

### **GOGRIAL WEST COUNTY - WARRAP STATE**

Map 0.1: Location of Gogrial West county within South Sudan indicating payam boundaries and key settlements



#### **GOGRIAL WEST - KEY FACTS**

Estimated population: 325,922<sup>1</sup> (2022 OCHA estimates); 582,379<sup>2</sup> (2023 NBS and UNFPA estimates)

Note: Calculations using population figures in this county profile use the 2022 estimates

- Area: 4,401 km<sup>2</sup>
- Population density: 74 persons per km<sup>2</sup>
- County capital: Kuajok
- Payams: Gogrial, Alek South, Alek North, Alek West, Kuac North, Kuac South, Akon South, Akon North, Riau

Gogrial West county is in Warrap State, bordered to the west by Aweil South and Jur River, and to the north by Twic. To the east, it shares a boundary with Gogrial East, and to the south, it is adjacent to Jur River. The county consists of nine payams and spans an extensive area of 4,401<sup>3</sup> square kilometers.

The county is considered one of the most peaceful counties in Warrap state but is still impacted by communal conflicts.<sup>4</sup> The primary sources of conflict in the county stem from competition over resources.<sup>5</sup>

Located in lowland terrain with a patch of wetland and rivers, the county faces an annual challenge of flooding, attributed to intense rainfall and riverbank overflow. This geographical susceptibility renders the county prone to recurrent flooding. In 2021, an estimated 13,000<sup>6</sup> individuals were impacted by floods, and the following year, the number rose to at least 71,821 affected people.<sup>7</sup>

### About REACH

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



This county profile has been made possible by the generous support of the Global Facility for Disaster Risk Reduction and Recovery (GFDRR)



# **1. CLIMATE AND ENVIRONMENT**

# **GOGRIAL WEST COUNTY**

Map 1.1. Elevation and natural features including wetland areas, rivers and water bodies in Gogrial West county



40 20

(mm)

Precipitation

#### Illustrated in map 1.1, Gogrial West displays a mostly flat topography with an average elevation of 431 meters above sea level. The highest elevations are situated in the southwestern part of the county and along the Jur River county border, gradually decreasing as one progresses northeastward into Alek North payam and the adjacent Twic county.

The county is situated in the "Northwestern flood plain sorghum and cattle" livelihoods zone and is distinguished by its flat grasslands. The natural terrain in this zone features a diverse range of vegetation, including grasslands, wetlands and bush scrubs.8 This composition influences the livelihoods of the residents, particularly in terms of crop cultivation and cattle rearing.9 In the southern part of the county, a unique expanse of wetlands can be found in Kuac South payam, along the Jur River.

The county receives a considerable annual rainfall of around 881 mm on average, as depicted in graph 1.1. August emerges as the month with the highest precipitation, whereas January tends to be the driest month. March and April generally register the highest temperatures, in contrast to the lowest temperatures experienced in the rainy month of August. An analysis of rainfall data from 2018 to 2022 indicates a consistent pattern throughout these years, as depicted in graph 3.1.

#### Graph 1.1. Average monthly precipitation and temperature, Gogrial West county (1981 - 2022)1011







### 2. LAND USE AND LAND COVER

# **GOGRIAL WEST COUNTY**

#### Map 2.1. Land use and land cover map, Gogrial West county<sup>15</sup>



Gogrial West county boasts a landscape predominantly defined by vast expanses of grasslands, constituting a substantial 67% of its total land cover. Amidst this prevalence of grassland, shrubland also makes up 29% of the county, while herbaceous wetlands occupy a modest 2%.<sup>12</sup> Crop land, tree cover, and bare land collectively occupy less than 2% of the county's terrain.<sup>13</sup>

For a comprehensive visualization of the spatial arrangement of these land cover features, readers can refer to Map 2.1. Additionally, Chart 2.1 offers further elucidation, providing a detailed breakdown of the proportional representation of each land cover type. Together, these visual aids contribute to a deeper understanding of the intricate patterns shaping Gogrial West county's environmental makeup.<sup>14</sup>

167,686 identified buildings in Gogrial West county<sup>16</sup>

Chart 2.1. Land cover as proportion of Gogrial West county area





### **3A. HYDROMETEOROLOGICAL HAZARDS - FLOODING**

### **GOGRIAL WEST COUNTY**

#### Map 3.1. Estimated maximum annual flood extent (2019-2022), affected settlements and key infrastructure



#### Graph 3.1. Rainfall from 2019 to 2022<sup>22</sup>



# Graph 3.2. Maximum Flood extent from 2019 to 2022<sup>i</sup>



#### **FLOODING**

Gogrial West grapples with annual flooding, primarily stemming from a combination of factors such as abundant rainfall, a relatively flat terrain, and the overflow of rivers during the rainy season.<sup>17</sup> Annually, the county experiences river flooding, typically occurring between June and September, aligning with the heavy rainfall witnessed during this period.<sup>18</sup> In 2021, the floods affected an estimated 13,000 people.<sup>19</sup> The onset of flooding in 2021 commenced early June in Akon South payam and extended across the entire Warrap region, due to substantial rainfall until mid-September.<sup>20</sup> This coincided with the harvesting period, resulting in crop damage. Furthermore, some houses collapsed, compelling affected populations to relocate to higher ground near the market. Others sought refuge in churches or integrated themselves with host communities as they navigated the challenges posed by the flooding.<sup>21</sup>

Map 3.1 highlights the regular occurrence of annual floods in this county from 2019 to 2022, emphasizing the interplay of geographical factors contributing to the recurring flooding challenges. Low elevation, coupled with the presence of rivers, amplifies the vulnerability of certain areas. The northwestern region of the county, characterized by low elevation and the presence of rivers Pongo and Lol, stands as the most vulnerable to flooding, consistently experiencing incidents over a span of four years.

Graph 3.1 illustrates a consistent pattern of rainfall distribution in Gogrial West county since 2019, maintaining a stable range between 811 mm/year and 957 mm/year. Notably, the months of June, July, and August consistently receive the highest amounts of rainfall. Graph 3.2 depicts flood extent and highlights the increased flooding in 2021 compared to other years.

Map 3.2. Estimated maximum annual flood extent (2019-22), Akun Settlement & its environs







This county profile has been made possible by the generous support of the Global Facility for Disaster Risk Reduction and Recovery (GFDRR)

### **3B. HYDROMETEOROLOGICAL HAZARDS - FLOODING IN 2022**

### **GOGRIAL WEST COUNTY**

Map 3.3. Estimated maximum annual flood extent in 2022, affected settlements and key infrastructure



Figure 3.1. Satellite imagery snapshot, Akun settlement. Increase in built up area as well as flooding intensity with flooded buildings





#### **FLOODING 2022**

In 2022, floods in Gogrial West county affected at least 71,821 people.<sup>23</sup> Rainfall commenced towards the end of July 2022, intensifying in mid-August, resulting in the destruction of houses, shops, and crops, along with the displacement of populations.

The flooding in 2022 followed a consistent pattern observed in previous years, affecting regions near rivers, or located in lowlands, as depicted in Map 3.3. Upon closer examination of the capital, Kuajok, it becomes evident that areas most severely affected by the floods were in close proximity to the Jur River. Despite the town's elevated positioning, the impact of the floods highlights the vulnerability of areas near rivers.

The consequences of the floods were severe, resulting in the submersion of shelters, the washing away of germinating crops, the destruction of food stocks, and the submersion of water points. A 2022 IRNA conducted in all payams within the county indicated that 175 hand pumps were submerged and 164 others rendered out of order, leading to the use of contaminated water by affected populations.<sup>24</sup> The flooding also had a detrimental effect on grazing lands for livestock, as pastures were submerged. In response to this challenge, some livestock were relocated to higher grounds, including other neighboring payams and major towns where the severity of flooding was deemed to be minimal.<sup>25</sup>



#### Map 3.4. Estimated maximum flood extent in 2022, Akun Settlement & it environs





This county profile has been made possible by the generous support of the Global Facility for Disaster Risk Reduction and Recovery (GFDRR)



### 4. HYDROMETEOROLOGICAL HAZARDS - DROUGHT AND DRY SPELLS

### **GOGRIAL WEST COUNTY**



#### Map 4.1. Vegetation condition index (VCI), indicator of drought severity, in July to September 2022, no drought

#### Graph 4.1. VCI (2000-2022) - drought index



i. Vegetation condition index calculated in Google Earth Engine based on MODIS EVI data





#### DROUGHT

The county does not experience drought, but it experiences a dry season from December through January and February, as shown in graph 3.1. Notably, January emerges as the driest month, marked by the lowest values on the Vegetation Condition Index (VCI), as depicted in Graph 4.1. This dry period prompts pastoralists throughout Warrap State to embark on migratory journeys towards the northeastern and eastern regions of the state in search of water.<sup>26</sup> As shown in map 4.1, there were no incidents of drought in the county.

Comparing the wet and dry seasons, an insightful examination of the VCI analysis reveals that January consistently witnesses the poorest vegetation health, while August witnesses the best. A low VCI indicates compromised vegetation health, whereas a high VCI signifies robust and flourishing vegetation. Spanning from the year 2000 onwards, graph 4.1 consistently portrays a pattern of elevated vegetation health conditions during the wet season and diminished conditions during the dry season.

Graph 4.2 shows rainfall anomaly in 2022, indicating April and May experienced higher amounts of rainfall than usual, while March and June experienced a dip, and the other months remained more or less within the normal range. Graph 4.3 highlights long term climatic trends, indicating there has been a slight decrease in precipitation levels and a slight increase in temperatures between 2003 and 2022.

#### Graph 4.3. Long-term climatic trends (1981-2022), Gogrial West county<sup>27</sup>



#### Projected climatic trends by 2060 based on SSP3-7.0 scenario," Warrap State

#### Projected change in precipitation in Projected change in max temperature in warmest month by 2060 wettest month by 2060 +11.54mm

+1.95°C

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





### **5. LIVELIHOODS AND SOCIOECONOMIC CONDITIONS**

# **GOGRIAL WEST COUNTY**

#### Map 5.1. Livelihood zones in Gogrial West county



# Graph 5.1. Year on year change relative to previous year in net cereal production (CFSAM)<sup>37</sup>



#### IPC Scores - 2023/24<sup>39</sup>

#### 🥺 Acute malnutrition

- Jul Sept 2023
   Oct 2023- Mar 2024 (Projected)

   PHASE 4
   PHASE 4
- Acute food insecurity
  Sept Nov 2023
  Dec 2023- Mar 2
  - ot Nov 2023
     Dec 2023- Mar 2024 (Projected)

     PHASE 3
     PHASE 3

Gogrial West is located in the "Northwestern flood plain sorghum and cattle" livelihoods zone, an area characterized by a mixed agro-pastoral production system, and where households are involved in both crop farming and pastoralism.<sup>29</sup> These dual activities play a crucial role in fulfilling the food and cash income needs of households in the zone. Agricultural endeavors are complemented by additional practices such as fishing, hunting, and gathering uncultivated native fruits and plants. The utilization of wild foods supplements the diets of the elderly and children following livestock migration.<sup>30</sup> These diverse practices form the foundation of the livelihood strategies employed by populations in this zone.<sup>31</sup>

Cropping in the county relies on rainfall, and the most cultivated crops include maize, sorghum, sesame, groundnuts, vegetables and millet.<sup>32</sup> As of 2022, approximately 66,670 hectares were dedicated to cereal cultivation, involving an estimated 60,609 households in cereal production.<sup>33</sup> Livestock, including cattle, goats, sheep, and poultry, are essential assets in the county. Notably, in Warrap State, pastoralists migrate during the dry season in search of water in the northeastern and eastern parts of the region. While Gogrial West county experiences fewer challenges with water and migration conflicts compared to its northern and eastern counterparts, sporadic intercommunal disputes, particularly regarding grazing lands, have disrupted livelihoods in the area in the past.<sup>34</sup>

Graph 5.1 displays the fluctuations in net cereal production, indicating a varying year on year evolution over the past seven years in the county. The peak change in net cereal production was observed in 2019, followed by a subsequent decline in the next three years. A slight positive change in production was recorded in 2022. This visual representation highlights the volatility in net cereal production, emphasizing the impact of environmental factors, particularly flooding, on agricultural outcomes in the county. The repercussions of the 2022 flooding starting in July included the washing away of germinating crops and the destruction of household food stocks, which impacted food production in the county.<sup>36</sup> However, the county was projected to meet its 2023 cereal demand and even have a surplus of 11,523 tonnes.<sup>38</sup> Nevertheless, the county was designated as IPC phase 4 for acute malnutrition and phase 3 for acute food insecurity from July to December 2023. Typically, the county endures flooding during this timeframe, potentially impacting harvest yields.

#### Figure 5.1. Cultivation calendar for livelihood zone SS07<sup>38</sup>







# 6. POPULATION AND DISPLACEMENT

### **GOGRIAL WEST COUNTY**

Map 6.1. Population density across Gogrial West county (2023)44

Map 6.2. Significant population movements in Gogrial West over a five year period (2018-22)<sup>4546</sup>





#### Table 6.1. Est. number of displaced persons by payam (2023)43

Payam	IDPs	Returnees	Relocated	Total
Akon	2,141	26,830	308	29,279
Akon North	909	10,407	337	11,653
Alek North	682	9,714	364	10,760
Alek South	676	10,579	537	11,792
Alek West	776	17,307	529	18,612
Gogrial	2,401	15,641	654	18,696
Kuac North-Kuajok	-	14,390	433	14,823
Kuac South	2,017	12,326	305	14,648
Riau	1,606	2,825	304	4,735
County total	11,208	120,019	3,771	134,998

The county's population distribution displays a scattered pattern, with elevated population density evident in the vicinity of towns, especially the county and state capital, Kuajok, as depicted in map 6.1.<sup>40</sup> Additional focal settlement areas encompass regions along major roads and towns like Majak, Akun, Gogrial, Alek, and Mayom. The section of the county bordering Gogrial East county emerges as the least inhabited area. This distribution underscores the influence of geographical features and infrastructure on population settlement trends in the county.

As of September 2023, the county had documented a total of 11,208 internally displaced persons (IDPs), 120,019 returnees, and 3,771 individuals who had relocated, as detailed in Table 6.1. Gogrial payam hosted 21% of the IDPs, while Akon and Kuac South hosted 19% and 18%, respectively. Kuac North-Kuajok, however, did not have any registered IDPs. Out of the total number of returnees, 16,611 arrived in 2021 while others arrived between 2016 and 2020. Floods, among other factors, played a role in causing displacement in the county. In 2021, at least 13,000 individuals were affected by floods, and this number increased to 71,821 in the following year.<sup>41</sup> The IRNA reports for 2021 and 2022 indicated that populations displaced by floods sought refuge at higher elevations and with relatives. Some settled along roads and under trees, potentially exposing themselves to health risks.<sup>42</sup>

The distribution of returnees was evenly spread across the payams, with the highest proportion (22%) choosing to reside in Akon payam. The majority of the population that relocated within the county were situated in Alek South, Alek North, Alek West, and Gogrial payams, constituting 55%.





# 7. COMMUNITY INFRASTRUCTURE AND SERVICES

### **GOGRIAL WEST COUNTY**

Map 7.1. Key infrastructure in Gogrial West county<sup>47 48</sup>



Map 7.2. Community infrastructure in Kuajok Town and its environs



#### EDUCATION AND HEALTH INFRASTRUCTURE

As of December 2023, an IOM database of education facilities in South Sudan indicates Gogrial West county had a total of 130 primary schools and eight secondary schools.<sup>49</sup> The 2021 IRNA, conducted in four out nine payams, indicated that floods had a severe impact on education, leading to the submergence of at least seven schools.<sup>50</sup> Displaced families, relocating with their children, faced challenges in maintaining regular school attendance. Enrollment during the 2022-2023 school year was concerning, as more than half (53%) of school-aged children (5 to 17 years old) in the county were not enrolled or registered in formal education.<sup>51</sup>

As of December 2023, a database of all health facilities in South Sudan indicates the existence of 26 health facilities in Gogrial West county.<sup>52</sup> These comprised of 18 Primary Health Care Units, seven Primary Health Care Centers, and one state hospital. In 2023, 39% of households had difficulties in obtaining healthcare, due to long distances, compounded by flood-related issues.<sup>53</sup>

#### WASH indicators<sup>54</sup>

36% of households take <30 minutes to fetch drinking water

88% of households practice open defecation



This county profile has been made possible by the generous support of the Global Facility for Disaster Risk Reduction and Recovery (GFDRR)



# 8. SETTLEMENT

### **GOGRIAL WEST COUNTY**

Figure 8.1. Satellite images showing change in built-up area in Kuajok town and its environs between 2011 and 2022

Kuajok, February 2011 (Google Earth Image)

Kuajok, March 2022 (Google Earth Image)



#### **SETTLEMENT STRUCTURE**

The administrative center of Gogrial West county is located in Gogrial payam,<sup>55</sup> while the county's capital and Warrap state capital is Kuajok town, which is situated in Kuac North payam. Kuajok town, depicted as the most populated area in the county in map 6.1, also serves as the main market, catering to larger parts of the county.

As per the 2023 ISNA data,<sup>56</sup> tukuls are the predominant shelter types in the county, with 87% of the population living in them. Other shelter types include rakoobas, semi-concrete buildings, and improvised shelters (constructed with materials like plastic sheets), used by 7%, 5%, and 1% of the population, respectively. In terms of structural integrity, the majority of shelters (61%) were reported as partially damaged, but indicating no structural risk and considered habitable. Additionally, 33% were

partially damaged and posed some structural risk but were still livable, while 6% of shelters were noted as completely damaged. The primary cause of shelter damage was floods and rain (36%).<sup>57</sup>

#### **SETTLEMENT CHANGE**

As depicted in figure 8.1, in the span of 11 years there has been an increase in the density of Kuajok Town Center. This can be seen when juxtaposing the 2011 satellite imagery with imagery from 2022, where an increase in the number of buildings with corrugated iron sheets is visible. An increase in the population could be attributed to flooding in the lower southern part of the county (see sections 3A and 3B), or due to conflict in other parts of the county or neighbouring counties.



This county profile has been made possible by the generous support of the Global Facility for Disaster Risk Reduction and Recovery (GFDRR)





### 9. MARKETS, TRANSPORT AND ACCESSIBILITY



**Sorghum price per Kg (Oct 2023)** 5% lower than South Sudan median

### MSSMEB price (Oct 2023)

6% lower than South Sudan median

# **GOGRIAL WEST COUNTY**

#### MARKETS

The primary markets in the county, namely Kuajok and Akon, are consistently fully-functional, providing essential services. According to the Joint Market Monitoring Initiative (JMMI) analysis from REACH, as of October 2023, both primary markets of the county (Kuajok and Akon) were fully operational.<sup>50</sup> This suggests that these markets were accessible, had basic items available, and their infrastructure was functional at that time. Other secondary markets in the county often operate at reduced functionality.<sup>59</sup>

As of October 2023, the county's sorghum cost per kilogram was 5% lower than the national median, while the Multi-Sectoral Survival Minimum Expenditure Basket (MSSMEB) was 6% below the national median for the same period.<sup>60</sup> This implies that, within that specific timeframe, sorghum prices and prices of other MSSMEB components were advantageous in the county. Generally, sorghum prices in the county exhibit greater volatility compared to the national level, as illustrated in Graph 10.1. The September to November period is recognized as the harvest season in the county, and as depicted in Chart 10.1, prices during this season typically fall below the national average. The chart also highlights that sorghum prices were generally higher in 2023 compared to 2022.

### TRANSPORT

Gogrial West county is characterized by a well-defined road network, consisting of two primary roads and two secondary roads, complemented by an extensive grid of tertiary roads. The primary road originating from the southern part of the county traverses through the capital city, Kuajok, and key towns such as Gogrial, Alek, Mayom, and Panliet, extending northwards. This major route also establishes a crucial link between Gogrial West county and the adjacent Twic county to the north. Another primary road connects Gogrial town to Aweil South county, and one of the secondary roads stretches from Gogrial town to Gogrial East county. This road infrastructure plays a vital role in promoting economic activities and enhancing accessibility to various parts of the county.

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





Market Name

**Kuajok** 

Akon

Table 9.1. Key market supply routes, Gogrial West county (2023)

Primary Supply route

From Kuajok (by Road)

From Wau Town (by Road)



# **ENDNOTES**

# **GOGRIAL WEST COUNTY**

1	HDX/UN OCHA. 2022 South Sudan admin level 2 population figure estimates based on the 2008 census and annual	32	CSRF. Gogrial West county profile. 2023
	natural growth and attrition rates with displacement adjusted estimates. 2022.	33	FAO/WFP. 2021 Crop and Food Security Assessment Mission (CFSAM) to the Republic of South Sudan. June 2022.
2	HDX/UN OCHA. 2023 South Sudan Population Estimation Survey: admin level 2 population figure estimates by the National Bureau of Statistics (NBS) and UNEPA 2023	34	CSRF. <u>Gogrial West county profile.</u> 2023
3	HDX/LIN OCHA. South Sudan administrative level 0-2 gazetteer. 2023	35	IRNA Report on flood affected communities. Gogrial West County. 2022.
4	IRNA Report 2021	36	FAO/WFP. 2021 Crop and Food Security Assessment Mission (CFSAM) to the Republic of South Sudan. June 2022.
5	CSRE Gogrial West county profile, 2023	37	lbid
6	UN OCHA. Flood data, 2021.	38	Famine Early Warning Systems Network (FEWSNET). Livelihood Zone Map and Descriptions for the Republic of South
7	UN OCHA. Flood data, 2022.	20	Sudan Issued August 2018.
8	Familie Early Warning Systems Network (FEWSNET). Livelihood Zone Map and Descriptions for the Republic of South	39	Nov 2023.
0	Sudan Issued August 2018.	40	IOM. <u>DTM Baseline dataset.</u> 2023.
9		41	UN OCHA. Flood data. 2021/ UN OCHA. Flood data. 2022.
10	Google Earth Engine. <u>CHIRPS Daily Rainfall Data</u> . 1981-2022.	42	IRNA Report on flood affected communities. Gogrial West County. 2022.
11	Google Earth Engine. ERA5-Land Monthly Average Dataset. February 2022.	43	IOM. DTM Baseline dataset. 2023.
12	Google Earth Engine. <u>ESA WorldCover v100.</u> 2020.	44	HDX.South Sudan: Population Density for 400m H3 Hexagons. October 2023
13	lbid	45	REACH. Gogrial West and East Rapid Assessment: Warrap State, South Sudan. September 2021.
14	Ibid	46	IRNA Report: Gogrial West. 02-09 August 2022
15	Google Earth Engine. <u>ESA WorldCover v100.</u> 2020.	47	IOM. Education facilities in South Sudan. 2021.
16	Digitize Africa. Building footprints. 2017	48	WHO. <u>Health facilities.</u> 2021.
17	IRNA Report on flood affected communities Gogrial West County. 2021.	49	IOM. <u>Education facilities database</u> . 2023
18	lbid	50	IRNA <u>Report.</u> 2021.
19	UN OCHA. Flood data. 2022.	51	IOM. Inter-Sector Needs Assessment (ISNA). 2023.
20	IRNA Report on flood affected communities Gogrial West County_2021.	52	Global Healthsites Mapping Project dataset, 2023
21	lbid.	53	IOM. Inter-Sector Needs Assessment (ISNA), 2023.
22	DAHITI. Altimetry data. 2002-2022.	54	lbid
23	UN OCHA. Flood data. 2022.	55	CSRE Gogrial West county profile 2023
24	IRNA Report on flood affected communities. Gogrial West County. 2022.	56	IOM Inter-Sector Needs Assessment (ISNA) 2023
25	Ibid	57	lbid
26	CSRF. <u>Gogrial West county profile.</u> 2023	58	REACH Joint Market Monitoring Initiative (JMMI)
27	Google Earth Engine. CHIRPS Daily Rainfall Data. 1981-2022.	59	Ibid
28	WFP VAM. <u>Climate Explorer.</u> 2022.	60	Ibid
29	Famine Early Warning Systems Network (FEWSNET). Livelihood Zone Map and Descriptions for the Republic of South Sudan Issued August 2018.	00	
30	CSRF. <u>Gogrial West county profile.</u> 2023		
31	Famine Early Warning Systems Network (FEWSNET), Livelihood Zone Map and Descriptions for the Republic of South		

31 Famine Early Warning Systems Network (FEWSNET). <u>Livelihood Zone Map and Descriptions</u> for the Republic of South Sudan Issued August 2018.



