risk mitigation measures also need to be integrated into other sectoral responses.

Sub-Sector
Mine Action

PEOPLE IN NEED	FEMALE	WITH PHSICAL DISABILITY
685K	50%	15%

CHILDREN

54%

Overview and affected population

The population with the greatest need for mine action response is non-displaced and host community members, followed by IDPs and returnees in Canal, Juba, Magwi, Morobo, Terekeka, Torit and Yei counties. Landmines and ERW affect women, men, boys, and girls differently as they approach their environment for specific requirements, such as firewood collection for women and girls or agriculture for men and boys. When women and girls are unable to access water or firewood in proximity to their homes due to the presence of explosive hazards, they must travel to locations further away, which can make them vulnerable to gender-based violence. Children who cannot attend a school in their community for the same reason not only fail to receive an education, but potentially are subject to forced recruitment and other protection risks. IDPs and returnees are particularly in jeopardy as they are unfamiliar with new terrain and the hazards it may contain. For those seeking to re-establish their lives in contaminated areas, to build shelter, or to plant crops, mines and ERW remain a deadly threat.

Monitoring

The Protection Cluster will monitor needs in 2020 through regular protection monitoring, partner reports and data, and 3Ws (Who, What and Where) demonstrating availability of services across locations. Furthermore, the Cluster will advance its monthly 5Ws (Who do What, Where, When and for Whom) by disaggregating by different population groups and will include reporting on persons with disabilities to improve understanding of this segment of the population. The Cluster will also analyse information shared by partners in the Mobile Coordination Forum, as well as reports from the Protection Cluster Roving teams, for analysis of protection and humanitarian needs, including for the Needs Analysis Working Group. The sub-clusters will regularly monitor core service needs through safety audits and assessments conducted at field, state, and national level. The Cluster will also work closely with other clusters' data collection mechanisms to mainstream protection in their tools, thus providing a richer base of cross-sectoral data for future analysis.

GBV Sub-Cluster will work with GBV service providers in collaboration with the National Bureau of Statistics to conduct nationwide surveys on GBV needs in 2020. The findings of the surveys will inform needs assessments and future programmes.

Child Protection Sub-Cluster has developed a situational and response monitoring system that ensures needs are identified and responded to in time, as well as conducting assessments to hotspot locations where needs and gaps have been identified. Furthermore, Child Protection Working Groups plan to conduct specific monitoring missions and assessments in 2020.

Mine Action Sub-Cluster partners will submit weekly and monthly reports to the Information Management System for Mine Action (IMSMA), which is the national database that provides the number of people who receive risk education disaggregated by gender and age, as well as the number of hazardous areas surveyed and cleared. The Sub-Cluster will conduct regular assessments to enhance the Cluster's monitoring and reporting mechanisms.

All sub-clusters will continue to liaise and coordinate with the Protection Cluster in information-sharing and advocacy.

Indicators

#	INDICATORS	SECTORS	SOURCE	FREQUENCY
x01	% of communities reporting general violence (Shelling/artillery/missile attack, non-state actor overtakes territory) with high areas of displacement. **COMPOSITE INDICATOR OF:** 1. Active fighting based on ACLED 2. High areas of displacement	Protection	ACLED OCHA/DTM IDP population Protection monitoring reports	Monthly
x02	# of unaccompanied and separated children	Child Protection Sub-Cluster	CPIMS	Monthly
x03	% of individuals who mentioned forced displacement, forced relocations, forced returns as the main protection concerns **COMPOSITE INDICATOR OF:** 1. Displacement ratios (% IDPs of total population) 2. Incidents affecting communities and individuals reported in 2019, protection monitoring reports 3. IPC	Protection	Incidents reported affecting communities and individuals Protection monitoring reports IPC classification was used for location severity determination	
x04	Extent host communities support continued presence of persons of concern/to returnees and IDPs (areas)	Protection	OCHA/DTM IDP population percentage in comparison to the total population	Monthly
x05	# Hazardous area (landmines/UXO) in counties	Mine Action Sub-Cluster	IMSMA GIS for geographical data	Monthly
x06	# of people who are in need of risk education in mine/ERW affected counties	Mine Action Sub-Cluster	IMSMA GIS for geographical data	Monthly
x07	% of at risk individuals with access to core GBV services	GBV Sub-Cluster	GBV SC 5W for 2019 Mapping of Women and Girls Friendly Spaces Cantonment paper GBV service mapping reports CMR services Expert judgment	Monthly
x08	% affected and at-risk girls and boys in need of psychosocial support	Child Protection Sub-Cluster	SADD methodology Conflict affected areas Access to basic services	Monthly

3.8

Water, Sanitation and Hygiene

PEOPLE IN NEED	FEMALE	CHILDREN	WITH PHYSICAL DISABILITY
5.5M	50%	54%	13%

Overview

An estimated 5.5 million people are need of WASH services in 2020. This includes 5.2 South Sudanese women, men and children who will not have access to adequate WASH services in 2020. These people include IDPs, non-displaced and host community members, returnees from internal displacement and refugee returnees who are vulnerable with limited access to WASH services. In addition, some 300,000 refugees lack access to sufficient WASH services.

In 2019, 38 per cent of households reported access to an improved water source in under 30 minutes without facing protection concerns. The remaining 62 per cent of the population across the country either rely on unimproved or surface water sources (35 per cent), take more than 30 minutes to reach the improved sources (24 per cent), or are able to reach an improved source in less than 30 minutes but face protection concerns while accessing the source (3 per cent). The highest proportion of households relying on surface water were found in Greater Upper Nile (59 per cent).

Access to sanitation remained low, with 15 per cent of households reporting owning a latrine in their compound and 4 per cent with a communal or shared latrine, and in 43 counties zero to 10 per cent of HHs reported using latrines. Regional access varied greatly, from 67 per cent in Western Equatoria to 6 per cent in Lakes, 5 per cent in Northern Bahr el Ghazal and 4 per cent in Warrap. In addition to physical infrastructure, only 13 per cent of households reported ownership of three key WASH items—buckets/jerry cans, soap, mosquito nets.

UPPER NILE, SOUTH SUDAN

Internally displaced people fetch water from an unsafe water source in Aburoc settlement camp in Fashoda, Upper Nile. ©OCHA South Sudan

These key indicators show that WASH infrastructure coverage alone, for instance, water points and latrines, is weak in South Sudan, and additional indicators show that the impacts of poor WASH coverage is measurable through a multi-sectoral view. Poor access to WASH services and goods combined with high levels of food insecurity has a detrimental impact on the health of the most vulnerable, as seen through the high prevalence of malnutrition and water-borne diseases, with 74 per cent of households reporting members affected by a water or vector-borne disease. The most commonly self-reported diseases were malaria, fever and acute watery diarrhoea. In addition, counties reporting high GAM rates have also identified with high WASH needs.

Affected population

As access to improved water sources is predominately communal in South Sudan, the limited access to WASH services will impact all population groups—including IDPs, non-displaced and host community members, returnees from internal displacement, spontaneous refugee returnees—will need to collect water. With the projected increasing proportion of people returning to settlements, payams and counties of origin, the already limited water sources may become overstretched as the demand increases. The same stress may be placed on sanitation facilities.

Women and girls face increased risk of harassment, assault and sexual violence when collecting water, using communal latrines and accessing menstrual hygiene products. Additionally, appropriate and dignified washing locations remain as critical needs. IDPs in PoC sites do not have sufficient access to hygiene and sanitation facilities and are at risk of disease outbreaks in the congested conditions. WASH needs are also high among IDPs and returnees in non-camp settings and among their already stretched host communities. While host communities and non-displaced people are also in need of WASH items and facilities, the increasing needs are expected in the recently returned refugees and IDP groups, or those settling in new locations.

Different needs are also found in populations in urban and rural settings. Access to water may be sufficient in urban populations, however insufficient sanitation may lead to a rise in vector-borne disease. Additionally, there are challenges to the South Sudanese context that transverse rural and urban settings, specifically cholera. The hotspot counties ranked with the highest priority and identified in the analysis done by WHO and UNICEF are Juba, Kapoeta North, Panyijar, Rubkona, Awerial and Yirol East with a mix of both large urban and rural populations, with an additional 13 counties identified as being high and medium priority.

Analysis of humanitarian needs

The number of people requiring emergency WASH services in 2020 decreased by 500,000 from the previous year, a decrease attributed to the new calculation methodology and the exclusion of sanitation as well as a slight improvement in WASH service provision coverage. However, the needs of the population remain similar.

High WASH severity can be attributed to a heavy reliance on surface water, lacking sanitation facilities and the repeated presence of insecurity in some of these counties. Higher WASH severity was mapped throughout Greater Upper Nile and Greater Bahr el Ghazal, and in counties in Central and Eastern Equatoria bordering the White Nile. WASH severity mapping highlighted that the counties with the greatest need of WASH services are found in the former Upper Nile State. Of these top 10 counties (Awerial, Malakal, Fashoda, Luakpiny/Nasir, Renk, Juba, Ulang, Kapoeta South, Maiwut, and Melut), seven are in Upper Nile State. Awerial County, in particular, has been found to be in the top ten counties over the past three years.

This analysis of key WASH humanitarian needs is not one that is solely reliant on WASH data, as WASH for GBV mitigation, WASH in Nutrition and WASH in Health remain key WASH-related humanitarian needs. Therefore, the severity mapping conducted included key nutrition, GBV and health indicators in order to identify counties with high multisectoral needs, where an integrated WASH service provision would increase accurately targeting population needs.

Poor access to WASH infrastructure and services will drive needs in other clusters, as is demonstrated through the rate of GAM in different counties. Renk is a key example of a country with sufficient access to food but one that has, for the past three years, reported high GAM rates (above 30), with the high rate partially attributed to poor access to WASH services.

Projection of needs

As the movement and flow of returnees to South Sudan continue with populations returning to their areas of origin, demand for the already limited water and sanitation infrastructure is expected to increase. Access to water may become a driver for conflict as increasing numbers attempt to access insufficient improved water sources. As the number of people living in urban and peri-urban regions increases, so will the demand on sustainable WASH infrastructure at the community and institution level in these areas.

Poor access to water may drive people to collect water from potentially contaminated sources. Limited or no sanitation infrastructure may increase the need for new latrine construction as well as place an increasing demand on the frequency of faecal waste management of existing sanitation structures. Without adequate WASH infrastructure, the potential presence of water or vector-borne diseases as well as the ability to contain them may impact the well-being of the local populations at risk of disease outbreaks in the increasingly congested urban setting.

Monitoring

The WASH Cluster will monitor the needs of the population through a multitude of means, in particular through direct links with the sub-national coordinators in the field. As during 2018 and 2019, key WASH indicators (as referenced below) will be collected through the FSNMS in order to support the monitoring of needs as well as flag areas where WASH needs appear to

spike.[133] In addition to FSNMS, the WASH Cluster has created a specific WASH monitoring and evaluation tool which partners will be trained on, that will also be able to feed into the indicators below. Progress on addressing the population in need will be measured through the monthly WASH Cluster 5Ws, with specific indicators created in order to address the WASH Cluster's 2020 Strategic Objectives. The Cluster will also continue working to strengthen accountability to the affected population conducted by WASH partners and will monitor partner progress through quarterly quality snapshots.

Indicators

#	INDICATORS	SECTORS	SOURCE	FREQUENCY
x01	Prevalence of GAM for children aged 6–59 months	Nutrition	FSNMS/SMART	Twice a year
x02	% of household members affected by relevant health issues (respiratory, acute watery diarrhoea, cholera, eye infection)	WASH	FSNMS	Twice a year
x03	% of people in cholera hotspot counties	WASH/Health	WHO/UNICEF	Ad hoc
x04	% of households with access to an improved water source	WASH	FSNMS	Twice a year
x05	% of households with access to a functional and improved sanitation facility	WASH	FSNMS	Twice a year
x06	% of households with access to WASH items (unbroken jerry can/bucket with lids, every member of the households sleeps under a mosquito net, access to soap)	WASH	FSNMS	Twice a year

Part 4

Annexes

UNITY, SOUTH SUDAN

Displaced people arriving at Bentiu PoC site, Unity. ©UNICEF South Sudan

4.1 Intersectoral Analysis Methodology

Analysis team

The ICWG and the IMWG worked together in joint meetings and engagement throughout the process of defining the scope of the analysis and setting the analytical framework. Cluster coordinators and cluster information management officers worked together with OCHA, global cluster focal points, cluster lead agencies, other humanitarian country team members, and subject matter experts in both South Sudan and respective headquarters to suggest indicators both for the intersectoral and sectoral analysis, as well as to gain a more thorough understanding of the data available in country.

The clusters subsequently proposed data sources and sets that were robust enough to be analysed and disaggregated, for collective agreement by the ICWG and IMWG. This effort involved regular input from the NAWG, which meets on a biweekly basis in the capital, Juba, to inform operational decision making for inter-agency assessments and response, and undertakes a quarterly, forward-looking analysis exercise on needs across the country and factors driving the needs.

The analysis effort included consultations with in-country and regional experts, such as the team working on the FSNMS data collection and analysis and a variety of indices, such as the Resilience capacity index, as well as the wealth index. Experts on population movement, including IOM Displacement Tracking Matrix (DTM), UNHCR and Internal Displacement Monitoring Centre (IDMC), were also involved, including in the effort to agree on population estimations to be used for the 2020 HNO.

This included regular meetings of a newly formed Population Mobility Working Group to set the population baselines for the exercise and the parallel IPC analysis, as well as to analyse trends in displacement and returns. IDMC led a workshop in-country to bring together partners to improve ongoing handling of displacement and returns related data, particularly data related to cross-border movements. The outcomes will inform ongoing efforts to track these population movement trends and provide robust figures to inform periodic monitoring of needs and response, as well as the HNO and HRP process of coming years, as the environment evolves.

The process to arrive at population estimations involved calculating numbers of South Sudan refugees disaggregated by counties of origin—to enable the adjustment of County populations based on the 2008 census numbers while IDP movement statistics as well as returnee data (IOM DTM, OCHA, WFP, REACH, host government data sets) were used to inform inter-county population movements and make appropriate adjustments. The team also compared final population numbers with the current data set (Common Operational Datasets) used by the humanitarian community as well as the population numbers generated by the Famine Early Warning System Network, which accounts for factors such as conflict, displacement, natural population growth and mortality. To ensure a comprehensive picture of the situation, the team used mixed-methods approach; drawing on both quantitative and qualitative data sources. Specifically, this entailed collating information from partners with population mobility data gathered through various methods, for example sample-based household questionnaires, focus group discussions and key informant interviews and analysing the results of each of these methods together.

Scope of the analysis, including population groups

The HNO analysis covers all 78 counties (second administrative level) of South Sudan. This broad geographic scope was maintained from previous years' analysis, since the humanitarian crisis has impacted the whole country, with every county hosting displaced people and witnessing high humanitarian needs.

Similarly, as the clear majority of the South Sudanese population has felt the impacts of the crisis, no major population group was excluded from the analysis. Specifically, the analysis considered the needs of the following four groups: host community members and people who have not been displaced but are otherwise affected; IDPs; returnees; and refugees in South Sudan. For the returnee group, initial analysis considered the specific needs of three sub-groups: people who have returned to their places of origin or habitual residence from internal displacement, spontaneous refugee returnees in areas of return, and spontaneous refugee returnees living in IDP-like situations. The analysis presented in the HNO combines the three returnee sub-groups, since sufficient data was not available to identify specific sub-groups' needs.

To set boundaries for the population baseline around people most affected by the humanitarian crisis, the wealthiest

UPPER NILE, SOUTH SUDAN
A sick child waits to receive treatment at a hospital in Malakal, Upper Nile. ©UNICEF South Sudan

quintile was removed from each county's host community and non-displaced population. This was done using the wealth index, which is a composite index composed of key asset ownership variables and which is used as a proxy indicator of household level wealth. The index measures relative wealth and, unlike a poverty line, is not an absolute measure of poverty or wealth. It is generated with a statistical procedure known as principal components analysis. The wealth index was applied to the data for all of the indicators used for the intersectoral severity analysis, with the exception of those where the index is already part of the analysis for the indicators: the IPC on food insecurity and GAM on malnutrition. This technique drew upon analysis that is newly developed and evolving in country, on using wealth quintiles to better understand the potential impact of shocks on the population and how that may be different based on access to resources. It was used as a way to set boundaries within the population baseline around people most affected by humanitarian crisis for the purposes of this humanitarian-focused analysis, in a setting where even pre-crisis, there was a significant baseline of long-standing human development needs which require attention from development actors and investment from beyond the humanitarian community and envelope of emergency resources.

Context and impact

The ICWG and IMWG, joined by sectoral experts and analysts, convened for a workshop to identify the key issues for the context and impact. The identification of issues first drew on the outcomes of the May 2019 Needs Analysis Working Group quarterly workshop, which focused on causes and drivers of need. Cluster coordinators and information managers contributed to the desk review with a wealth of studies, research papers and grey literature, complemented by anecdotal evidence and additional inputs from Humanitarian Country Team members.

Intersectoral people in need methodology

The PiN presented in the HNO is a sum of the number of people in need, by humanitarian consequence in each population group and geographical area based on the analysis of available data.

The first step was to select indicators of need for each of the humanitarian consequences. For the selection of indicators, the ICWG and IMWG considered appropriateness, non-correlation and data availability. OCHA encouraged clusters and partners to be responsible, transparent and creative in pushing forward the quality and rigour of the exercise in selecting indicators and data sources, and handling the data to be broken down by geography, population group and humanitarian consequence.

The selection of indicators was based on consulting the 'Indicator Reference Table' produced by the Joint Intersectoral Analysis Group of the Inter-Agency Standing Committee, which contains a set of Joint Intersectoral Analysis Framework (JIAF) 'core indicators' adapted for use in intersectoral needs and severity analysis. The selection of indicators involved iterative rounds of consultations over several weeks with global cluster leads, OCHA headquarters and local agency experts, to guide decisions by cluster teams with OCHA on use and handling of indicators and related data for PiN and severity analysis, to arrive at a set of indicators for intersectoral analysis. The examination of the data coverage, reliability, measurability, and relevance and handling of the indicators, and the mix of indicators, led to decisions to exclude some indicators, such under-five mortality rate and percentage of IDP site populations with access to goods and services. Local and global clusters, OCHA and agency colleagues used expert judgement and geographic extrapolation to fill data gaps, and tested for outlying data points.

One practical way of testing the indicators was to identify which indicator was driving the PiN in any given county, and for any given population group. This revealed initial issues with the quality of the indicator–for example if an indicator used for a specific population group such as IDPs drove that group's PiN to be significantly higher than the PiN for other groups that were considered to be in similar level of need. The identification of driving indicators also helped identify where incorrect population baselines were initially used, and allowed for the baselines to be adjusted for the correct age and sex, for example only pregnant women of reproductive age, or boys and girls under age 5, or all children under age 18.

The use of composite indicators was recommended to be avoided to the extent possible, with the exception of using globally accepted composite indicators for food security and malnutrition (IPC and GAM). Some compromises were made. The WASH Cluster proposed a set of indicators for the intersectoral analysis that, even after adjusting the thresholds to the South Sudanese context, would have driven the PiN very high if used separately. The decision was therefore made to use the median value per county for the WASH-related indicators.

The severity thresholds of some indicators, for example access to an improved water sources, were adjusted to better differentiate between more and less severe needs in the South Sudan context, again to place boundaries around the needs which are most related to improving and sustaining physical and mental well-being and living standards–versus those which must be addressed over the mid-longer term for broader and more sustainable human development. This is in a context where South Sudan ranks third last of 189 countries in UN Human Development Index.

The ICWG and IMWG also consulted and made decisions regarding mapping of indicators to the humanitarian consequences of physical and mental well-being and living standards. In accordance with emerging global guidance, the indicators for food security (people in IPC Phases 3–5) are included under the physical and mental well-being category. This drives the PiN number with challenges in the physical and mental well-being category to be larger than those having needs with respect to maintaining adequate living standards that prevent them from falling into more severe levels of crisis. This is an exception to the balance of well-being and living standards PiNs in most contexts, where the well-being PiN is lower than that for living standards. The final PiN by county was adjusted to reflect the food insecurity situation and resultant Food Security and Livelihoods sectoral PiN as the highest PiN in most counties, such that no county could have a PiN figure lower than the IPC result for the particular county.

The table below sets out the final set of indicators chosen for the intersectoral analysis and the severity thresholds that were set to adapt them to the South Sudan context.

Intersectoral PiN indicators and severity thresholds

	SEVERITY CLASS	NONE/ MINIMAL	STRESS	SEVERE	EXTREME	CATASTROPHIC	SOURCE (AUTHOR, DATE)
	INDICATORS	1	2	3	4	5	
PHYSICAL AND MENTAL WELL-BEING							
Malnutrition	Prevalence of GAM among children between 6–59 months	Acceptable (<2.5%)	Alert (2.5–4.9%)	Serious (5–9.9%)	Critical (10–14.9%)	Very critical (>15%)	Food, Security and Nutrition Monitoring System, June–July 2019
Disease	Cholera hotspots	Not a hotspot	Not a hotspot	Type 3—medium	Type 2—high	Type 1—very high	National Cholera Plan. 2018–2023/6 years. WASH component/prevention. WHO/UNICEF/Paul Cottavoz. June, 2019
	% of HH with one or more members affected by self-reported water- or vector-borne disease in the two weeks prior to data collection.	HH with no members affected by self-reported water- or vector-borne disease in the two weeks prior to data collection.	HH with adults' members affected by self-reported water- or vector-borne disease in the two weeks prior to data collection.	HH with child members affected by self-reported water- or vector-borne disease in the two weeks prior to data collection.	N/A	HH with adults and children affected by self-reported water- or vector-borne disease in the two weeks prior to data collection.	Food, Security and Nutrition Monitoring System, June–July 2019
	Incidence rates for five common diseases	0	>0–<0.005	>=0.005–>0.011	>=0.011–<0.020	<=0.020–+	EWARS
	Case fatality rates for most common diseases	<1.0%	1.0%–<1.5%	1.5%–<2.0%	2.0%–<2.5%	2.5%+	EWARS
Child protection	No. of unaccompanied and separated children	<20 UASC	20–39 UASC	40–99 UASC	100–350 UASC	>350 UASC	In 2013, UNICEF in collaboration with Save the Children started family tracing and reunification of these unaccompanied and separated children. These children have been recorded since then in a database (CPIMS).

	SEVERITY CLASS	NONE/ MINIMAL	STRESS	SEVERE	EXTREME	CATASTROPHIC	SOURCE (AUTHOR, DATE)
	INDICATORS	1	2	3	4	5	
Violence against civilians	% of communities reporting general violence with high areas of displacement	<5% IDPs	15%–29% IDPs	30%–39% IDPs	40%–49% IDPs	>50% IDPs or active fighting based on ACLED	Active fighting based on ACLED 2019 High areas of displacement—OCHA population figures 2019 Expert judgement on service gaps and general violence in those areas
Food insecurity	IPC Phase	Minimal (Phase 1)	Stressed (Phase 2)	Crisis (Phase 3)	Emergency (Phase 4)	Catastrophe (Phase 5)	The IPC analysis, based on FSNMS conducted during June and July 2019 (about 110 per country; data sets established for the IPC analysis will be written up and compiled in the FSNMS round 24 report by late 2019 or early 2020)
LIVING STANDARDS							
Water quality	% of HHs with access to an improved water source	Water comes from an improved water source, provided collection time is not more than 30 minutes for a round trip, including queuing	Water comes from an improved source for which collection time exceeds 30 minutes for a round trip, including queuing	Water comes from an unimproved water source in less than 30 minutes	Water comes from an unimproved water source in more than 30 minutes	Water comes directly from rivers, lakes, ponds, etc.	Food Security and Nutrition Monitoring System, June–July 2019
Access to WASH NFIs	% of HHs with access to WASH NFIs (unbroken jerry can/bucket with lids, every member of the HH slept under a mosquito net, access to soap)	% of HHs with access to all three WASH NFIs	% of HHs with access to two of three WASH NFIs	% of HHs with access to one of three WASH NFIs	N/A. There are only four levels of severity for this indicator, hence one of the levels was not classified.	% of HHs with no access to WASH NFIs	Food Security and Nutrition Monitoring System, June–July 2019

	SEVERITY CLASS	NONE/ MINIMAL	STRESS	SEVERE	EXTREME	CATASTROPHIC	SOURCE (AUTHOR, DATE)
	INDICATORS	1	2	3	4	5	
Access to protection services	% of at-risk women and girls with access to core GBV services	<30% of women and girls in need of core GBV services	30%–35% of women and girls in need of core GBV services	35%–40% of women and girls in need of core GBV services	40%–45% of women and girls in need of core GBV services	>45% of women and girls in need of core GBV services	GBV SC 5W for 2019 Mapping of Women and Girls Friendly Spaces Protection Cluster Cantonment Advocacy paper, 2019 GBV Service mapping reports Health Cluster data on the availability of clinical management of rape services Expert judgment of GBV SC coordinators to determine severity thresholds and availability, accessibility, quality of GBV services
	% of at-risk children without access to psychosocial support and other child protection services	<1,000 displaced children	1,000–5,000 displaced children	>5,000–10,000 displaced children	>10,000–20,000 displaced children	>20,000 displaced children	OCHA population figures 2019, ACLED data on incidents 2019, high areas of displacement, Cantonment Advocacy Paper 2019, CP service mapping reports 2019, CP 5Ws for 2019
	% of people without access risk education in mine/explosive remnants of war affected counties	No. of hazardous areas = 0	No. of hazardous areas = 1	No. of hazardous areas = 2–6	No. of hazardous areas= 7–12	No. of hazardous areas >12	IMSMA data is collected through accredited mine action (MA) organizations, including MA operators, international NGOs, national NGOs, and community-based organizations (CSOs), trained and accredited per the South Sudan National Technical Standard Guideline (NTSG) for MA operations in South Sudan. All organizations are obliged to report their activities (survey, clearance, and RE) to the IMSMA database on regular basis.
Access to education	% of out-of-school children (3–17 years old)	N/A	N/A	>=50%–<80%	>80%	N/A	Global Initiative on Out-of-School Children—South Sudan Country Study (May, 2018)
	% of school drop-out (3–17 years old)	N/A	N/A	>=4%–<10%	>10%	N/A	EMIS 2018

	SEVERITY CLASS	NONE/ MINIMAL	STRESS	SEVERE	EXTREME	CATASTROPHIC	SOURCE (AUTHOR, DATE)
	INDICATORS	1	2	3	4	5	
Living conditions in displacement sites	% of site populations in unmanaged sites	0—10%	11—30%	31—60%	61—99%	>99%	DTM and OCHA
Access to health services	Coverage of measles vaccination (<1 year old)	0—49.9%	50%–69.9%	70%–79.9%	80%–99.9%	100% +	DHIS 2
	PENTA 3 coverage in <1 year old	0—49.9%	50%–69.9%	70%–79.9%	80%–99.9%	100% +	DHIS 2
	% of births unassisted by skilled attendants	<60%	61%—70%	71%—80%	81%—90%	91% +	DHIS 2

After selecting the final set of indicators for the intersectoral analysis, the calculation of the PiN began. Clusters provided the percentage of PiN by indicator for the different population groups and locations at second administrative level. These were put together to estimate the PiN for well-being, and subsequently for living conditions.

Below are the steps followed during the PiN calculations by humanitarian consequences and by population groups.

PiN by indicator by county: Here the PiN was calculated by summing up the three severity levels scales (severe + extreme + catastrophic) to calculate the PiN of the specific indicator by county by population group.

PiN by humanitarian consequences: The indicators were then grouped by their respective humanitarian consequences and MAX formula was used to select the indicator with the highest value to derive PiN for a specific consequence by county. This process was done for the rest of the 78 counties.

The overall PiN for a county: was calculated by taking the MAX between the two humanitarian consequences (physical and mental well-being and living standards). This process was done for the rest of the 78 counties.

PiN by population group: All the above three steps were done for each of the six population groups, except for refugees in South Sudan.

Refugees in South Sudan: All refugees in South Sudan were considered as in need of humanitarian assistance per UNHCR guidance and therefore added to the overall PiN. However, the refugee PiN was not part of the intersectoral analysis due to unavailability of data sets for the indicators selected for physical and mental well-being and living standards. Instead, the refugee PiN was added to the overall PiN by county for locations with existing refugee population. This invariably led to counties with refugee populations having a PiN higher than the existing county population, since refugees from other counties in South Sudan are not part of the South Sudan population baseline.

A notable limitation in the PiN calculations was that the data did not allow for direct application of a severity scale with PiN disaggregated by severity scale 3, 4 and 5 (severe, extreme and catastrophic need) for a given indicator. Instead, the clusters primarily provided data only for the sum of the number of people in severity scale 3–5). There were some exceptions, such as the IPC phases and some protection-related indicators that would have allowed for the PiN to be disaggregated by severity scale, but this was not available across the selected indicators and could therefore not be used for the analysis. Data collection will be strengthened for 2020 to allow for greater disaggregation of the PiN by severity scales, in an effort to inform response prioritization.

With the exception of indicators that referred only to a specific sub-group, such as children under age 5, the highest percentage of PiN among all the selected indicators was applied to the baseline population of each of the population groups for each of the counties. Eventually, the total PiN for the each of the humanitarian consequences was the PiN of all the population groups added up for each of the locations.

UNITY, SOUTH SUDAN
A conflict-affected man during an assessment mission in Ding Ding, Rubkona County, Unity. ©OCHA South Sudan

This, however, revealed some weaknesses in the data and thresholds provided for some of the population groups. In particular, the data for IDPs and returnees suggested that often nearly 100 per cent of people in these groups were in need, while only some 60–70 per cent of the host community members and those otherwise affected but non-displaced people were estimated to be in need. Using expert judgement, it was decided that the initial analysis by population group did not provide a PiN that corresponded to the humanitarian situation in the county, as the PiN was several millions higher than that from previous years, and because there was not credible analysis to suggest that non-displaced people's needs were significantly lower than those of the displaced people they often hosted.

Therefore, the initial methodology was adjusted to apply the severity scales and percentages derived using the PiN methodology for the host community members and non-displaced but otherwise affected to the entire South Sudan population, therefore masking the first suggested high needs of the displaced and returnee populations. To still make the analysis people-centred and acknowledge the different population groups, the numbers of IDPs and returnees in need were estimated based on available data expert judgement and proportions of PiN against the baseline population of the respective group, which was derived using the new PiN methodology detailed above.

Resilience analysis

For the resilience and recovery consequence, sufficient data was not available to calculate a consequence-specific PiN figure. This could be developed in the future with the involvement of development actors. For now, resilience capacity was described using the Resilience Capacity Index developed by the UN Food and Agriculture Organization. Its pillars, definitions and variables are explained in the table on page 73.

Resilience Capacity Index pillars, definitions and variables

PILLAR	DEFINITION	VARIABLE
Access to basic services	This shows the ability of a household to meet basic needs, by accessing and effectively using basic services, such as sending children to school; accessing water, electricity and sanitation; and selling products at the market.	Distance to water sources (inverted); access to safe sanitation; access to improved water sources; distance to health facilities (inverted); type of housing
Access to assets	Access to assets, both productive and non-productive, are the key elements of a livelihood, since they enable households to produce and consume goods. Examples of productive assets include land and agricultural index (e.g. agricultural equipment), while non-agricultural assets take into account the monetary value of the house where the household is located, and its appliances.	Household assets index; productive/ agricultural assets index; access to land for cultivation; livestock ownership
Social safety nets	Social safety nets proxies the ability of the household to access formal and informal assistance from institutions, as well as from relatives and friends.	Borrowing frequency; access to formal transfers; access to informal transfers; participation in social groups
Adaptive capacity	Adaptive capacity is the ability to adapt to a new situation and develop new livelihood strategies. For instance, proxies of the AC are the average years of education of household members and the household perception on the decision-making process of their community.	Education of the household head; number of income sources; number of crops cultivated; participation in training activities; reduced coping strategies index

4.2

Sectoral Data Sources and Methodologies

Clusters employed their own individual PiN methodologies based on the severity thresholds from the PiN estimation guideline and JIAF indicator matrix. Where possible, sectoral PiN calculations were based on those in the intersectoral HNO framework and the indicators selected for the intersectoral PiN and severity analysis. Most indicators were indeed used to calculate both the sectoral and intersectoral PiN analysis and severity mapping. The sectoral PiN calculations are not entirely consistent with the intersectoral analysis, however, because in some cases, the sectors added further indicators for their sectoral PiN and severity analysis. This explains partially why in some cases the sectoral severity maps show catastrophic needs in locations that are considered severe or extreme intersectorally. The section below explains the specific methodologies employed by the clusters.

Food Security and Nutrition Monitoring System

The Food Security and Nutrition Monitoring System (FSNMS) is a nationwide exercise established to monitor key food security indicators, and acute and chronic malnutrition rates among children under 5 years of age and mothers, as well as to identify geographic areas and socioeconomic groups that are food insecure. The FSNMS surveys provide regular updates on the food security and nutrition situation in South Sudan and are key sources of information for IPC analysis. Twenty-five rounds of FSNMS survey have been completed so far. Historically, the system was designed to produce state-level results. However, with the need for county-level data, particularly for IPC analysis, the survey was designed in such a way as to produce food security results at county level, while nutrition results were produced at state level.

JONGLEI, SOUTH SUDAN

Community members queue for a distribution of fishing kits and seeds in Padding, Jonglei.
©UNICEF South Sudan

Sampling design was informed by the food security indicators representative at county level and was calculated based on the following approach:

- Two-stage cluster sample design was adopted for FSNMS round 25. In the first stage the enumeration areas were selected by using the systematic probability proportional to the size of households (PPS) method.
- The second-stage sampling technique was used at the county level, where clusters were selected using PPS sampling.
- The primary sampling unit for bomas was the enumeration areas based on the 2008 census. No re-listing of the enumeration areas was possible during the assessment. Household selection was done through listing of households in the enumeration areas and enumerators were selected using random methods.
- Large enumeration areas were first subdivided into segments. One segment was selected and household listing was conducted on that segment.
- In this way, 12 sampled households per cluster, nine clusters/enumeration areas from each county and 702 clusters/enumeration areas and 8,424 households were selected across the 78 counties (domains) in the 10 former states of South Sudan. The sampling frame was based on the 2008 Population and Housing Census.
- The confidence interval was 95 per cent (Z=1.96) while a precision level of 10 per cent is recommended for food security surveys.
- The adjusted sample in each county was inflated by 5 per cent as non-response rate.
- The survey instrument consisted of food security and nutrition modules, including anthropometry of under-five children.
- Open Data Kit was used as the data collection tool, programmed with high quality data checks to ensure high quality data at the time of data collection. Once the data was uploaded, regular data quality checks were conducted, and feedback was provided to the teams in the field to further improve the quality of data.
- The data was plotted online on a map using Tableau, through which real-time data collection monitoring was ensured, and regular updates were shared with the partners and teams on the ground.

Camp Coordination and Camp Management

IOM DTM mobility tracking data (round 5), OCHA's IDP population baseline and camp management agencies' population data were the primary sources for the needs analysis. They were analysed with a primary focus on IDPs and returnees living in displacement situations. These population groups were further classified into four different categories: IDPs living in PoC sites, IDPs living in collective sites, IDPs living in spontaneous sites and informal settings, and returnees living in PoC sites/collective sites/spontaneous sites and informal settlements.

The Cluster took significant steps in 2019 to streamline data collection to ensure compatibility, quality and comparability of needs assessments with a view to strengthening the Cluster-specific humanitarian analysis. In August 2019, the Cluster and partners finalized PoC site service profiles to harmonize sectoral data collection and to enable more rigorous secondary data review in the process of determining the population of PiN. The Cluster used the percentage weighting to calculate severity based on the prioritized indicators and the overall humanitarian consequences. The Cluster determined that more than 92 per cent of IDPs living inside the PoC and collective sites would be in need of access to services, while 87 per cent of the displaced persons in camp-like settings and informal settlements would need assistance.

To determine the severity of needs, the Cluster made the assumption that the need would be severe if less than 60 per cent of the displaced population have access to basic lifesaving services, while the need was less severe if at least 60 per cent of the population was reached with services. With regard to the second indicator, the percentage of people in unmanaged sites, the Cluster would consider the need to be severe if more than 30 per cent of IDPs remained in unmanaged sites and very severe if more than 60 per cent of the site populations were in the same situation. The severity of need would be considered catastrophic if only 1 per cent of people were residing in managed sites.

Education

Data collected through the 2018 Education Management Information System (EMIS) assessment and the out-of-school children (OoSC) study by UNESCO were mainly used in analysing the needs. As both of these data sources and indicators specifically targeted education beneficiaries, outcomes are directly adaptable and have the ability to determine children in need of support in South Sudan. Data collection was based on school level through a national school census exercise, while the out-of-school study was based on secondary data available at state level.

The methodology changed slightly from last year due to the change of proxy indicators. Previous indicators were 'drop-out' and 'non-attendance'. This year, the Cluster used two proxy indicators—percentage of out-of-school children and drop-out—to analyse the severity of the education situation in the South Sudanese context. The first indicator, out-of-school children, was assigned a higher weight of 10 and the second indicator, drop-out, was assigned five, making an overall weightage of 15. The significance of out-of-school children is high as it is difficult to track and bring these children back to school when the reasons for non-attendance are chronic (over-age, displacement, socioeconomic) while children who have dropped out can be traced and mainstreamed through community mobilization and incentives. The JIAF indicator reference table did not have a pre-defined threshold for both indicators and therefore the Cluster had to use expert judgment based on available data.

School-aged children, aged 3–17, in different population groups were calculated based on the population estimate data provided by OCHA, which represents 45 per cent of the entire population. School-aged learners were further grouped according to different school levels: pre-primary, primary and secondary. The two proxy indicator percentages were applied to the school-aged population from each of the selected population groups by county. PiN in each population group were calculated by adding the results of the two indicators and summed up to arrive at the total number of PiN in all population groups. The number of education personnel in need of support was determined by applying the pupil-teacher ratio (1:50) as an assumption to estimate the required number of teaching personnel as per the national education standards in the South Sudanese context. The analysis was done at state level for the Cluster due to lack of data at county level.

Emergency Shelter and Non-Food Items

Displacement and population data from different sources, including OCHA, IOM DTM, UNHCR and various assessments conducted by cluster partners were used. The needs have been analysed with a focus on IDPs living inside PoC sites and collective centres, returnees living in the PoC and other collective sites as well as in spontaneous sites and informal settlements, returnees from within South Sudan, refugee returnees in places of return, and non-displaced and host communities.

The number of PiN was calculated by reviewing the assessment trends in previous years and determining the average percentages of PiN of assistance. The Cluster determined that 100 per cent of IDPs living inside the PoC and collective sites would need emergency shelter and NFIs as most of the distributed items lasted for approximately six months and the existing complaints and feedback mechanisms would handle the replacement requirements on a case by case basis as routine care and maintenance mechanism working with camp management. Furthermore, more than 70 per cent of the displaced population outside PoC sites, collective centres and camp-like settings as well as around 60 per cent of returnees will need assistance.

In terms of the severity of needs, the Cluster used the pre-determined global cluster indicators presented in the intersectoral severity of needs analysis. To determine the severity of needs, the Cluster assumed that the need situation would be catastrophic if less than 25 per cent of the population in a particular county have access to shelter. The Cluster would consider the need as extreme if 25 to 50 per cent of the population have access to shelter while the need would be categorized as severe if 50 to 70 per cent of the population have access to shelter. The data source for this assumption is derived from the partner's distribution reports. The same principle is applied to the second indicator.

Food Security and Livelihoods

Data from FSNMS round 24, which was conducted across 78 counties, was used for the IPC analysis in August 2019. The FSNMS data is collected twice per year: November–December and June–July, ahead of the respective IPC analyses in January (post-harvest) and August (depth of the lean season). The information was collected from 8,500 randomly sampled rural households across all the 78 counties. This equated to a randomly sampled and representative number of the affected population covering a range of wealth in population groups and with varying degrees of food insecurity. FSL PiN (phases) is determined through the IPC protocols, which always include all available/relevant data sources and are globally recognized. Contributory factors were provided from FSL assessments and context reports conducted in the previous six months provided by the FSL Cluster and other clusters as part of an IRNA.

The methodology is in line with the IPC protocols and the Global Food Security Cluster guidelines. The IPC protocols and framework for acute food insecurity includes: 1) Examining vulnerabilities/risk, 2) Drivers/contributing factors, 3) Food consumption outcomes (level 1 outcome), 4) Livelihood coping outcomes (level 1 outcome), and 5) GAM/mortality (level 2): food consumption scores, household diet diversity scores, household hunger scale, reduced coping strategy index, livelihood coping strategy, GAM/SAM rates and mortality rates. Of these, FCS, HDDS, HHS, rCSI, LCS, GAM and CDR are apart but they do not determine phases. The data is reviewed and assessed by state-level teams at the August IPC analysis for the lean season (July–August) with projections made for the period September–December 2019 and January–April 2020.

Health

Data on the five most common diseases (malaria, measles, acute respiratory infection, acute watery diarrhoea and acute bloody diarrhoea) was used to measure disease burden on the population by county. Raw data for nominator (number of cases) were obtained from WHO's EWARS while denominator (estimated population for each population group) was obtained from the population working group. The same data was used to calculate the case fatality rate to identify disease severity and quality of health care. Raw data for nominator (number of deaths) and

denominator (number of cases) were obtained from WHO's EWARS system. In addition, measles coverage for children under 1 year of age, PENTA 3 coverage among children under 1 year of age and the percentage of births assisted by a skilled attendant were taken into consideration while analysing the needs.

The methodology to calculate the number of PiN changed from last year in which it was calculated by assigning weights to each indicator as per severity. This year, an integrated approach was used for severity analysis to be in line with the analysis for PiN—higher severity, a higher percentage was be applied to calculate the number of PiN. The percentage of PiN was calculated for each indicator as a first step. The percentage of PiN was then calculated for all indicators. The percentage values were then multiplied by the number of people for each population group to get the value of PiN for each indicator in every population group by county. In the last step, the number of PiN for each population group was summed to get the total number of PiN of health services. By using the wealth index, the wealthiest quintile was removed from the non-displaced and host community population group.

Incident rates for common disease data were converted to a five-point scale. Counties with zero (0) values were reflected at the first scale, while the remaining four scale thresholds were derived by dividing the maximum value by four, which provided four equal cut-off points. The higher the incident rate value was, the higher the scale assigned. Case fatality rates for common diseases were shown on a five-point scale obtained from the JIAF indicator matrix suggested by the Global Health Cluster. The higher the CFR value was, the higher the scale assigned.

For measles coverage (less than 1 year), the coverage gap was calculated first by deducting coverage percentage from 100 per cent. The cut-off points were obtained from WHO's EPI section and are used to calculate five-point scales i.e. 1= 0%–49.9%, 2= 50%–69.9%, 3=70%–79.9%, 4=80%–99.9%, 5=100%+. The higher the gap value is, the higher the scale assigned. PENTA 3 coverage (under 1 year of age): Coverage gap was calculated first by deducting coverage percentage from 100%. Cut-off points were obtained from WHO's EPI section which are used to calculate five-point scales i.e. 1=0–49.9%, 2=50%–69.9%, 3=70%–79.9%, 4= 80%–99.9%, 5=100% +. Higher the gap value was, higher scale was assigned. The percentage of births not assisted by a skilled attendant gap was calculated first by deducting percentage of births assisted by skilled attendants from 100%. The cut-off points were obtained from JIAF indicator matrix suggested by the Global Health Cluster. i.e. 1=<60%, 2=61%–70%, 3=71%–80%, 4=81%–90%, 5=91% +. The higher the gap value was, the higher the scale assigned.

Nutrition

The FSNMS is a nationwide exercise established to monitor key food security indicators, acute and chronic malnutrition situation among under-five children and mothers. It also identified geographic areas and socioeconomic groups that are nutrition insecure. The FSNMS data which has been improved in 2019 in terms of timing, quality and precision was used to calculate the number of PiN and the severity of their needs. However, FSNMS nutrition data is only representative at state level and not at county level. Representative FSNMS survey at county level presents huge financial implications. Data quality was ascertained through the SMART methodology-based quality assessment, using criteria such as global score, proportion of flagged/excluded data, and standard deviation. To ensure data quality at the time of data collection, the Open Data Kit was used as the data collection tool, programmed with high quality data checks. For further and consistent improvement in data quality, the real-time data collection monitoring is in place to monitor the data collection process and provide feedback. Population movements and displacements remained a challenge in PiN calculation, leading to over- and under-estimation in some counties, especially in Greater Upper Nile.

The Cluster considered three indicators for both severity mapping and calculation of number of people in need. Data for indicators were sourced from the latest FSNMS (round 24) conducted in July 2019. The World Health Organization's guidance for categorizing severity according to the prevalence of GAM among under-five children was used. The same guidance was used to categorize severity regarding the prevalence of acute malnutrition among pregnant and lactating women.

Recommended vitamin A coverage is 80 per cent as part of the package for high impact nutrition interventions. For South Sudan, the Nutrition Cluster agreed to put the vitamin A supplementation coverage requirement at 90 per cent given the high level of infectious morbidity and the poor quality of diet in children as well as poor coverage of health services. As such, a proportion of children not covered with vitamin A supplementation of less than 10 per cent is indicative of a serious situation. Considering the importance of acute malnutrition among children of age 6–59 months and its potential to contributing to child death, the indicator has been weighted three times heavier than each of the other two. Indeed, it is estimated that a child with severe acute malnutrition (SAM) or moderate acute malnutrition (MAM) is twelve or three times more likely to die than a well-nourished child, respectively.[134]

The severity mapping for 2020 is different from 2019 by the indicators used: prevalence of GAM, the prevalence of SAM and the crude death rate. With regard to PiN estimates, there is a methodologic difference in comparison to 2019. A mixed approach was applied in 2019 whereby programme data was used for all counties due to the lack of reliable prevalence data, except for one county for which prevalence-based calculation was performed. This led to applying a programme data-based estimate in 2019. For 2020, the Cluster relied on the timely and improved data quality from FSNMS. In using the prevalence-based estimates, major changes consisted of the use of a definition of acute malnutrition that combines WFH and MUAC, and the presence of bilateral pitting oedema with the use of an incidence correction factor of 2.9 (in place of 2.6 for 2019). People who will be in need of SAM and MAM services in 2020 is estimated to be higher than 2019

by 440,900 children, 34 per cent of which is due to the change of methodology and 64 per cent of which is due to the deteriorating nutrition situation.

Protection

Data from different sources including IOM DTM tracking, IPC analysis together with GBV service mapping reports and incidents reported by the affected people were used. For the Child Protection Sub-Cluster, in line with the Global General Protection guidelines and Child Protection Area of Responsibility, the needs of the host communities, IDPs, returnees and refugees were analysed. The Mine Action Sub-Cluster has analysed geographical data with county/payam level breakdowns, population data, the number of hazard areas and the number people received risk education between August 2017 and July 2019 and the number of people who are in need of risk education. Data collected through the Information Management System for Mine Action (IMSMA) database was also used. Sex and age disaggregated data is available for beneficiaries of risk education programmes.

Following the Global Protection Cluster guidance, sub-clusters collectively selected indicators for severity analysis based on the data availability. The indicators were classified either under 'physical and mental well-being' or 'living standards' across the different sub-clusters allowing to disaggregate the severity and the number of people in need by these categories. The number of people in need per county as well as per population groups were estimated by using the data collected from different sources. Severity rank per county was calculated per indicator according to the available data and analysis for the people in need calculation. In addition, expert judgment and geographic extrapolation were used to complement the quantitative data to define severity ranks in locations with the most need. Some indicators were given higher weights to influence the severity mapping to better reflect the protection needs across South Sudan, including the contextual indicator, GBV and child protection indicators.

For the indicator related to physical and mental well-being, the number of people in need and severity thresholds were defined based on the reported incidents in Armed Conflict Location and Event Data Project (ACLED), and high areas of displacement per county by every population group. In relation to the indicator on living standards, a criteria for displacement ratio, the number of incidents reported in 2019 and IPC classification that was released in August 2019 were used to identify the severity thresholds and to calculate the number of people in need. The wealth index for the non-displaced host community was also taken into consideration for both indicators while calculating the number of people in need per population group by county. The area-specific living standard indicator did not affect the calculation of people in need, however, it had an impact on the location severity ranking. Locations with the highest number of displaced persons in comparison to the total population are more likely to be in need as the resources are exhausted, social cohesion decreases and intercommunal violence becomes a trend.

For the Child Protection Sub-Sector, two indicators—the percentage of affected and at-risk girls and boys who are in need of psychosocial support and the number of unaccompanied and separated children–were used to identify severity in each county and each population group. The number of children in need who were classified as severity Phase 3 and above was calculated by using the sex and age disaggregated data methodology with the baseline accounting for wealth with the threshold of 60 per cent for host communities and 80 per cent for other population groups. In addition, the Sub-Cluster analysis was also based on general protection investigation of the situation including displacement, access to basic services, conflict-affected areas among others and cantonment sites available in the community at the county level. For the UASC indicator, counties without UASC have not been ranked in the severity mapping. The severity scale consists of a staggered five steps prioritization which is used for the identification of the most affected geographical counties.

Under the first indicator, children in need are calculated from total children in IDPs and the percentage of children of the non-displaced and host community in need after applying the wealth index. Theoretically, all IDPs and their children are affected in one way or another. The Cluster considers all children of IDPs as in need of some form of protection. However, the severity scales of severe, extreme and catastrophic were applied in order to come up with the PiN for each population group. Their level of need differs from one person to another. In order to get the children in need under the first indicator, the Cluster organized the number of these children from largest to smallest and applied the threshold. In order to get the number of children in need from the host community, the Sub-Cluster calculated the percentage of children in the host community in a particular county after deduction of the number of IDPs in the county. For the number of UASC indicator, the number of unaccompanied and separated children data was received from the Child Protection Information Management System database. The number of children in need is the sum of children in need in different population groups but also the number of UASC of IDPs, a portion of children of people in need and a portion of unaccompanied and separated children.

The GBV Sub-Cluster selected the percentage of women and girls that lack access to core GBV prevention and response services as an indicator to show the magnitude of gaps in GBV prevention and response services. This indicator is calculated based on the number of people accessing GBV prevention, risk mitigation and response services including case management, psychosocial support and clinical management of rape services. To arrive at the affected population, estimation of population groups was taken into consideration with the wealth index for the non-displaced and host community. After the number of affected population for each location is determined using expert judgment, the number of people that lack access to core GBV prevention and response services are calculated based on the number of services availed. This estimation shows the current coverage and gaps in access to GBV prevention and response services.

As mine action indicators were in relation to contaminated areas, cleared counties were not ranked in the severity mapping to avoid inaccurate presentation. Based on the data collected through IMSMA, the severity was identified for locations with hazardous areas. Counties and payams with more than 12 hazardous areas (HA) were categorized as level-5 severity while locations with 7 to 12 hazardous areas were identified as severity level 4 and places with two to six hazardous areas were severity level 3. This indicator is area based, it had no effect on the PiN calculation, however, had an impact on the location severity ranking. In relation to physical and mental well-being indicator, the percentage of people who are in need for risk education in mine/ERW affected counties was also taken into consideration. This was calculated by subtracting the number of people who received risk education from the estimated population in county. The affected population and people in need were calculated by summing up the estimated population in a county under each severity.

Water, Sanitation and Hygiene

Available data sources used to analyse WASH needs improved in 2018, after identifying the critical gap in access to countrywide WASH data in 2017. This was done through the development and collection of four key WASH indicators through FSNMS, a seasonal countrywide representative survey that employs two-stage sampling using a state-based sample size and cluster determination. Following a revision of the JIAF indicators and the available WASH data sets in South Sudan, five relevant indicators were selected. When applicable, the severity scale as outlined by the JIAF indicators was reviewed and then adjusted, taking into consideration the pre-crisis condition of WASH infrastructure and services. The JIAF indicator for access to water was adjusted through the removal of time required to access water for the first two levels of severity, so that any HH with access to a borehole or tapstand was not classified as being in need. Access to sanitation was not included in the PiN calculation, rather only for severity mapping as the limited access to sanitation could not solely be contributed to the current protracted crisis as insufficient sanitation coverage pre-dates 2013.

The remaining indicators were not selected from the JIAF indicator list, rather created from the data sets in South Sudan that were shaped to address the key WASH humanitarian needs: access to WASH NFIs and the prevalence of self-reported water- or vector-borne diseases in a HH. In addition to the three WASH indicators, two indicators were added to reflect the importance of intersectoral needs—GAM prevalence and the presence of cholera hotspots. The identification of cholera hotspots was done through an analysis of the available data from the last five years when a cholera outbreak occurred to identify counties with a higher risk of cholera.

WASH beneficiaries were not uniquely targeted during data collection, as FSNMS data collection is country wide and randomly sampled, an undefined number of WASH beneficiaries would have been included in the assessment. While FSNMS does ask about accountability to affected people, the focus is on the provision of food and livelihoods services so data collected was not applicable for WASH, thus the results have not been included in this analysis.

The key change in the methodology for 2020 was the addition of severity ranking, as opposed to identifying what proportion of the population did not have access to each indicator and using those proportions to classify levels of severity. In addition, in 2020 indicators were averaged as per the humanitarian consequence rather than in 2019, where the average was made using the severity levels of all indicators combined. The well-being of people in need was determined by averaging two of the three well-being indicators together: the percentage of household members affected by relevant health issues (respiratory, acute watery diarrhoea, cholera, eye infection, etc.) and the percentage of people in cholera hotspot counties. GAM was not used here, as it is only applicable to children under age 5, however, it is referenced as it is used for severity mapping. The living standard of people in need was determined by averaging the two well-being indicators together: the percentage of households having access to an improved water source and the percentage of households with access to WASH NFIs (unbroken jerry can/bucket with lids, every member of the household slept under a mosquito net, access to soap). As mentioned, while access to sanitation was not used to calculate the PiN, it was used for severity mapping.

As per the new global methodology for people in need, six specific population groups were identified: non-displaced and host communities, IDPs (inclusive of populations within PoC sites), returnees from within South Sudan, spontaneous refugee returnees who returned to their area of origin, spontaneous refugees returnees in an IDP like situation, and refugees. The well-being and living standards combined indicators were applied to all groups aside from refugees. Exceptions were made prior to applying the combined indicators to the following two population groups: non-displaced and host communities and IDPs (inclusive of populations within PoC sites). A wealth index as calculated by OCHA was applied to the non-displaced and host communities prior to the application of the combined humanitarian consequence indicators. For the second population group, IDPs, the population in PoC sites was subtracted from the IDP population, under the assumption that persons living in PoC sites would be in need, and then the combined indicator calculation was then applied to the remaining IDP population. The proportion of IDP population identified as being in need through the combined indicator calculation was then added to the total population in PoC sites, with this final sum becoming the people in need for the IDP population group.

4.3 Information Gaps and Limitations

Camp Coordination and Camp Management

Accessing displaced persons outside of camps, particularly in urban settings, is one of the limitations in collecting data as it was difficult to distinguish them from the host community. Limited funding and partners' presence in hard-to-reach locations and access due to extremely poor road infrastructure and security issues were some of the factors contributing to the information gaps the Cluster faced. In addition, data on persons with disabilities was not available.

As a result, the Cluster seeks to strengthen the analysis based on vulnerabilities in 2020 as population groups stabilize and continues to promote the sharing and use of assessment reports throughout 2020.

Education

EMIS assessment was nation-wide and built on actual figures while the OoSC study covered six former states with a projection of 60 per cent applied to the remaining states (Upper Nile, Jonglei, Unity, and Western Bahr el Ghazal) which were not accessible at the time of the survey.

Though the EMIS data was disaggregated by gender and age, the OoSC was disaggregated only by gender and focused on age groups of 6–17 years only. OoSC focused on formal primary schools and enrolment data were not disaggregated by age or class attended. Defined school age was between 6–17 years, while pre-school age (3–5 years old) is compulsory for education in emergencies (EiE). Due to access limitation, OoSC data from four conflict-affected states were based on projections in line with available secondary data.

Data related to both proxy indicators was analysed at the state-level rather than the county-level. This resulted in applying a blanket percentage to counties under that specific state. Therefore, the level of required accuracy of the county-level data decreased. Data triangulation was limited because available options were not always in sync with other sources. In addition,

UNITY, SOUTH SUDAN

A woman scoops dried beans at a food distribution site in Bentiu, Unity. ©UNICEF South Sudan

there are no education assessments specific to IDPs and returnees from within South Sudan.

To address some of these gaps and limitations, the Cluster plans to conduct a nationwide assessment. The Cluster will also conduct internal data collection to determine the drop-out rate for the previous year. All these initiatives will supplement each other through triangulation to ensure consistency.

Emergency Shelter and Non-Food Items

The Cluster used proxy indicators to arrive severity of needs as a result of lacking detail data on shelter condition outside PoC sites or possession of NFIs. The scope of data available has limitations on geographical coverages and contents. To overcome this challenge, the Cluster uses data collected by DTM mobility tracking round 5 and apply the weightage on different population groups.

Food Security and Livelihoods

In FSNMS round 24, almost all sampled clusters (nine in each county) in all 78 counties were surveyed with a 100 per cent of coverage. The FSNMS targets the rural population (approximately 80 per cent of the country) with the omission of significant urban populations, for example: Juba, Nimule, Yei, Wau, Renk, etc. The previous period of significant returns saw a rapid increase in urbanization in both large cities and smaller urban centres. A similar phenomenon is anticipated going forward in South Sudan. Complementary urban assessments have been conducted in Juba in 2016 and 2018, Maban, Bor and Wau based on demand to assist programming.

The sectoral gaps have been built upon over the past 10 years and most data for the key food security and nutrition indicator data requirements are met, including for the food consumption index. Over the years, the FSNMS has been built upon to include more WASH data and in round 24 to include more asset and resilience specific data sufficient to compute the wealth and resilience capacity indices.

Other ways in which the Cluster partners aim to improve FSNMS in general is through supporting training on data collection and data analysis. Further iterations of review and revision are expected in round 25. Any gaps that are identified from the current r round will be included in future FSNMS rounds which are conducted on a bi-annual basis across all 78 counties.

Health

The Health Cluster is targeting 62 per cent of the PiN because it represents the Health Cluster prioritization for acute lifesaving needs. The methodology included prioritizing 100 per cent of IDP and returnees. The Cluster prioritized 50 per cent of the non-displaced host community who would normally have only 44% access to health care services.

Nutrition

With the data being not valid at the county level, the state-level prevalence was applied to its respective counties assuming intra-state homogeneity. There is need of continued investment in county-level SMART surveys in prioritized counties, to complement the FSNMS surveys.

Protection

Data on housing, land and property issues across the country was inadequate in terms of quality and representation. Another data gap was insufficient quantitative data on persons with disabilities. There were limitations in some of the indicators, particularly those for mine action, and unaccompanied and separated children, which could not be broken down by population groups. Due to insufficient quantitative data disaggregated by population groups, projections had to be applied. Although there are some population group categories in the IMSMA database for risk education beneficiaries, the existing categories do not match with the OCHA listed population group categories, and it is not appropriate for the needs analysis. Therefore, the Mine Action Sub-Cluster has not used that data to calculate people in need. In addition, the number of victims is available on the IMSMA database: on average 50 people are reported as having been killed or injured per year in South Sudan. In places where mine/ERW accidents have happened, needs for risk education become greater, however this was not factored into this analysis.

Data on each population sub-group lacks accuracy as it heavily depends on estimation rather than actual population figures due to the fluidity of the population movement within the country and across its borders. Due to the changing dynamics in the country and seasonal impact on access and population movements, some assessments that were used for the analysis became outdated and expert judgment had to be applied to ensure a proper reflection of the needs. Due to limitations in the monitoring and reporting systems, the number of people accessing core GBV services can be under-reported. Age- and gender-disaggregated data was based on projections from the population figures.

To address these gaps and limitations, the Cluster will revamp data collection and reporting systems such as 5W to include disability and to properly disaggregate beneficiaries by population groups.

In addition, the protection monitoring coverage will be scaled up and simple quantitative data collection tools will be developed and used. The Cluster will also work closely with other clusters' data collection mechanisms and common data collection services throughout the year to ensure that protection is mainstreamed in their tools, thus providing a richer base of cross-sectoral data. Specifically, the Mine Action Sub-Cluster will work with different agencies working on mine action to address the limitations regarding population data.

Water, Sanitation and Hygiene

Information gaps that were keenly present in this round of data analysis were the distinction of needs between the six different population groups. There was no data available during the analysis that could break down the WASH needs per population group, thus the same proportion of people classified as being in need per indicator were applied to each population group. Additionally, a key data gap was on the urban and peri-urban areas in South Sudan. There is limited current data on the population size or needs of the growing urban and peri-urban areas in South Sudan, and data collected through FSNMS is not collected in an urban setting. Available data is limited to infrastructure mapping conducted in key urban areas (Juba, Yambio, Rumbek and Torit). The WASH Cluster will work to broaden the scope of infrastructure mapping through the creation of qualitative and quantitative tools so as to collect data on urban needs.

Population mobility

Some of the key challenges encountered by population mobility tracking partners in the context of South Sudan humanitarian response are related to gaps and contentious administrative units following executive decrees that more than tripled the existing number of states. This is particularly challenging in view of the ongoing discussions on state/county boundaries and differences in the nomenclature used by the national and local authorities on one hand and humanitarian organizations on the other. This hinders direct applicability and interoperability of collected data, delayed by the time needed for data to be translated into response-wide compatible format. Partners involved in primary data collection often encounter different types of impediments and accessibility challenges related to general insecurity or seasonal weather conditions such as heavy flooding that occurred in the second half of 2019. This subsequently causes delays in the collection of data and provision of time sensitive logistical support to field teams.

There are a range of data sources and data collection activities in South Sudan, and humanitarian organizations on the ground produce different reports, conduct assessments or collect diverse primary data. In such situations, the coverage of the sources is not consistent from one to another and offers a combined overview that does not entirely map together to serve as a single set. The diversity of sequencing and timelines of data collection history and starting points for cumulative analysis, for example on returns, makes it difficult to compare across data sets. There is a need for a more systematic approach and an objective evaluation of the existing information with concrete recommendations on how data can be better utilized for operational purposes.

Agencies and clusters have made an additional effort in 2019 to identify gaps, but clear recommendations are needed regarding forward-looking planning and funding for data collection. One of the elements to be considered is a clear communication on the conceptualization of assessments, methodologies, terminology and definitions used during data collection. This will increase the comparability of different sources and data that could be brought together for joint analysis in response to the information needs on the ground. In particular with respect to population mobility, it has been proposed that the community utilize the occasion of the issuance of each forthcoming round of IOM DTM data, to review the complete set of data from across sources and reconcile the data, not only on displacement, as has been done on a monthly basis in the past, but on return movements and overall population mobility trends.

The humanitarian community, including organizations with expertise on displacement and population mobility data collection as well as coordination and data analysis, needs to collaborate through 2020 to create increasingly interoperable data sets to support joint analysis. This is required to inform response to spontaneous returns, new displacements and protracted humanitarian situations, and adjust the humanitarian and longer-term response over the course of 2020.

In response to some of the barriers to greater understanding of the situation in South Sudan, in October 2019, an ACAPS information analyst has been seconded through NORCAP to IOM DTM to support the efforts of IOM, OCHA, REACH and other partners for improved utility of available data and existing methodologies leading to better targeted analysis products.

Acronyms

AAP	Accountability to Affected Populations
ACLED	Armed Conflict Location and Event Data Project
BeMonc	basic emergency obstetric and newborn care
CAR	Central African Republic
CCCM	Camp Coordination and Camp Management
CeMonc	comprehensive emergency obstetric and newborn care
CMR	clinical management of rape
CPIMS	Child Protection Information Management System
DRC	Democratic Republic of the Congo
DTM	Displacement Tracking Matrix
EiE	education in emergencies
EMIS	Education Management Information System
ERW	explosive remnants of war
EVD	Ebola virus disease
EWARS	Early Warning Alert and Response System
FCS	food consumption score
FSL	Food Security and Livelihoods
FSNMS	Food Security and Nutrition Monitoring System
GAM	global acute malnutrition
GBV	gender-based violence
HA	hazardous areas
HDDS	household diet diversity score
HH	household
HHS	household hunger scale
HMIS	Health Management Information Systems
HNO	Humanitarian Needs Overview
HPC	humanitarian programme cycle
ICWG	Inter-Cluster Working Group
IDMC	Internal Displacement Monitoring Centre
IDP	internally displaced person
IDSR	Integrated Disease Surveillance and Response
IMSMA	Information Management System for Mine Action
IMWG	Information Management Working Group
INFORM	Index for Risk Management
IOM	International Organization for Migration
IPA	individual protection assistance
IPC	Integrated Food Security Phase Classification
IRNA	Initial Rapid Need Assessment
JIAF	Joint Intersectoral Analysis Framework
MA	mine action
MAM	moderate acute malnutrition
MHPSS	mental health and psychosocial support services
MUAC	mid-upper-arm circumference
NAWG	Needs Analysis Working Group
NFIs	non-food items
NIS	Nutrition Information System
NGO	non-governmental organization
NSF	National Salvation Front
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OoSC	out-of-school children
PENTA 3	diphtheria, pertussis, tetanus, hepatitis B and haemophilus influenza vaccine
PiN	people in need
PoC	Protection of Civilians
PPS	probability proportional to the size
PWD	persons with disabilities
R-ARCSS	Revitalized Agreement on the Resolution of the Conflict in South Sudan
RCSI	reduced coping strategy index
RRM	rapid response mechanism
SAM	severe acute malnutrition
SARA	Service Availability Readiness Assessment
SGBV	sexual and gender-based violence
SMART	Standardized Monitoring and Assessment of Relief and Transitions
SPLA	Sudan People's Liberation Army
SSPDF	South Sudan People's Defence Force
TGNU	Transitional Government of National Unity
UASC	unaccompanied and separated children
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commission for Refugees
UNICEF	United Nations International Children`s Emergency Fund
UXO	unexploded ordnance
WASH	water, sanitation and hygiene
WFH	weight-for-height
WFP	World Food Programme
WHO	World Health Organization
3Ws	Who does What Where
5Ws	Who does What, Where, When and for Whom

End Notes

1 Intergovernmental Authority on Development, *Signed Revitalized Agreement on the Resolution of the Conflict in South Sudan*, September 2018, available at https://igad.int/programs/115-south-sudan-office/1950-signed-revitalized-agreement-on-theresolution-of-the-conflict-in-south-sudan

2 According to recent analysis on population mobility by the International Organization for Migration Displacement Tracking Matrix (IOM DTM) and UN High Commissioner for Refugees (UNHCR).

3 The HNO calculations use an IDP baseline of 1.83 million, per data available at the time of writing. South Sudan's IDP baseline has since been set at 1.47 million, following the culmination of an 18-month-long data review and rationalization exercise between IDP data sets maintained by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) and the International Organization for Migration (IOM). For more on the review process and methodology, see www.humanitarianresponse.info/en/operations/south-sudan/document/south-sudan-new-idp-baseline

4 Refugees International, *No Confidence: Displaced South Sudanese Await 'Real Peace'*, October 2019, available at static1.squarespace.com/static/506c8ea1e4b01d9450dd53f5/t/5d95e3f68bb633646340bd85/1570104322464/South+Sudan+-+Dan+-+October+2019+-+FINAL+update.pdf

5 UNHCR, *Regional Intention Survey of South Sudanese Refugees: Summary*, June 2019

6 See more in Annex: intersectoral analysis methodology

7 UNDP, *Human Development Index,* available at http://hdr.undp.org/en/2018-update

8 UNICEF, *South Sudan Health Briefing Note*, May 2019, available at www.unicef.org/southsudan/media/2086/file/UNICEF-South-Sudan-Health-Briefing-Note-May-2019.pdf

9 WHO, *The Lancet - New WHO prevalence estimates of mental disorders in conflict settings: a systematic review and meta-analysis*, 2019, available at dx.doi.org/10.1016/S0140-6736(19)30934-1

10 UNICEF, *Childhood Under Attack: The staggering impact of South Sudan's crisis on children,* 2017

11 United Nations, *Report of the Secretary-General on South Sudan (covering the period from 29 May to 27 August 2019),* September 2019

12 United Nations, *Report of the Secretary-General on Future Planning for Protection of Civilians Sites in South Sudan*, September 2019, available at reliefweb.int/report/south-sudan/future-planning-protection-civilians-sites-south-sudan-report-secretary-general

13 Saferworld, *South Sudan Civilian Disarmament*, February 2012

14 South Sudan Protection Cluster, *Advocacy Note to the Humanitarian Country Team on Cattle Related Violence,* 2019 (internal)

15 REACH, *Western Lakes Population Movement, Food Security and Livelihoods Profile,* July 2019, available at reliefweb.int/sites/reliefweb.int/files/resources/reach_ssd_profile_westernlakesstate_august2019.pdf

16 Protection Cluster in South Sudan, *Advocacy Note to the Humanitarian Country Team on Cantonment Related Protection Risks and Mitigation Strategies*, July 2019 (internal)

17 Information Management System for Mine Action (IMSMA), 2019

18 REACH, *Overview of Area of Knowledge indicator trends: July 2018 to July 2019,* August 2019 (unpublished)

19 South Sudan Population Working Group, *Population estimates for 2020*

20 World Bank, *World Population Prospects,* 2018

21 United Nations IGME, 2019

22 Save the Children, *Rapid Gender Assessment,* 2019

23 Mutuku, C. and Jendeka, C., *Scaling Up Nutrition Gender Analysis Final Report,* 2019

24 Gender Based Violence Information Management System, 2019

25 South Sudan Gender-Based Violence Sub-Cluster, *National Strategy*, 2019

26 UNMISS Rule of Law Advisory Section, *Conflict Analysis: Justice and Accountability as Bridges to Durable Peace,* 2019 (internal paper)

27 World Bank, 2019, *South Sudan Overview* available at www.worldbank.org/en/country/southsudan/overview

28 UNDP, *About South Sudan*, available at www.ss.undp.org/content/south_sudan/en/home/countryinfo.html

[29] The Health sector registers an increment of 31 per cent, however, sees its allocation reduced to 1 per cent of the national budget. This falls below the required 15 per cent of the Abuja Declaration in 2001. The Education sector register an increment of 54 per cent, however, sees its allocation reduced to 5 per cent of the national budget. Ministry of Finance and Planning-UNICEF, *Citizen's Budget for Enacted Budget,* forthcoming after President's Decree on final budget.

[30] World Bank, 2019, *South Sudan Overview* available at www.worldbank.org/en/country/southsudan/overview

[31] United Nations, August 2019, *Report of the Secretary-General on South Sudan (covering the period from 29 May to 27 August 2019),* 10 September 2019, available at reliefweb.int/sites/reliefweb.int/files/resources/S_2019_722_E.pdf

[32] World Bank, *South Sudan: Recent Development*, October 2019, available at pubdocs.worldbank.org/en/713731492188171377/mpo-ssd.pdf

[33] FAO, *South Sudan Humanitarian Response Plan 2019*, available at www.fao.org/3/CA3217EN/ca3217en.pdf

[34] FAO, South Sudan Humanitarian Response Plan 2019, available online at http://www.fao.org/3/CA3217EN/ca3217en.pdf

[35] International Committee of the Red Cross, *South Sudan: One year after peace deal, violence and humanitarian needs haven't decreased, September 2019*, available at www.icrc.org/en/document/south-sudan-one-year-after-peace-deal-violence-and-humanitarian-needs-havent-decreased

[36] REACH, *South Sudan Population Movement Baseline,* August 2019 (unpublished)

[37] REACH, *South Sudan—Water, Sanitation and Hygiene Brief*, 2019, available at www.impact-repository.org/document/reach/09477d8e/reach_southsudan_situation_overview_wash_baseline_july_2019.pdf

[38] ACAPS, *South Sudan: Country Profile*, 2015, available at reliefweb.int/sites/reliefweb.int/files/resources/s-c-acaps_country_profile_southsudan_august2015.pdf; REACH, *South Sudan—Water, Sanitation and Hygiene Brief*, 2019, available at www.impact-repository.org/document/reach/09477d8e/reach_southsudan_situation_overview_wash_baseline_july_2019.pdf

[39] Mosello, B. et al, *Improving WASH service delivery in protracted crises: The case of South Sudan*, 2016, Overseas Development Institute, available at www.odi.org/publications/10531-improving-wash-service-delivery-protracted-crises-case-south-sudan

[40] Global Partnership for Education, UNICEF and UNESCO, *Global Initiative on Out of School Children—South Sudan Country Study*, May 2018, available at uis.unesco.org/sites/default/files/documents/global-initiative-out-of-school-children-south-sudan-country-study.pdf

[41] UNMISS Rule of Law Advisory Section, *Conflict Analysis: Justice and Accountability as Bridges to Durable Peace,* 2019 (internal paper)

[42] OHCHR, *UN Commission on Human Rights in South Sudan: Localization of conflict and unaddressed community grievances serve as barriers to sustainable peace*, 2019, available at www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=24914&LangID=E

[43] International Law and Policy Institute, Oslo (Stern, O. M.), *Gender Country Profile South Sudan,* 2015

[44] WFP, *Logistic Capacity Assessment - South Sudan Road Network*, August 2019, available at dlca.logcluster.org/display/public/DLCA/3.4+South+Sudan+Telecommunications

[45] WFP, *Logistic Capacity Assessment - South Sudan Road Network*, August 2019, available at dlca.logcluster.org/display/public/DLCA/3.4+South+Sudan+Telecommunications

[46] World Bank, *Access to Electricity,* 2017, available at data.worldbank.org/indicator/EG.ELC.ACCS.ZS?end=2017&locations=SS&name_desc=false&start=1990&view=chart

[47] WFP, *Logistic Capacity Assessment - South Sudan Road Network*, August 2019, available at dlca.logcluster.org/display/public/DLCA/3.4+South+Sudan+Telecommunications

[48] According to IOM DTM, natural disasters account for less than 1 per cent of the recorded IDP caseload. See more at displacement.iom.int/reports/south-sudan-%E2%80%94-mobility-tracking-report-5-19-july-2019?close=true

[49] IPCC, *AR5 Climate Change 2014: Impacts, Adaptation, and Vulnerability*, 2014, available at www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap22_FINAL.pdf

[50] Maplecraft, *Climate Change Vulnerability Index,* 2017, available at reliefweb.int/sites/reliefweb.int/files/resources/verisk%20index.pdf

[51] UNEP, *South Sudan—First State of Environment and Outlook Report—Summary for Policymakers*, 2018, available at wedocs.unep.org/bitstream/handle/20.500.11822/25530/SouthSudan_SoE_Summary.pdf?sequence=1&isAllowed=y

[52] UNEP, *South Sudan—First State of Environment and Outlook Report—Summary for Policymakers*, 2018, available at wedocs.unep.org/bitstream/handle/20.500.11822/25530/SouthSudan_SoE_Summary.pdf?sequence=1&isAllowed=y

[53] UNEP, *South Sudan—First State of Environment and Outlook Report—Summary for Policymakers*, 2018, available at wedocs.unep.org/bitstream/handle/20.500.11822/25530/SouthSudan_SoE_Summary.pdf?sequence=1&isAllowed=y

[54] UNEP, *South Sudan—First State of Environment and Outlook Report,* 2018, available at wedocs.unep.org/bitstream/handle/20.500.11822/25528/SouthSudan_SoE2018.pdf?sequence=1&isAllowed=y

[55] London School of Hygiene and Tropical Medicine (Checchi, F. et al.), *Estimates of crisis-attributable mortality in South Sudan, December 2013–April 2018,* 2018, available at www.lshtm.ac.uk/south-sudan-full-report

[56] UNICEF, *Childhood Under Attack: The staggering impact of South Sudan's crisis on children,* 2017

[57] Integrated Food Security Phase Classification, *South Sudan: Acute Food Insecurity and Acute Malnutrition Situation Projection for May-July 2019*, February 2019, available at www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1152080/

[58] FAO and WFP, *Crop and Food Security Assessment Mission to South Sudan*, 2019, available at www.fao.org/in-action/kore/publications/publications-details/en/c/1185517/

[59] WHO, *South Sudan intensifies efforts to control an ongoing measles outbreak,* April 2019, available at www.afro.who.int/news/south-sudan-intensifies-efforts-control-ongoing-measles-outbreak

[60] UNICEF, *3 in 4 children born in South Sudan since independence have known nothing but war*, 2018, available at www.unicef.org/press-releases/children-born-south-sudan-independence-nothing-war

[61] Dataset available at displacement.iom.int/datasets/south-sudan-%E2%80%94-baseline-assessment-%E2%80%94-round-6

[62] Preliminary figures from IOM DTM round 6 (June 2019), October 2019, available at displacement.iom.int/system/tdf/reports/20191001%20IOM%20DTM%20SSD-%20MT%20rd%206%20initial%20data%20release%201%20October%202019.pdf?file=1&type=node&id=6678

[63] UNHCR and partners, average across protection profiling exercises conducted in Malakal (August 2018), Juba PoC 1 (September 2018), Juba PoC 3 (October 2018), Bor (December 2018), Bentiu (February 2019), Leer TPA (June 2019) and Wau (August 2019)

[64] IOM DTM, Mobility Tracking Report, round 5, available at displacement.iom.int/reports/south-sudan-%E2%80%94-mobility-tracking-report-5-19-july-2019?close=true

[65] IOM DTM, *IOM's New Report Documents Need for Improved Service Delivery in Conflict Affected Areas*, August 2019, available at southsudan.iom.int/media-and-reports/press-release/iom%E2%80%99s-new-report-documents-need-improved-service-delivery-conflict

[66] IOM DTM, *IOM's New Report Documents Need for Improved Service Delivery in Conflict Affected Areas*, August 2019, available at southsudan.iom.int/media-and-reports/press-release/iom%E2%80%99s-new-report-documents-need-improved-service-delivery-conflict

[67] REACH, *South Sudan Population Movement Baseline,* August 2019 (unpublished)

[68] IOM DTM, Thematic report on Jur River County displacement, available at displacement.iom.int/reports/south-sudan-%E2%80%94-jur-river-displacement-wau-march-june-2019?close=true

[69] IOM DTM, *IOM's New Report Documents Need for Improved Service Delivery in Conflict Affected Areas*, August 2019, available at southsudan.iom.int/media-and-reports/press-release/iom%E2%80%99s-new-report-documents-need-improved-service-delivery-conflict

[70] REACH, *South Sudan Cross-Border Population Movement Dynamics, Key Findings for HNO,* July 2019 (unpublished)

[71] REACH, *South Sudan Cross-Border Population Movement Dynamics, Key Findings for HNO,* July 2019 (unpublished)

[72] Dataset available online at displacement.iom.int/datasets/south-sudan-—-baseline-assessment-—-round-6

[73] Dataset available online at displacement.iom.int/datasets/south-sudan-—-baseline-assessment-—-round-6

[74] Refugees International, *No Confidence: Displaced South Sudanese Await 'Real Peace'*, available at static1.squarespace.com/static/506c8ea1e4b01d9450dd53f5/t/5d95e3f68bb633646340bd85/1570104322464/South+Sudan+-+Dan+-+October+2019+-+FINAL+update.pdf

[75] UNHCR, *Overview of spontaneous refugee returns, January-June 2019,* available at data2.unhcr.org/en/documents/download/70680

[76] UNHCR, *UNHCR Position on Returns to South Sudan - Update II*, April 2019, available at www.refworld.org/docid/5cb4607c4.html

[77] UNHCR, *bi-monthly household surveys conducted among spontaneous refugee returnees*

[78] UNHCR, *Regional Intention Survey of South Sudanese Refugees: Summary*, June 2019

[79] IOM DTM, Mobility Tracking round 5, 2019, available at www.globaldtm.info/south-sudan-mobility-tracking-report-5-19-july-2019/

[80] REACH, *South Sudan Population Movement Baseline,* August 2019 (unpublished)

[81] Oxfam, *Born to Be Married,* 2019, available at www.oxfam.org/en/research/born-be-married-addressing-child-early-and-forced-marriage-nyal-south-sudan

[82] Mutuku, C. and Jendeka, C., *Scaling Up Nutrition Gender Analysis Final Report,* 2019

[83] OCHA, *Humanitarian Access Severity Analysis, June-September 2019*

[84] According to the access severity analytical framework, the following definitions are used for low, medium and high severity of access: Accessible or Low: No or very few access constraints. Armed groups, checkpoints, bureaucratic or other impediments may be present, but these rarely or only occasionally result in restrictions on humanitarian assistance. Partners are able to operate. With adequate resources, partners would be able to reach all or nearly all people in need. Medium: Medium level of access constraints. Armed groups, checkpoints, bureaucratic or other impediments are present and regularly result in restrictions on humanitarian operations. Operations continue in these areas with regular restrictions. With adequate resources, partners would be able to reach roughly half of people in need. High: High level of access constraints. Access is extremely difficult or impossible. Armed groups, checkpoints, bureaucratic or other impediments are present and actively restrict humanitarian operations. Operations in these areas are often severely restricted or impossible. Even with adequate resources, partners would be unable to reach more than a very small minority of people in need.

[85] Step-by-Step Practical Guide for Humanitarian Needs Overviews, Humanitarian Response Plans and Updates, available at www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/hpc-stepbystep_v6.pdf

[86] UNICEF, *South Sudan Health Briefing Note*, May 2019, available at www.unicef.org/southsudan/media/2086/file/UNICEF-South-Sudan-Health-Briefing-Note-May-2019.pdf

87 International Committee of the Red Cross, *South Sudan: One year after peace deal, violence and humanitarian needs haven't decreased, September 2019*, available at www.icrc.org/en/document/south-sudan-one-year-after-peace-deal-violence-and-humanitarian-needs-havent-decreased

88 WHO, *The Lancet—New WHO prevalence estimates of mental disorders in conflict settings: a systematic review and meta-analysis*, 2019, available at dx.doi.org/10.1016/S0140-6736(19)30934-1

89 UNICEF, *Childhood Under Attack: The staggering impact of South Sudan's crisis on children,* 2017

90 Assessment reports from the Upper Nile Mental Health and Psychosocial Support Technical Working Group, 2017–2019, available upon request.

91 Step-by-Step Practical Guide for Humanitarian Needs Overviews, Humanitarian Response Plans and Updates, available at www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/hpc-stepbystep_v6.pdf

92 WHO, *Health Service Functionality Survey*, July 2019 (unpublished)

93 WHO and UNICEF, Joint Monitoring Programme for Water Supply and Sanitation, 2017, available at www.who.int/mediacentre/news/releases/2017/launch-version-report-jmp-water-sanitation-hygiene.pdf

94 Education Cluster, *Education Management Information System (EMIS),* 2018

95 Education Cluster, *Needs Assessment Survey*, October 2018, available at www.humanitarianresponse.info/en/operations/south-sudan/document/nationwide-assessment-report-ssec-2018-10

96 South Sudan Law Society (Deng, D.K.), *Housing, Land and Property Disputes in South Sudan,* March 2019

97 The Global Women's Institute, International Rescue Committee, CARE, and UK Aid, *No Safe Place: A Lifetime of Violence for Conflict-Affected Women and Girls In South Sudan; What works to prevent violence*

98 See Annex on intersectoral analysis methodology on the Resilience Capacity index pillars and definitions used

99 REACH, *Accountability to Affected Populations Factsheet*, May 2019 and August 2019 (Forthcoming). The study, which began remotely surveying settlements across the country via key informants in May 2019, collected data from 1,954 settlements via 2,435 key informant interviews.

100 REACH, *Accountability to Affected Populations Factsheet*, May 2019 and August 2019 (Forthcoming). The study, which began remotely surveying settlements across the country via key informants in May 2019, collected data from 1,954 settlements via 2,435 key informant interviews. Data collected in August.

101 Multisectoral Assessment Report—Lainya County, *Inter-Agency Assessment mission*, July 2019

102 Health Cluster, *5W matrix*, August 2019

103 IOM DTM, *Ebola Preparedness Flow Monitoring Dashboard*, September 2019, available at displacement.iom.int/reports/south-sudan-—-ebola-preparedness-flow-monitoring-dashboard-september-2019?close=true

104 Inter-Agency Standing Committee and the European Commission, *INFORM Global Risk Index 2020*, 12 September 2019, available at drmkc.jrc.ec.europa.eu/inform-index/Countries/Country-Profile-Map

105 Collective sites are places where displaced persons are accommodated in pre-existing non-functional buildings sometimes allocated by faith-based organizations. In South Sudan, due to the huge number of the displaced in collective sites, the majority of the families live within the compounds of church buildings or schools, or disused factories. Collective centre options are based on a "right of use" agreement. Buildings have not been rehabilitated and upgraded to meet the shelter and basic services needs of the inhabitants. Management and maintenance of the collective centres should be ensured throughout the period of refugee living in the building.

106 Spontaneous settlements are common in South Sudan. They are displacement sites where displaced persons spontaneously settle on land over which they hold no legal status (land has not been allocated by local authorities). The land could be public or privately owned. Informal agreement occurs with the host community. These self-settlements are not always aligned with the Government policy, thus it is important to negotiate with government regarding the sustainability of these locations. Relocation to official locations could be envisaged to minimize protection risks

107 *Rapid Assessment Report for Mahad IDP Camp*, July 2019. The multifunctional team was comprised of HDC, HI, IRC, ISRaAID, JCCP and UNHCR. The team conducted an assessment with the aim of identifying the root causes of suicide among IDPs in Mahad.

108 Education Cluster, *Education Management Information System (EMIS),* 2018

109 Education Cluster, *Needs Assessment Survey*, October 2018, available at www.humanitarianresponse.info/en/operations/south-sudan/document/nationwide-assessment-report-ssec-2018-10

110 Education Cluster, *Education Management Information System (EMIS),* 2018

111 Oxfam, *Education-focused Gender Analysis Case Studies: Pibor and Juba, south Sudan*, 2019, available at reliefweb.int/sites/reliefweb.int/files/resources/rr-south-sudan-education-gender-analysis-260319-en.pdf

112 UNESCO, *Global Initiative on Out of School Children South Sudan Country Study*, 2018, available at uis.unesco.org/sites/default/files/documents/global-initiative-out-of-school-children-south-sudan-country-study.pdf

113 FEWS Net, *Risk of Famine (IPC Phase 5) persists, though slight improvements expected with reduced conflict*, September 2019, available at fews.net/east-africa/south-sudan/food-security-outlook/june-2019

[114] Food insecurity is represented as a proportion of the population who are in Crisis (IPC Phase 3) or worse because of differences in national population figures from one round to another. Population changes are driven by displacement, returnees and other factors. In September 2018, an estimated 59% of the population was classified in Crisis (IPC Phase 3) or worse acute food insecurity.

[115] *HSF Report*, July 2019

[116] *SARA Survey*, July 2019

[117] UNHCR, *UNHCR Bulletin*, July 2019

[118] UNHCR, *UNHCR Bulletin*, 2019

[119] *South Sudan Mortality Statistics*, 2016

[120] *South Sudan Mortality Statistics*, 2016

[121] Integrated Food Security Phase Classification (IPC), *IPC Acute Food Insecurity and Acute Malnutrition Analysis (August 2019–April 2020)*, September 2019, available at www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_South%20Sudan_Key_Messages_August_2019.pdf

[122] UNICEF, *State of the World's Children*, 2019, available at www.unicef.org/media/60806/file/SOWC-2019.pdf

[123] *Food Security and Nutrition Monitoring System (FSNMS) round 24*

[124] Development Initiatives, *Global Nutrition Report: Shining a light to spur action on nutrition*, 2018

[125] FAO, 2006

[126] FAO and WFP, *Crop and Food Security Assessment Mission*, 2018–2019

[127] Integrated Food Security Phase Classification(IPC), *IPC Acute Food Insecurity and Acute Malnutrition Analysis—August 2019 to April 2020*, 11 September 2019, available at www.ipcinfo.org/fileadmin/user_upload/ipcinfo/docs/IPC_South%20Sudan_Key_Messages_August_2019.pdf

[128] Mark Myatt, *How do we estimate case load for SAM and /or MAM in children 6–59 months in a given time period*, 2012, available at www.ennonline.net/attachments/3133/MAM-and-SAM-caseload-calculations.pdf

[129] Tefera K, *WFH vis-à-vis MUAC in South Sudan context,* 2015 (unpublished)

[130] Humphreys A, Sarker B, Habib BB, Dobamo AG, Pantchova D, *Estimating 'people in need' from combined GAM in Afghanistan. Field Exchange 61*, September 2019, available at www.ennonline.net/fex/61/gamafghanistan

[131] UNICEF/Harvard University, *SAM Incidence Correction Factor Research Findings*, February 2019

[132] The Secretary General's Report on Children and Armed Conflict, 2018, available at childrenandarmedconflict.un.org/document-type/annual-reports/

[133] While access to sanitation and the prevalence of GAM have not been used as an indicator to calculate the PiN, they have been for severity mapping and will be used to monitor the WASH needs throughout the country.

[134] Khara, T., & Dolan, C. (2014). Technical Briefing Paper: Associations between Wasting and Stunting, policy, programming and research implications. Emergency Nutrition Network (ENN), June 2014

Get the latest updates

OCHA

OCHA coordinates humanitarian action to ensure crisis-affected people receive the assistance and protection they need. It works to overcome obstacles that impede humanitarian assistance from reaching people affected by crises, and provides leadership in mobilizing assistance and resources on behalf of the humanitarian system.

www.unocha.org/southsudan
twitter.com/ochasouthsudan

Humanitarian RESPONSE

Humanitarian Response aims to be the central website for Information Management tools and services, enabling information exchange between clusters and IASC members operating within a protracted or sudden onset crisis.

www.humanitarianresponse.info/southsudan

Humanitarian InSight

Humanitarian InSight supports decision-makers by giving them access to key humanitarian data. It provides the latest verified information on needs and delivery of the humanitarian response as well as financial contributions.

www.hum-insight.com

fts Financial Tracking Service

The Financial Tracking Service (FTS) is the primary provider of continuously updated data on global humanitarian funding, and is a major contributor to strategic decision making by highlighting gaps and priorities, thus contributing to effective, efficient and principled humanitarian assistance.

fts.org/appeals

HUMANITARIAN NEEDS OVERVIEW
SOUTH SUDAN

ISSUED NOVEMBER 2019