

Progress of Regions



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Notes for the Reader

"Non-achievement"

Statistical publications usually report achievements. In this case however, we feel there is so much work to do that focusing on achievement detracts from the gravity of what is still left to accomplish. For instance, every child un-immunized is a child whose right to health is violated. Every girl out of school is a girl whose right to education is violated. This report highlights "non-achievement" in order to show what needs to be done in order to realize the rights of all children, everywhere.

Insecurity and Access

Insecurity and access denials made it impossible to visit certain locations in southern Sudan. This report reflects data from only those locations that were accessible and only in rebel-held areas.

Abduction and Child Soldiers

Information on abduction and child soldiers is anecdotal and has been collected for a period of upto 15 years. It has no statistical validity and is included only to give estimates.

Population Figures

Population figures are estimates and not census figures. The estimated figures, however, correspond closely to information gathered during National Immunization Day's for Polio in 1999.

'Areas with greatest needs'

On each page there is a chart called 'Areas with greatest needs'. This ranks each region, worst to best, based on what percentage of needs are not being covered. The second column of the chart indicates, again worst to best, which areas have the greatest needs according to the number of people surveyed. This chart is important because it allows the reader to get a more accurate idea of which areas are actually experiencing the greatest deficits, despite how the raw percentages may make it appear. While this is useful for prioritizing and strategy development, ultimately all children must be reached.

Notes for the Reader

'Girl/Boy' Ratio

The 'Girl/Boy' ratio is derived by dividing the coverage figures for girls by those for boys. A value of one (1) indicates no disparity. A ratio of more than one indicates disparity against boys while a ratio of less than one indicates disparity against girls. These disparities are highlighted in yellow.

Missing Gender Data

Gender data for about 0.98% children were missing and is therefore not reflected in the separate columns designated boys and girls, but was included in the 'total' column. Therefore, the total is not the sum of the boys and girls but a greater value.

Confidence Intervals

Surveys such as MICS use a percentage of the population to gain a picture of the whole situation. In order to get an accurate picture it is necessary to allow for a margin of error. This is done through 'confidence interval' calculations. When studying an arbitrary population that is not necessarily normally distributed, one can only calculate an estimate of the mean (average) of the population. Using the mean from a large random sample of measurements, one must allow for a margin of error either side of that figure. This is the 'level of confidence', and in this case the size of the error has been taken at 95%. The range of the estimate for the mean, given by $0.95 \pm$ or $-$ the sample mean, is called a **confidence interval**. Each time a random sample is gathered, a different sample average will be found; thus, there will be a different confidence interval with each sample.

Numbers

In absence of census figures, the numbers used in the tables are extrapolated from the percentage data using regional population figures. They are presented to indicate the possible quantum of the non-achievement or the problem and have limited statistical validity.

Population

Population

Analysis

- The total population of rebel-controlled areas in the southern part of Sudan is estimated at 5.06 million.
- 58% of the population is below 17 years of age. Bahr el Ghazal and Lakes account for 56% of the population followed by Equatoria at 32%, then Upper Nile and Jonglei.
- There are more women than men. However, there are 20% fewer girls than boys under five years of age. There are also 12% fewer girls than boys in the 6-17 year age category.
- There are twice as many women as men in the adult population (above 17 years of age). War, death in conflict and displacement/ emigration (refugees) could be the main reason for this difference. Children under 17 years outnumber adults in Bahr el Ghazal, Upper Nile, Jonglei and Eastern Equatoria. These areas have seen significant conflict and displacement. The average household size in the southern part of Sudan is five (5), with children under 17 accounting for three out of five in every people household.
- The population in the southern part of Sudan is increasing rapidly. Some indirect estimates place the crude birth rate at almost 50/1000. There is limited availability of contraceptives. The limited access to health facilities means that many women are repeatedly exposed to the risk of disease, disability and death during pregnancy, labour, birth and in post-natal recovery. Lack of education and employment opportunities for the young will pose serious challenges as this population grows older.

Table 1 - Population Estimates in the southern part of Sudan
(where the survey was conducted)

	Under 5	Between 5 and 17	Adult	Total
Bahr el Ghazal	528,156	613,579	736,092	1,877,827
Lakes	241,151	286,328	446,072	973,551
Upper Nile	94,856	114,071	113,606	322,533
Jonglei	67,947	99,030	130,008	296,985
Western Equatoria	133,561	233,949	415,810	783,320
Eastern Equatoria	186,039	341,663	277,107	804,809

	Male	Female	Total
Overall Estimated Population of children under 5	689,393	574,981	1,264,374
Overall Estimated Population of children between 5 and 17	895,757	801,066	1,696,823
Overall Estimated Population of Adults	682,590	1,413,728	2,096,318
Overall Estimated Total Population	2,267,740	2,789,775	5,057,515

Population Estimates in the southern part of Sudan
(where the survey was conducted)

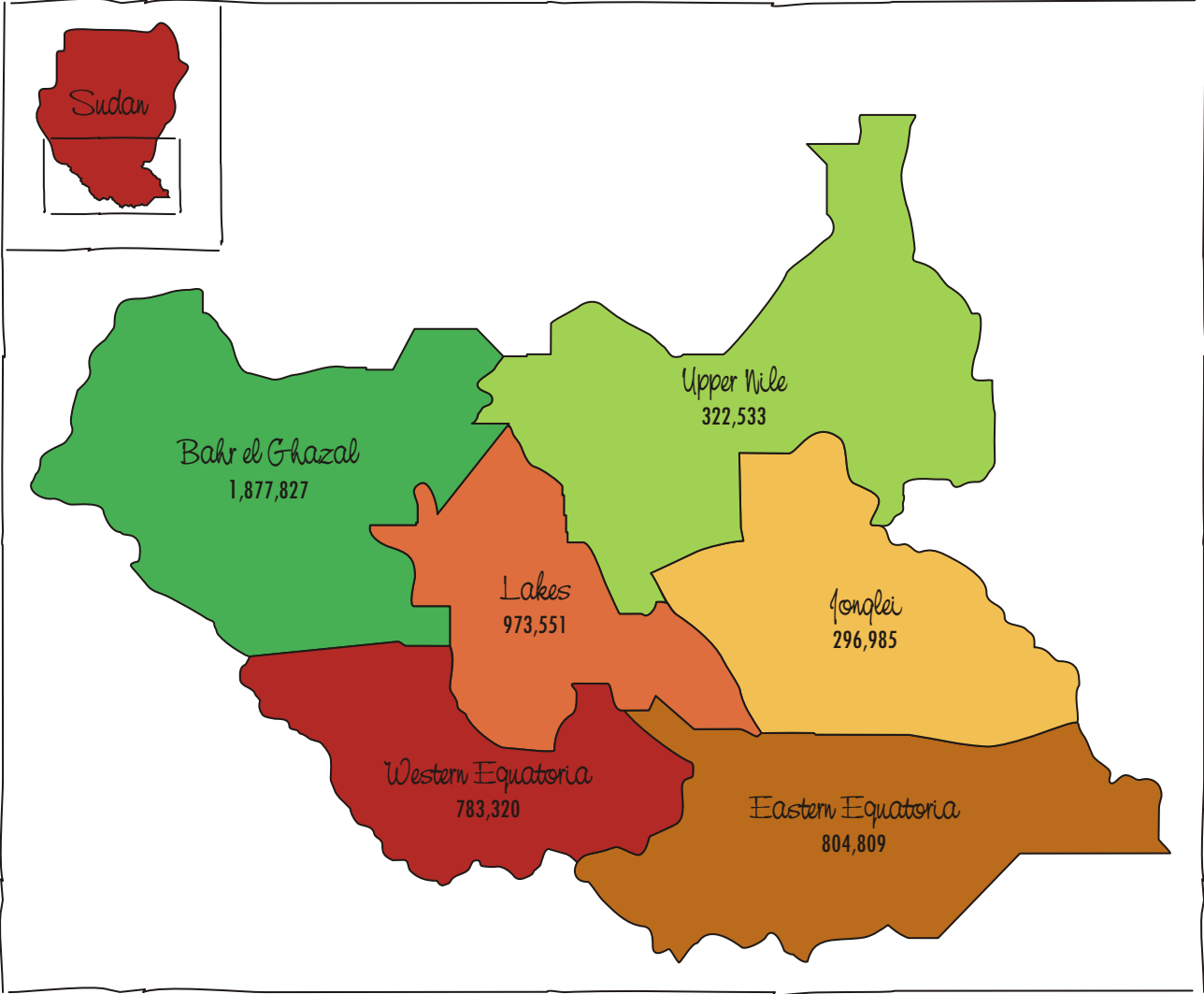


Table 2 - Population of the southern part of Sudan by Gender & Age

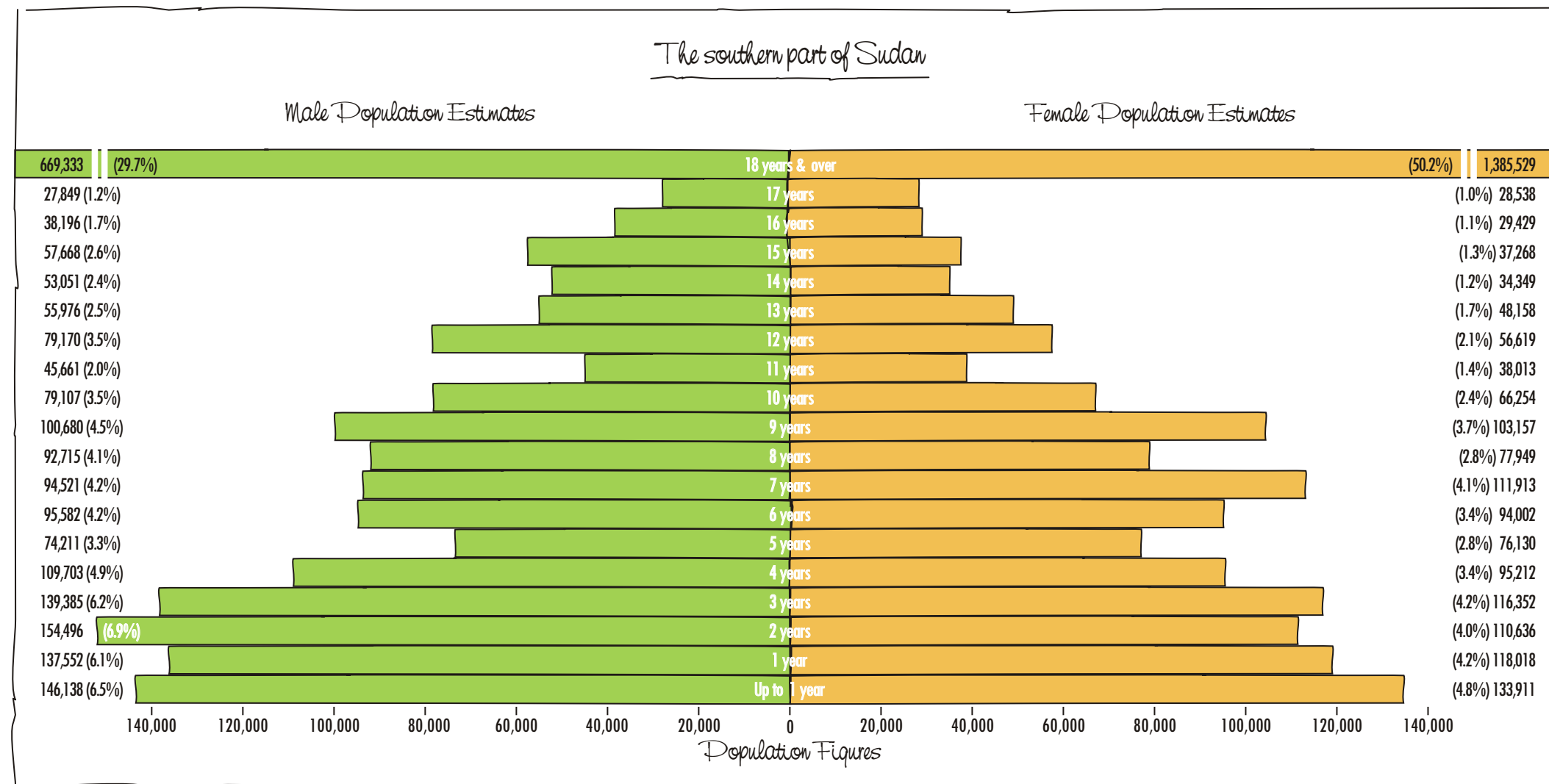
	Under 5		Between 5 and 17		Adult		Total	
	M	F	M	F	M	F	M	F
Bahr el Ghazal	294,770	233,386	328,945	284,634	186,256	549,836	809,971	1,067,856
Lakes	129,735	111,416	154,511	131,817	166,223	279,849	450,469	523,082
Upper Nile	51,951	42,905	60,441	53,630	31,372	82,234	143,764	178,769
Jonglei	37,004	30,943	51,043	47,987	43,302	86,706	131,349	165,636
Western Equatoria	67,529	66,032	125,410	108,539	178,097	237,713	371,036	412,284
Eastern Equatoria	100,442	85,597	166,921	174,742	93,938	183,169	361,301	443,508

Table 3 - Mean Household Size

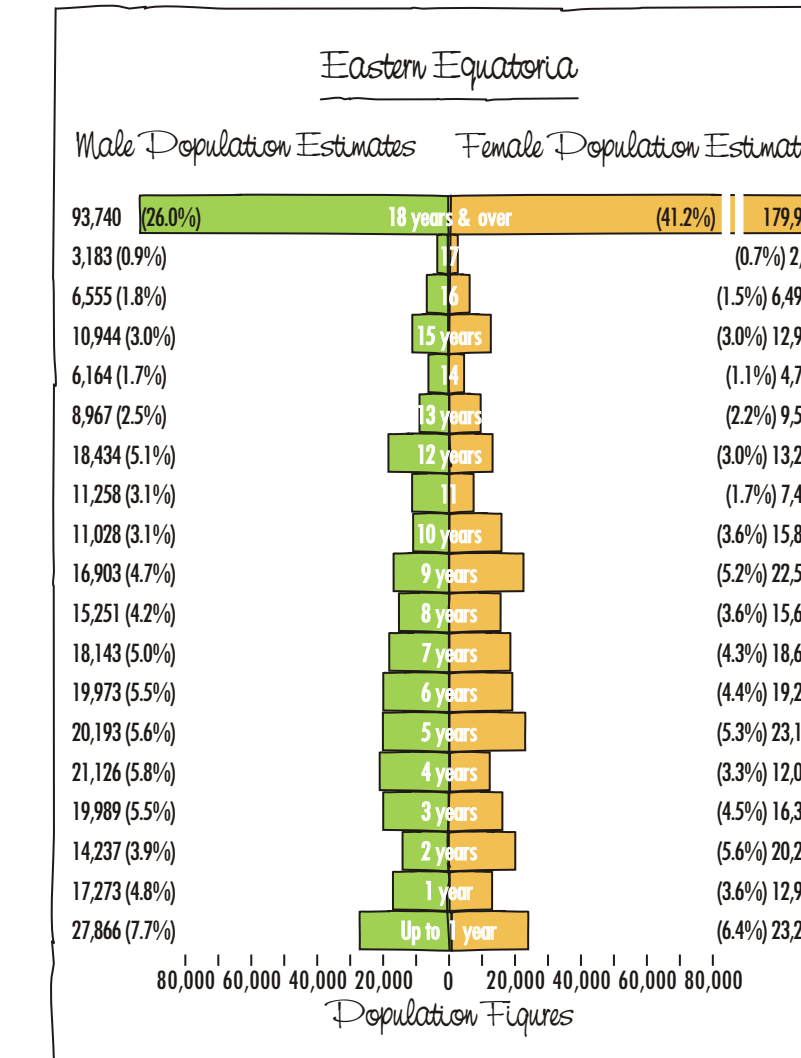
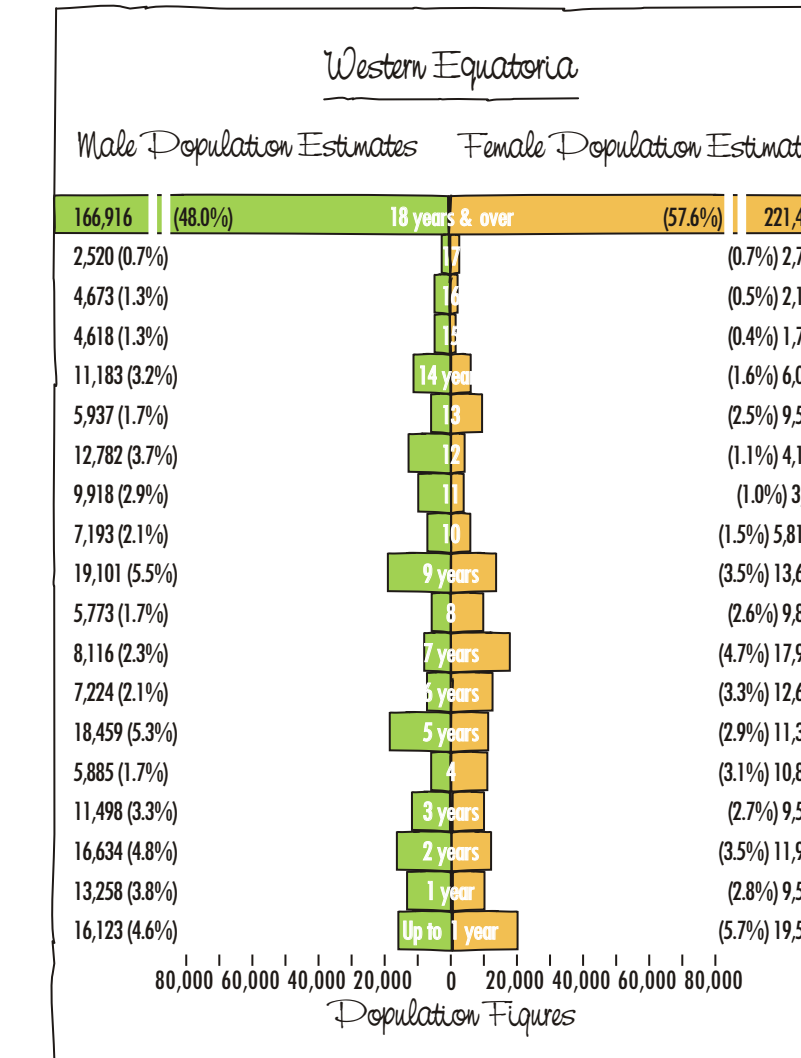
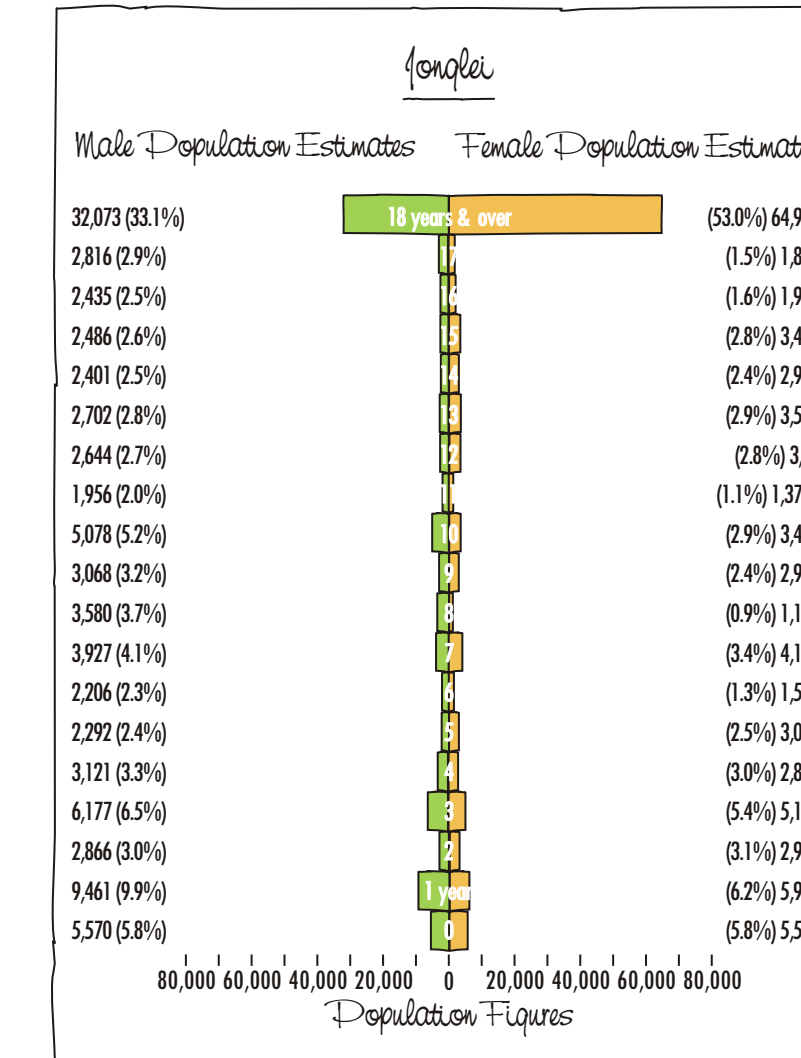
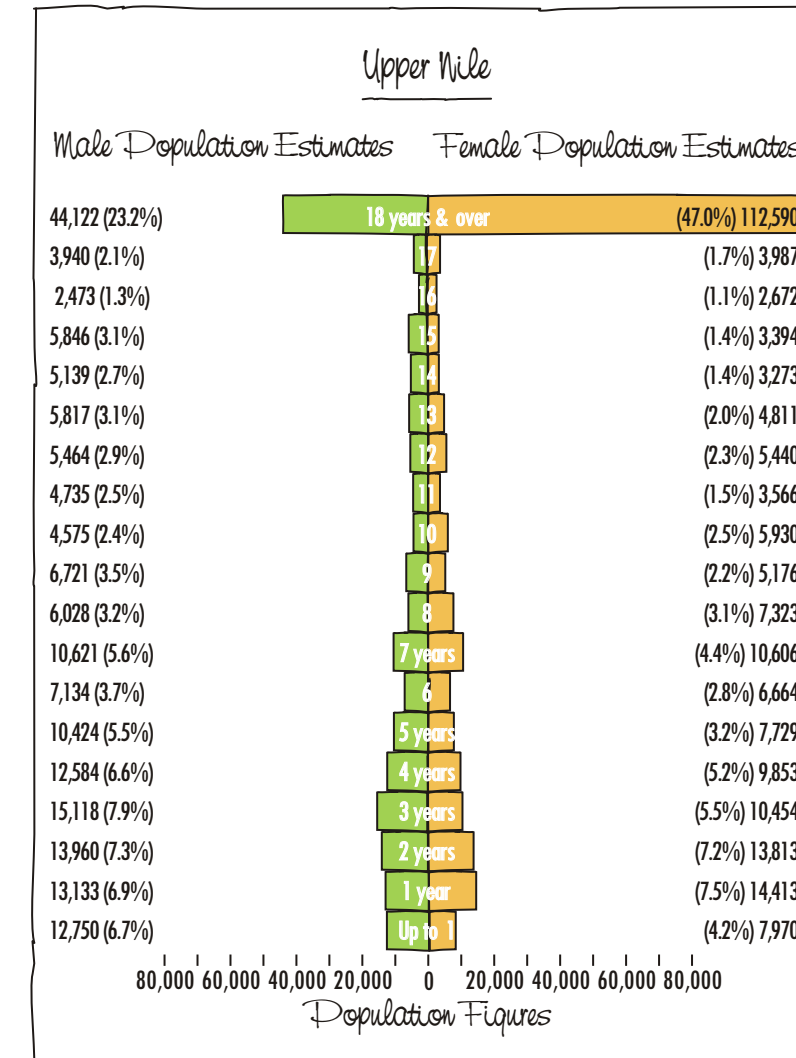
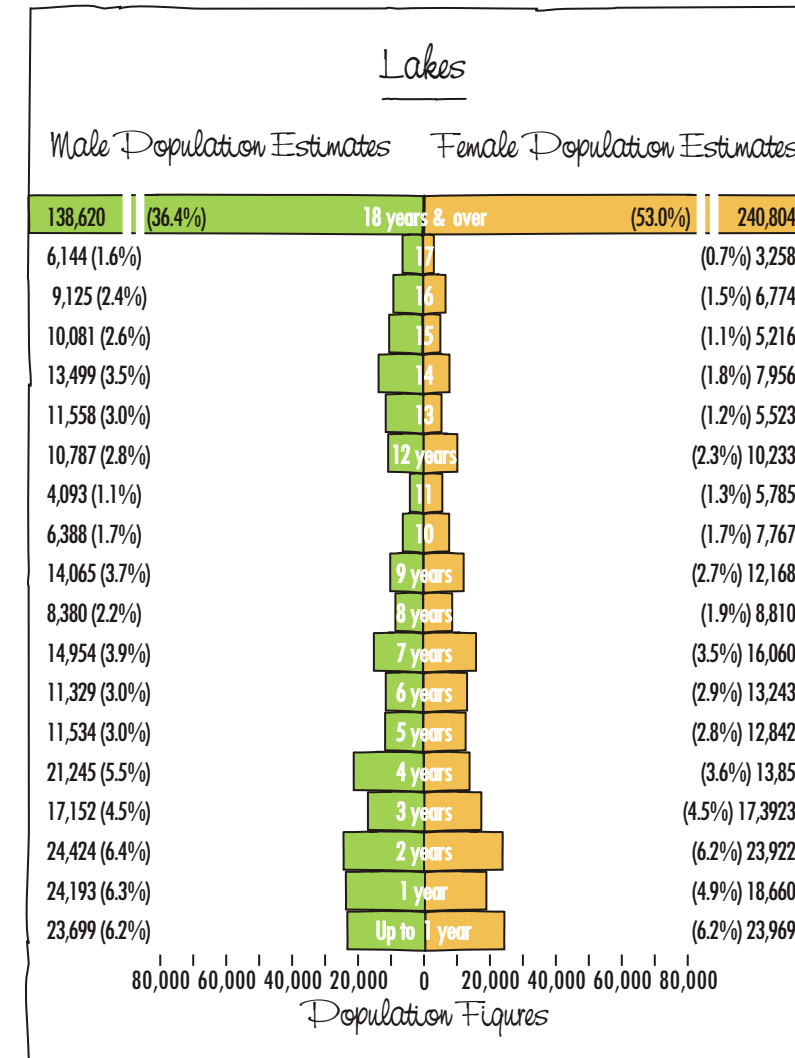
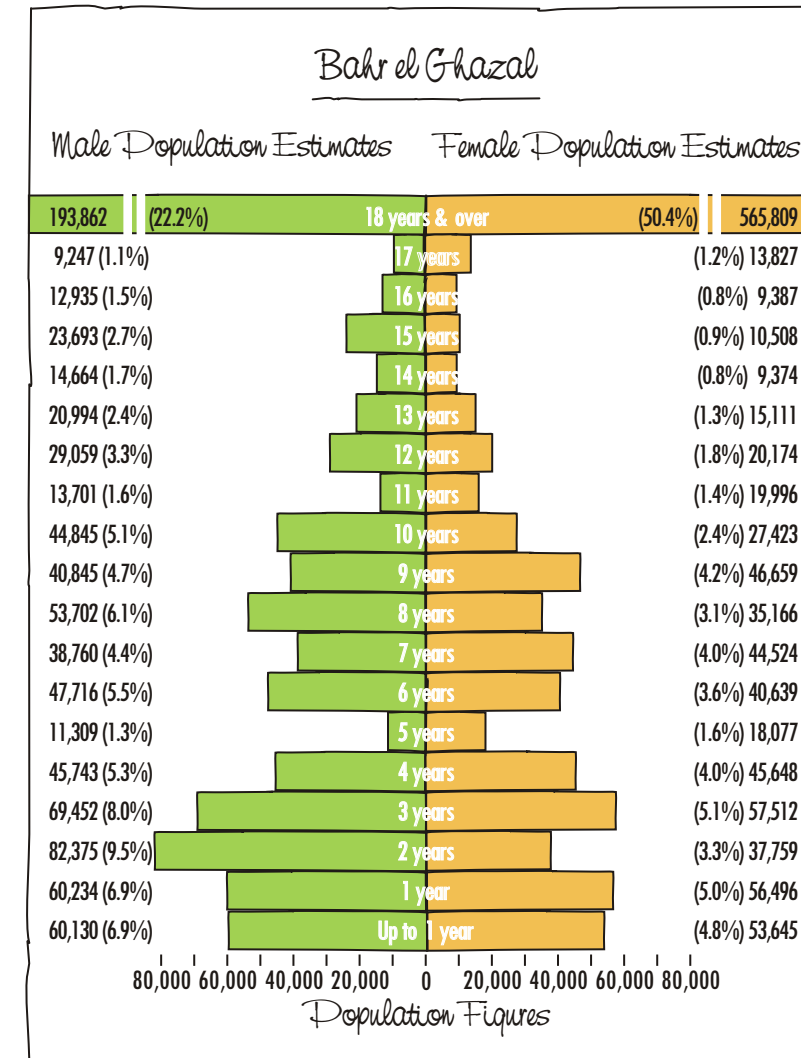
	Under 5	Between 5 and 17	Adult	Total
Bahr el Ghazal	1.18	1.72	1.92	4.82
Lakes	1.45	1.98	2.67	6.10
Upper Nile	1.18	1.67	1.55	4.40
Jonglei	1.21	1.68	2.04	4.93
Western Equatoria	1.06	1.66	2.37	5.09
Eastern Equatoria	1.19	1.97	2.15	5.32
Overall	1.22	1.79	2.16	5.17

Age Distribution

Age Distribution in the southern part of Sudan (where the survey was conducted)



Population Pyramids for each region of the southern part of Sudan
(where the survey was conducted)



The Ante-natal Period & Delivery

The Antenatal Period & Delivery

Analysis

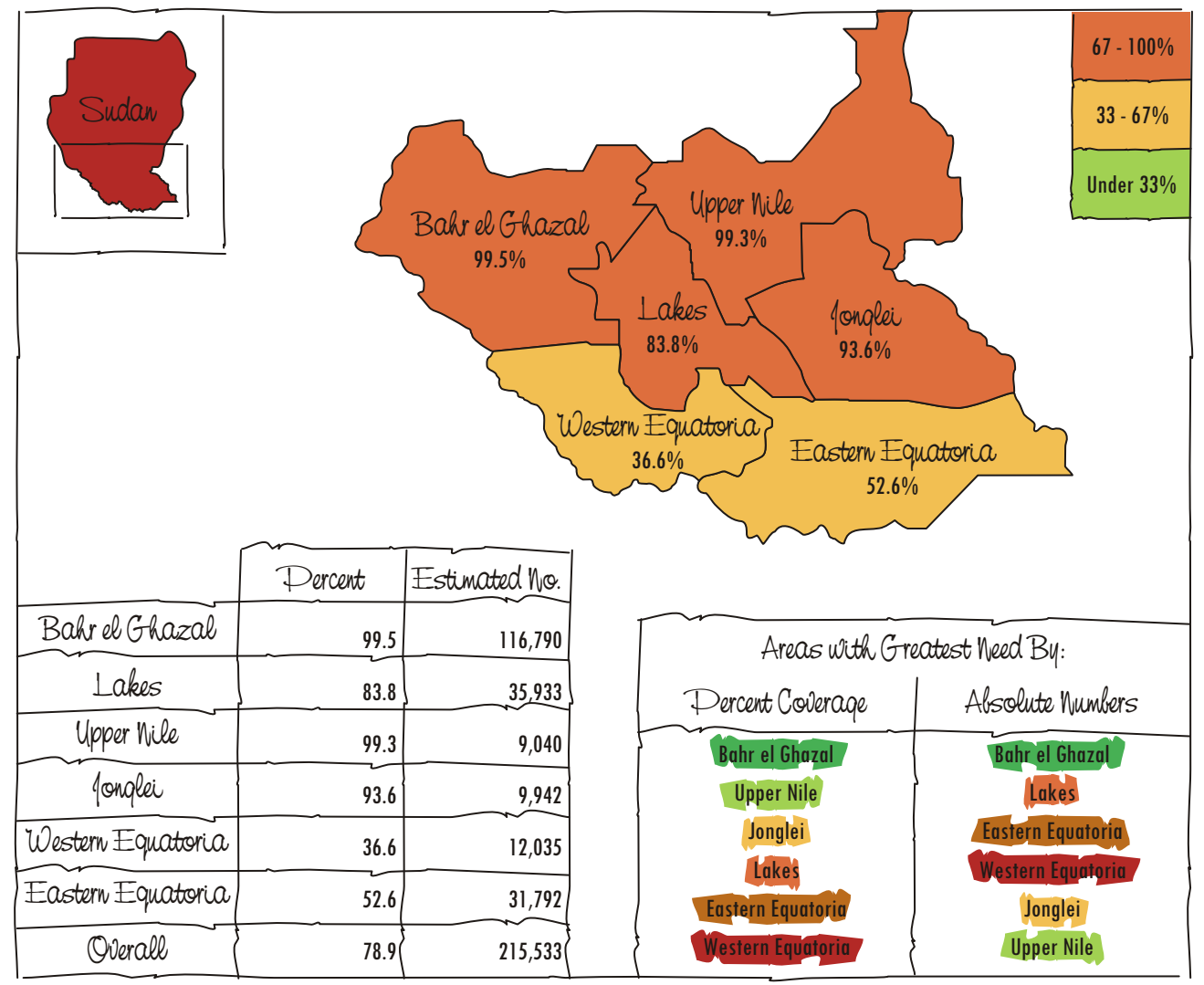
- During 1999, most women and their newborns were not protected against Tetanus. Even in the Equatorias, only half of them had received the Tetanus Toxoid (TT) vaccine during their last pregnancy. Most women also did not receive any antenatal care during their last pregnancy. Almost all deliveries are conducted at home. Eastern Equatoria has the highest number of deliveries (18%) conducted in a health facility. Long distances to travel, low awareness levels regarding the benefits of health care and in some cases a lack of trained personnel and essential drugs are some of the reasons that women tend to stay at home.
- Most deliveries in the southern part of Sudan are conducted by untrained birth attendants. However, two-thirds of the deliveries in Western Equatoria and 40% in Eastern Equatoria are conducted by trained birth attendants. Relative security and increased availability of trained workers could be the main reasons for this difference.
- Almost none of the women surveyed received Vitamin A immediately after delivery. Administration of Vitamin A soon after delivery can reduce the risk of mortality of the mother and the newborn (if it is breastfed) as it is known to be essential for the effective functioning of the immune system.
- There is an almost total absence of Obstetricians and Gynaecologists in southern Sudan. In the absence of adequate health services for women, every pregnancy means an increased risk of morbidity, disability or mortality for the mother and child. Disabilities such as ano-rectal fistula, which can make the women's life miserable both physically and socially. While no data is available for maternal mortality rates, the conditions in southern Sudan indicate that theirs would be one of the highest in the world.

Action Points

1. Increase access to health services by supporting rehabilitation or construction of simple low cost facilities.
2. Continue to support the training of Traditional Birth Attendants and Community Health Workers in Antenatal Care
3. Promote the use of Hygienic Delivery Kits in all health facilities and in homes
4. Promote ante-natal contacts between the pregnant women and the nearest health facility
5. Organize special TT immunization campaigns for women (special emphasis women 15-30 years of age)
6. Promote administration of Vitamin A to the mother soon after delivery

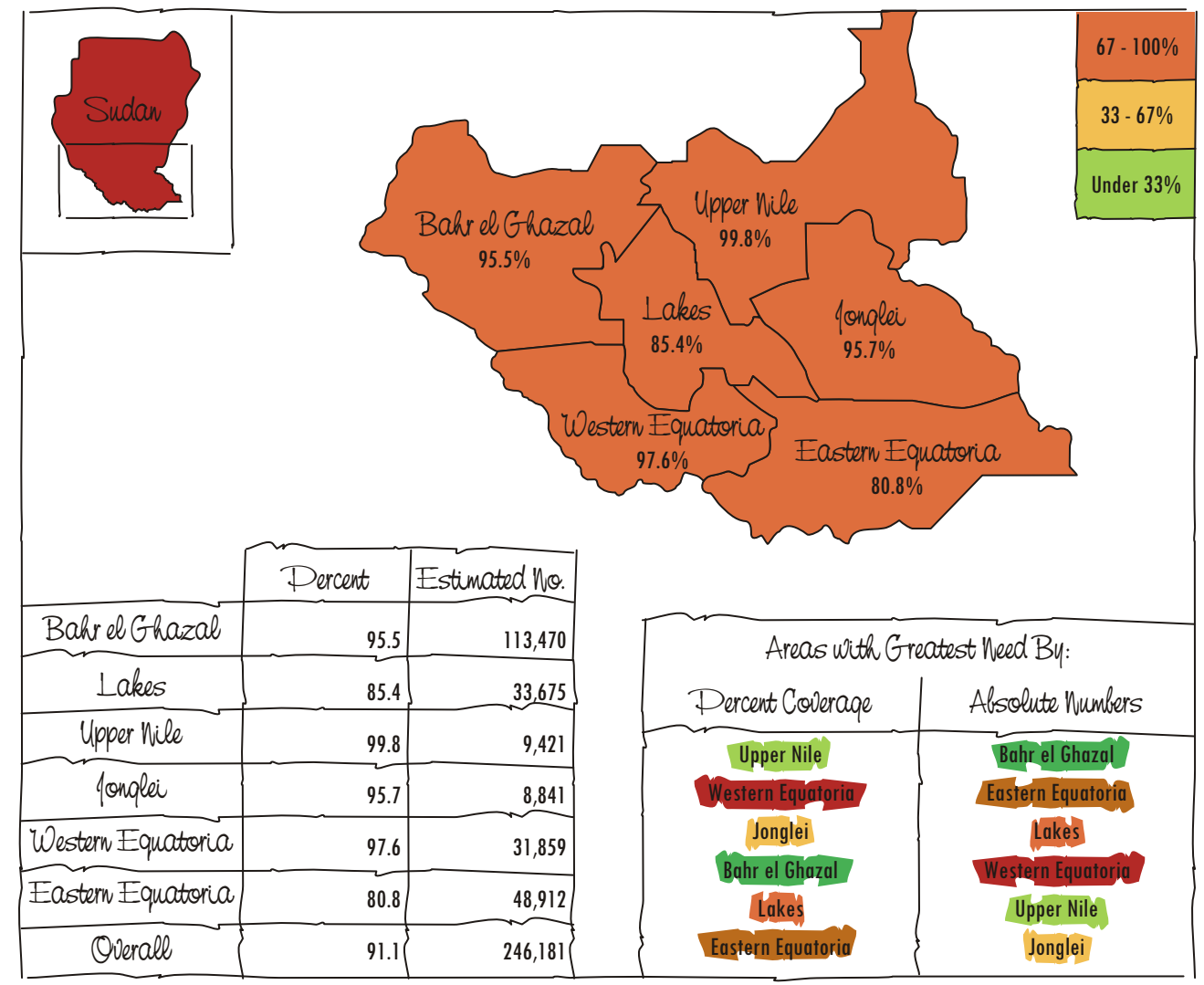
Article 6 of the CRC gives every child the right to life, survival and development. Article 24 of the CRC gives every mother the right to appropriate pre-natal and post-natal health care.

Table 5 - Antenatal Care not received during last Pregnancy



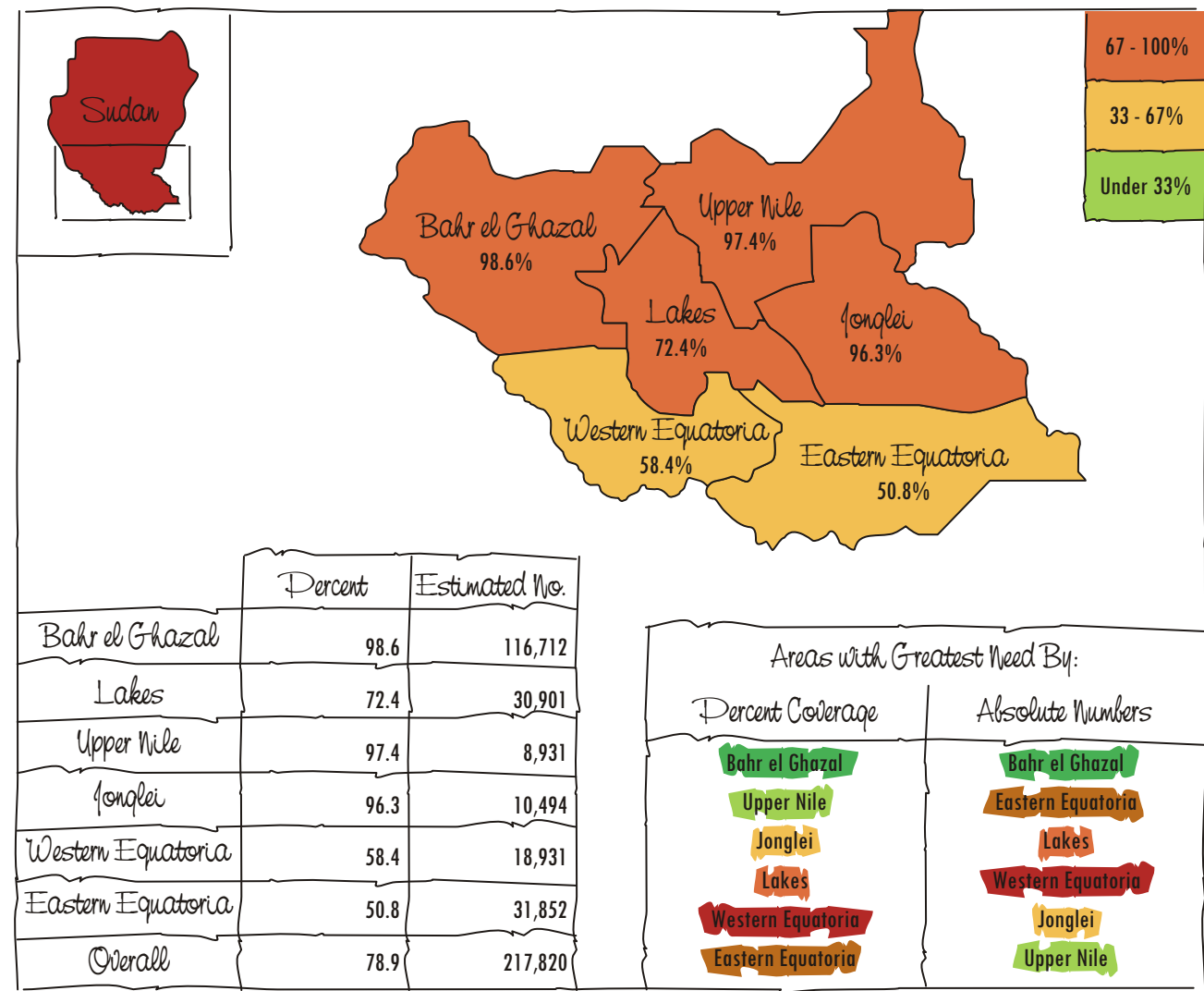
Article 6 of the CRC gives every child the right to life, survival and development. Article 24 of the CRC gives every mother the right to appropriate pre-natal and post-natal health care.

Table 6 - Vitamin A not received after Delivery



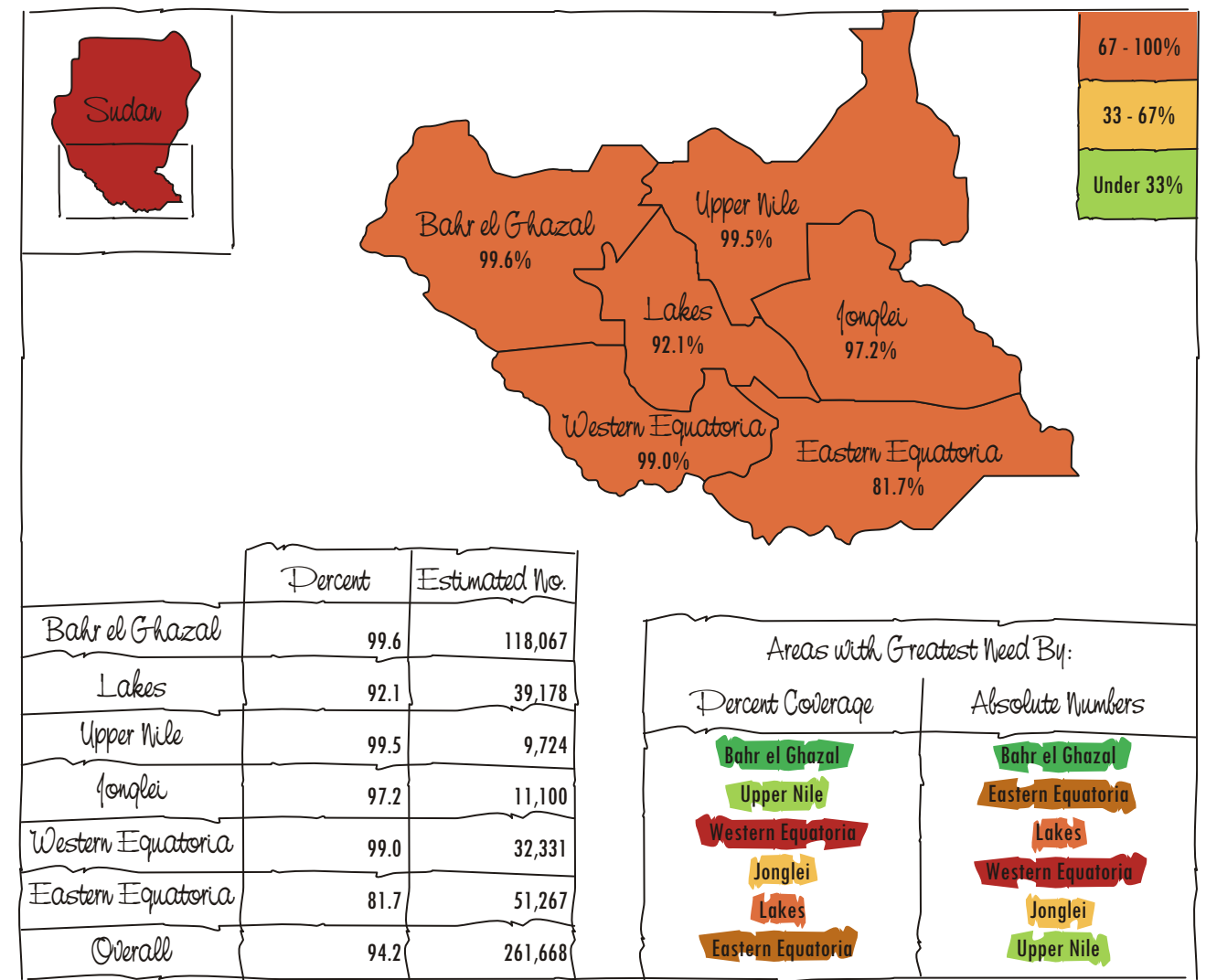
Article 6 of the CRC gives every child the right to life, survival and development. Article 24 of the CRC gives every mother the right to appropriate pre-natal and post-natal health care.

Table 7 - Tetanus Toxoid not received during last Pregnancy



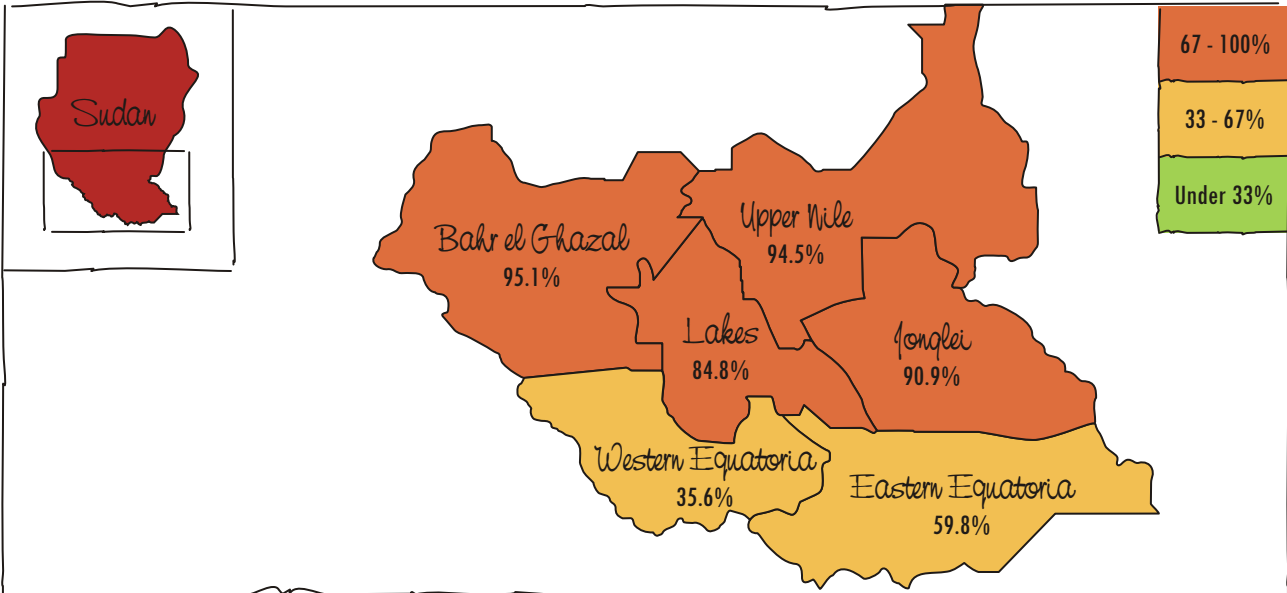
Article 6 of the CRC gives every child the right to life, survival and development. Article 24 of the CRC gives every mother the right to appropriate pre-natal and post-natal health care.

Table 8 - Delivery not done at a Health Facility



Article 6 of the CRC gives every child the right to life, survival and development. Article 24 of the CRC gives every mother the right to appropriate pre-natal and post-natal health care.

Table 9 - Delivery Conducted by an Untrained Birth Attendant



	Percent	Estimated No.
Bahr el Ghazal	95.1	106,120
Lakes	84.8	36,130
Upper Nile	94.5	9,167
Jonglei	90.9	9,447
Western Equatoria	35.6	12,550
Eastern Equatoria	59.8	35,841
Overall	77.7	209,257

Areas with Greatest Need By:	
Percent Coverage	Absolute Numbers
Bahr el Ghazal	Bahr el Ghazal
Upper Nile	Lakes
Jonglei	Eastern Equatoria
Lakes	Western Equatoria
Eastern Equatoria	Jonglei
Western Equatoria	Upper Nile

Breastfeeding

Breastfeeding

Analysis

- Almost all children in southern Sudan are breastfed until at least one year of age. Western Equatoria has the largest percentage of infants not receiving any breastmilk at 12 months of age. Very little data is available on the frequency of exclusive breastfeeding. However, it has been documented that traditionally the southern Sudanese breastfeed for up to two years of age. Exclusive breastfeeding for the first six months greatly enhances a child's prospects of survival, as immunity factors in breast milk can help the baby to fight off infections. Breast milk also contains vitamins, minerals, and enzymes which aid the baby's digestion.

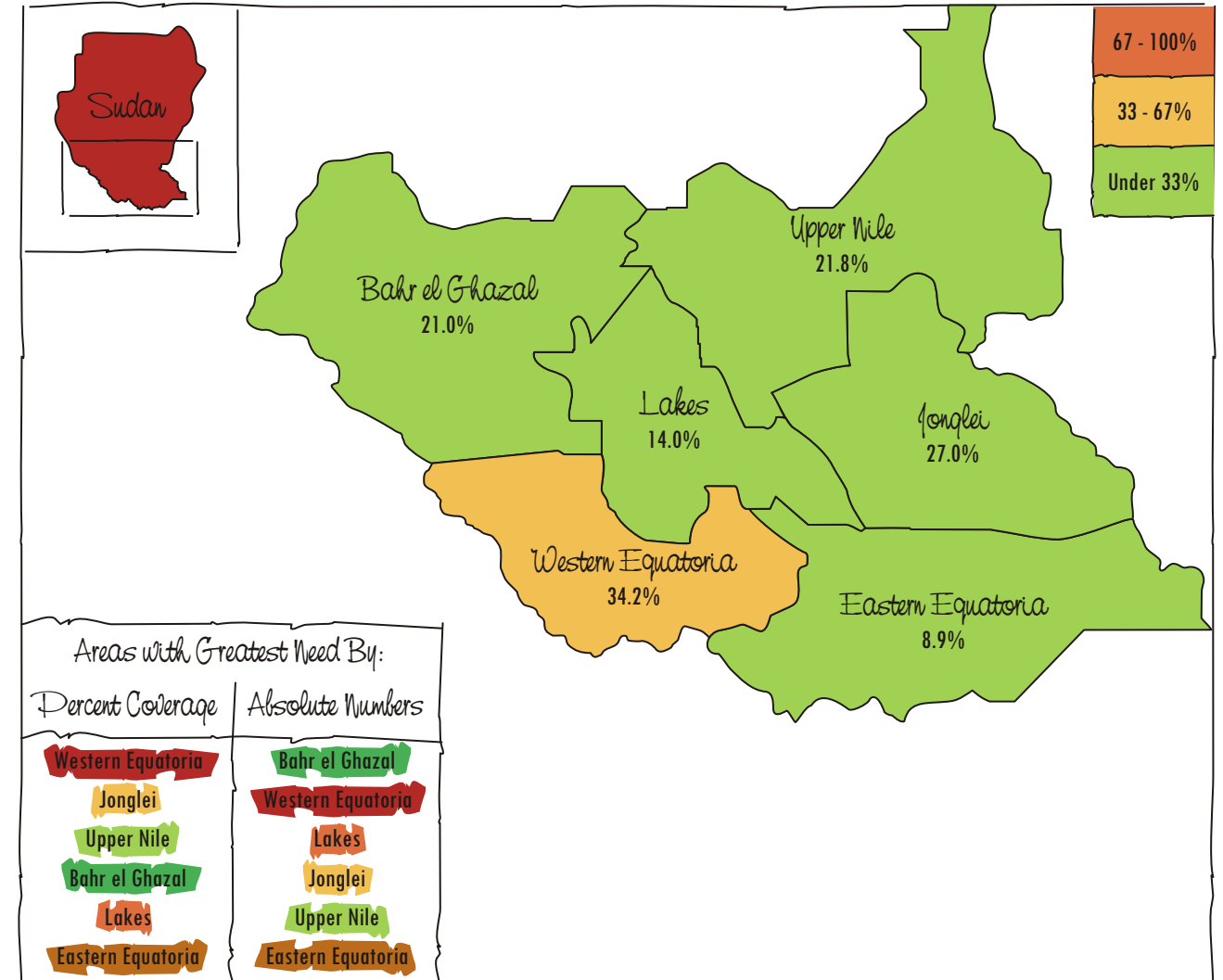
Action Points

1. Use the growing database systems within OLS to gather and analyze information on exclusive breastfeeding practices in southern Sudan in order to plan appropriate awareness campaigns.
2. Promote exclusive breastfeeding by including information regarding exclusive breastfeeding in all communications at health facilities and community centers and by including it in the content of Life Skills training materials.
3. Support and train the humanitarian wings of the rebel movements to develop guidelines regarding appropriate breastfeeding practices and marketing/promotion of breast milk substitutes.

Table 10 - Infants who received less than 12 months continuous Breastfeeding

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	17.1	9,819	25.2	12,960	1.47	21.0	22,779
Lakes	18.5	4,671	9.2	2,047	0.50	14.0	6,717
Upper Nile	20.1	2,137	23.4	2,662	1.16	21.8	4,800
Jonglei	27.3	2,796	27.1	2,038	0.99	27.0	4,834
Western Equatoria	31.3	4,033	38.4	3,670	1.23	34.2	7,702
Eastern Equatoria	-	-	-	-	-	8.9	2,730
Total	20.3	23,636	22.9	23,377	1.13	19.9	49,563

Infants who received less than 12 months continuous Breastfeeding



Immunization & Vitamin A

Infants: Immunization & Vitamin A

Analysis

- 72% children were not protected against childhood tuberculosis (TB), the range is from 95% in Bahr el Ghazal to 34% in Western Equatoria.
- 75% of children were not protected against Diphtheria, Pertussis and Tetanus. The Equatorias had the highest coverage (58%) while Upper Nile and Bahr el Ghazal had the lowest percentages.
- Over 70% of children were not protected against polio. Significant gender differences in polio coverage are seen in Upper Nile and Western Equatoria where more girls have received the polio vaccine than boys. Bahr el Ghazal has the lowest coverage while Western Equatoria has the highest. Even though the polio coverage (under five) is reported at 90%, Bahr el Ghazal, Lakes and Upper Nile areas are showing very low coverage amongst infants. Distances from the immunization site and the unwillingness of parents to carry infants over long distances could be the reason for this low coverage.
- 66% of children were not protected against measles. Significant gender difference in coverage is seen in Eastern Equatoria where 55% more boys were immunized than girls. Upper Nile, Bahr el Ghazal and Jonglei had the lowest coverage while Western Equatoria had the highest (60%).
- 84% of children under-five did not receive Vitamin A in the last 6 months. The coverage was uniformly low in all regions of southern Sudan.

Action Points

1. Organize pulse immunization campaigns in southern Sudan and increase the coverage against selected preventable and killer diseases to over 80%.
2. Organize special immunization campaigns for the eradication of Polio. Use house-to-house campaign strategies to reach younger children and to increase immunization coverage in accessible areas.
3. Combine Vitamin A administration with immunization campaigns.

Table 11 - Infants not immunized with the BCG Vaccine

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	94.8	51,309	95.2	47,760	1.00	95.0	99,069
Lakes	59.9	13,428	51.9	11,424	0.87	55.5	24,921
Upper Nile	92.5	9,655	93.0	10,037	1.01	92.7	19,692
Jonglei	52.5	4,975	49.3	3,409	0.94	51.2	8,384
Western Equatoria	35.8	4,431	31.9	2,901	0.89	34.1	7,331
Eastern Equatoria	35.2	5,910	37.6	4,683	1.07	36.9	10,909
Total	71.4	89,708	72.0	80,214	1.01	71.6	170,305

Infants not immunized with the BCG Vaccine

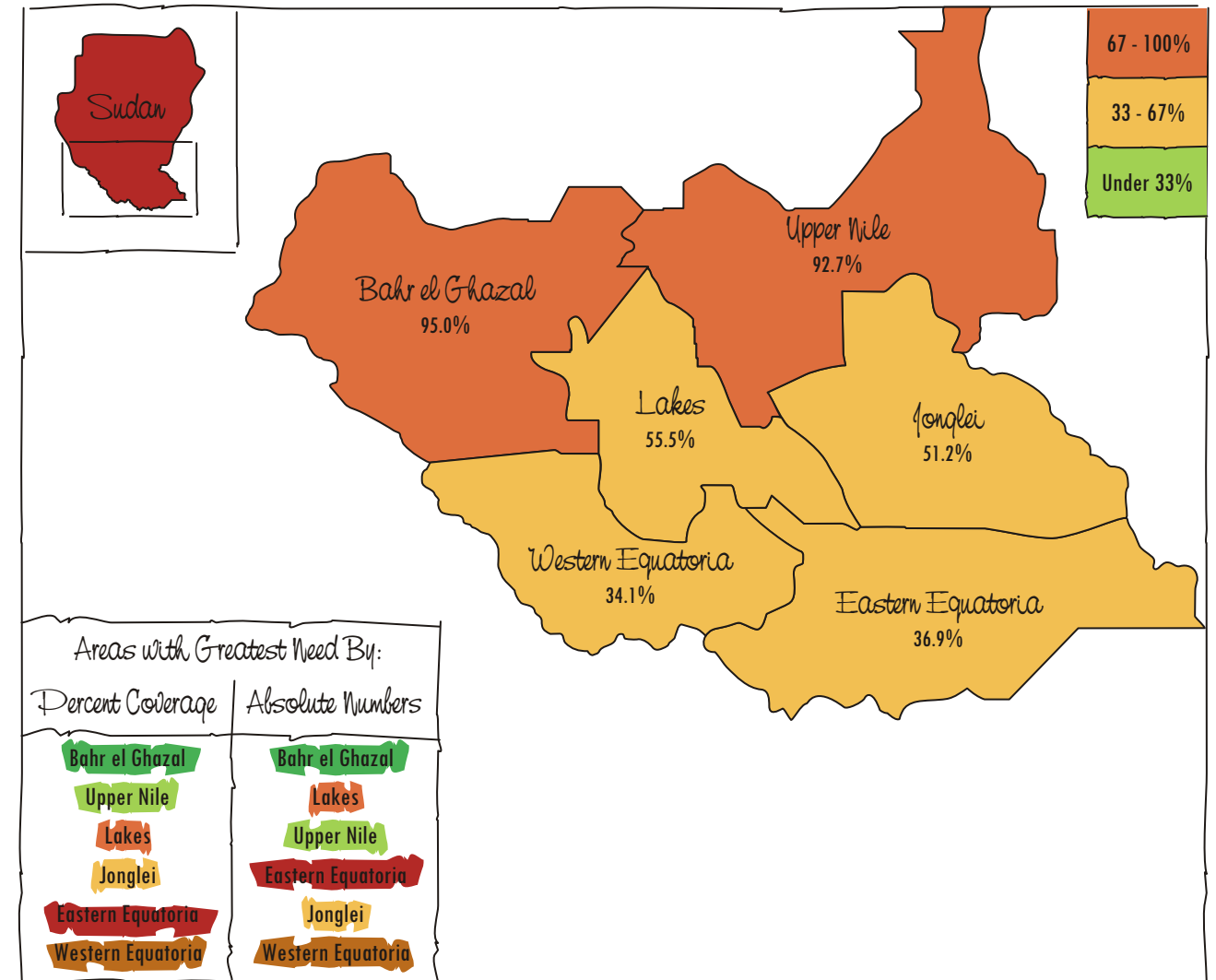


Table 12 - Infants not immunized with the DPT Vaccine

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	91.9	51,589	84.7	42,988	0.92	88.1	94,578
Lakes	68.8	15,810	75.8	13,055	1.10	71.1	28,934
Upper Nile	99.4	9,915	99.8	10,289	1.00	99.6	20,205
Jonglei	59.7	5,661	57.7	3,630	0.97	58.9	9,290
Western Equatoria	42.4	4,884	35.8	2,531	0.84	39.9	7,415
Eastern Equatoria	41.0	6,752	47.2	5,710	1.15	44.2	12,777
Total	75.1	95,093	75.3	78,203	1.00	74.9	173,199

Infants not immunized with the DPT Vaccine

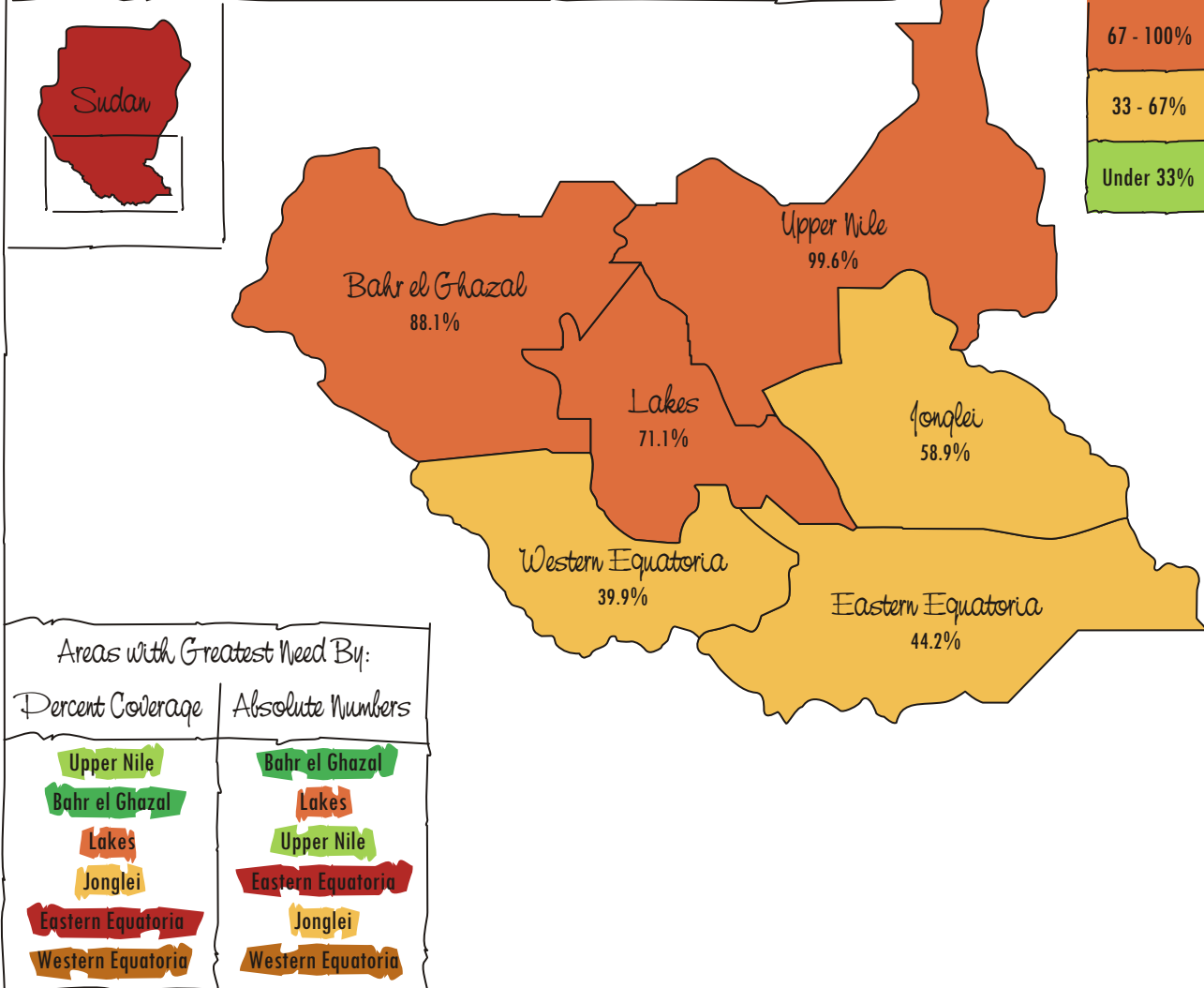


Table 13 - Infants not immunized with the Polio Vaccine

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	91.3	51,232	82.4	42,232	0.90	87.0	93,465
Lakes	69.9	16,355	75.1	15,287	1.07	71.7	31,710
Upper Nile	80.9	7,977	65.7	6,599	0.81	73.2	14,576
Jonglei	66.7	6,143	62.5	3,929	0.94	64.9	10,072
Western Equatoria	32.5	3,779	19.6	1,515	0.60	27.3	5,294
Eastern Equatoria	36.0	5,889	38.7	4,707	1.08	37.8	10,911
Total	72.2	91,375	68.9	74,269	0.95	70.6	166,026

Infants not immunized with the Polio Vaccine

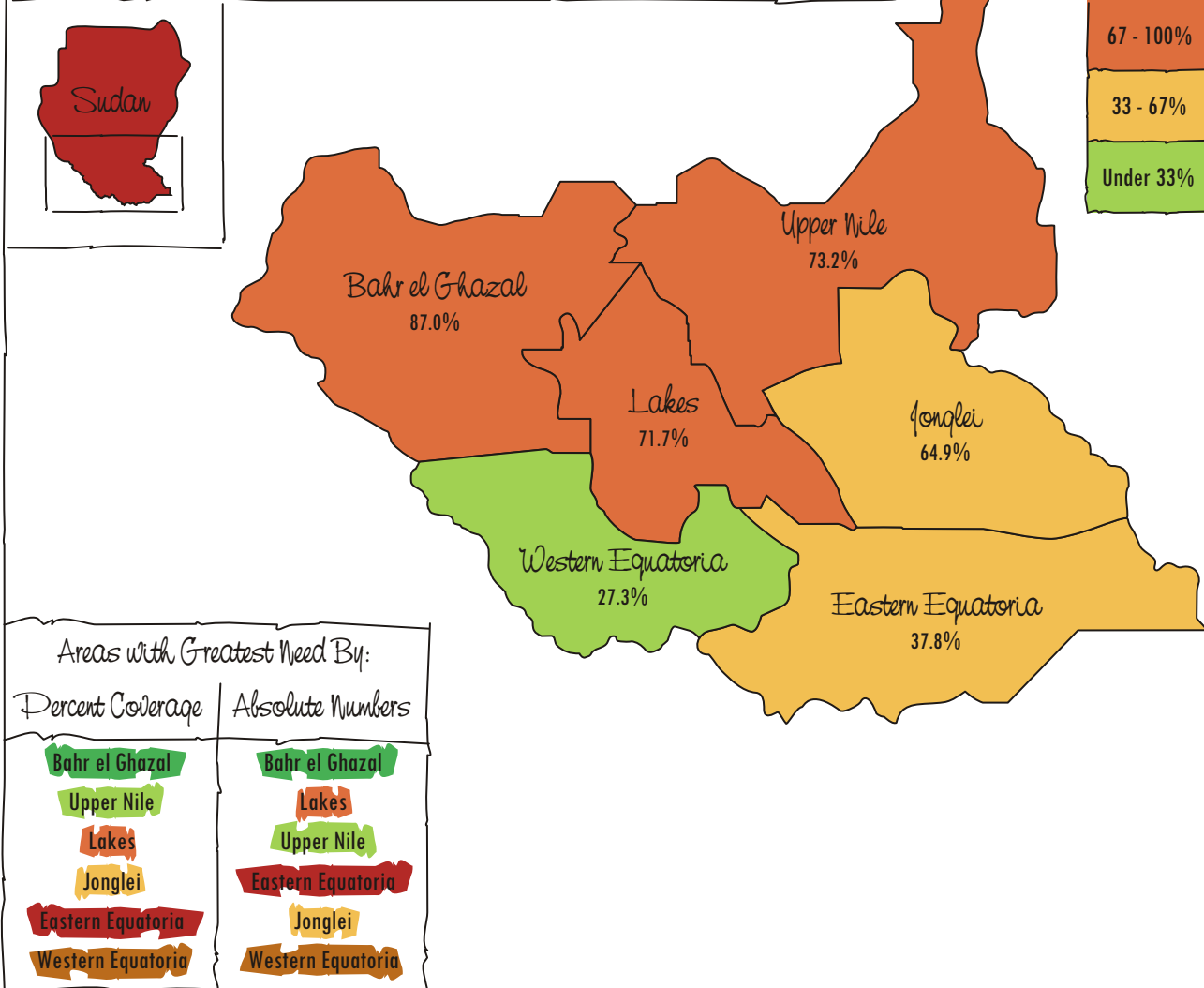


Table 14 - Infants not immunized with the Measles Vaccine

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	75.3	412,284	68.0	33,495	0.90	71.9	74,779
Lakes	63.8	13,536	76.1	15,113	1.19	69.1	28,719
Upper Nile	76.6	7,343	81.6	8,089	1.07	79.1	15,433
Jonglei	74.8	6,546	66.9	4,666	0.89	71.3	11,212
Western Equatoria	37.5	4,884	43.0	3,894	1.15	39.7	8,778
Eastern Equatoria	35.7	5,809	58.5	7,447	1.64	46.3	13,571
Total	64.2	79,402	67.4	72,704	1.05	65.7	152,492

Infants not immunized with the Measles Vaccine

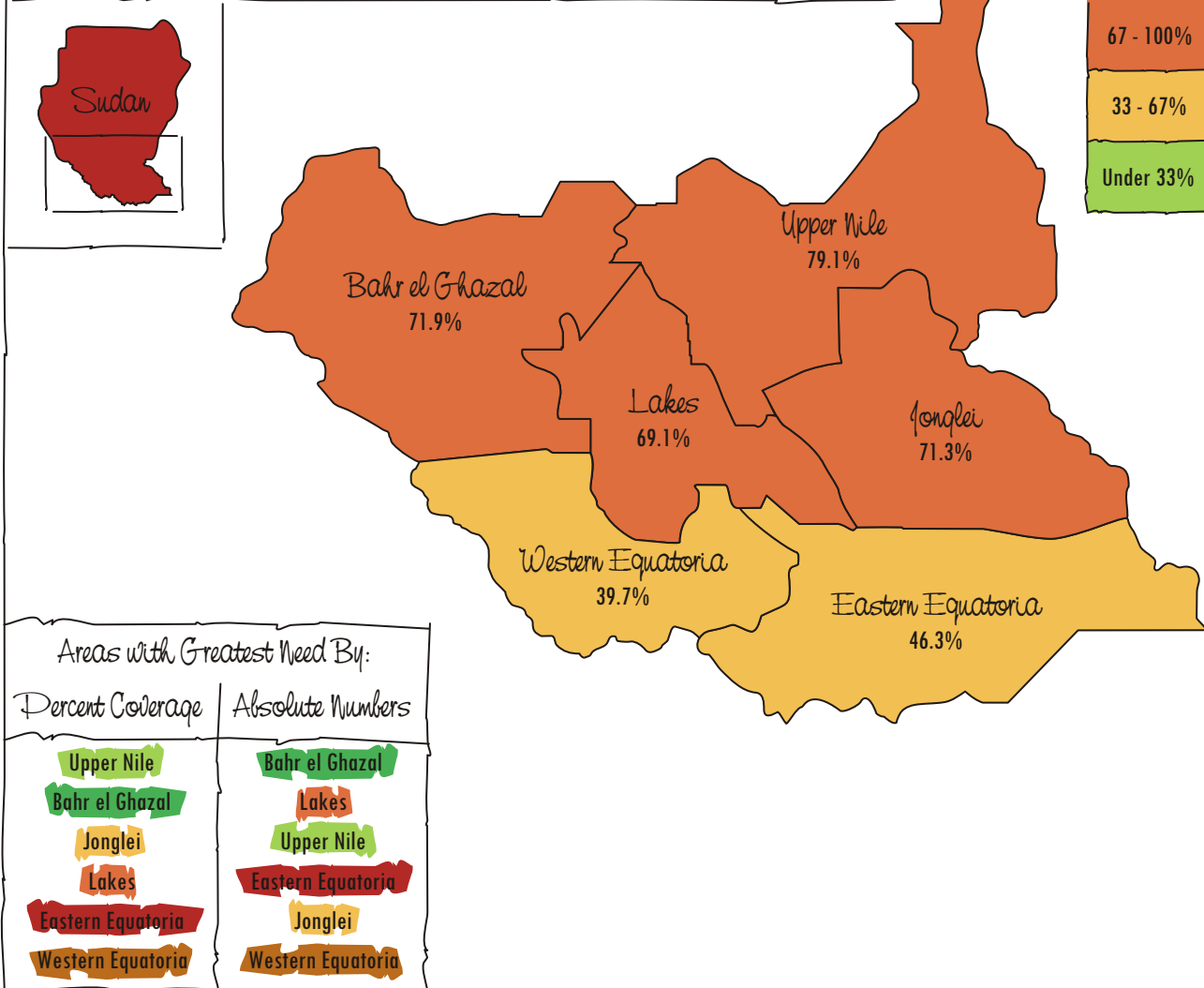
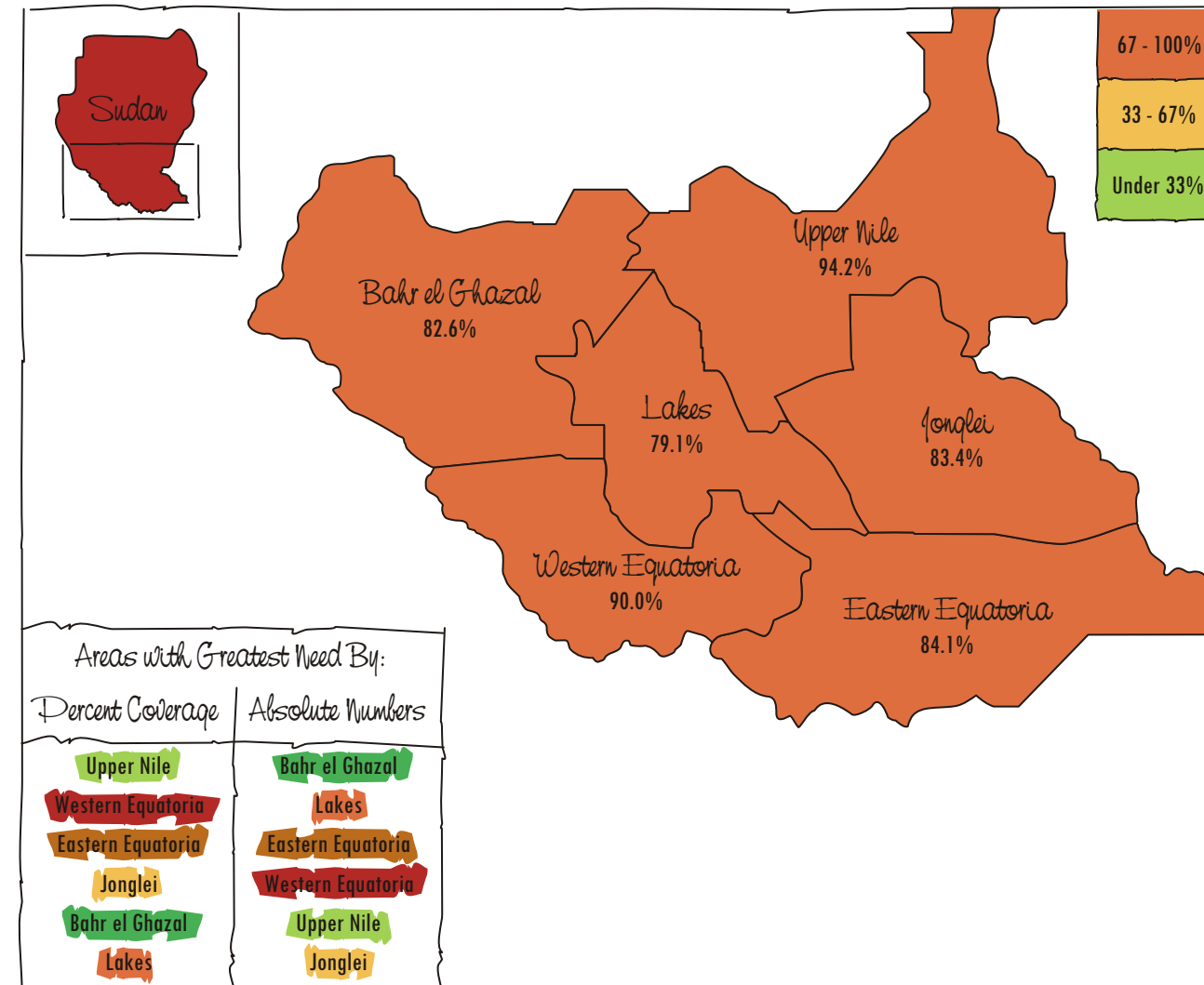


Table 15 - Infants who did not receive Vitamin A in the last 6 months

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	82.7	224,359	82.0	172,498	0.99	82.6	400,937
Lakes	79.9	80,873	78.2	70,992	0.98	79.1	153,813
Upper Nile	95.6	43,463	92.4	33,807	0.97	94.2	77,270
Jonglei	83.2	25,363	83.5	22,939	1.00	83.4	48,397
Western Equatoria	89.6	50,233	90.4	45,090	1.01	90.0	95,322
Eastern Equatoria	80.8	64,613	87.8	57,083	1.09	84.1	122,502
Total	83.6	488,904	83.8	402,409	1.00	83.8	896,919

Infants who did not receive Vitamin A in the last 6 months



Children under 5 years

Children under 5: Diarrhoea

Analysis

- 45% of children under-five had diarrhoea in the 15 days prior to the survey.
- Almost 63% of the children under-five did not get Oral Rehydration Salts (ORS) during their last episode of diarrhoea. No significant gender differences were found except in Eastern Equatoria where 47% more boys received ORS than girls. Upper Nile and Jonglei had the lowest prescription of ORS. Eastern Equatoria had the most (65%).
- There is a direct correlation between the cases of diarrhoea that were treated at a health facility and cases where ORS was prescribed. This indicates that health facilities throughout southern Sudan do prescribe ORS for management of diarrhoea.
- Three out of every four children under-five did not get increased fluids during diarrhoea. This indicates that even in health facilities (especially in Eastern Equatoria), families were not being advised or did not choose to increase administration of fluids to children with diarrhoea. Gender differences were insignificant.
- Almost 60% of all children under-five were given less or no food during an episode of diarrhoea. Gender differences were significant in Lakes and Eastern Equatoria where 21% and 32% respectively more girls than boys got at least the same amount of food during diarrhoea.

Action Points

1. Information on appropriate management of diarrhoea needs to be promoted through all channels of communication to households and through Life Skills materials, teacher-training materials and school-based learning materials.
2. The health worker training materials should be reinforced to communicate the importance of increased fluids and continued feeding during diarrhoea.

Table 16 - Children under 5 years who had a Diarrhoeal episode in the last 15 days

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	49.4	151,049	44.4	104,258	0.90	47.2	255,525
Lakes	43.0	50,404	41.0	44,310	0.95	42.4	96,545
Upper Nile	37.1	19,551	33.6	14,617	0.91	37.3	46,356
Jonglei	50.4	17,882	44.1	13,643	0.88	47.6	31,726
Western Equatoria	50.6	31,774	53.6	32,646	1.06	52.1	64,420
Eastern Equatoria	43.3	42,476	40.8	33,580	0.94	42.1	76,214
Total	46.5	313,136	43.4	243,054	0.93	45.2	558,999

Children under 5 years who had a Diarrhoeal episode in the last 15 days

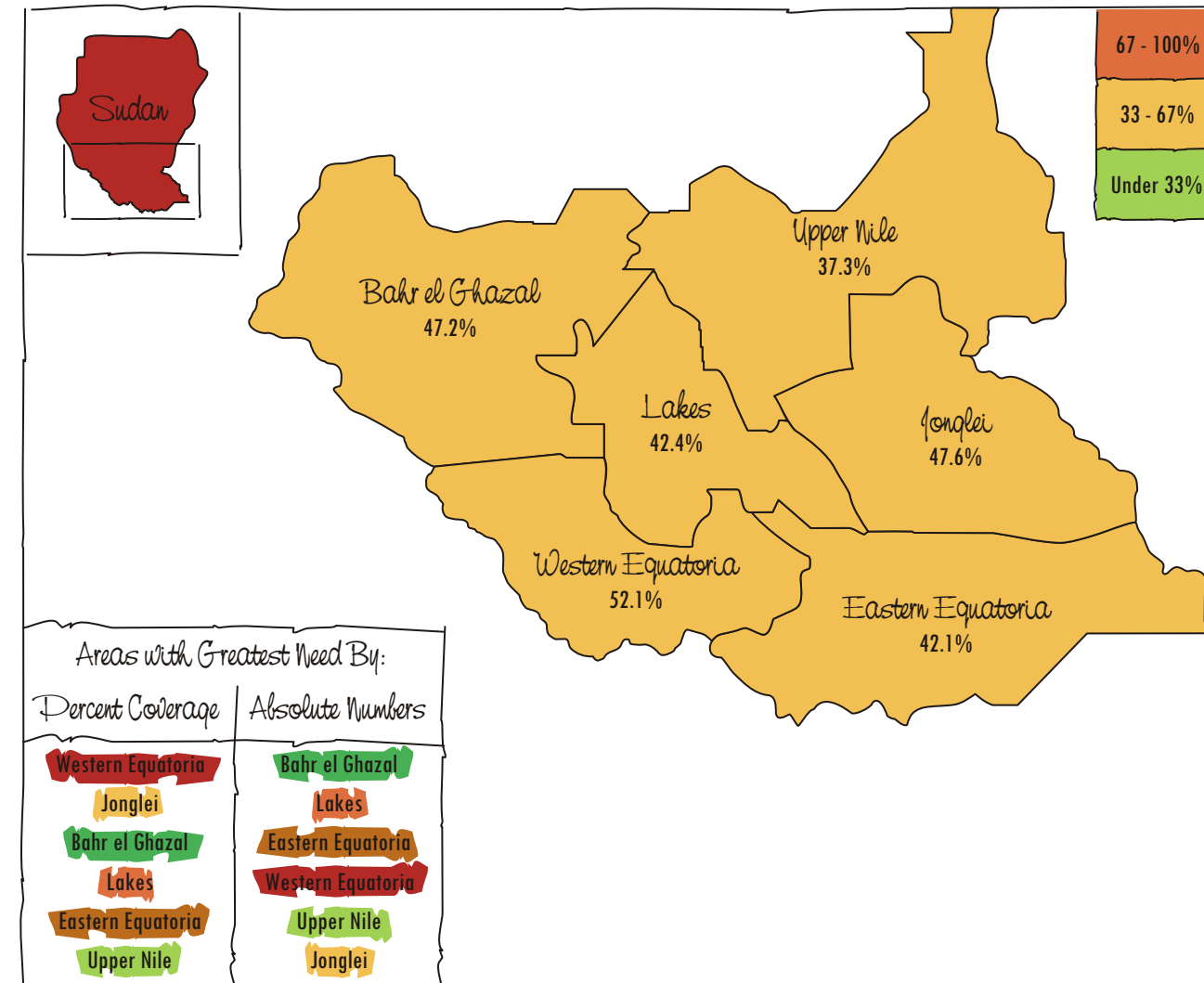


Table 17 - Children under 5 years who were not given an ORS/Sugar-Salt Solution during Diarrhoea

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	67.6	101,089	63.4	65,454	0.94	65.9	166,544
Lakes	62.8	31,146	69.6	30,087	1.11	66.0	61,234
Upper Nile	77.5	15,085	76.1	11,057	0.98	76.9	26,142
Jonglei	74.3	13,064	77.6	10,392	1.04	75.7	23,456
Western Equatoria	63.3	18,121	61.3	19,677	0.97	62.2	37,798
Eastern Equatoria	25.1	10,576	48.9	15,747	1.95	35.4	26,323
Total	61.6	189,081	63.8	152,414	1.04	62.6	341,496

Children under 5 years who were not given an ORS/Sugar-Salt Solution during Diarrhoea

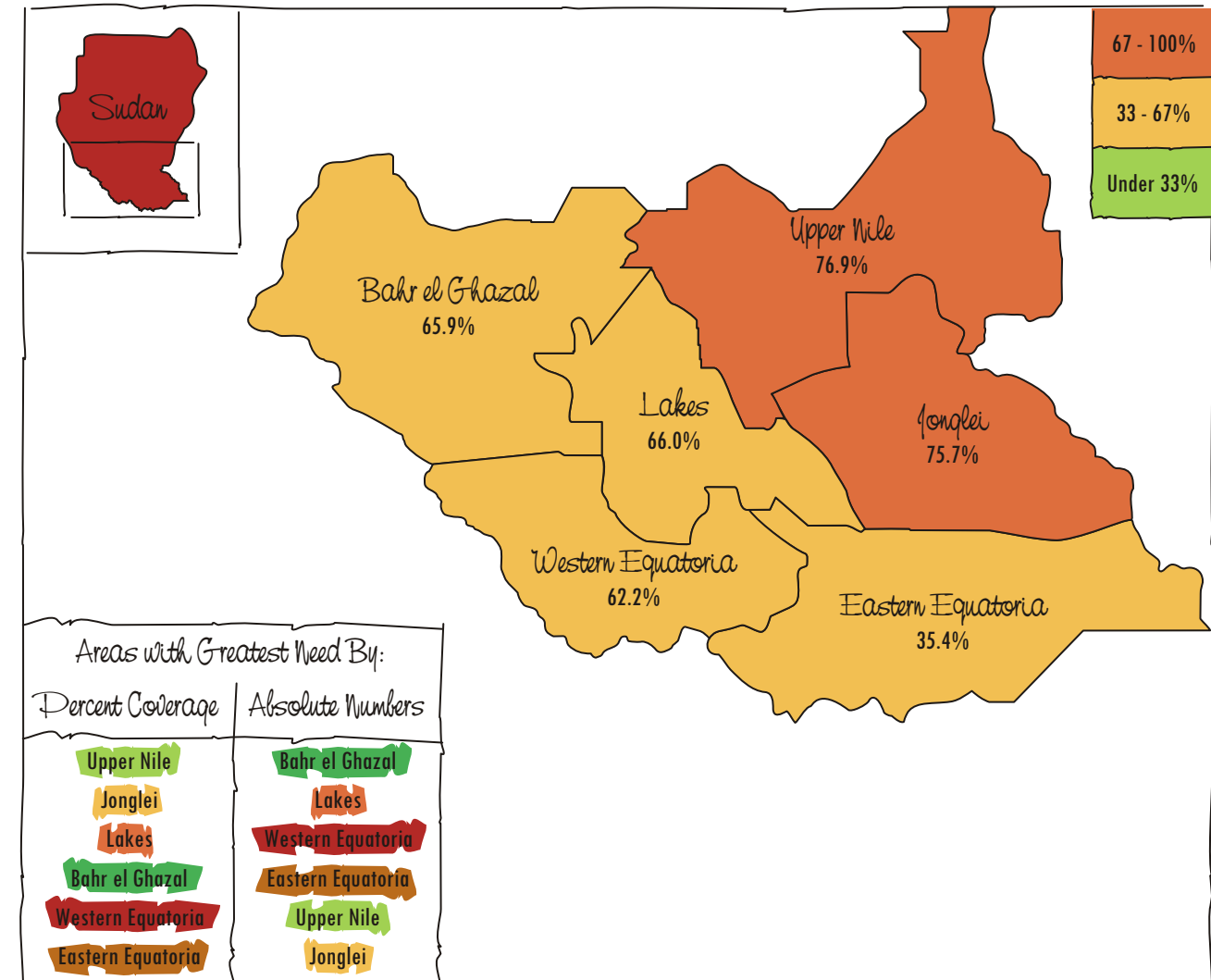


Table 18 - Children under 5 years whose Diarrhoea was not treated at a Health Facility

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	66.2	98,432	61.9	62,340	0.94	64.5	160,771
Lakes	55.7	27,913	59.8	25,685	1.07	57.6	53,598
Upper Nile	79.7	15,370	69.3	9,902	0.87	75.3	25,272
Jonglei	72.4	12,281	74.4	10,020	1.03	73.2	22,301
Western Equatoria	44.5	12,749	61.0	17,999	1.37	52.9	30,748
Eastern Equatoria	20.1	8,417	44.6	14,416	2.22	30.7	22,833
Total	57.3	175,162	60.2	140,362	1.05	58.5	315,523

Children under 5 years whose Diarrhoea was not Treated at a Health Facility

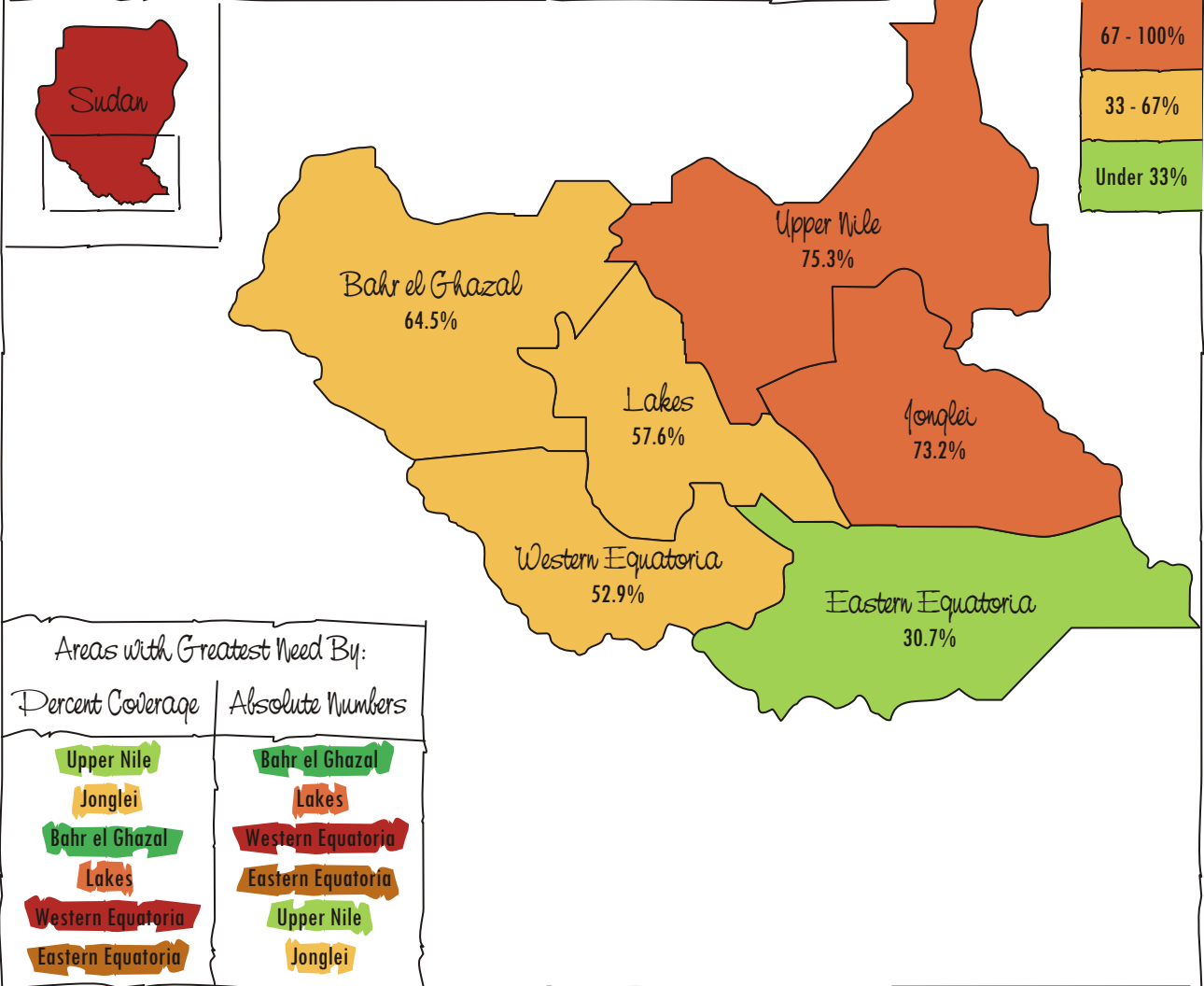


Table 19 - Children under 5 years who were not given more Liquid during Diarrhoea

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	72.2	108,733	80.0	81,369	1.11	75.5	191,483
Lakes	75.3	36,838	81.0	34,741	1.08	78.3	37,411
Upper Nile	88.5	17,240	80.6	11,521	0.91	85.1	28,761
Jonglei	71.4	12,334	70.1	8,594	0.98	71.0	21,729
Western Equatoria	77.1	24,567	82.6	26,439	1.07	79.9	51,572
Eastern Equatoria	79.5	34,387	67.8	21,551	0.85	74.6	56,096
Total	75.1	234,091	78.2	184,215	1.04	76.7	423,053

Children under 5 years who were not given more Liquid during Diarrhoea

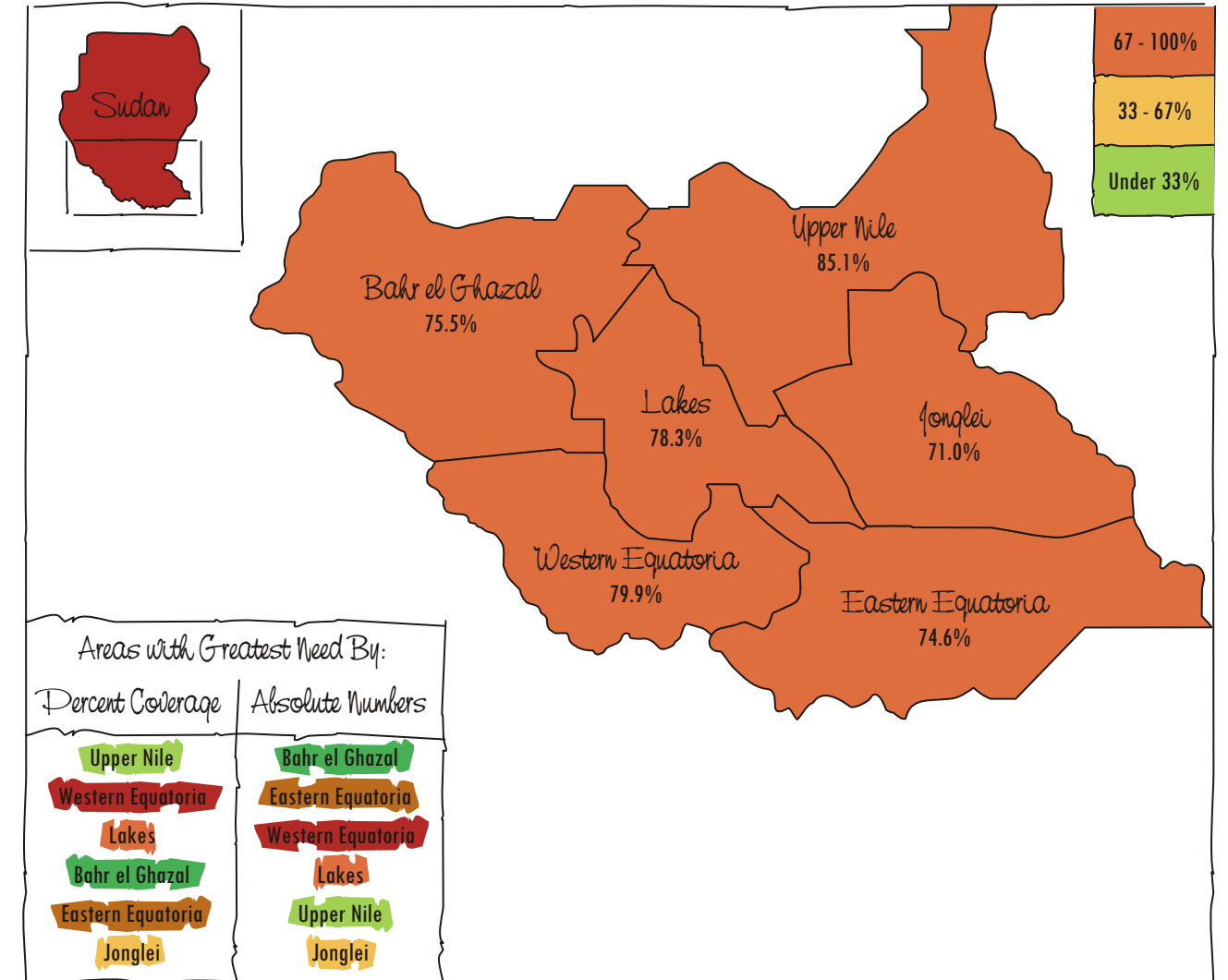
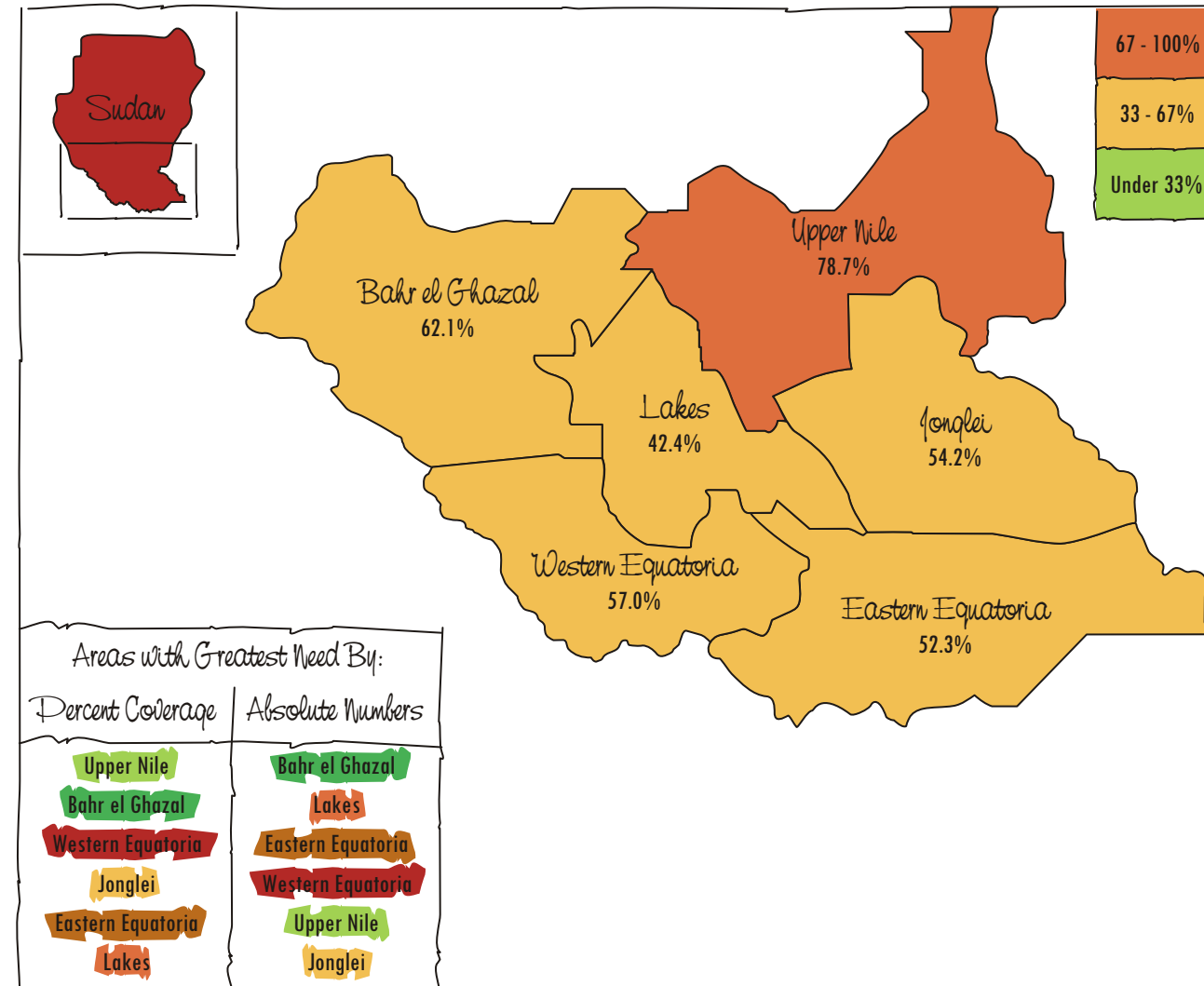


Table 20 - Children under 5 years who were given
less/no Food during Diarrhoea

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	58.9	88,008	66.1	67,261	1.12	62.1	156,867
Lakes	48.2	23,459	37.3	15,937	0.77	42.4	39,466
Upper Nile	78.1	15,259	79.6	11,388	1.02	78.7	26,647
Jonglei	57.9	10,016	49.5	6,579	0.85	54.2	16,672
Western Equatoria	53.5	16,940	60.2	19,614	1.13	57.0	36,622
Eastern Equatoria	57.8	24,879	44.5	13,840	0.77	52.3	38,876
Total	56.1	178,561	57.1	134,619	1.02	57.4	315,150

Children under 5 years who were given
less/no Food during Diarrhoea



Children under 5: Fever, Cough & Malaria

Fever & Cough

Analysis

- Almost 45% of children had a cough up to 15 days prior to the survey. This reflects high morbidity which is about 2.5 times greater than rural communities in other developing countries. No significant gender differences were noted. Jonglei, Western and Eastern Equatoria had a higher prevalence of coughing than other areas.
- Of those who had a cough, three out of four in Bahr el Ghazal and Upper Nile reported difficulty in breathing or fast breathing, indicating a possible lower respiratory infection. Only half in Eastern Equatoria were reported as cases with difficult breathing or fast breathing. Good medical facilities and better quality of health personnel in Eastern Equatoria could account for this difference.
- Only 55% of the children who reportedly had difficult or fast breathing were treated at a health facility. There was a direct correlation between the access to health facilities and the number of children treated.
- Over 60% of children under-five had a fever in the 15 days prior to the survey. Children in Jonglei and Western Equatoria reported the most cases of fever (72%) while Bahr El Ghazal and Upper Nile reported the lowest number of cases (56%).
- 44% of those who reported fever were not given any medicine by the health facility. The percentage was highest in Upper Nile and Jonglei and lowest in Western Equatoria and Lakes. Better availability of drugs in the latter areas could account for this difference. More girls in Western Equatoria, Eastern Equatoria, Upper Nile and Lakes were given drugs than boys. It is possible that girls are more often taken to a health facility when they are seriously ill, while boys may be taken at the first sign of illness.

Children under 5: Fever, Cough & Malaria

Malaria

Analysis

- Almost 64% of children under-five do not sleep under a mosquito net and are therefore exposed to the risk of malaria. The range is from 94% in Eastern Equatoria to 32% in Lakes. Significantly more boys than girls in Lakes did not sleep under a net, increasing their risk of getting malaria.

Action Points

1. Access to trained health personnel needs to be significantly increased in Bahr el Ghazal, Upper Nile and Jonglei.
2. Integrated Management of Childhood Illnesses (IMCI) training needs to be accelerated. Medium-term emphasis should be placed on enhancing local capacities, while the immediate or short-term response might be increasing the service provision by International NGOs.
3. Another short-term measure is to organize regular out reach visits by trained health personnel from nearby areas.

Table 21 - Children under 5 years who had a Cough in the last 15 days

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	36.2	101,730	40.5	90,437	1.12	38.1	193,330
Lakes	43.0	47,954	40.9	42,154	0.95	42.6	92,412
Upper Nile	48.3	27,440	46.1	24,207	0.95	45.3	43,080
Jonglei	58.1	19,567	58.8	17,614	1.01	58.5	37,382
Western Equatoria	56.2	33,246	48.3	27,440	0.86	52.4	60,753
Eastern Equatoria	50.9	48,783	57.5	46,904	1.13	53.8	95,889
Total	44.0	278,720	46.3	248,756	1.10	44.4	522,846

Children under 5 years who had a Cough in the last 15 days

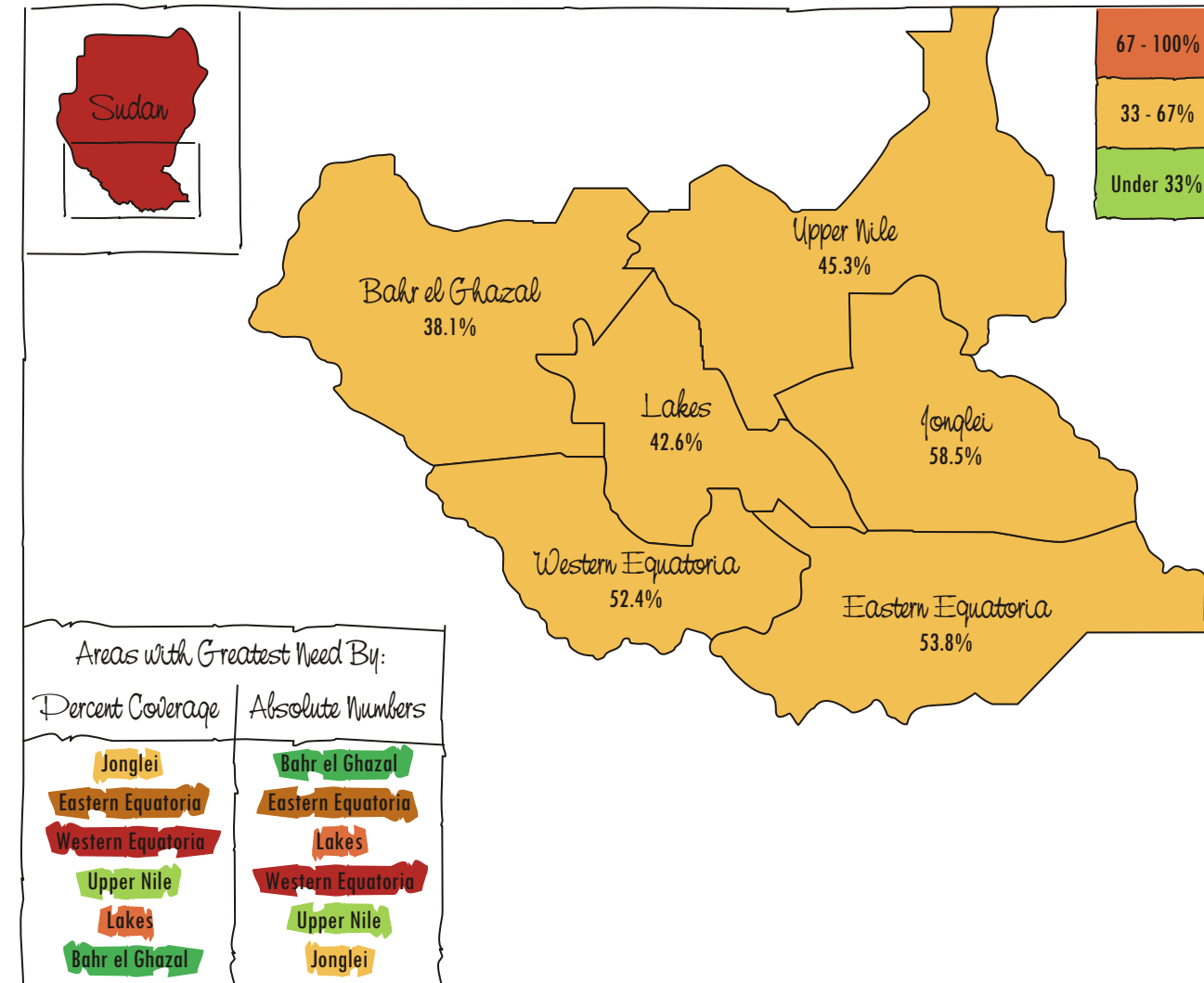


Table 22 - Children under 5 years with a Cough who had difficulty / fast Breathing in the last 15 days

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	70.8	86,385	73.7	76,023	1.04	72.3	163,788
Lakes	49.1	24,177	54.0	23,361	1.10	52.0	49,300
Upper Nile	75.2	18,609	79.3	14,481	1.05	76.9	33,089
Jonglei	63.9	13,149	56.1	9,917	0.88	60.5	23,267
Western Equatoria	75.8	26,076	61.0	18,893	0.80	68.8	45,036
Eastern Equatoria	44.3	21,871	53.2	25,465	1.20	48.8	47,539
Total	65.5	190,256	64.4	168,140	0.98	64.0	362,020

Children under 5 years with a Cough who had difficulty / fast Breathing in the last 15 days

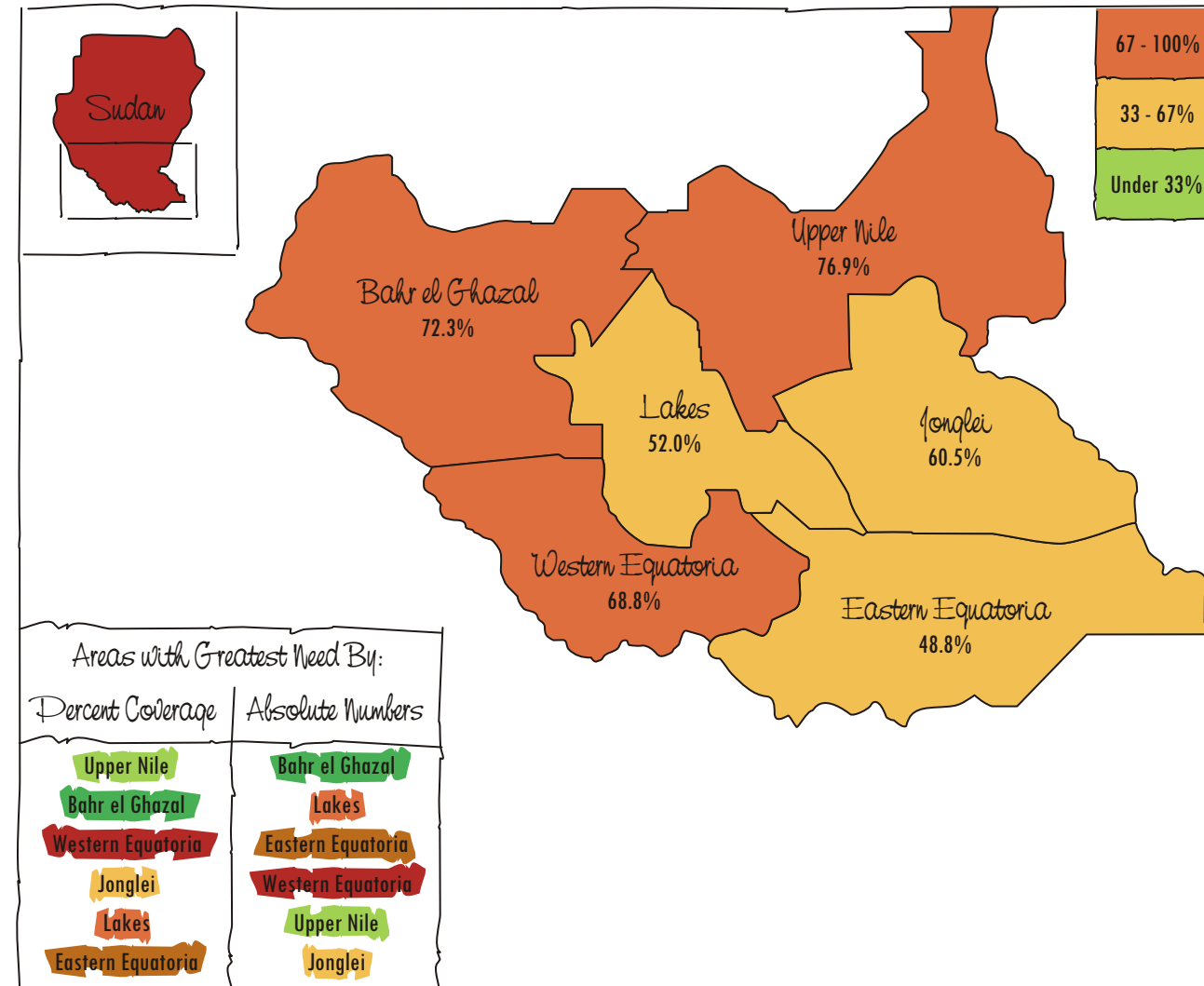


Table 23 - Children under 5 years with a
Cough who had difficulty / fast
Breathing not Treated at a Health Facility

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	56.4	48,354	47.1	35,519	0.84	52.1	83,873
Lakes	29.7	6,817	32.9	7,582	1.11	31.3	14,400
Upper Nile	66.9	9,580	61.6	6,284	0.92	64.7	15,864
Jonglei	64.6	7,894	74.3	6,501	1.15	68.6	14,395
Western Equatoria	20.8	5,277	28.8	5,287	1.38	24.2	10,564
Eastern Equatoria	31.8	6,357	24.3	5,677	0.76	27.8	12,035
Total	46.6	84,279	42.0	66,850	0.90	44.5	151,130

Children under 5 years with a
Cough who had difficulty / fast
Breathing not Treated at a Health Facility

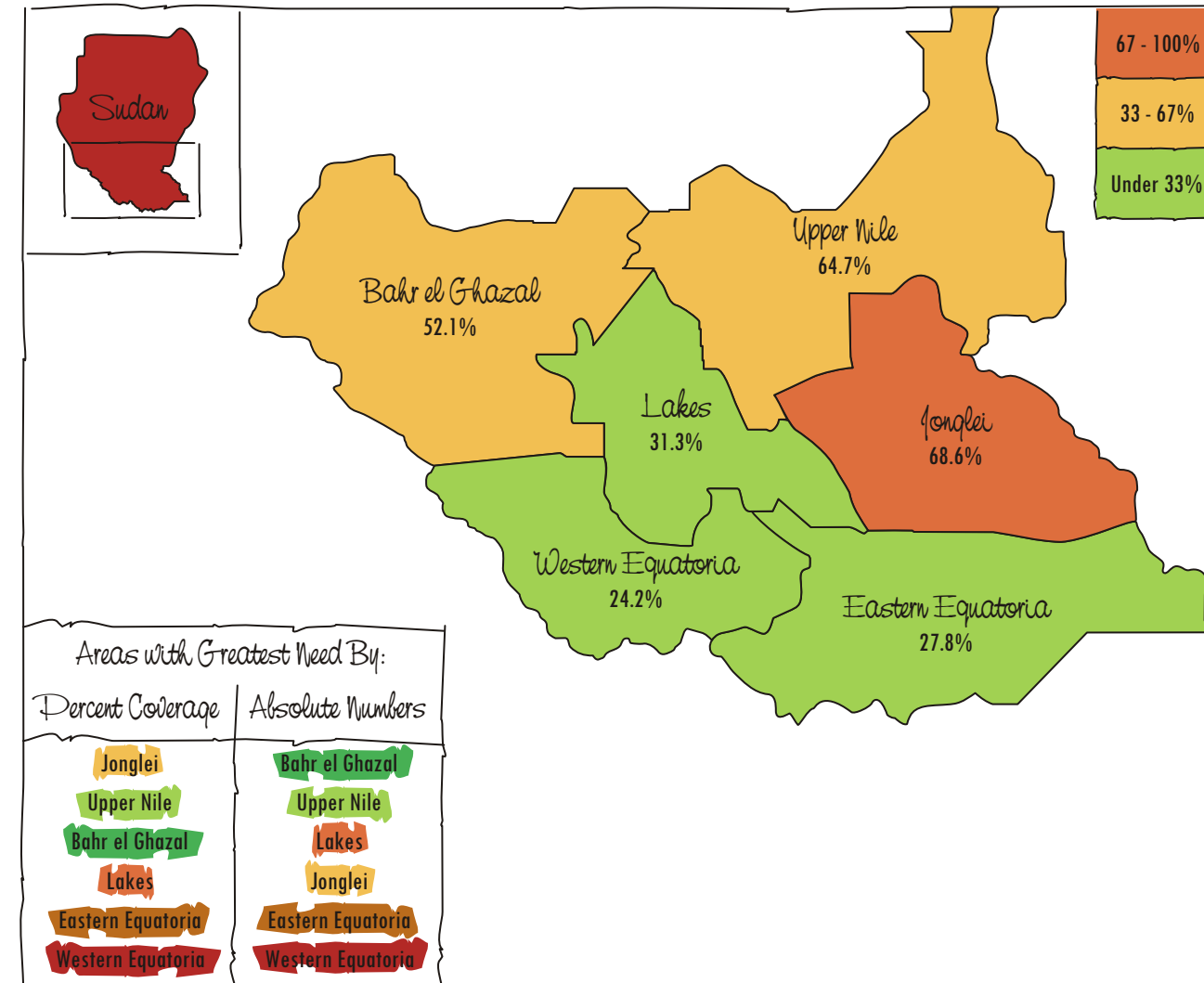


Table 24 - Children under 5 years who
had a Fever in the last 15 days

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	59.4	177,793	50.2	114,229	0.85	55.3	292,458
Lakes	66.5	75,155	59.0	60,831	0.89	62.5	136,643
Upper Nile	63.2	33,137	53.3	22,897	0.84	58.8	56,035
Jonglei	73.1	24,844	74.5	22,122	1.02	73.8	47,090
Western Equatoria	68.9	43,055	73.4	42,404	1.07	71.1	85,458
Eastern Equatoria	64.5	62,255	65.2	51,799	1.01	64.7	114,277
Total	74.6	416,239	58.1	314,282	0.78	60.8	731,961

Children under 5 years who
had a Fever in the last 15 days

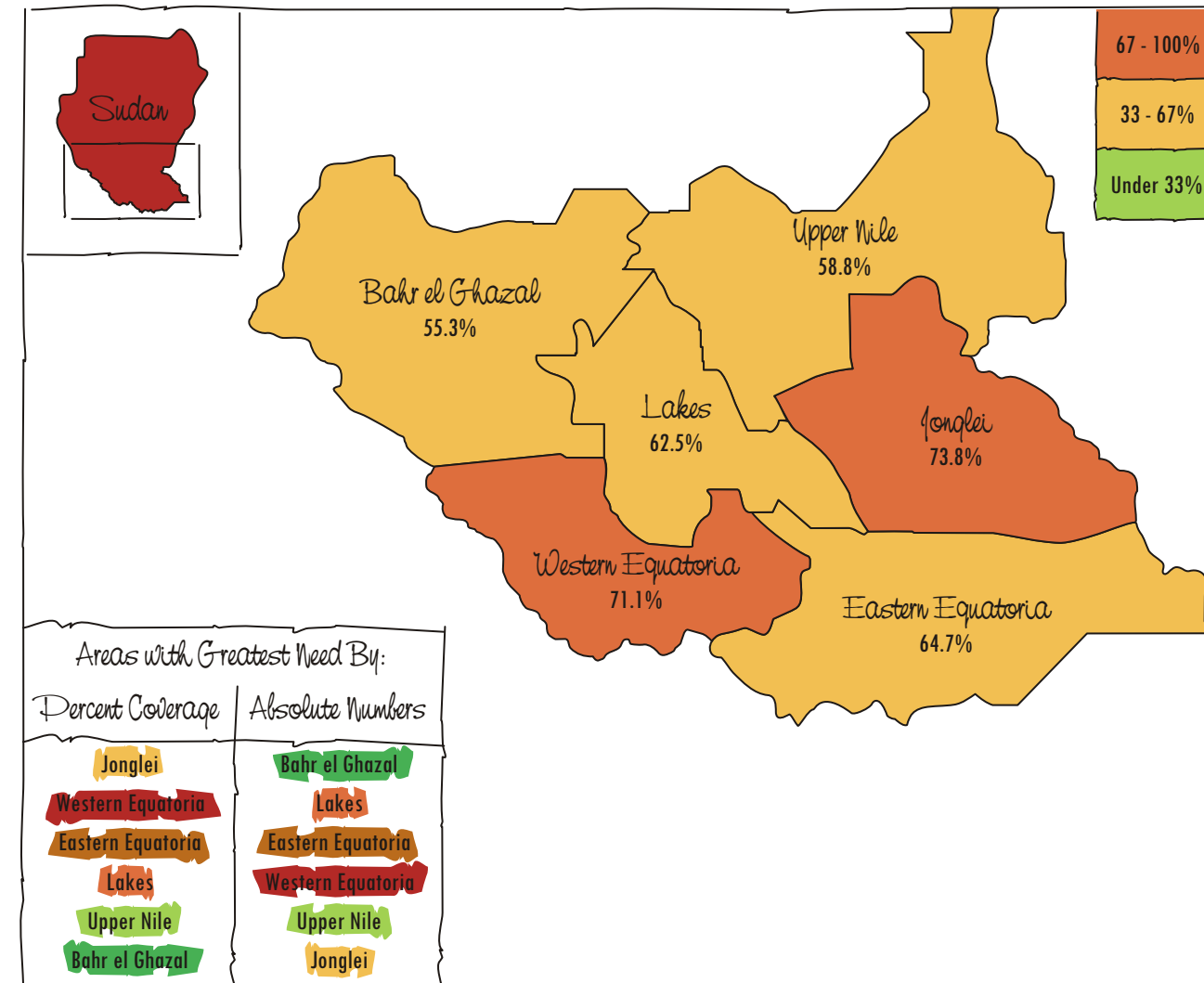


Table 25 - Children under 5 years who had a Fever
 & were not provided Medicine by a Health Facility

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	42.5	76,273	45.4	51,016	1.07	43.5	127,725
Lakes	36.4	25,613	30.4	17,952	0.84	33.7	43,820
Upper Nile	78.6	25,919	65.4	14,247	0.83	73.4	40,165
Jonglei	64.3	15,595	76.8	116,582	1.19	70.3	32,300
Western Equatoria	38.6	16,657	29.0	13,251	0.75	33.7	29,908
Eastern Equatoria	44.5	26,959	35.7	18,194	0.80	40.6	45,376
Total	45.4	187,016	42.2	131,242	0.93	44.1	319,800

Children under 5 years who had a Fever
 & were not provided Medicine by a Health Facility

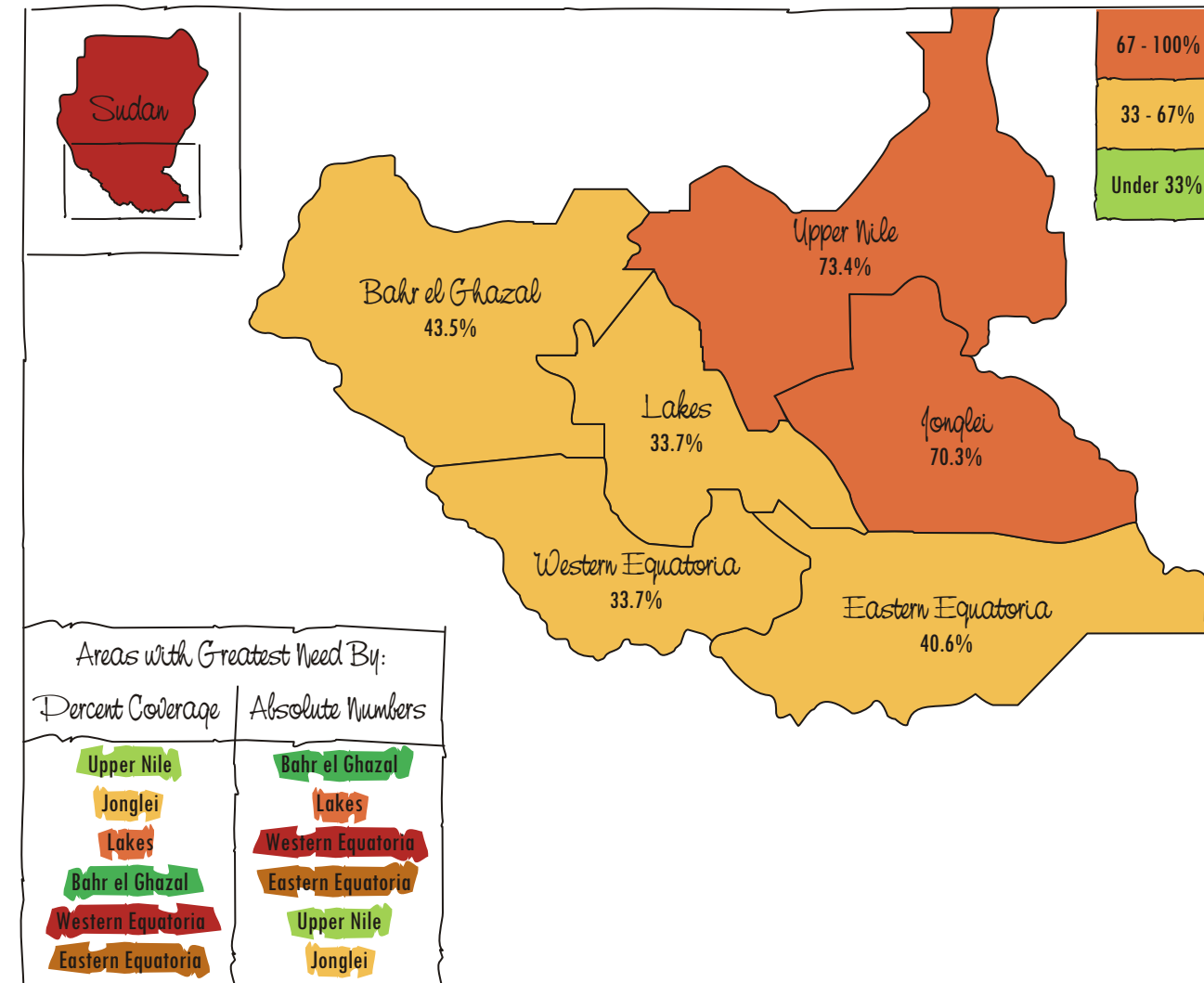
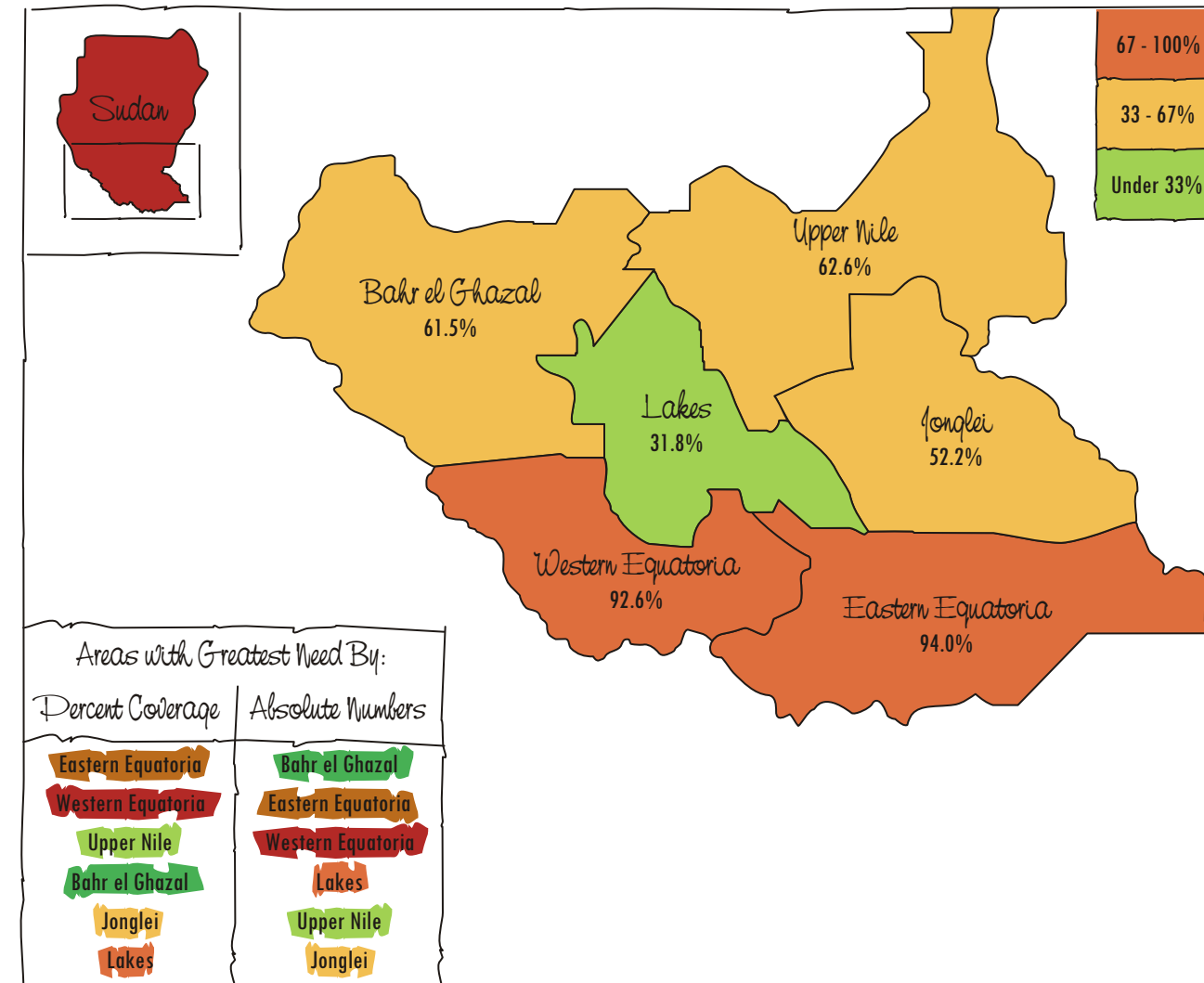


Table 26 - Children under 5 years who
do not Sleep under a Bed-Net

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	57.1	158,605	66.9	147,986	1.17	61.5	308,535
Lakes	27.8	28,929	36.3	35,779	1.31	31.8	64,823
Upper Nile	63.5	31,722	61.4	24,693	0.97	62.6	56,415
Jonglei	48.9	15,048	56.0	15,361	1.15	52.2	30,445
Western Equatoria	91.6	53,554	93.7	52,213	1.02	92.6	105,767
Eastern Equatoria	93.5	80,912	94.4	73,211	1.01	94.0	154,928
Total	60.7	368,770	67.1	349,243	1.11	63.6	720,912

Children under 5 years who
do not Sleep under a Bed-Net



Children under 5: Malnutrition

Analysis

- About 7% of children under-five were malnourished at the time of the survey. Jonglei had the highest levels of malnutrition while Western Equatoria had the lowest.
- Eastern Equatoria has been experiencing a drought for the last three to four years. Flight denials and high levels of insecurity have seriously limited the access of the local population to humanitarian assistance. Repeated episodes of cattle raiding by the neighbouring Turkana community have had an impact on livestock availability and insecurity. Jonglei has always suffered from food insecurity. Local insecurity caused by cattle raiding as well as poor access due to very harsh terrain has significantly reduced the access of local communities to food assistance.
- Continuous inter-ethnic fighting has led to destruction of crops, looting and displacement of people. Some people are displaced three or four times in a year.
- Three times more girls were malnourished than boys in Eastern Equatoria. Significantly higher levels of malnutrition were found in girls in Lakes and Upper Nile, while malnutrition in boys was significantly higher than girls in Jonglei.

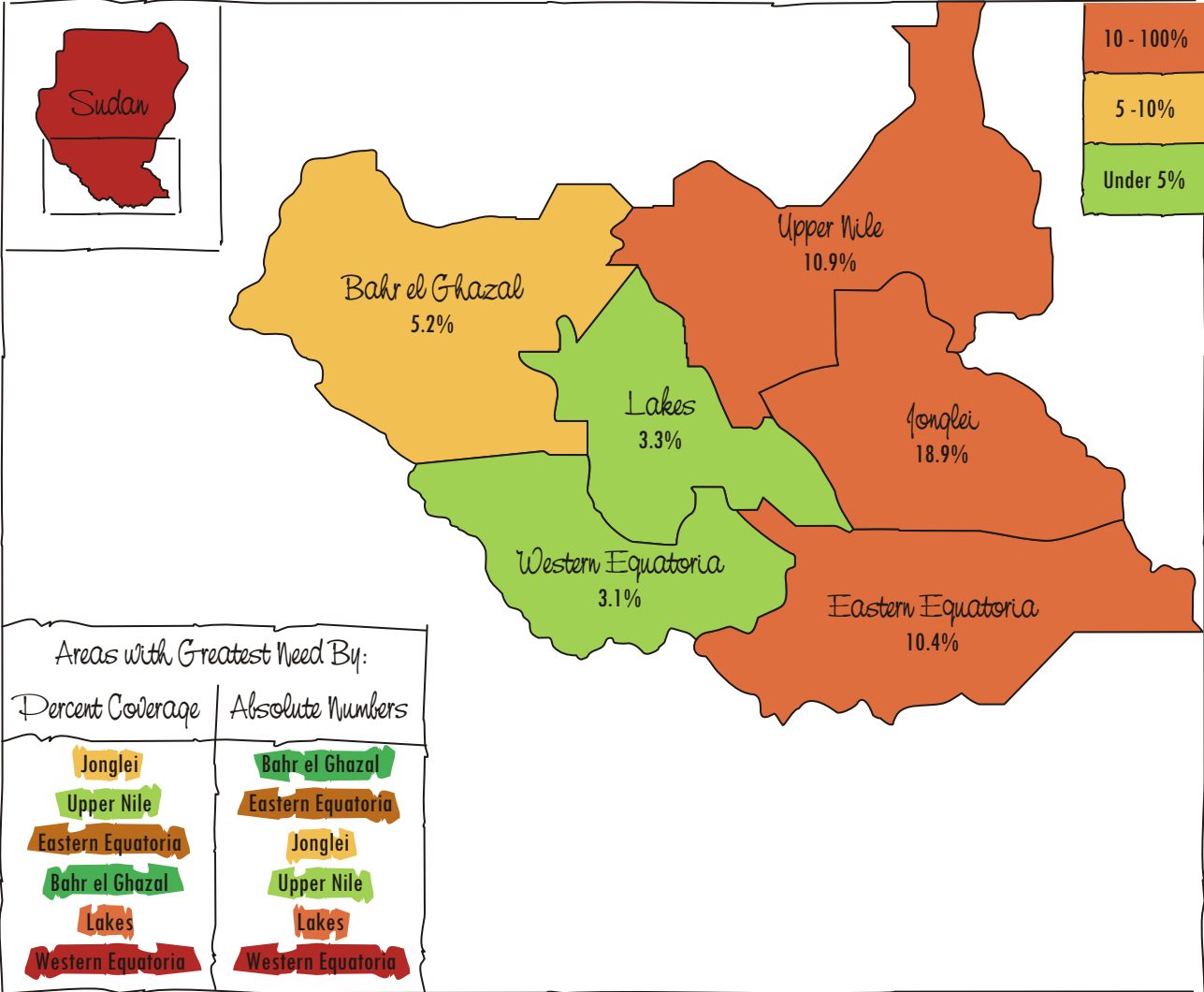
Action Points

1. Introduction of short maturity crops can increase the household food security, as these crops will significantly reduce the periods for which crops are exposed to looting and burning and also the time needed to harvest. Training households in growing these crops is essential.
2. Continued high-level advocacy to the Government of Sudan is needed to allow for regular access to the populations in need.
3. Special food convoys are needed to provide food aid to the population in Eastern Equatoria.
4. Alternative means of transport are needed to ensure perennial access to areas in Jonglei which are very difficult to reach.
5. Gender sensitivity and awareness workshops need to be organized in Bahr el Ghazal, Lakes and the Equatorias to reduce and possibly eliminate intra-household gender biases in food distribution.

Table 27 - Children under 5 years whose MUAC was less than 125mm

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	5.7	12,492	4.6	7,103	0.81	5.2	19,593
Lakes	3.0	2,358	3.7	2,715	1.23	3.3	5,142
Upper Nile	10.2	3,450	11.7	3,591	1.15	10.9	7,041
Jonglei	22.3	5,377	15.5	3,407	0.70	18.9	8,784
Western Equatoria	3.0	1,208	3.2	1,117	1.07	3.1	2,325
Eastern Equatoria	5.5	3,533	16.4	9,178	2.98	10.4	12,710
Total	6.2	28,418	7.3	27,111	1.18	6.7	55,595

Children under 5 years whose MUAC was less than 125mm



Children from 5 to 17 years

Children from 5 to 17 years: Education

Analysis

- Only 37% of children between the ages of 6-17 years are enrolled in school. Equatorias have the highest enrollment and Upper Nile has the lowest. This directly correlates with access to schools. In almost all areas (except Upper Nile & Jonglei) there is discrimination against girls enrollment in schools e.g. almost twice the number of boys are in schools compared to girls in Western Equatoria.
- Most of those enrolled attended school for more than three days in the week before the survey. Upper Nile had the largest percentage of children who attended school for less than three days in a week. Less girls in Western Equatoria, Bahr el Ghazal and Jonglei were attending school regularly, probably due to household chores. The reverse was true in Upper Nile and Eastern Equatoria.
- Of those who were not enrolled, over 86% had never enrolled in school. Lakes had the highest number of those who had never enrolled in school while Eastern Equatoria had the lowest.
- Over 30% more girls drop out of school because they have to do household chores than boys. In Upper Nile three times more girls dropout of school than boys for this reason.
- 25% more boys dropout from school because they help their families in some economic activity besides household chores.
- Lack of clothes has also emerged as a reason for dropping out of school especially from higher classes. This was found more so for girls in Lakes and Eastern Equatoria than boys.
- Lack of teaching and learning material was among other key factors leading to drop out from schools.

Children from 5 to 17 years: Education

Action Points

1. Access to schools is the single most important factor affecting low enrollment rates. Renovation of buildings or construction of low cost schools nearer to households is essential to increase school enrollment rates.
2. Another challenge is to retain those who enroll. This alone could bring the enrollment rates up to around 60%. Teacher training, provision of text books and learning/reading materials as well as relevance of the curriculum are important elements in increasing the retention of those who enroll.
3. Some income generation possibilities or incentive schemes for teachers will be essential to help retain them in the education system.
4. Flexible timing of schools is necessary to allow children to complete their work and still attend the school. The school timings must be set by the local community so as to allow all children to attend school.
5. Timely distribution of teaching and learning materials is necessary to reduce school dropouts.

Table 28 - Children 5-17 years not
Enrolled in School in 1999

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	65.6	236,293	86.7	280,407	1.32	75.7	522,822
Lakes	60.5	84,326	84.7	99,659	1.40	71.6	184,529
Upper Nile	80.5	50,117	84.9	47,515	1.05	82.5	98,054
Jonglei	58.8	26,714	69.4	30,531	1.18	64.0	57,282
Western Equatoria	35.2	41,278	66.2	67,188	1.88	48.9	108,545
Eastern Equatoria	26.9	44,180	40.0	66,570	1.49	33.5	110,908
Total	54.3	482,908	73.2	591,870	1.35	63.3	1,082,140

Children 5-17 years not
Enrolled in School in 1999

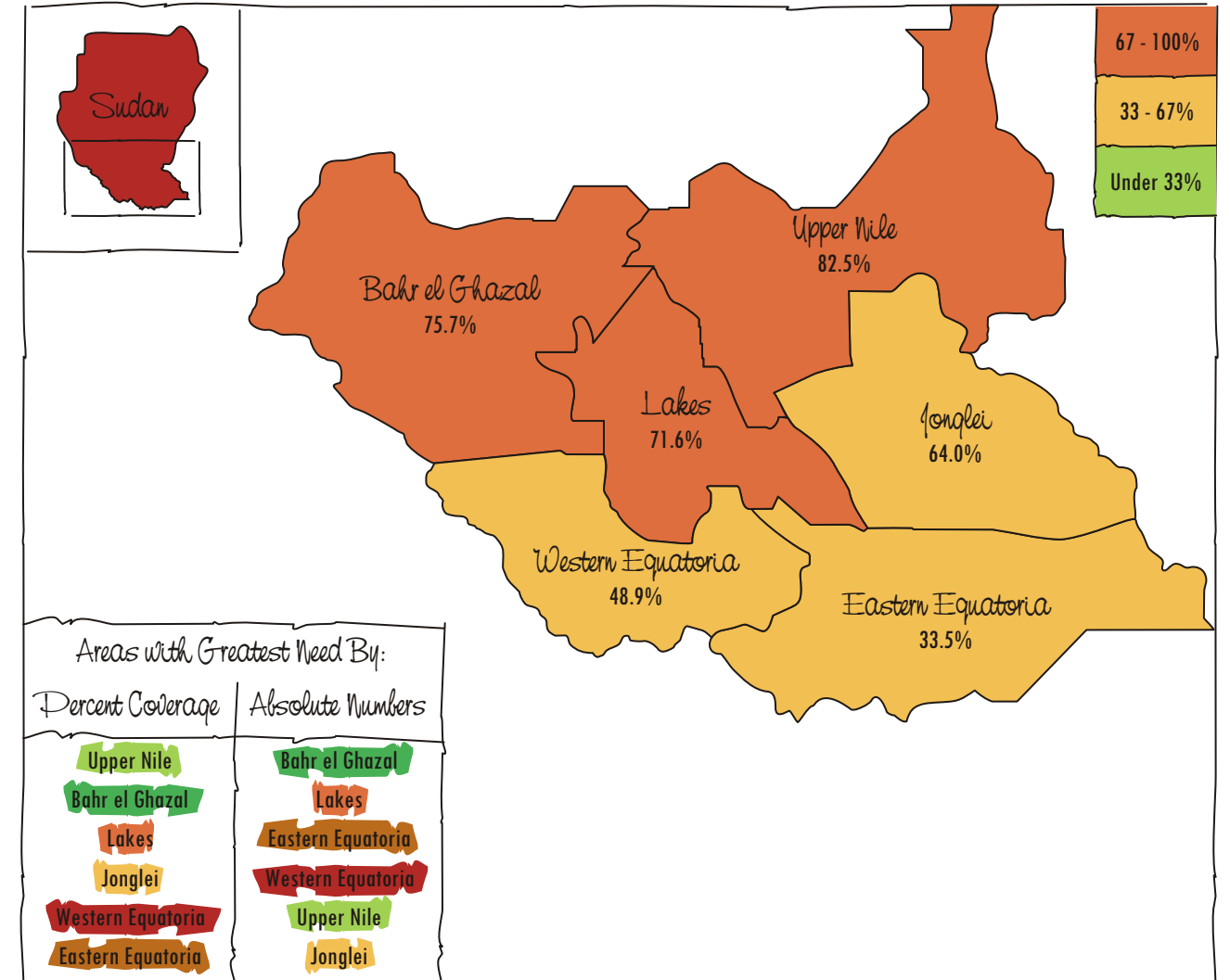


Table 29- Children 5-17 years Enrolled in School who did not attend Classes for more than 3 days in a week

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	5.8	6,943	12.9	5,422	2.22	7.7	12,366
Lakes	2.5	1,332	0.2	36	0.08	2.0	1,368
Upper Nile	25.5	2,863	17.5	1,440	0.69	21.9	4,303
Jonglei	12.7	2,334	16.0	2,078	1.26	14.0	4,412
Western Equatoria	7.6	5,452	24.2	7,577	3.18	12.2	13,028
Eastern Equatoria	14.6	15,797	10.1	9,431	0.69	12.5	25,228
Total	9.1	34,721	12.7	25,984	1.39	10.3	60,705

Children 5-17 years Enrolled in School who did not attend Classes for more than 3 days in a week

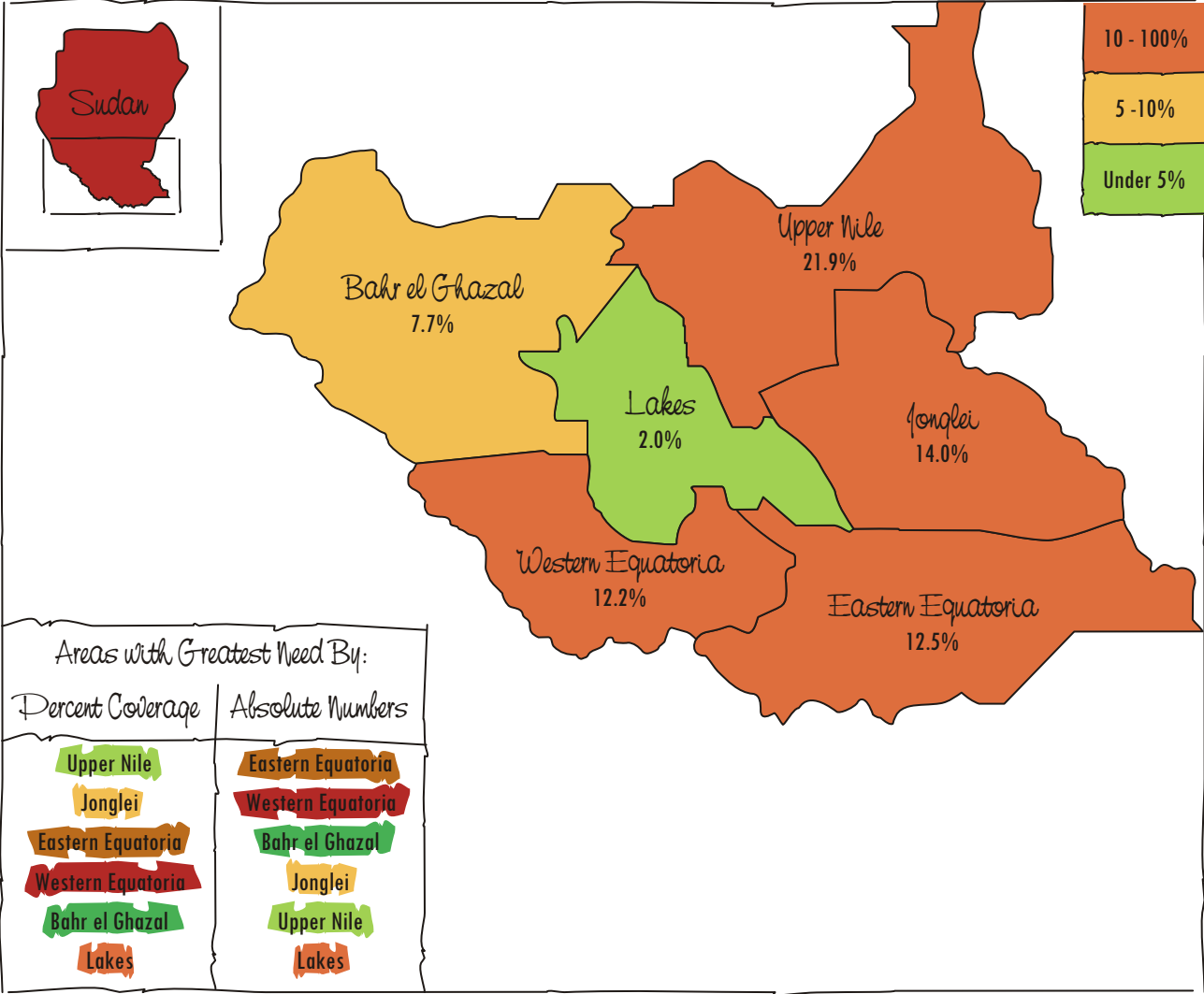


Table 30 - Children 5-17 years among Unregistered
never Registered in School

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	85.2	178,112	89.7	222,233	1.05	87.8	405,900
Lakes	97.2	74,552	98.4	89,395	1.01	97.9	164,492
Upper Nile	90.1	41,643	88.7	38,255	0.98	89.5	80,319
Jonglei	69.9	18,055	82.4	24,462	1.18	76.6	42,516
Western Equatoria	75.9	22,658	71.3	37,491	0.94	73.0	60,228
Eastern Equatoria	77.5	27,489	65.2	32,282	0.84	70.4	59,928
Total	85.7	362,509	86.5	444,118	1.01	86.2	813,383

Children 5-17 years among Unregistered
never Registered in School

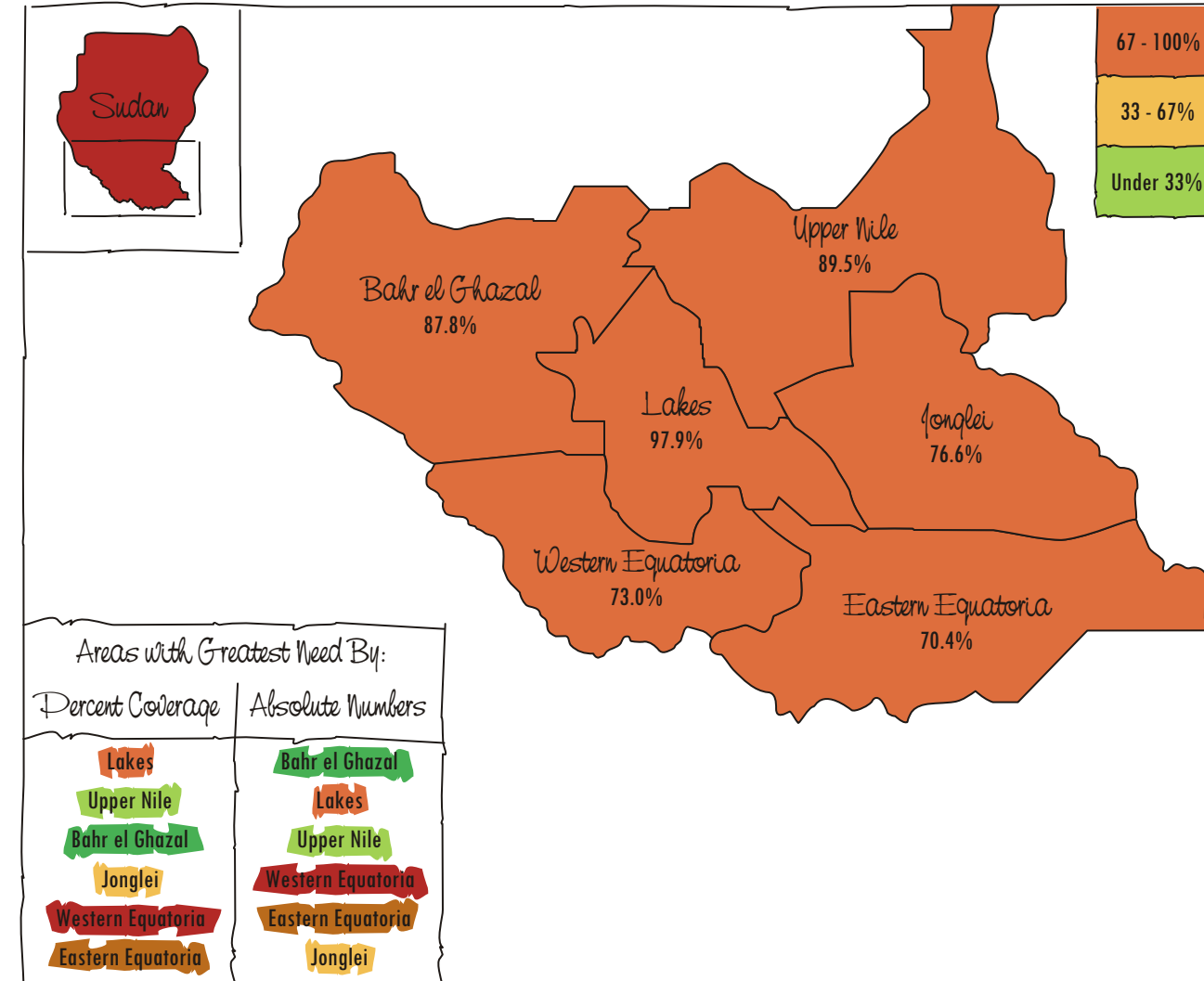


Table 31 - Reasons for Children 5-17 years dropping out of school
(multiple responses given by each respondent)

Reasons	Bahr el Ghazal				Lakes				Upper Nile			
	Boys		Girls		Boys		Girls		Boys		Girls	
	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Domestic Chores	28.1	14,292	32.9	9,723	23.4	1,163	50.8	913	4.3	301	13.9	788
Productive Work	24.2	12,310	21.8	6,441	47.7	2,376	53.7	966	16.2	1,143	7.5	425
No Books/Pencils	25.6	13,002	25.3	7,498	5.6	278	7.7	139	47.7	3,371	46.4	2,631
Short of Clothes	42.1	21,443	41.5	12,286	10.5	523	30.1	541	31.5	2,228	28.5	1,617
Others	15.6	7,916	21.9	6,489	44.4	2,209	9.8	177	43.1	3,043	44.3	2,512

Jonglei				Western Equatoria				Eastern Equatoria				Total			
Boys		Girls		Boys		Girls		Boys		Girls		Boys		Girls	
%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
35.2	3,764	45.8	3,486	17.6	1,833	29.5	4,377	22.7	1,730	39.9	6,457	25.2	23,083	34.0	25,744
32.6	3,487	16.1	1,227	10.3	1,069	9.6	1,430	32.0	2,440	21.4	3,464	24.9	22,826	18.4	13,953
67.3	7,190	65.5	4,994	13.0	1,351	10.2	1,517	14.0	1,069	20.5	3,315	28.6	26,262	26.5	20,094
59.5	6,354	41.8	3,187	21.0	2,190	14.2	2,104	5.1	387	21.6	3,495	36.1	33,124	30.7	23,230
32.5	3,475	42.8	3,260	83.5	8,707	69.2	10,257	69.8	5,329	63.5	10,283	33.5	30,680	43.6	32,978

Article 28 of the CRC establishes the child's right to an education free and compulsory, making primary education free and compulsory. Article 31 ensures the child the right to rest and leisure, to engage in play and recreational activities. Article 27 gives every child the right to material assistance, with particular regard to clothing.

Children from 5 to 17 years: Household Work

Analysis

- Most children in southern Sudan help in household chores. The range is from 84% in Lakes to 56% in Bahr el Ghazal. More girls in Jonglei, Eastern Equatoria and Bahr el Ghazal helped in household chores than boys. Gender differences however were not significant.
- 58% of children 5-17 years old helped in generating income for the household. Nearly 80% of children in Western Equatoria and Lakes contributed to household income. Around 50% did so in the other regions. Although more boys were seen to be involved in income generating activities at the household level, gender differences were not statistically significant in all regions.

Action Points

1. Due to the impoverished status of southern Sudanese households, every member of the household needs to contribute in the family chores and economic activity. School enrollment should be carefully monitored and school schedules adjusted in such a way that these children are not deprived of education.
2. Awareness should be raised to ensure that children are not engaged in hazardous work.

Table 32 - Children 5-17 years who help with Household Domestic Chores

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	48.1	174,247	64.2	207,550	1.33	55.7	385,501
Lakes	81.6	114,483	87.3	104,477	1.07	84.3	219,505
Upper Nile	55.0	34,220	63.7	35,824	1.16	59.2	70,267
Jonglei	50.7	22,916	75.5	33,336	1.49	62.9	56,289
Western Equatoria	80.4	94,400	85.1	86,384	1.06	82.8	183,875
Eastern Equatoria	58.3	96,308	79.6	135,764	1.37	69.2	232,230
Total	60.8	536,574	74.0	603,335	1.22	66.8	1,147,867

Children 5-17 years who help with Household Domestic Chores

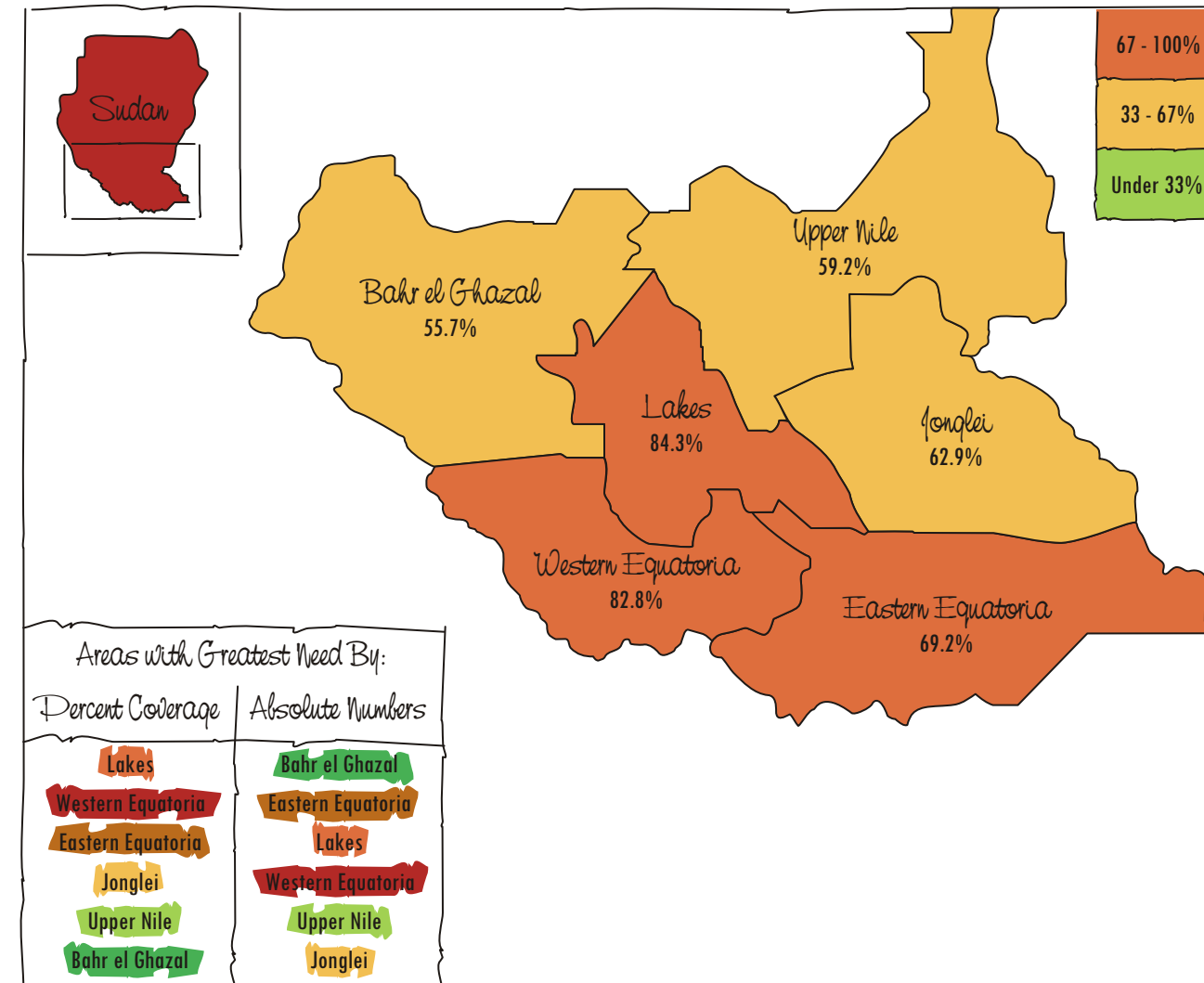
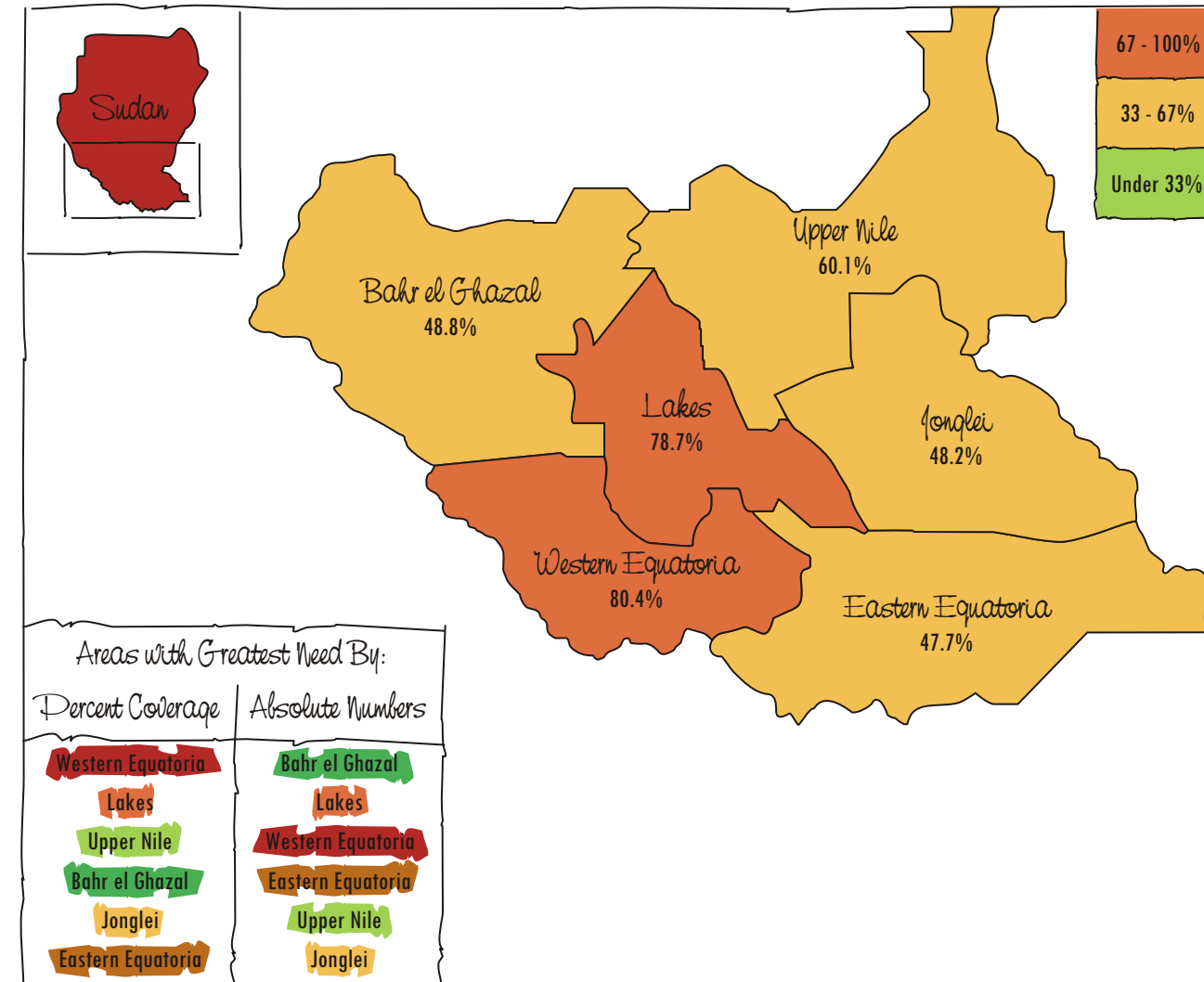


Table 33 - Children 5-17 years who help with Household Income Generation Work

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	50.8	184,39	46.2	150,188	0.91	48.8	339,163
Lakes	83.4	116,456	73.0	87,211	0.88	78.7	204,360
Upper Nile	65.5	40,792	54.3	30,224	0.83	60.1	71,261
Jonglei	52.7	24,037	43.5	18,971	0.83	48.2	43,008
Western Equatoria	81.1	95,165	78.9	80,478	0.97	80.4	178,734
Eastern Equatoria	52.6	85,261	42.8	72,358	0.81	47.7	157,776
Total	61.3	546,104	53.3	439,430	0.87	57.9	994,301

Children 5-17 years who help with Household Income Generation Work



Disability & Impairment

Disability & Impairment

Analysis

- 9% of children under-five had some kind of disability or impairment. Upper Nile and Jonglei had the highest prevalence of childhood disability, followed by Equatoria, Lakes and Bahr el Ghazal. Three times as many boys had some form of disability compared to girls in Bahr el Ghazal and Western Equatoria. The reverse was true for Lakes. 46% more boys had disabilities in Eastern Equatoria than girls.
- 10% of children between the ages of 5-17 years had some form of disability or impairment. Jonglei and Upper Nile had the highest prevalence of disability/impairment while Lakes had the lowest prevalence. Gender differences were not statistically significant except in Lakes where more boys had disability/impairment than girls.
- Over 9% of children 5-17 years reported problems with seeing at night, indicating a possible Vitamin A deficiency. The prevalence was highest in Eastern Equatoria and the lowest in Western Equatoria. Eastern Equatoria has been experiencing a drought for the last 3 years, while Western Equatoria has a food surplus and an extensive availability of mangoes and green leafy vegetables. The prevalence has a direct correlation to access to food and insecurity. Night blindness was reported significantly more in boys than girls in Lakes, Upper Nile and Western Equatoria.
- Diagnostic and Rehabilitative services in southern Sudan are practically non-existent.

Action Points

1. OLS needs to encourage more international NGOs to get involved in preventive, promotive and rehabilitative services for children with disability. The capacity of local NGOs also needs to be strengthened in this area.
2. Blanket distribution of Vitamin A along with Polio NIDs and Immunization campaigns must be done.
3. Promotion of household gardens with green leafy vegetables and promotion of their consumption in regular diet will not only increase the availability of Vitamin A rich foods but will also increase household food security. Young school-going and adolescent children should be trained to organize and maintain household gardens as a part of their school curriculum.
4. Children with disabilities (especially physical) should be identified and brought to the attention of ICRC which has taken a lead role in rehabilitation for people with disabilities. Support should also be provided to indigenous NGOs who deal with rehabilitation for children with disabilities,
5. Children with disabilities have abilities and should be recognized for them. This concept needs to be introduced and inculcated in the society and should be an important part of the Life Skills curriculum.

Table 34 - Children Under 5 years who have
a disability/impairment

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	10.0	24,741	3.1	5,759	0.31	7.0	30,500
Lakes	5.2	4,836	9.0	7,517	1.73	7.1	12,755
Upper Nile	15.9	6,991	20.0	7,577	1.26	17.8	14,568
Jonglei	15.2	4,242	14.1	3,423	0.93	14.6	7,665
Western Equatoria	13.4	6,340	5.0	2,090	0.37	9.5	8,430
Eastern Equatoria	11.5	8,317	7.8	4,850	0.68	9.7	13,167
Total	10.4	55,469	7.2	31,216	0.69	9.0	87,085

Children Under 5 years who have
a disability/impairment

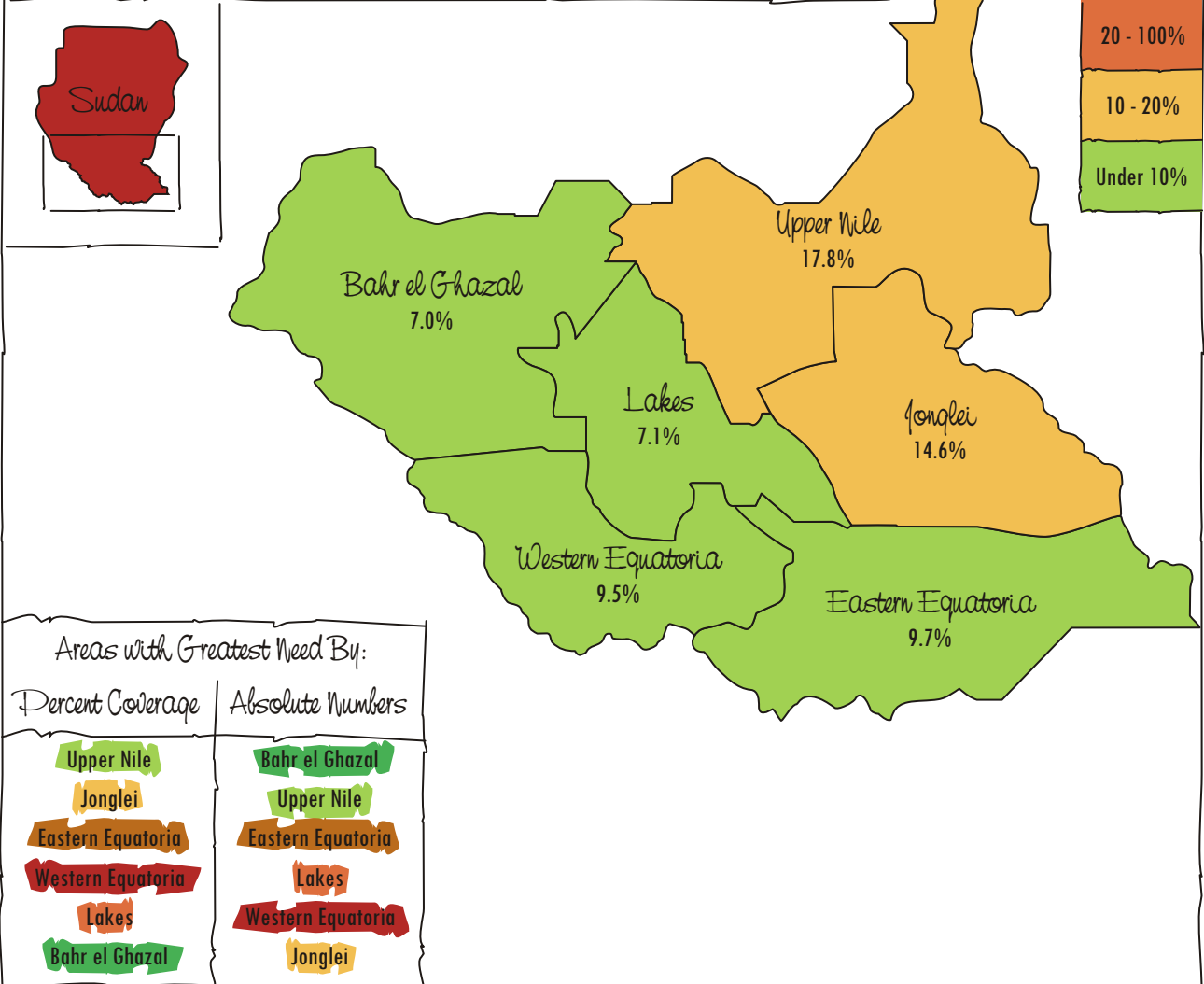


Table 35 - Children 5-17 years who have a Disability or Impairment

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	9.3	43,696	9.1	30,370	0.98	9.2	65,501
Lakes	5.8	8,346	4.6	5,586	0.79	5.3	13,932
Upper Nile	16.7	10,844	16.0	9,109	0.96	16.6	20,342
Jonglei	24.9	11,589	24.0	10,857	0.96	24.5	22,483
Western Equatoria	9.2	10,908	10.5	10,732	1.14	9.7	21,738
Eastern Equatoria	11.5	19,292	11.4	19,695	0.99	11.4	38,987
Total	11.5	104,675	10.4	86,349	0.90	10.4	182,983

Children 5-17 years who have a Disability or Impairment

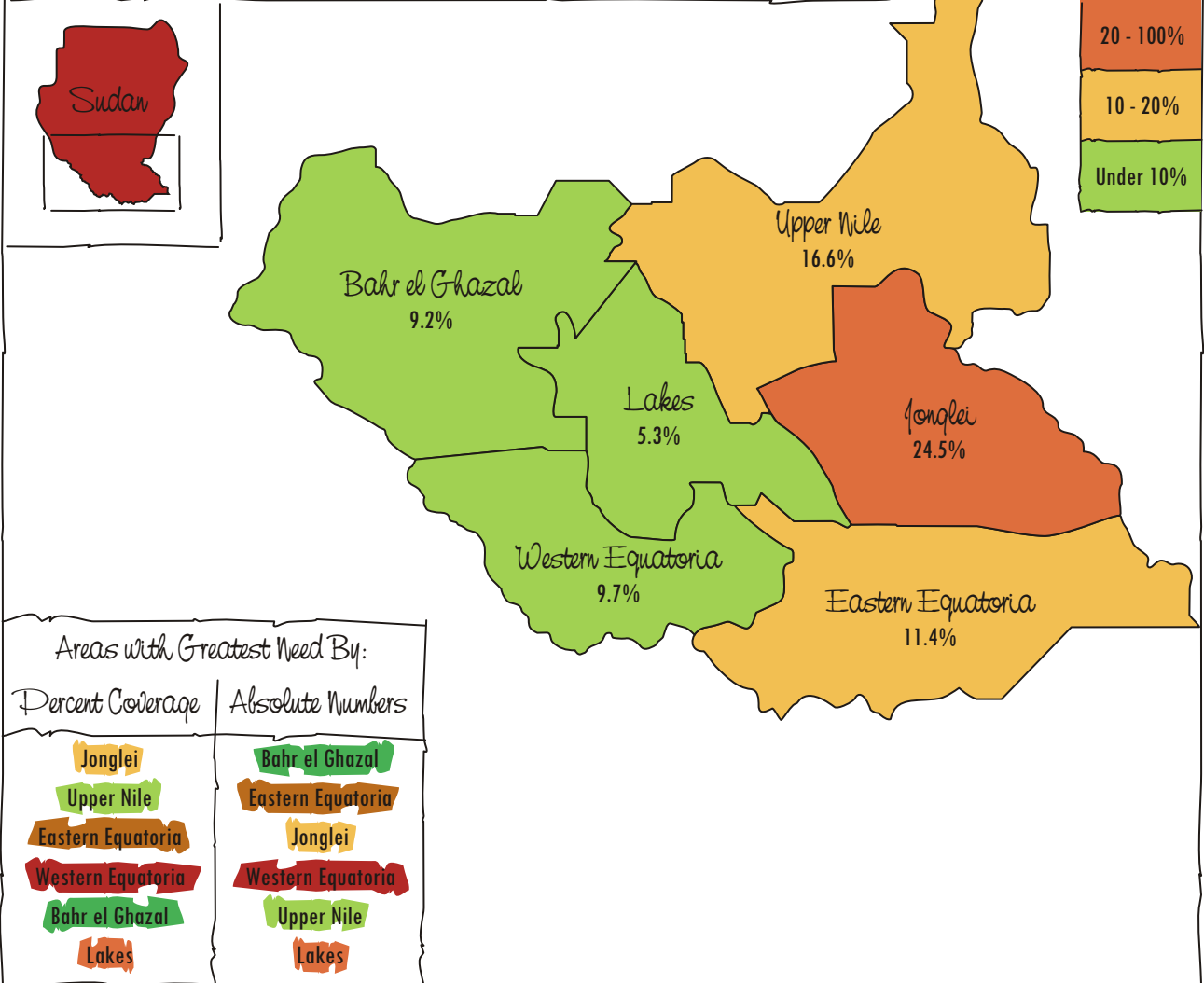
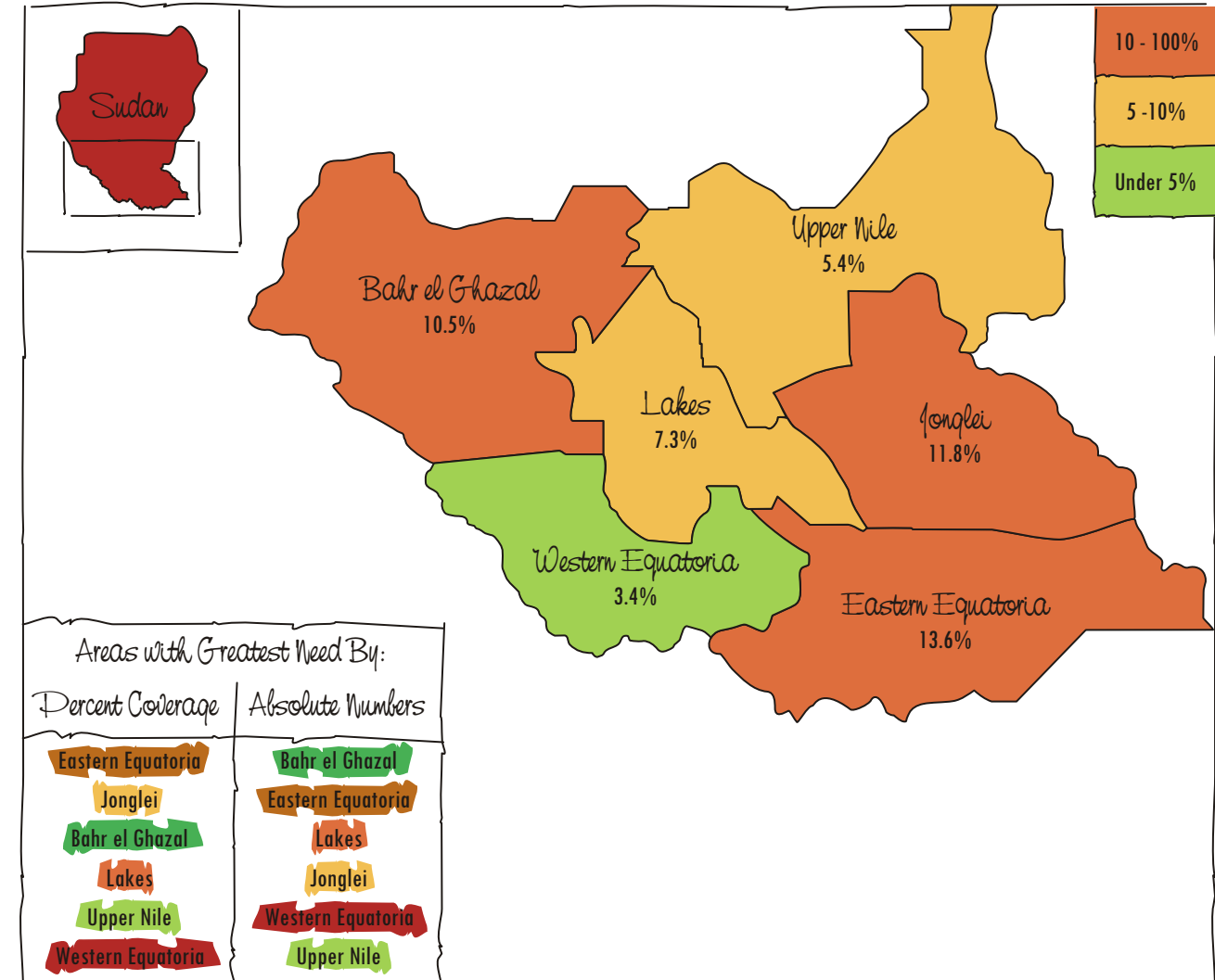


Table 36 - Children 5-17 years who had problems with Night Vision

	Boys		Girls		Girl/ Boy Ratio	Total	
	Percent	Number	Percent	Number		Percent	Number
Bahr el Ghazal	10.0	34,799	11.2	35,559	1.12	10.5	70,358
Lakes	8.2	11,237	6.3	7,417	0.77	7.3	18,654
Upper Nile	6.8	3,961	3.8	1,934	0.56	5.4	5,895
Jonglei	12.1	5,297	11.6	4,908	0.96	11.8	10,205
Western Equatoria	4.1	4,796	2.7	2,573	0.66	3.4	7,369
Eastern Equatoria	13.3	21,504	14.0	23,770	1.05	13.6	45,274
Total	9.4	81,594	9.6	76,161	1.02	9.4	157,755

Children 5-17 years who had problems with Night Vision



Article 23 of the CRC gives disabled children the right to special care, education, training, health care, rehabilitation and preparation for employment.

Table 37 - Types of disabilities/ impairments in Children Under 5 years

	Boys		Girls	
	%	No.	%	No.
Hearing/Vision	26.7	14,833	33.2	10,359
Hand/Leq	28.7	15,936	40.9	12,757
Speaking	35.3	19,562	23.0	7,173
Mental	15.0	8,347	8.6	2,673

Article 23 of the CRC gives disabled children the right to special care, education, training, health care, rehabilitation and preparation for employment.

Table 38 - Types of disabilities/ impairments in Children 5-17 years

	Boys		Girls	
	%	No.	%	No.
Hearing/Vision	55.9	53,518	47.1	40,636
Hand/Leq	19.9	19,029	27.1	23,381
Speaking	15.6	14,947	20.1	17,373
Mental	11.6	11,081	13.7	11,802

The Environment for Survival,
Growth & Development

Water & Sanitation

Analysis

- Only 26% of households had access to safe drinking water during the dry season previous to the survey. The access was lowest in Upper Nile.
- Because of the long distances that need to be traveled and the time needed to collect safe water, more people switch to drinking unsafe water during the wet season when small water ponds or rivulets are available everywhere. In the dry season, when these seasonal sources of water dry out, more people switch to safe drinking water.
- This indicates that the awareness regarding the benefits of safe drinking water is still not there in the community.
- Almost all households in Jonglei, Upper Nile, Lakes and Bahr el Ghazal and almost half in Eastern Equatoria do not use sanitary latrines. Western Equatoria is the exception, with almost all households using a sanitary latrine.

Action Points

1. The focus in the provision of safe water has been predominantly on the use of ground water. Significantly, more work is needed to make surface water safe. To rapidly increase the availability of safe water to the population, the use of intermediate technologies needs to be explored.
2. Promotion of sanitary latrines and hygiene practices has been the most neglected aspect of Water and Sanitation work in southern Sudan. Significant emphasis needs to be placed on these projects in future programme activities.
3. Awareness campaign is needed to increase community awareness regarding the benefits of safe drinking water. The life skills and school curriculum modules must also include this information.
4. Increased access to safe drinking water, closer to the households should be a high priority of the water programme.
5. Protecting open wells and springs can increase the access of households to safe drinking water by about 25%.

Table 39 - Households drinking Unsafe Drinking-Water during the Dry Season

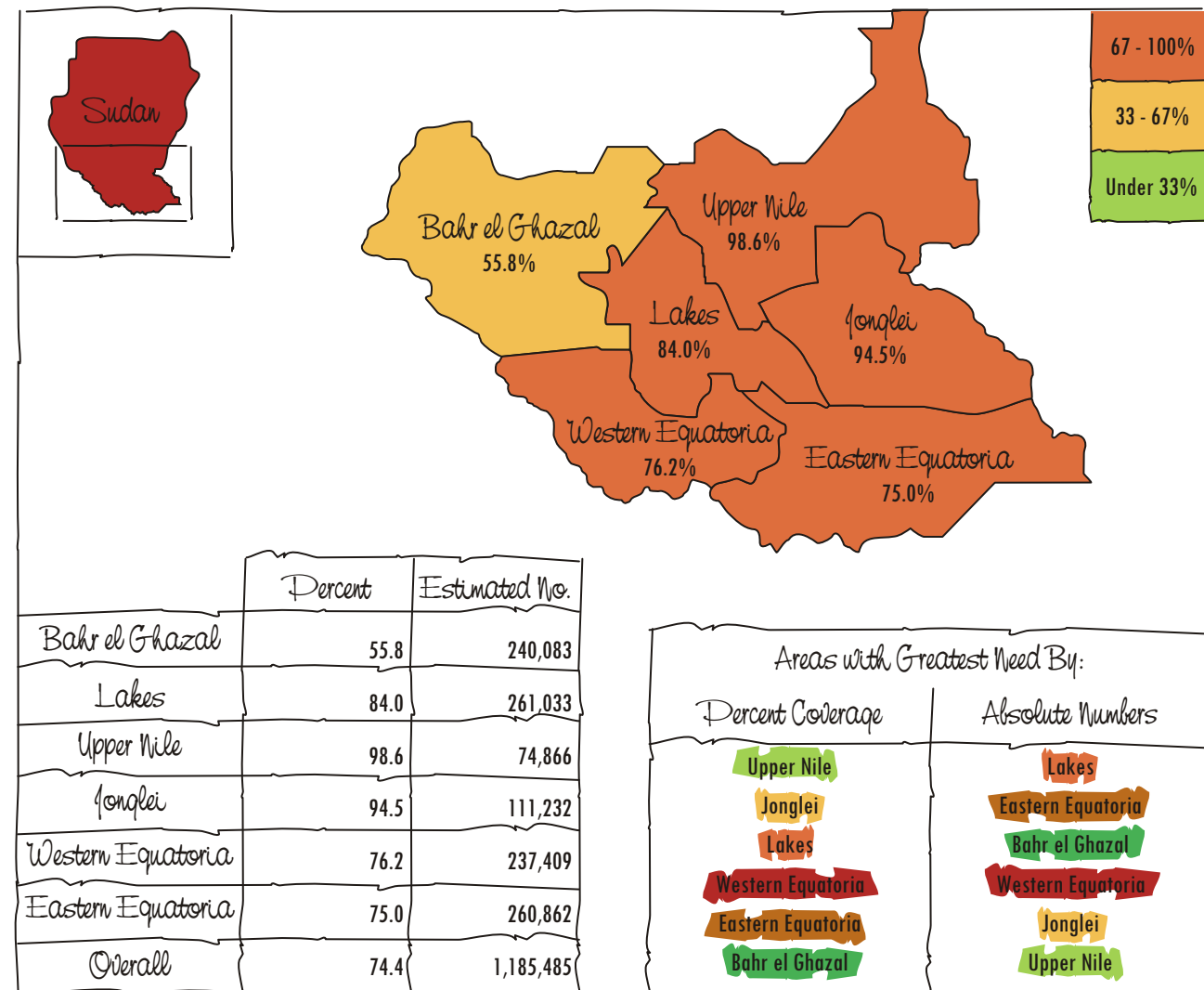


Table 40 - Households Drinking Unsafe Drinking-Water during Cultivation Season

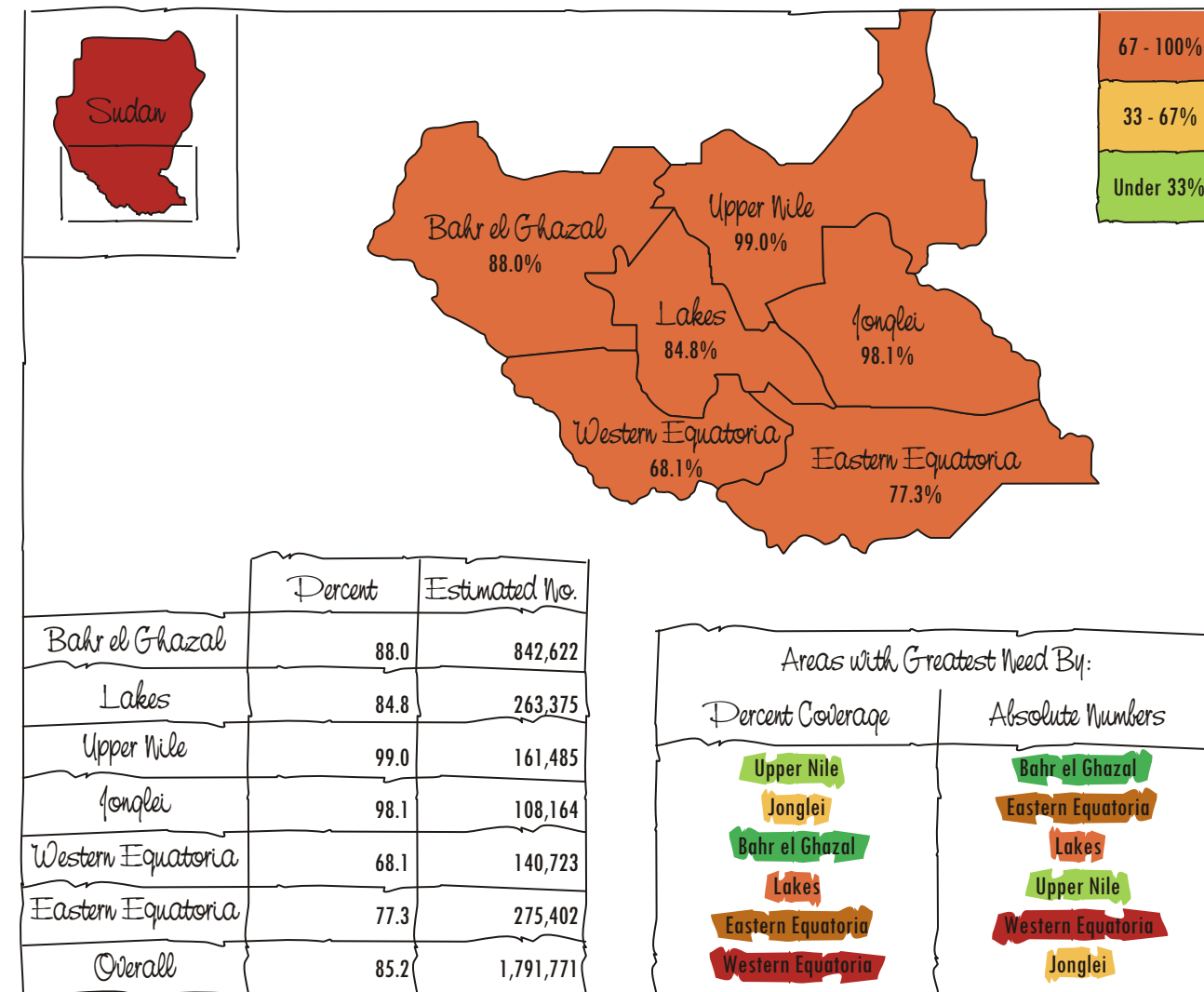


Table 41 - Source of Water Supply during the two Seasons
(multiple responses given by each respondent)

Source of Drinking Water during the Dry Season	Bahr el Ghazal		Lakes		Upper Nile	
	%	No.	%	No.	%	No.
Pump	44.2	190,173	31.1	48,671	-	-
Protected Spring	0.0	209	0.7	1,080	1.4	1,063
Open Well/Spring	34.4	148,112	37.2	58,225	31.3	23,474
River/Stream	15.8	67,919	31.4	49,182	71.0	53,245
Pond/Canal	16.2	69,779	13.8	21,518	5.0	3,740

Source of Drinking Water during Cultivation	Bahr el Ghazal		Lakes		Upper Nile	
	%	No.	%	No.	%	No.
Pump	26.1	113,782	25.4	39,558	0.2	177
Protected Spring	0.2	1,043	5.0	7,747	1.9	1,417
Open Well/Spring	15.9	69,358	34.1	53,229	26.4	19,878
River/Stream	12.1	52,661	9.1	14,134	63.1	47,436
Pond/Canal	57.4	250,631	32.3	50,428	19.0	14,321

Jonglei		Western Equatoria		Eastern Equatoria		Total	
%	No.	%	No.	%	No.	%	No.
7.3	4,279	45.5	70,393	36.4	63,282	35.9	376,797
3.7	2,186	2.3	3,604	13.5	23,456	3.0	31,599
27.7	16,268	65.9	102,090	27.5	47,772	37.7	395,976
36.4	21,402	22.1	34,240	22.6	39,230	25.3	265,220
32.6	19,140	4.3	6,662	12.4	21,595	13.7	142,436

Jonglei		Western Equatoria		Eastern Equatoria		Total	
%	No.	%	No.	%	No.	%	No.
3.4	1,998	42.4	65,754	32.1	57,045	26.3	278,312
0.2	103	2.3	3,604	13.3	23,737	3.5	37,651
25.7	15,174	70.1	108,731	30.2	53,720	30.2	320,093
34.3	20,279	19.9	30,894	37.4	66,540	21.9	231,943
47.6	28,135	7.7	11,904	8.1	14,471	34.9	369,891

Article 24 of the CRC in order to combat disease, gives every child the right to clean drinking-water. It also sets out to ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of child health, hygiene and environmental sanitation.

Table 42 - Households not using Sanitary Latrines

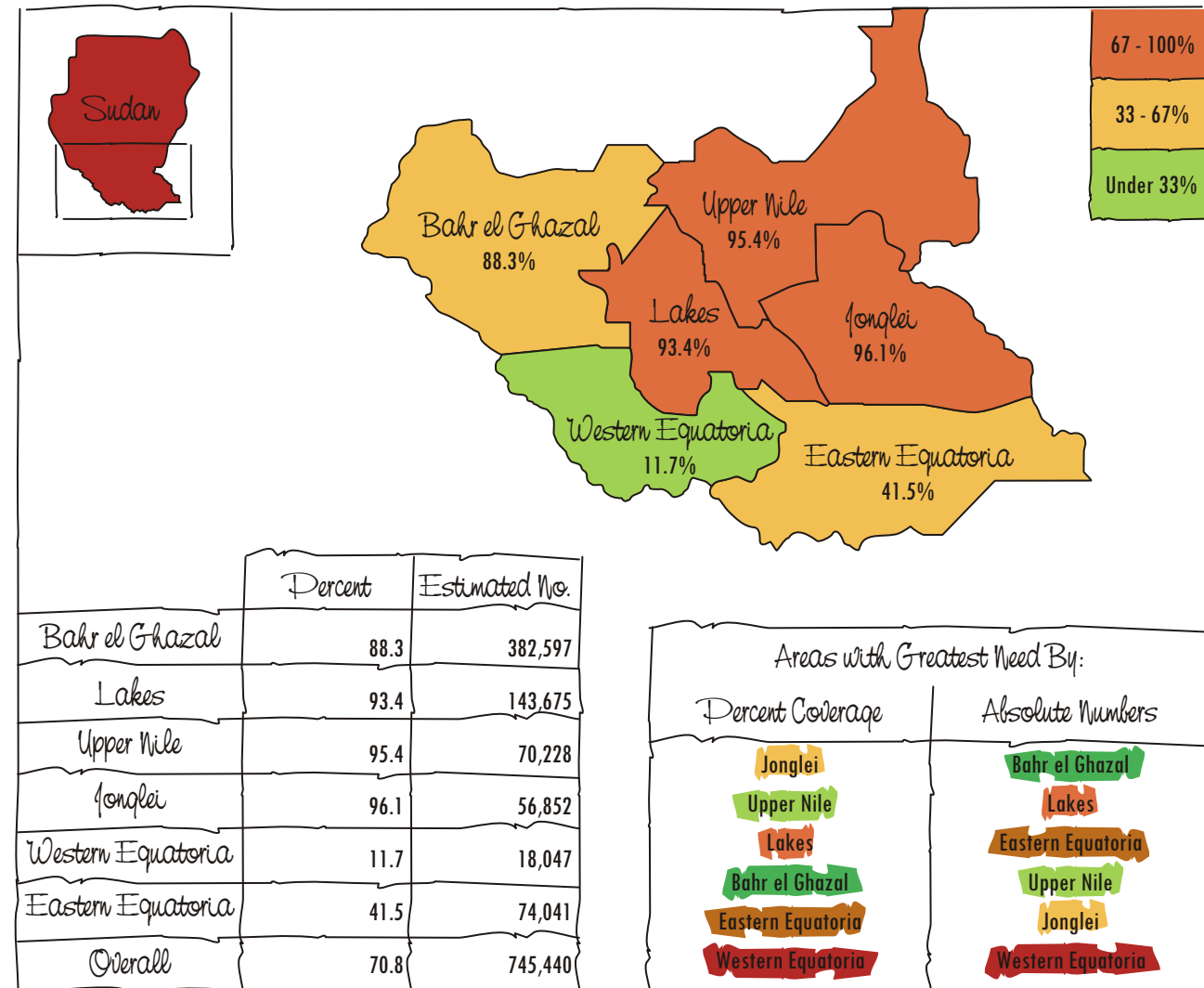
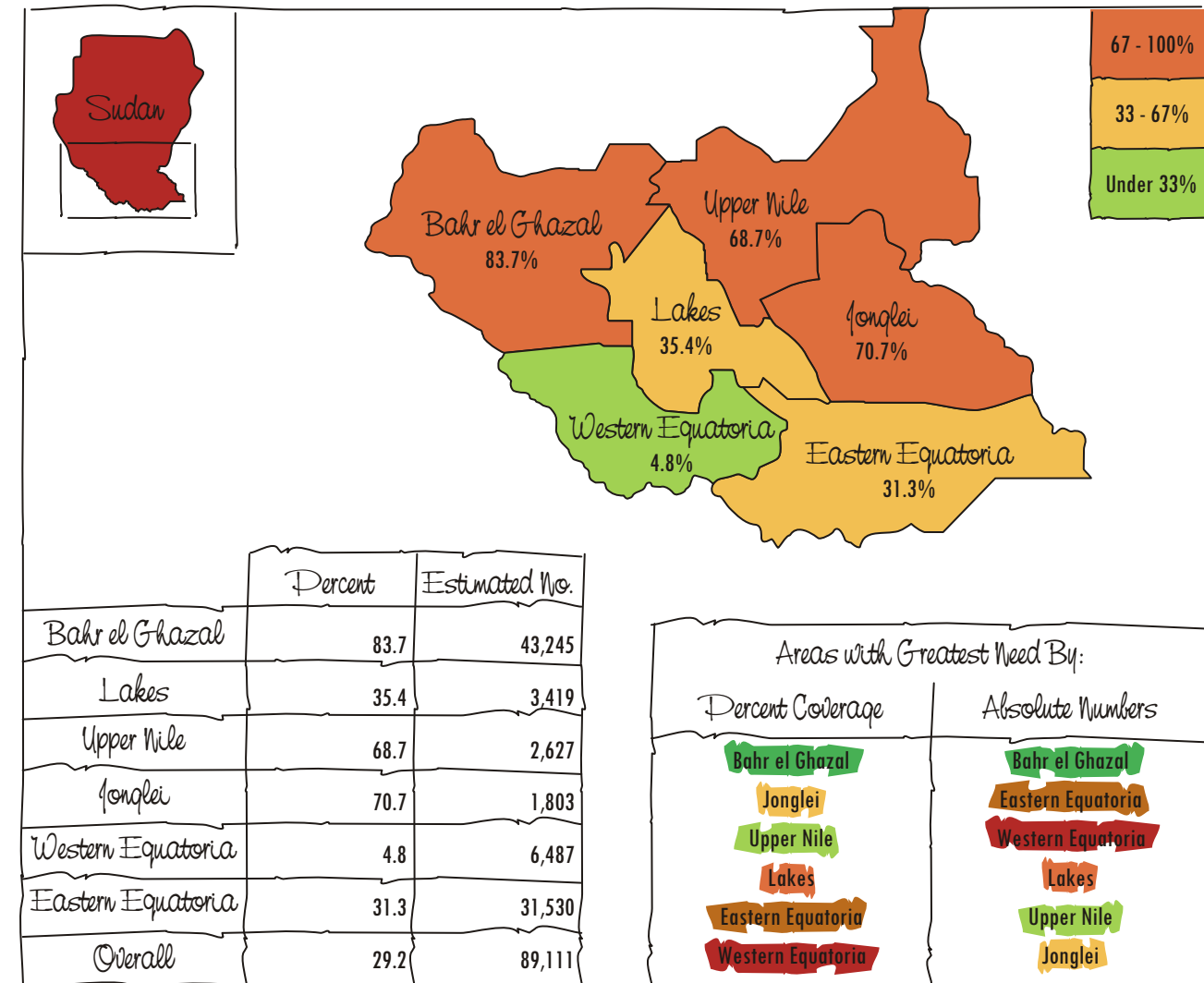


Table 43 - Households which are Latrine Users but do not have one for their Own Household



Household Food Security

Analysis

- Most households in southern Sudan keep livestock. The percentage is lower in Western Equatoria where most households depend on agriculture and have poultry. In Bahr el Ghazal, the 1998 famine, continued insecurity, repeated cattle raiding and the presence of large number of IDPs may be the reason that one in three households do not have livestock.
- 22% of households either ate wild foods or consumed no food on at least one occasion prior to the survey. These households are the most vulnerable in southern Sudan. The percentage was highest in Bahr el Ghazal and Upper Nile where one in three households had no food (or only wild foods) on at least one occasion prior to the survey and lowest in Western Equatoria which is a food surplus area in southern Sudan.
- Almost all households (except in Equatoria) either eat wild foods or have no food during the drought period. Low food reserves due to insecurity and poor agricultural techniques significantly increase the vulnerability of southern Sudanese households.

Action Points

1. Promotion of fishing and recipes using wild foods will play a significant role in increasing household food security in Upper Nile, Northern Bahr el Ghazal and Jonglei areas.
2. Introduction of short maturity crops and training in agriculture for predominantly pastoralist population groups will help increase household food security.
3. Timely seed and tools distribution, especially to displaced populations, will increase food security and reduce dependence on food aid.

Article 24 of the CRC sets out to ensure that a child is provided adequate nutritious foods. Article 27 assures the child support, particularly with regard to nutrition.

Table 44 - Households who do not have Livestock

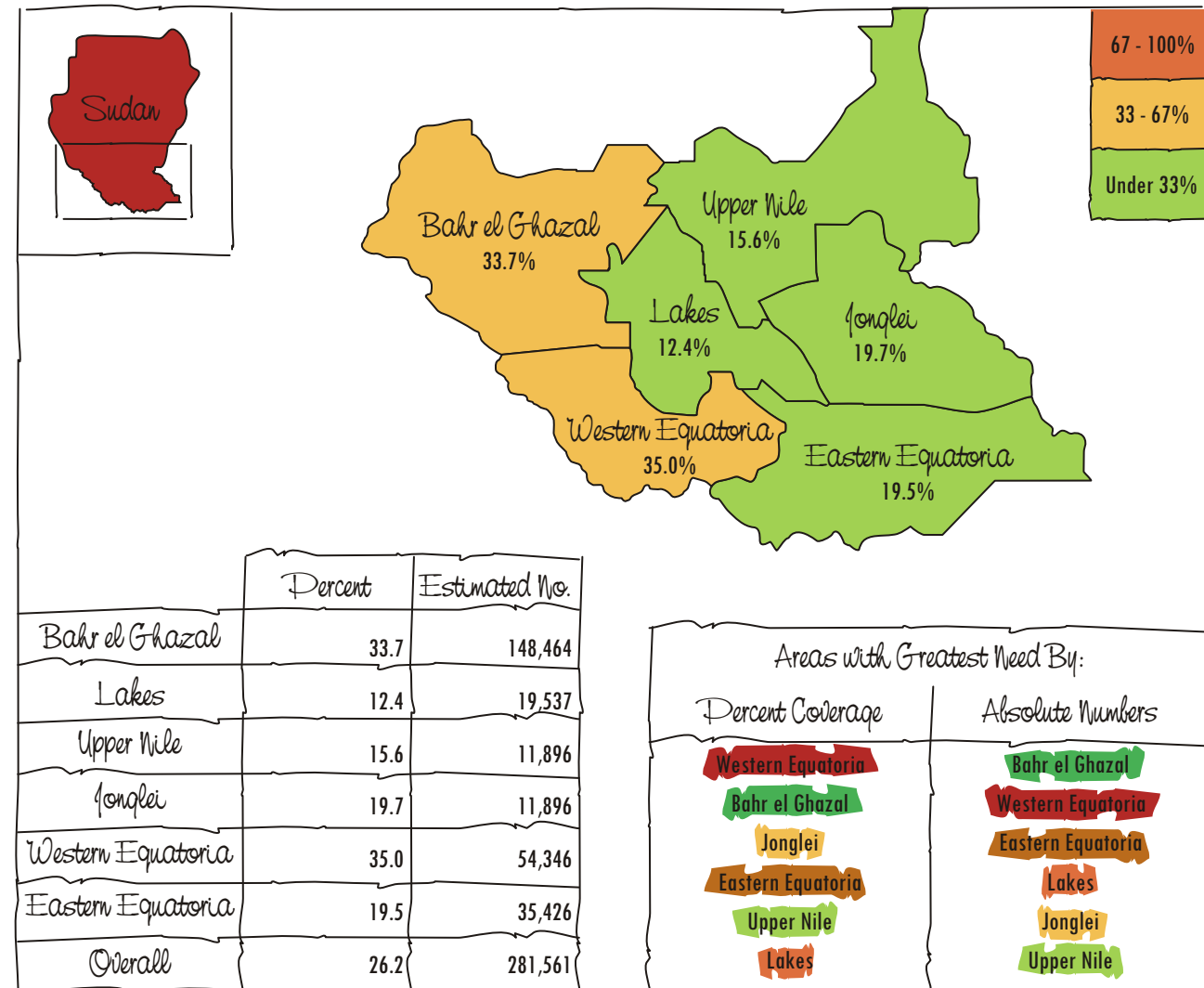
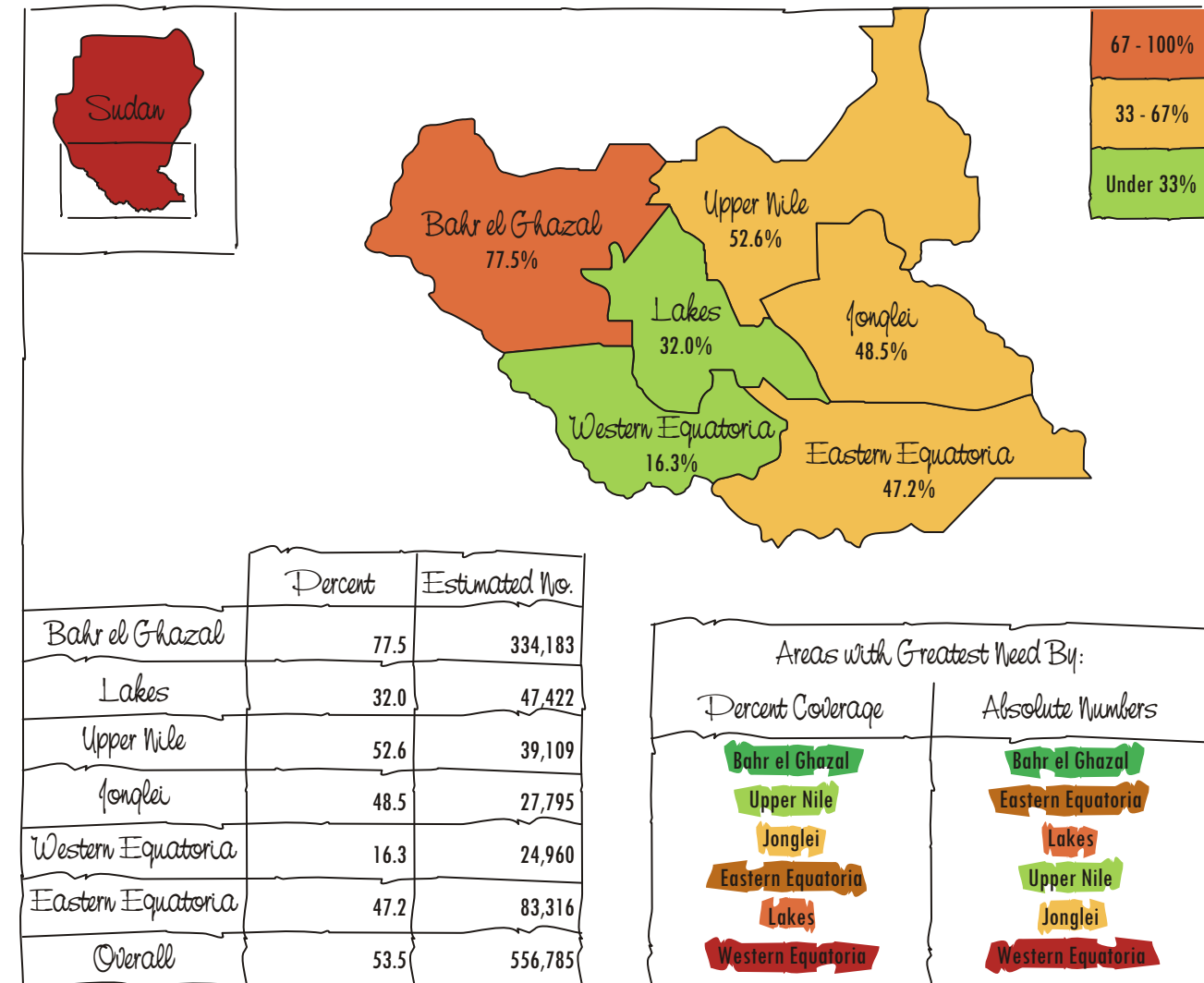


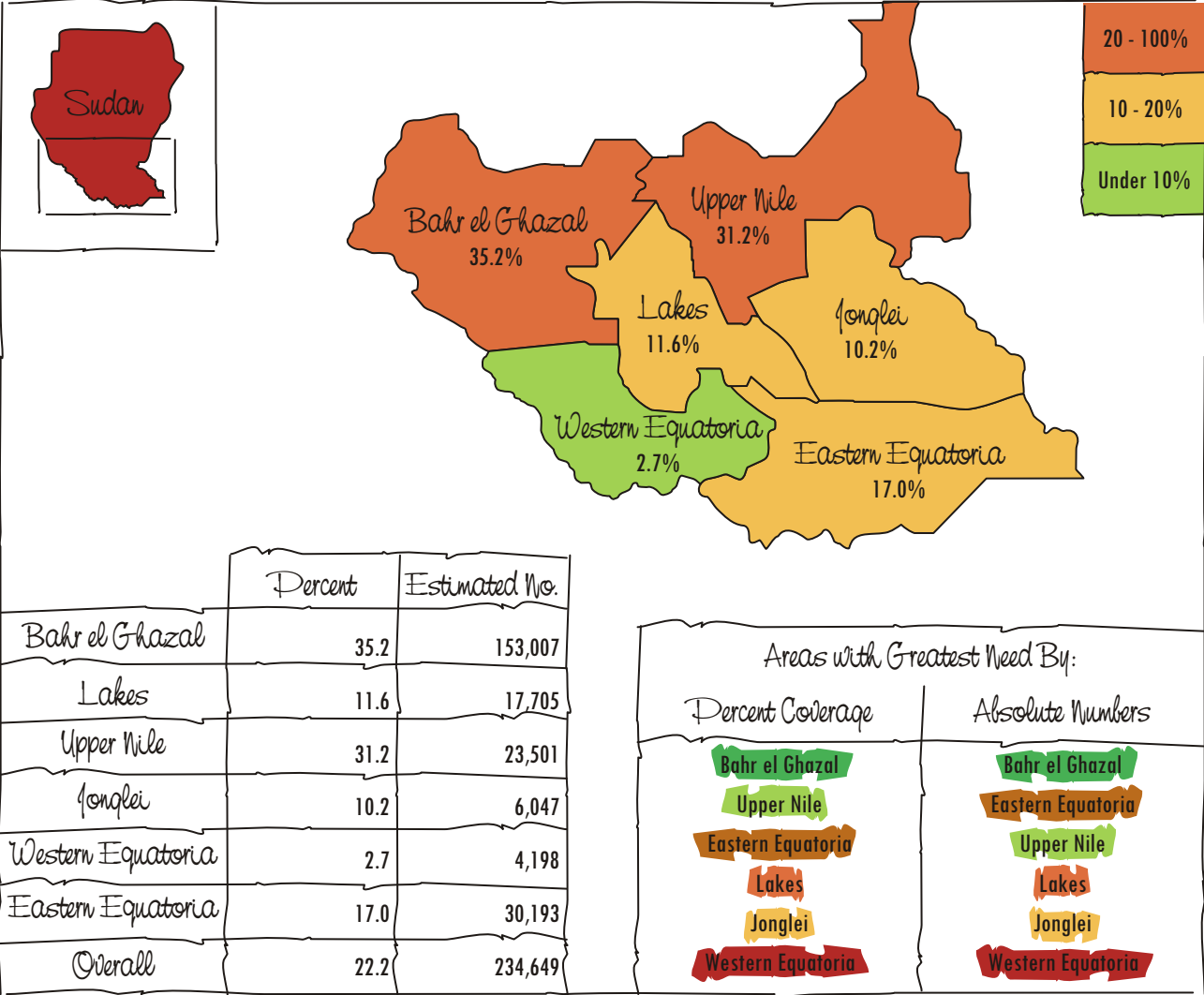
Table 45 - Food consumed since the last harvest not Own or not Purchased (dependence on relief or food loan)



Article 24 of the CRC sets out to ensure that a child is provided adequate nutritious foods. Article 27 assures the child support, particularly with regard to nutrition.

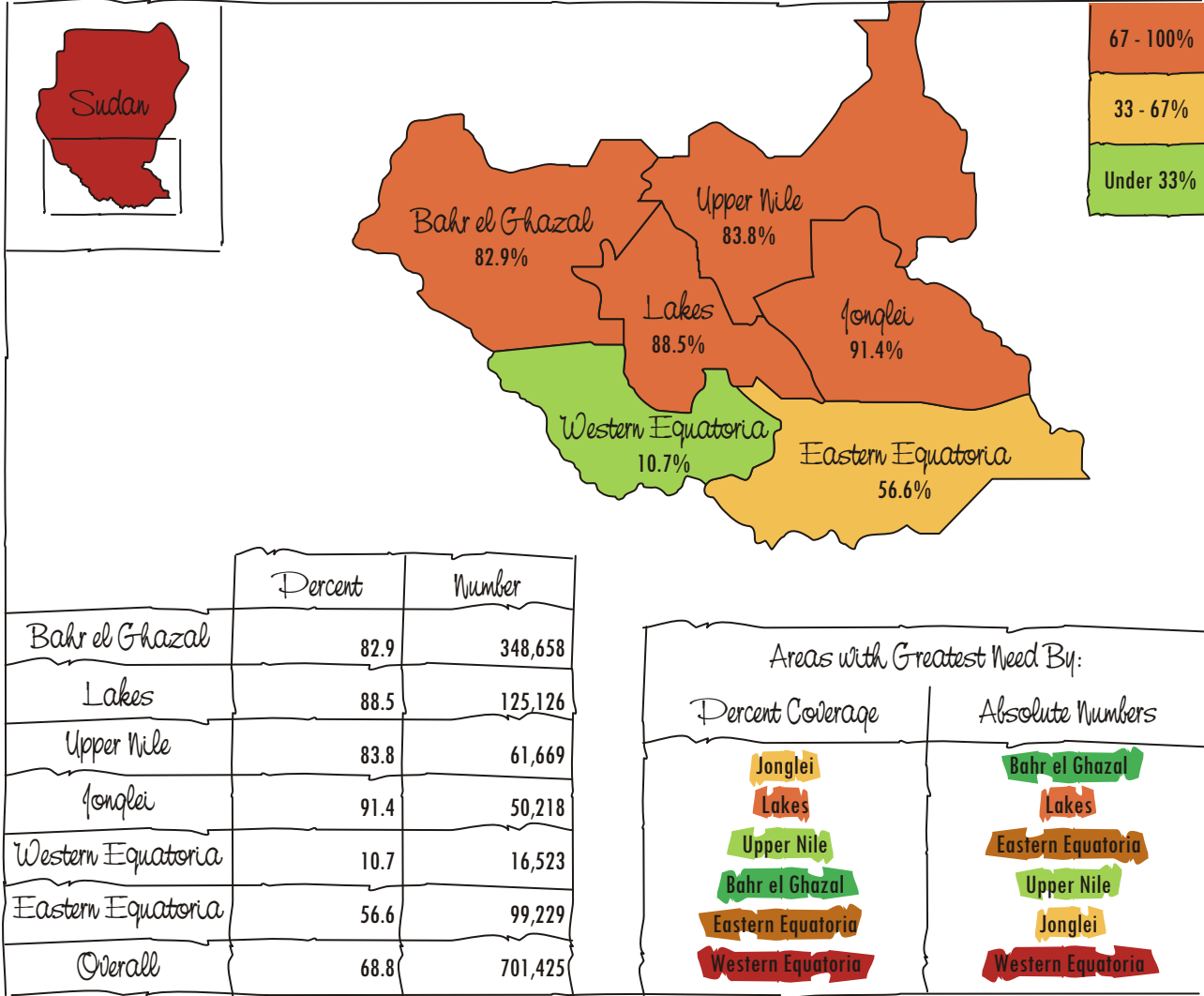
Article 24 of the CRC sets out to ensure that a child is provided adequate nutritious foods. Article 27 assures the child support, particularly with regard to nutrition.

Table 46- Wild or No Food Consumed Yesterday



Article 24 of the CRC sets out to ensure that a child is provided adequate nutritious foods. Article 27 assures the child support, particularly with regard to nutrition.

Table 47 - Households consuming Wild or No Food during Drought Periods



Use of Salt

Analysis

- 36% of households do not use salt in their diet. Areas which have difficulty accessing salt (northern Bahr el Ghazal and Jonglei) use some kind of ash to meet their salt needs. Almost all households in Equatoria use salt, while two in three households in Lakes and Upper Nile use salt in their diet.
- Of those who use salt, almost all in Lakes, Jonglei and Upper Nile use iodated salt. This is because most salt available in these areas is provided by OLS agencies as incentives. Two out of three households in Bahr el Ghazal and Eastern Equatoria use iodated salt, while only one in three do so in Western Equatoria.
- Carrying iodated salt into southern Sudan is very expensive. The porous borders and the conflict make any kind of regulation on the import of salt impossible to enforce. Most salt in southern Sudan comes from Port Sudan, Uganda and Kenya. Most of this salt is not iodized.

Action Points

1. Advocacy for universal salt iodation in Sudan, Uganda and Kenya.
2. Organization of a three-party meeting of salt manufacturers to promote the manufacture and distribution of iodated salt.
3. Use of iodized oil capsules along with immunization campaigns.

Table 48 - Households who do not Use Salt

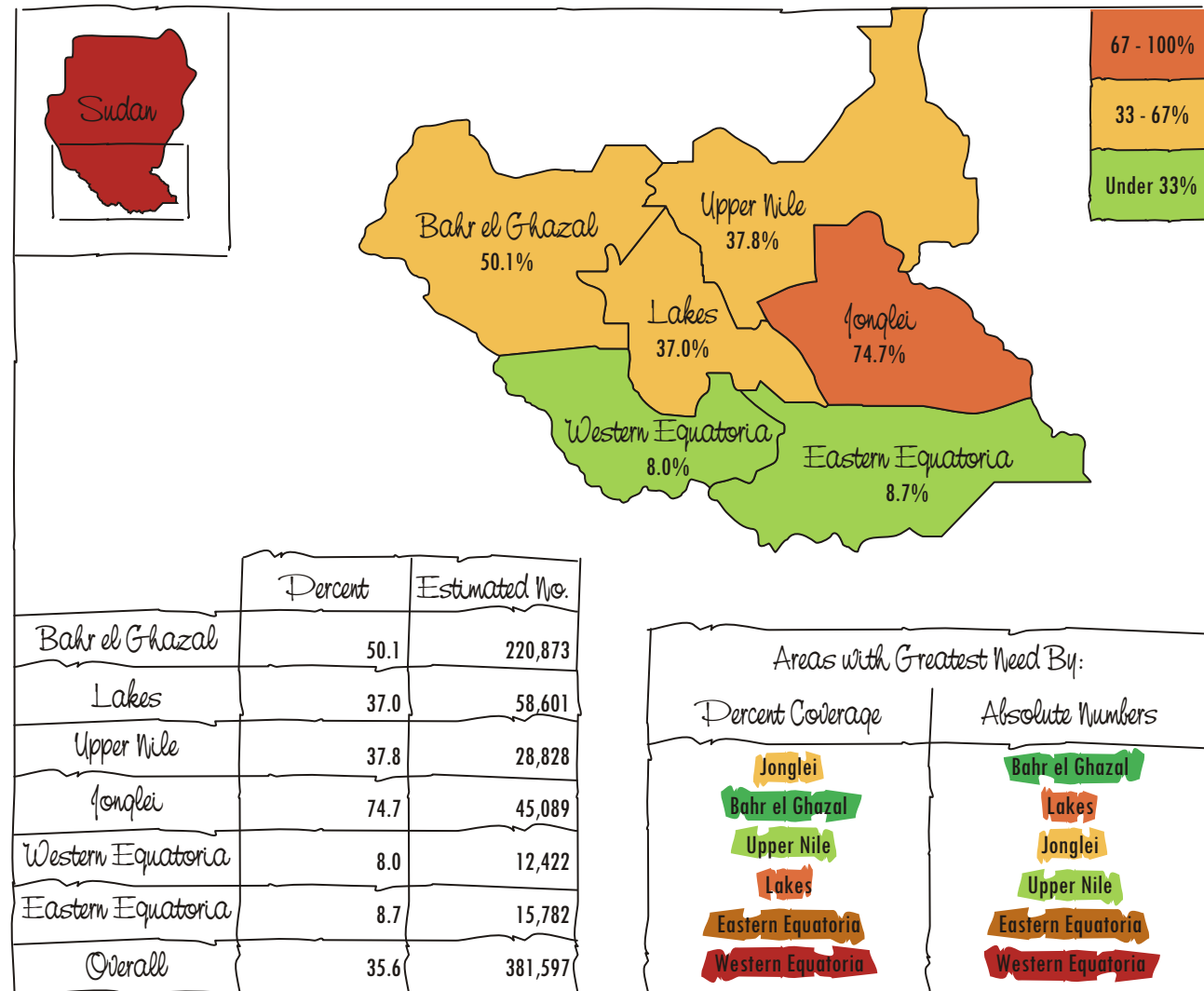
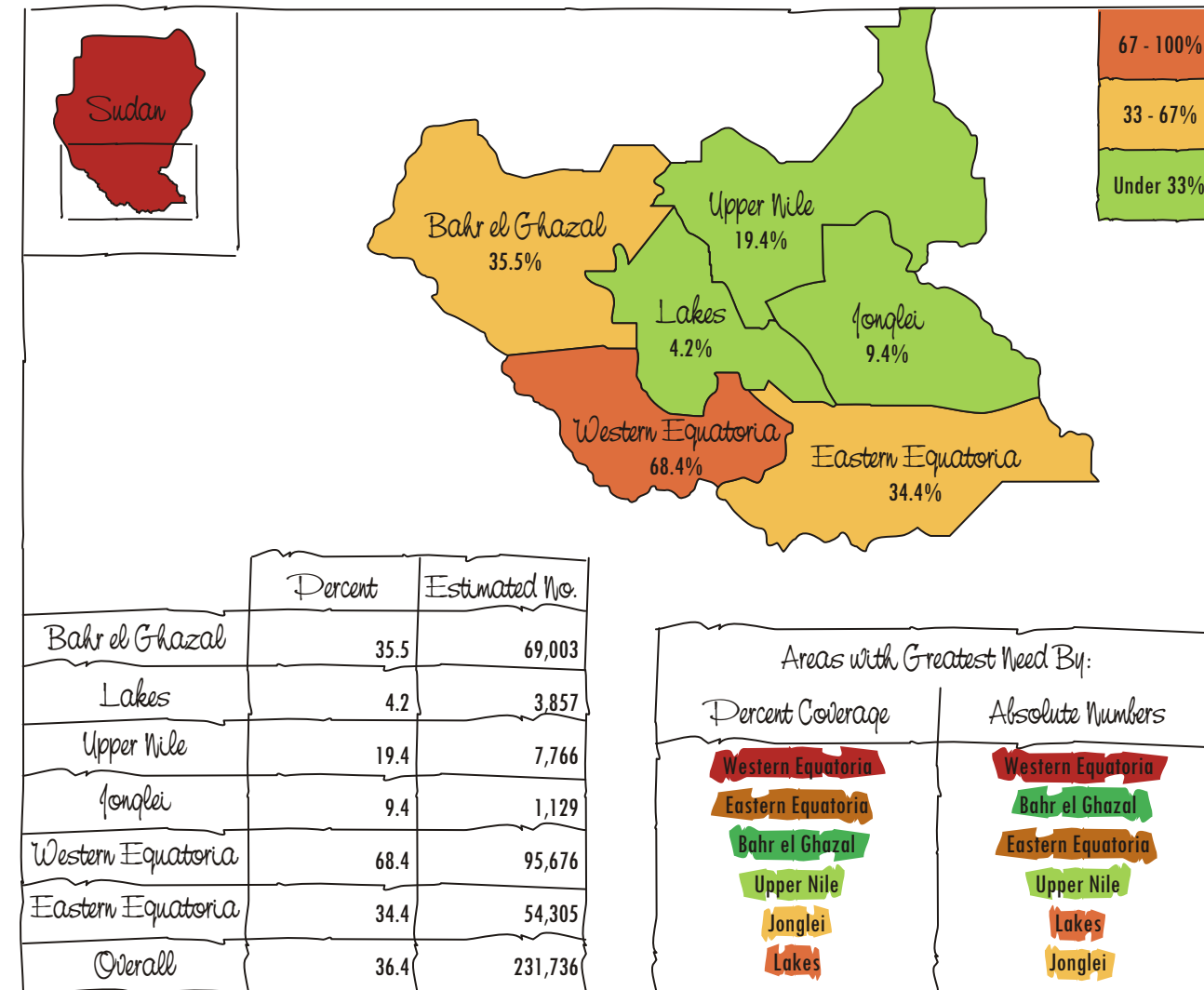


Table 49 - Salt user Households who Use Non-iodized Salt



Awareness of Child Rights

Analysis

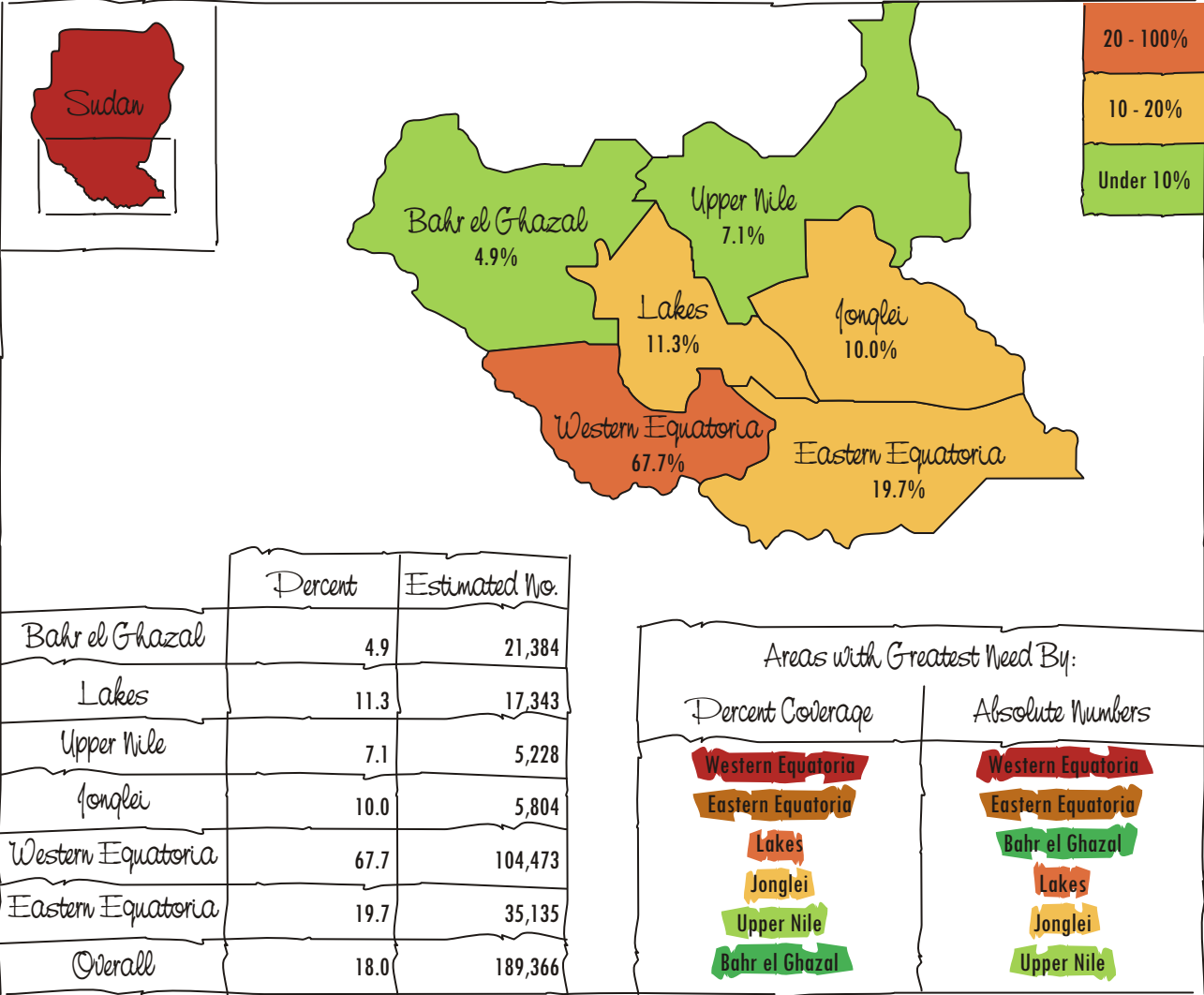
- Almost all households (except in Western Equatoria) are aware that children have rights.
- Most households are unaware of the Convention on the Rights of the Child (CRC).

Action Points

1. An intensive awareness campaign, building on the traditional acceptance of the concept of rights of the child, needs to be launched and its impact monitored carefully.
2. Reasons for low understanding and acceptance of Child Rights in Western Equatoria needs to be studied.

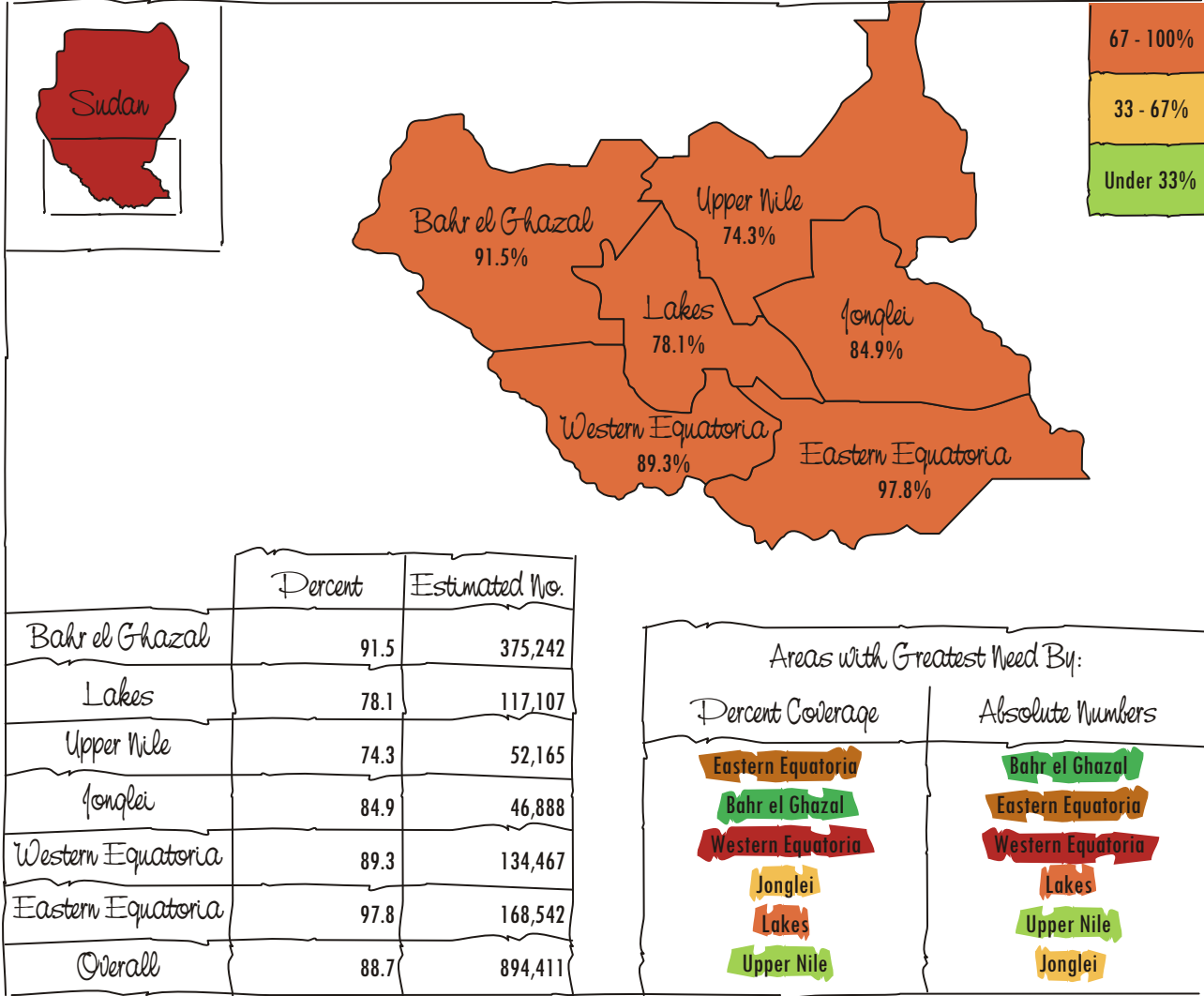
Article 3 sets out to ensure that a child is protected and cared for, as is necessary for his or her well-being, taking into account the rights and duties of his or her parents.

Table 50 - Households Unaware of the Rights of Children



Article 42 sets out to ensure that the principles and provisions of the Convention are widely known, by appropriate and active means, to adults and children alike.

Table 51 - Households Unaware of the Convention on the Rights of Children



Awareness related to HIV/AIDS

Analysis

- Awareness about HIV/AIDS is very low in all regions of southern Sudan except in Eastern Equatoria and to a lesser extent Western Equatoria.
- Of those who were aware of HIV/AIDS most were aware of the problems related to HIV/AIDS. The sub-sample from Upper Nile and Jonglei was too small to draw any meaningful conclusions.
- Of those who were aware of HIV/AIDS, most of those in the Equatorias knew about the relationship between unprotected sexual activity and HIV/AIDS. However, only two in three people in Lakes and one in four in Bahr el Ghazal knew of this association.
- Of those who were aware of HIV/AIDS, most in the Equatorias were aware of the transfoetal transmission of AIDS.

Action Points

1. Support is needed for the development of guidelines on dealing with HIV/AIDS in the rebel-controlled areas of southern Sudan.
2. Studies are needed to establish the prevalence of HIV/AIDS in southern Sudan.
3. An intensive HIV/AIDS awareness programme needs to be launched in southern Sudan.

Table 52 - Adults who have never heard of HIV or AIDS

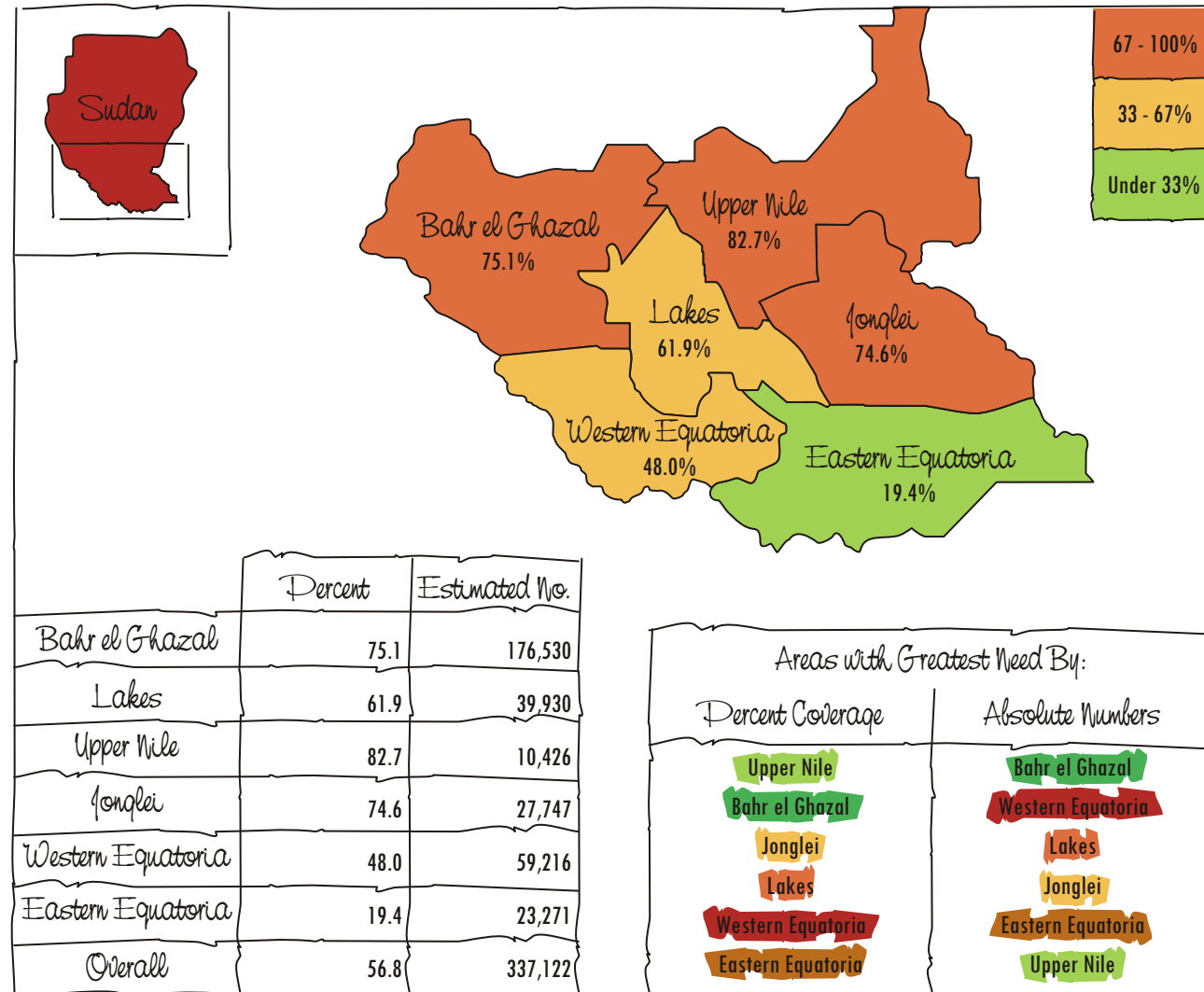


Table 53 - Adults who have heard of HIV or AIDS but do not know about problems related to it

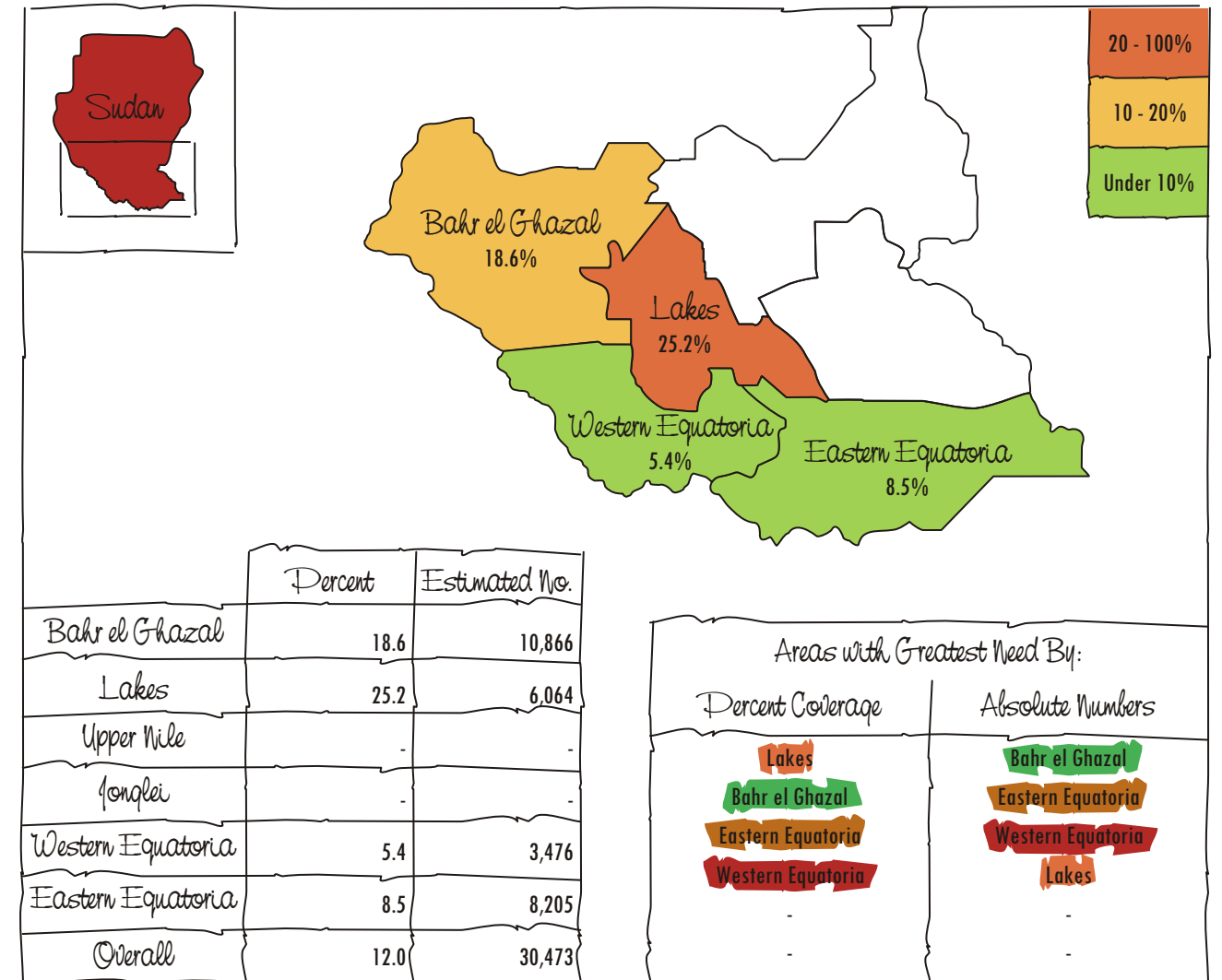


Table 54 - Adults who do not know about the relationship of Unprotected Sexual Activity to HIV or AIDS

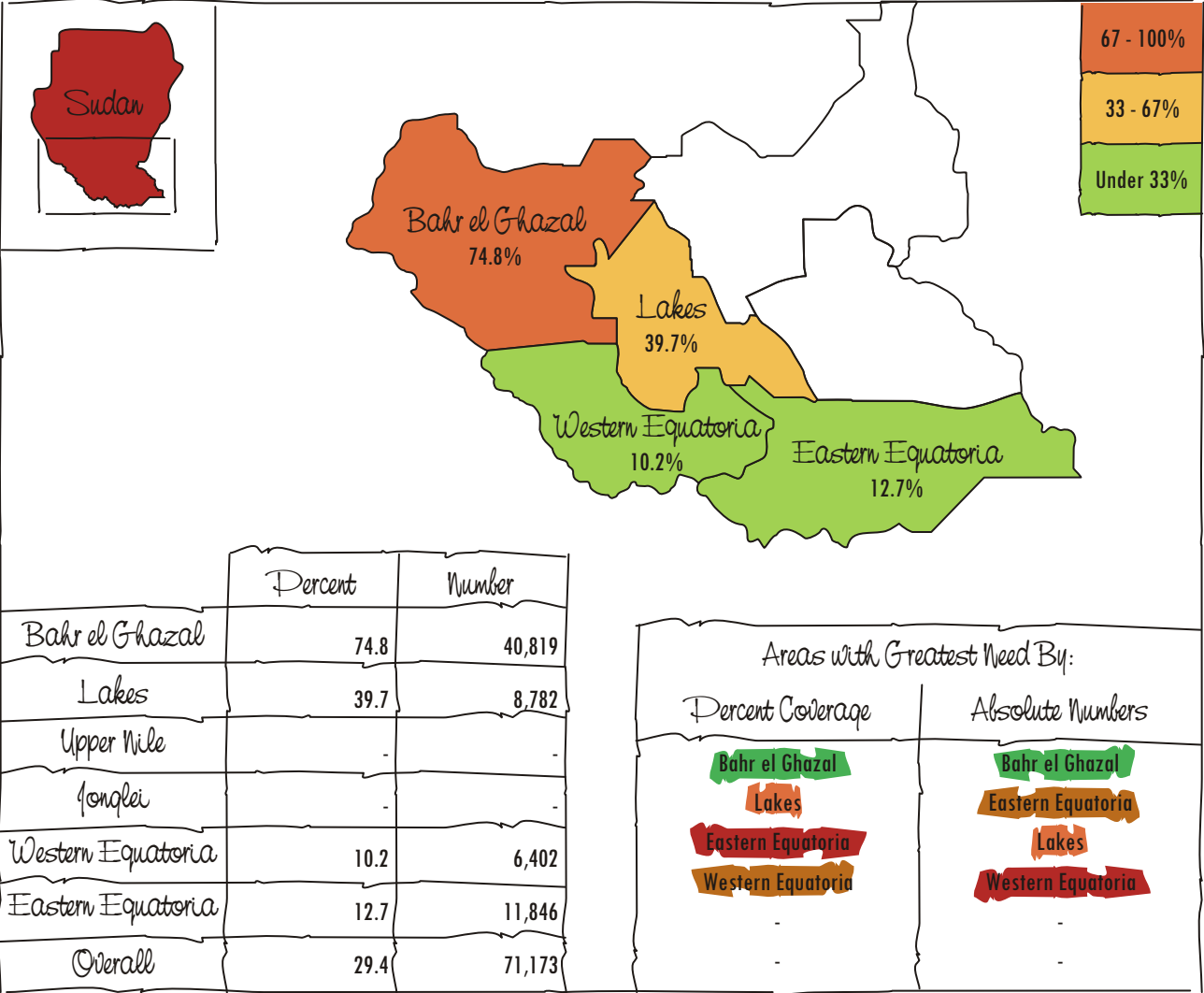
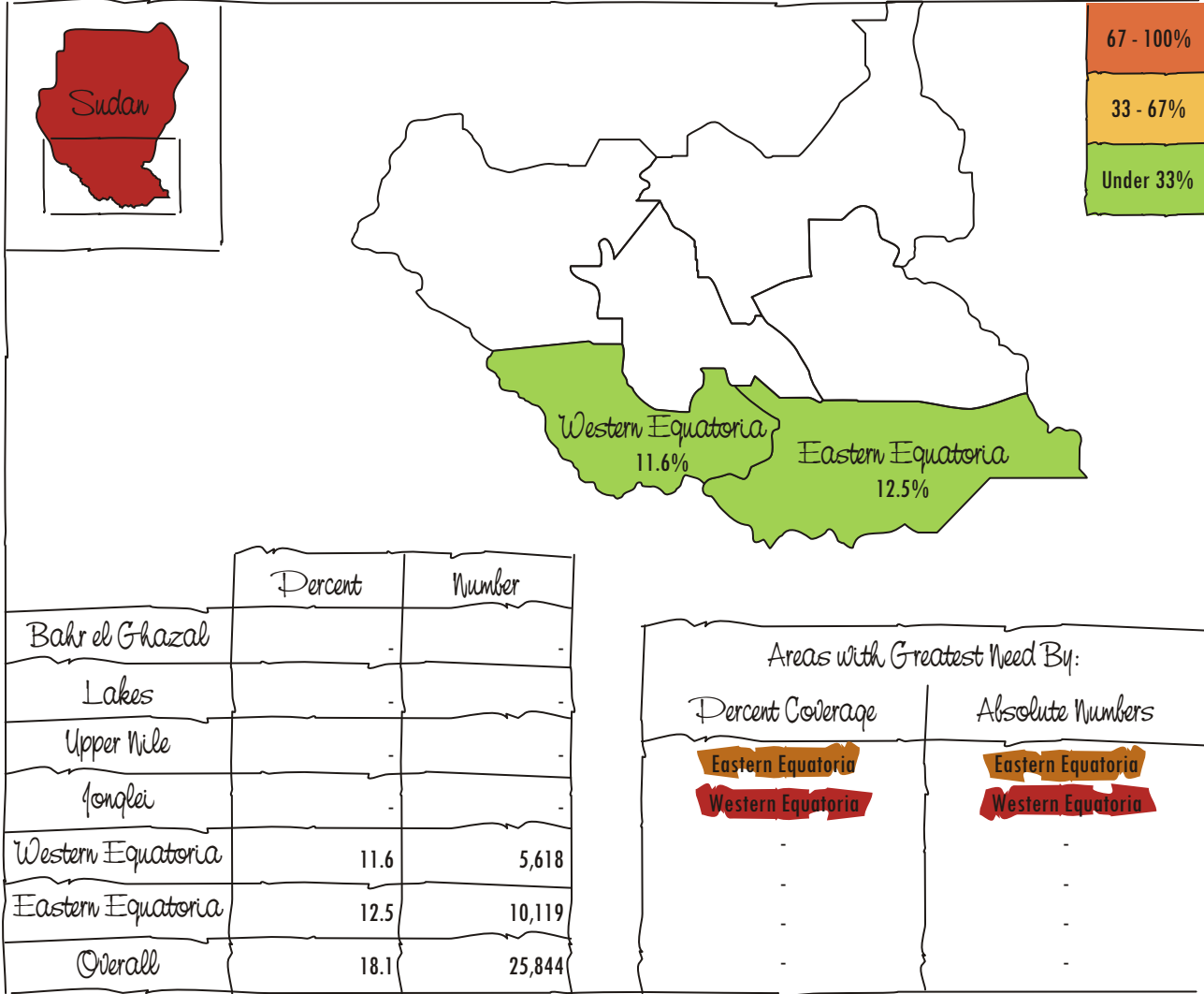


Table 55 - Adults who are Ignorant about the Transmission of HIV from Mother to Fetus & Infant



Humanitarian Assistance

Analysis

- Most households in southern Sudan are aware of the presence of humanitarian agencies. The low awareness of humanitarian agencies in Upper Nile could be due to fewer agencies working in that area and limited access due to insecurity and flight denials. While many humanitarian agencies are based in Western Equatoria, the low awareness might be due to the fact that fewer households need their support and therefore are not in contact with them.
- Of those who are aware of the presence of humanitarian agencies, most reported that they benefit from them except in Jonglei where one in three households do not.

Action Points

1. Development of local capacity and strengthening of coping capacities of the local communities should become the key objective of the work of all humanitarian assistance agencies operating in southern Sudan.

Table 56 - Households unaware of Humanitarian Agencies

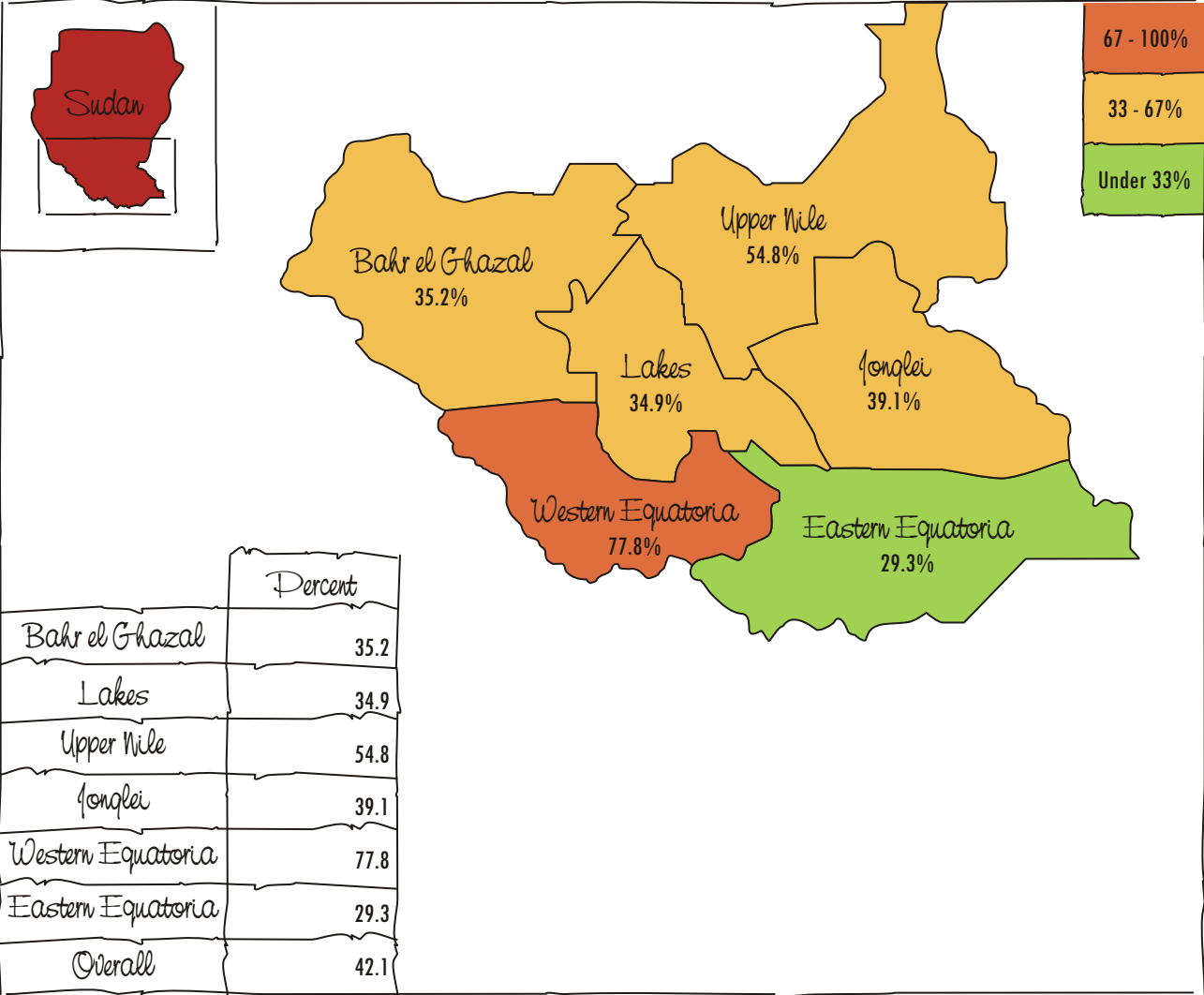
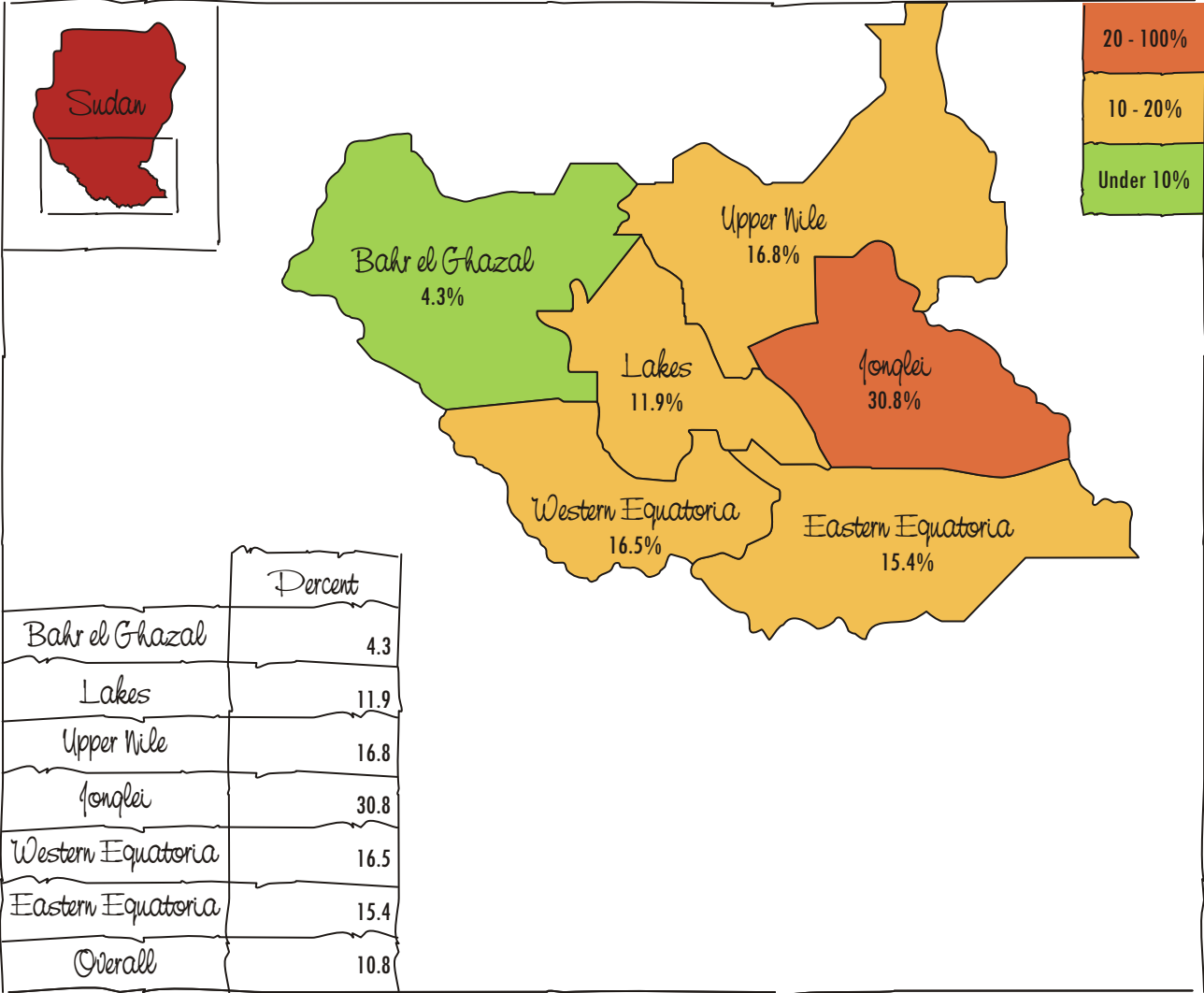


Table 57 - Households who do not benefit from Agencies



Protection

Analysis

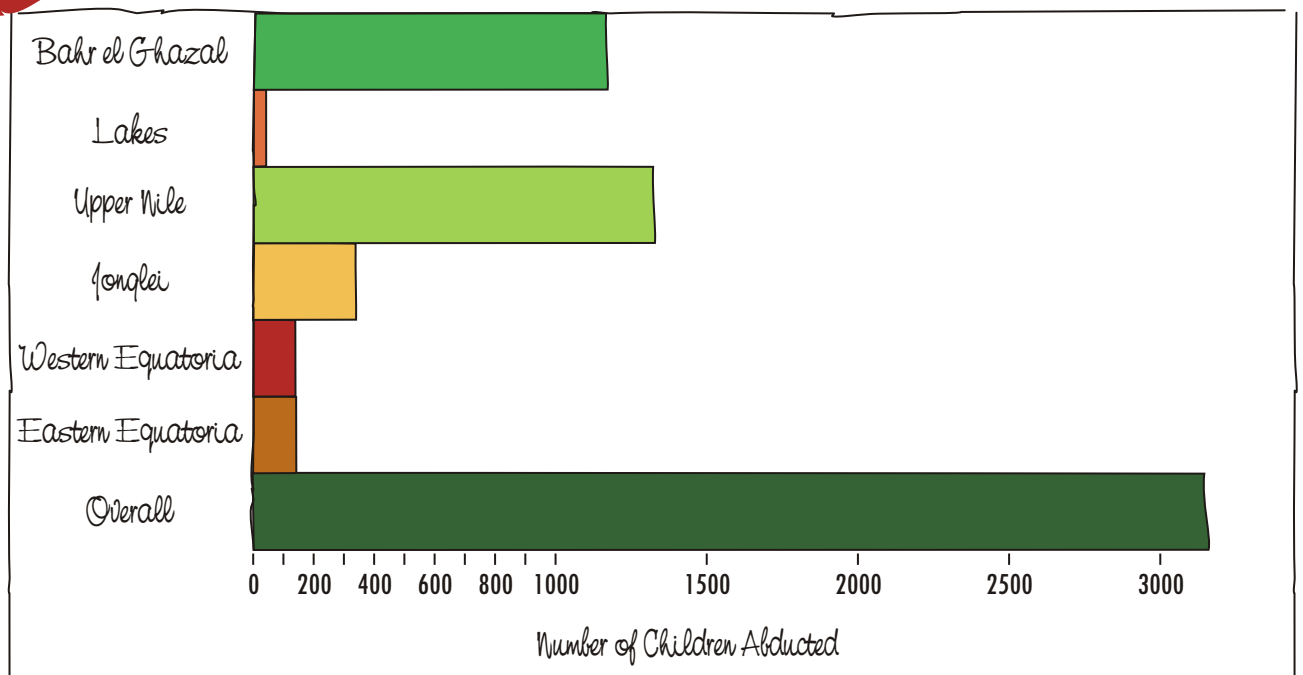
- It is estimated that almost 35,000 children of different age groups have been abducted by militia in the last 15 years. The largest numbers are reported in Bahr el Ghazal and Upper Nile - areas which are known for PDF, Muharileen and tribal raids.
- An estimated 16,000 women appear to have been abducted by militia in the last 15 years of conflict. Again, the largest numbers are reported from Bahr el Ghazal and Upper Nile.
- Over the last 15 years, it is estimated that almost 38,000 children under 18 have been conscripted into the army. Most recruitment seems to have taken place from Equatoria and refugee camps in neighbouring countries. Other studies and recent developments indicate that the trend is changing and that both the SPLA and SPDF are increasingly working towards the demobilization of child soldiers.
- These figures are based on anecdotal information and are at best indicative of the problem. The figures do not carry any statistical validity.

Action Points

1. Plans for implementing the commitments of the rebel movements on the demobilization of child soldiers need to be urgently put into place.
2. Coordinated actions with CEWAC on the identification and return of abducted children and women must be accelerated.

Article 35 guarantees prevention of abduction, sale or traffic of children. Article 37 assures that no child will be subjected to torture. Article 9 ensures that a child shall not be separated from his or her parents against their will.

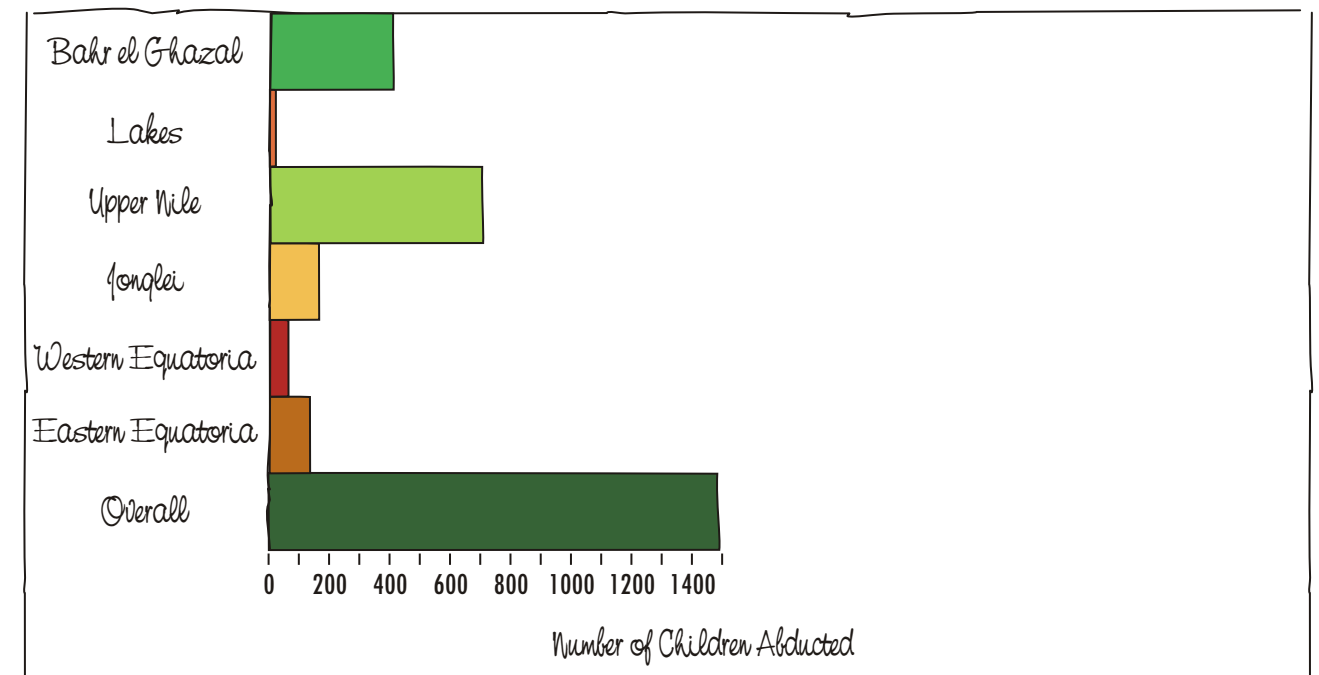
Table 58 - The Number of Children Abducted



	Number of Tribes	Number Abducted	From	To	
Bahr el Ghazal	2	1,171	1986	1999	Total in Study Area 3,163
Lakes	2	41	1990	1999	
Upper Nile	3	1,327	1985	1999	Extrapolated Number between 1985 and 1999 34,909
Jonglei	2	341	1986	1999	
Western Equatoria	3	140	1990	1999	
Eastern Equatoria	5	143	1990	1999	

Article 9 ensures that a child shall not be separated from his or her parents against their will.

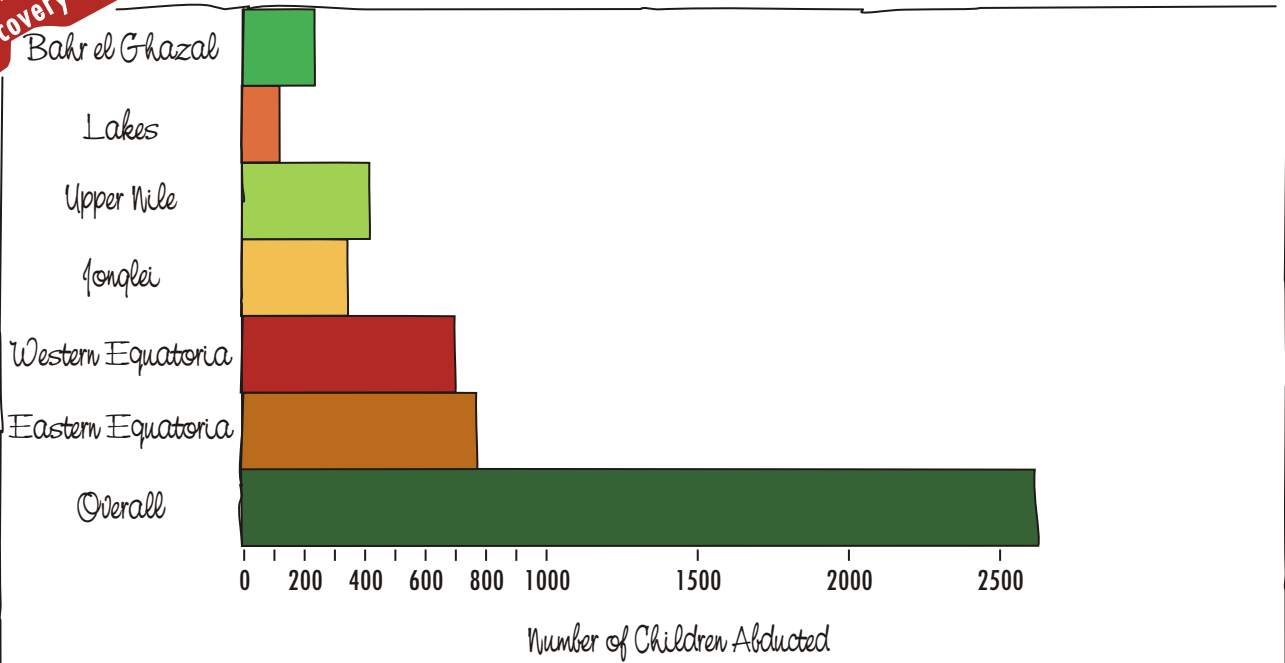
Table 59 - The Number of Women Abducted



	Number of Tribes	Number Abducted	From	To	
Bahr el Ghazal	2	409	1986	1999	Total in Study Area 1,492
Lakes	2	20	1990	1992	
Upper Nile	3	704	1985	1999	Extrapolated Number between 1985 and 1999 16,320
Jonglei	2	164	1986	1999	
Western Equatoria	3	61	1990	1997	
Eastern Equatoria	5	134	1990	1999	

Article 38 of the CRC states that children under 15 will not be recruited as soldiers. Article 32 gives all children the right to protection from hazardous work that is likely to affect their physical, mental and social development. Article 39 states that child victims will be supported in the recovery of physical and psychological damage.

Table 60 - The Number of Children Conscripted in the Army



	Number of Tribes	Number Abducted	From	To	
Bahr el Ghazal	2	240	1984	1996	Total in Study Area 2,638
Lakes	2	127	1997	1999	
Upper Nile	3	424	1986	1999	Extrapolated Number between 1985 and 1999 38,276
Jonglei	2	354	1986	1999	
Western Equatoria	3	711	1987	1999	
Eastern Equatoria	5	782	1986	1999	

Annexes

Annex 1: Confidence Interval Tables

Confidence Interval of Selected Indicators by Group

Confidence Interval of Selected Indicators

	Overall	Bahr El Ghazal	Lakes	Upper Nile	Jonglei	Western Equatoria	Eastern Equatoria
Antenatal Period & Delivery							
Antenatal Care <u>not</u> received during last Pregnancy	8.64	0.51	11.16	1.72	5.40	27.87	26.11
Vitamin A <u>not</u> received after Delivery	6.52	4.94	13.72	2.07	6.41	3.07	21.23
Tetanus Toxoid <u>not</u> received during last Pregnancy	7.27	1.89	16.35	3.49	5.140	16.63	27.05
Delivery <u>not</u> done at a Health Facility	6.56	0.52	7.39	0.95	4.61	1.73	26.28
Delivery Conducted by an <u>Untrained</u> Birth Attendant	10.39	6.52	8.95	4.82	5.74	24.20	29.29
Breastfeeding							
<u>Less</u> than 12 months continuous Breastfeeding	8.78	17.71	4.76	12.89	16.04	31.95	6.23
Immunization & Vitamin A							
Infants <u>not</u> immunized with the BCG Vaccine	7.06	6.21	15.26	10.94	11.20	22.57	17.17
Infants <u>not</u> immunized with the DPT Vaccine	8.49	14.52	18.05	9.51	22.38	25.75	18.16
Infants <u>not</u> immunized with the Polio Vaccine	7.87	14.18	11.04	16.76	9.18	19.09	16.14
Infants <u>not</u> immunized with the Measles Vaccine	11.14	22.16	12.47	15.94	13.76	25.64	14.57
Infants who did <u>not</u> receive Vitamin A	6.35	12.70	13.07	2.41	9.79	7.90	9.53
Children under 5 years: Diarrhoea							
Diarrhoeal episode in the last 15 days	3.48	6.22	9.30	8.67	2.93	13.92	4.70
<u>Not</u> given an ORS/Sugar-Salt solution	5.78	8.77	18.58	11.26	15.54	7.51	14.01
Diarrhoea <u>not</u> treated at a Health Facility	6.25	10.15	13.68	11.33	14.14	16.00	13.75
<u>Not</u> given more liquid during Diarrhoea	6.06	10.43	9.92	9.09	14.67	18.86	19.28
Given <u>less/no</u> food during Diarrhoea	5.83	8.40	20.70	9.71	11.68	16.56	9.67

Confidence Interval of Selected Indicators Continued

	Overall	Bahr El Ghazal	Lakes	Upper Nile	Jonglei	Western Equatoria	Eastern Equatoria
Children under 5 years: Fever, Cough & Malaria							
Had a Cough in the last 15 days	6.61	12.23	11.75	9.27	5.98	27.42	6.53
Had <u>difficulty/fast</u> breathing	7.37	13.39	13.20	9.10	15.96	16.77	9.87
Breathing problems not treated at a Health Facility	8.12	13.68	17.12	15.36	18.36	11.14	18.99
Had a Fever in the last 15 days	6.35	11.09	16.58	12.16	8.54	11.37	7.38
Medicine for fever not provided by Health Facility	7.19	11.68	18.36	14.14	12.98	22.10	12.63
<u>Do not</u> Sleep under a Bed-Net	5.96	9.86	16.02	11.85	16.25	10.92	2.67
Children under 5 years: Malnutrition							
Whose MUAC was <u>less</u> than 125mm	1.75	2.37	1.85	4.21	4.20	3.43	7.73
Children from 5 to 17 years: Education							
<u>Not</u> Enrolled in School in 1999	4.91	6.92	11.38	8.41	10.21	14.48	10.45
<u>Did not</u> attend classes for more than 3 days in a week	3.05	5.69	1.77	15.64	6.12	4.68	7.27
Among Unregistered <u>never</u> Registered in School	5.27	10.09	1.74	7.29	7.39	10.64	13.53
Children from 5 to 17 years: Household Work							
Those who help with Household Domestic Chores	7.50	12.27	5.70	16.89	14.64	18.64	9.74
Those who help with Income Generation Work	8.44	13.31	11.27	13.96	9.64	20.51	7.01
Disability & Impairment							
Children Under 5 who have a Disability/Impairment	3.24	5.17	2.48	14.65	4.92	12.27	7.03
Children 5-17 who have a Disability/Impairment	3.17	5.56	3.43	12.87	12.92	3.72	8.63
Children 5 - 17 who had problems with Night Vision	3.28	5.51	5.02	3.54	6.75	4.24	10.02

Confidence Interval of Selected Indicators Continued

The Environment for Survival, Growth & Development	Overall	Bahr El Ghazal	Lakes	Upper Nile	Jonglei	Western Equatoria	Eastern Equatoria
Water & Sanitation							
Drinking <u>Unsafe</u> Drinking Water in the Dry Season	10.82	17.40	13.34	0.93	5.93	14.86	33.42
Drinking <u>Unsafe</u> Drinking Water during Cultivation	11.74	24.06	16.25	0.46	1.22	11.65	28.29
Households <u>not</u> using Sanitary Latrines	11.87	12.62	5.31	3.65	5.49	13.71	13.36
Latrine Users but do <u>not</u> have one	16.42	-	-	-	-	6.54	11.72
Household Food Security							
Households who do <u>not</u> have Livestock	5.34	8.96	8.57	12.11	6.57	12.48	9.15
Food since last harvest <u>not</u> own or <u>not</u> purchased	9.78	11.24	13.03	21.79	9.27	13.62	16.67
<u>Wild</u> or No Food Consumed Yesterday	4.81	8.98	4.65	16.78	5.02	3.09	11.07
Households with <u>Wild</u> or No Food during Drought	12.69	17.07	4.66	14.53	4.52	13.31	11.88
Use of Salt							
Households who do <u>not</u> Use Salt	6.97	10.58	18.48	16.83	9.37	7.46	5.39
Salt user Households who Use <u>Non-iodized</u> Salt	13.27	16.55	2.62	18.27	11.72	32.13	27.66
Awareness of Child Rights							
Households <u>Unaware</u> of the Rights of Children	13.17	4.30	14.07	7.35	7.55	36.79	10.95
Households <u>Unaware</u> of the CRC	5.04	7.41	17.12	20.95	11.28	17.07	1.32
Awareness related to HIV/AIDS							
Adults who have <u>never</u> heard of HIV or AIDS	8.14	13.46	24.35	17.58	7.22	19.78	10.43
Do <u>not</u> know about HIV or AIDS related problems	5.35	21.81	19.27	-	-	4.99	6.52
Do <u>not</u> know of Relation of Unprotected Sex to HIV	15.90	23.71	13.44	-	-	7.37	10.63
Ignorant about Transmission of HIV from Mother to Child	14.56	-	-	-	-	12.73	10.52
Humanitarian Assistance							
Households <u>Unaware</u> of Humanitarian Agencies	11.31	14.25	20.52	22.85	9.02	19.60	26.52
Households who do <u>not</u> Benefit from Agencies	3.33	3.89	10.49	12.79	11.22	17.40	10.54

Annex 2: Methodology

Survey Methodology

Purpose

The study was conducted to estimate indices related to health, education, child employment and household characteristics for the six individual regions of southern Sudan.

A second, equally important goal was to establish statistically significant regional population estimates for southern Sudan for the first time in over seventeen years.

Survey Population

The study's statistical population was defined as all households in areas of southern Sudan deemed to be accessible in terms of internal security. Government garrison towns and their environs were recognised as 'out of scope' for the survey. It is thought that between 70 and 80 percent of the population residing in southern Sudan is thus covered by the survey. The sample that was designed and executed was done so in accordance with statistical probability selection methods so that the results are a valid representation of the population covered by the survey.

Statistical Unit

The household was taken as the statistical unit for the survey - defined as those individuals regularly coming together to eat from the same cooking pot.

Sampling Unit

The sampling unit was a cluster of twenty-five households. The clusters were selected in a 3-stage sampling process that is described in detail in the sub-heading below, 'Choosing Sample Clusters'.

Sampling Frame

As no recent census information or comparable framework exists for southern Sudan the sampling frame had to be created from scratch. The social hierarchy existent in southern Sudan was therefore used, whereby a listing of 'Executive Chiefs' or their equivalents, together with the number of Sub-Chiefs falling under each, was created.

Representatives of town populations, fishing communities and large groups of displaced persons were equated as equivalent to an Executive Chief and therefore included in the sampling frame as such.

Sample frame information for five of the twenty-eight counties/states could not be obtained prior to the survey, for reasons of security, access, or data availability, and therefore these areas had to be ruled out of scope for the study.

Survey Methodology

Data Collection

Data were collected through verbal interviews, conducted by southern Sudanese survey staff, working in one or more of the local languages. The information acquired was entered by the interviewer into a pre-prepared questionnaire (in English), designed to record the data of five households. Out of the 5000 households originally targeted by the survey, a total of 4300 were successfully interviewed. Thus the overall survey response rate was 86 percent ($100 \times \text{number interviewed} / \text{number selected into the sample}$).

It should be noted, however, that where households could be reached by survey staff, the response rate was 100% and therefore the interviewed household shortfall with the target was due to the last minute withdrawal of certain sample locations from the survey for reasons of security and/or accessibility.

Survey Reference Period

The survey reference period for the various indices to be studied varied between the day of questioning, to one day, one week, two weeks, one year, two years, five years or an open ended period in antecedenence.

Timing

The field survey was carried out between October 11th and November 7th, 1999.

Sample Size

Standard formulas for sample size determination cannot be applied in southern Sudan, as information on the predicted sizes of the key indicators is not available. However, on the basis of MICS surveys carried out in other countries, with sample sizes ranging from 3000 to 10000 households, a plausible sample size of 5000 households was suggested and adopted for southern Sudan.

A sample size of 5000 households was judged large enough to provide reliable data for all important indices, even if some of them have low prevalence rates of 10 or 15 percent. Furthermore, a sample of this size would allow reliable estimates to be made for each region (*) and the 3 or 4 largest ethnic groups.

Calculation of sample size based on an estimated coverage rate of 15 per cent for key immunisation indicators (e.g. polio), plus a number of other assumptions, yielded a figure of 5509 households, sufficiently close to support the proposed sample size (see appendix).

(* Assuming the population sizes of each region are more or less the same and that a given region does not contain less than 10 percent of the total in-scope population).

Survey Methodology

Choosing Sample Clusters

The sample clusters were chosen by means of the following process:

- Compilation of a sample frame listing, by county and payam / state and district, of Executive Chiefs, or their equivalents, and the number of Sub-Chiefs falling under each;
- Determination of areas (counties/states, payams/districts) out of scope for the survey - for reasons of insecurity, access, or lack of sample frame data and removal of associated Executive Chief and Sub-Chief information from the sampling frame;
- Arrangement of Executive Chief and Sub-Chief data according to a serpentine geographic ordering of the counties/states in southern Sudan starting in the northwest corner and finishing in the southeast corner
- Extraction of a systematic, stratified sample of 200 Sub-Chiefs from a total of 2238 in the final, adjusted, sampling frame; this by choosing every eleventh Sub-Chief ($2238/200 = 11.19$) from a random start (6) in the serpentine geographic listing;
- Identification of each sample Sub-Chief by number (n) and Executive Chief name and base location;
- Field identification of 'nth' Sub-Chief from roster held or generated by the selected Executive Chief or equivalent;
- Random selection in the field of sample 'Gol Leader' or headman from roster held or generated by the sample Sub-Chief;
- After locating the sample Gol Leader or headman, he was requested to assist in the generation of a simple sketch map showing the number and relative locations of households under his jurisdiction. The resultant sketch map was then divided into segments, each containing 25 roughly adjoining households. A random selection was then made from one of the resultant segments.

Data Collection from the Statistical Units within each Cluster

- All 25 households within the selected sample segment or cluster were interviewed in turn this approach was adopted to minimise the time wasted moving between households and to avoid potential respondent data registration problems, when adjoining households are not covered;
- A 'household' was defined as those individuals regularly coming together to eat from the same cooking pot;
- The questionnaire was divided into six sections: 1) Cover Page: Cluster / Interviewer Details, 2) Household Listing: Demographic Details of up to 5 Households, 3) Section A: Questions for Children Under 5 Years, 4) Section B: Questions for Children Aged 5-17 Years, 5) Section C: Questions on HIV/AIDS, for Men & Women of 18+ Years, 6) Section D: Questions on General Household Data;
- In Sections 'A' and 'B' of the questionnaire the reference person for questioning was the mother (or principal 'caretaker') in the household. Where more than one mother/caretaker was present in the same household data was collected from each, starting with the mother of the youngest child, within the particular age group. Information was collected on all the children, in both age groups, of household mothers/caretakers.

Survey Methodology

- In Section 'C' of the questionnaire, probing knowledge of HIV/AIDS, male interviewers were instructed to direct questions to the youngest man in the household above 18 years of age and female interviewers the youngest women in the household above 18 years of age;
- In Section 'D' the key respondent was the senior mother or caretaker - one respondent per household.

Formulas and Analysis

Completed questionnaire forms were collected by survey supervisors at regional 'hub' locations in southern Sudan, for consolidation, checking and despatch to UNICEF/OLS Headquarters in Nairobi passing via the OLS field base in Lokichokio, north-west Kenya.

Upon arrival in Nairobi each questionnaire was again screened prior to entry of the information into the survey database, by means of a specially tailored FoxPro Programme.

Data analysis was principally conducted using SPSS version 6, while Excel spreadsheets were used to summarise and present results.

Weighting of Indicators

The probability of selection is given as follows:

$$P_{ij} = \left(\frac{172}{2238} \right) \left(\frac{1}{g_i} \right) \left(\frac{m_j}{25} \right)$$

P_{ij} is the probability of selecting the j^{th} household or person under the i^{th} 'gol' leader / headman,

2238 is the total number of locations in the universe - that is, the total number of Sub-Chief jurisdictional areas that are in scope for MICS,

172 is the actual number of sample locations (PSUs),

g_i is the total number of 'gol' leaders / headmen in the i^{th} sample PSU,

1 is the number of sample 'gol' leaders / headmen in the i^{th} sample PSU,

m_j is the total number of households under the j^{th} sample 'gol' leader / headman, and

25 is the number of sample households under the j^{th} sample 'gol' leader / headman

The weight, W_{ij} , is simply the inverse of P_{ij} , or

$$\begin{aligned} W_{ij} &= \left(\frac{2238}{172} \right) \left(\frac{g_i}{1} \right) \left(\frac{25}{m_j} \right) \\ &= \frac{2238 g_i m_j}{4300} \\ &= \frac{g_i m_j}{1.92} \end{aligned}$$

Survey Methodology

Sampling Errors

To estimate the sampling variances (square of the standard errors, or sampling errors), the Taylor linearization method is the technique to use for MICS Sudan, as it is suitable to estimate variances for simple means or proportions, which is what most of the indicators are. This method of variance estimation organizes the first-stage sampling units the 172 PSUs for MICS Sudan into implicit strata containing at least two such units. To achieve homogeneity of implicit strata this is done by pairing adjacent PSUs in their original order of selection. This means there would be 86 such implicit strata for purposes of estimating the variances.

To calculate the variance any percentage or average is treated as a ratio estimate, $r = y/x$, of two sample totals y and x , where y is the weighted sample total for variable y (example, number of one-year olds vaccinated for polio) and x is the weighted sample total for the population in the sub-group under consideration (that is, one-year-old children). The variance of r is given as

$$\text{var}(r) = \left(\frac{1}{x^2} \right) \sum_{h=1}^H \left(\frac{m_h}{m_{h-1}} \right) \left[\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_{hi}^2}{m_{hi}} \right]$$

for which $z_{hi} = y_{hi} - (r)x_{hi}$

and $z_h = y_h - (r)x_h$

h represents the implicit stratum which varies from 1 to H (i.e., 1 to 86),

m_h is the total number of clusters selected in the h^{th} stratum,

y_{hi} is the weighted sum of the values of variable y in the i^{th} cluster in the h^{th} stratum,

x_{hi} is the weighted sum of the number of cases in the target group in the i^{th} cluster in the h^{th} stratum.

The square root of the variance is the standard error.

Source: Anthony G. Turner, Sample Design and Procedures for Multiple Indicators Cluster Survey of South Sudan, August-September 1999

Sample Size Calculation

In the MICS Handbook instructions are given for sample size determination, either by application of a mathematical formula that is provided or through using one of two tables in which sample sizes are pre-calculated. The latter may be available if the country situation fits various pre-determined assumptions.

The Handbook suggests that sample size be determined by choosing among several key MICS indicators that are expected to have low coverage rates. These include immunization coverage rates for DPT, measles, polio and tuberculosis, plus the indicator, birth weight below 2.5 kilograms. From among these key indicators, the one which has the lowest expected coverage rate is the one which is used to calculate the sample size, on the grounds that every other important MICS indicator would be measured with an equal or greater sampling reliability.

The formula for calculating sample size is given by:

$$n = \frac{4r(1-r)(f)(1.1)}{e^2(p)n_h}$$

Taking the components in order,

- n is the sample size for the KEY (rarest) indicator,
- 4 is a factor to achieve the 95 percent level of confidence,
- r is the predicted or anticipated prevalence (coverage rate) for the key indicator, which is further based upon the smallest target group in terms of its proportion of the total population,
- f is the survey design effect¹, and is assumed to equal 1.75 (if better information is not available from another survey),
- 1.1 is the factor necessary to raise the sample size by 10 percent to counter non-response,
- e is the margin of error to be tolerated, either 5 percent or 3 percent (i.e. .05 or .03),
- p is the proportion of the total population that the smallest target group comprises, and is generally assumed to equal 3 percent (i.e., .03) for a single-year age group such as 12-23 months old, unless more precise information is available,
- n_h is the average household size, assumed to be 6.0 again unless better data are available.

¹ The design effect, or deff, is a ratio of the expected sampling variance from the MICS compared to that of a simple random sample of the same size. It is a measure of how much more unreliable the cluster survey is compared to a random sample.

Sample Size Calculation

In South Sudan, the coverage rates for the key immunization indicators are thought to be about 15 percent value of r of 0.15. When coverage is that low, the Handbook urges the use of a margin of error, e, of .03 (when coverage is considerably higher, e should be taken as .05). Assuming the values of p, f and n_h are as given above, and ignoring the adjustment factor for non-response since it was expected that the response would be nearly 100 percent, the calculation for sample size, n, is given by

$$n = \frac{4(0.15)(0.85)(1.75)}{0.03^2(0.03)(6)}$$

$$= 5509 \text{ households.}$$

(The actual response rate obtained was 100 percent, in the sample cluster locations successfully reached by survey staff ; the overall survey response rate was 86 percent).

We have settled on a sample size of 5000 households, since that is close to the calculated value and the formula is fraught with assumptions anyway. The interpretation of the sample size is that if the true value of the immunization coverage rate for an indicator, say, polio, is 15 percent, then the survey will measure it within a 3 percentage point margin of error at the 95 percent level of confidence. In other words, the confidence interval of the estimate of polio vaccinations would be 12-18 percent.

Coverage may be less than the assumed value of 15 percent for some important indicators. If it is as low as 10 percent, for example, the sample size necessary to measure it with 3 percent margin of error would be about 3900 households. It is better to take the conservative approach, however, and use the larger sample size of 5000.

Regional estimates are also wanted. In general the margin of error for each of the 6 regions would be about 2.45 (the square root of 6) times higher than the national margin of error, or about 7.3 percentage points rather than 3. For an ethnic, tribal group that comprises about 25 percent of the total population, the margin of error for the estimates would be approximately twice as large (square root of 4), or 6 percentage points.

Source: Anthony G. Turner, Sample Design and Procedures for Multiple Indicators Cluster Survey of South Sudan, August-September 1999

Annex 3: Definitions

Definitions

Part A: Definitions of terminology used in the Questionnaire For Children Under 5 Years of Age

ORS /Home-made fluid not given during Diarrhoea

'ORS' or 'Sugar-Salt Solution' was not administered during last diarrhoeal episode

Diarrhoea not Treated in Health Facility

Last diarrhoeal episode was treated either by 'Village Practitioner', 'Self /Family' or 'Other'

More Liquid Not Given During Diarrhoea

'Same', 'Less' or 'No' liquid was given during the episode

Less/No Solid Given During Diarrhoea

'Less' or 'No' solid was given during the episode

Difficulty Breathing (ARI) not Treated in Health Facility

Short /difficult breathing episode was treated either by 'Village Practitioner', 'Self /Family' or 'Other'

Did not go to Health Facility with Fever

Did not go to health facility with the complaint of fever

Less than 18 Months of Continuous Breastfeeding

Children were continuously breastfed for less than or equal to 12 months, among 13-24 month old children

Less than 4 Months of Exclusive Breastfeeding (5-18)

Children were exclusively breastfed for less than or equal to 4 months, among 5-18 month old children

Didn't Receive Vitamin-A in last 6 Months

Did not receive Vitamin-A within the last 6 months before the interview, among the 6-59 month old children

Didn't Receive BCG Vaccine

Did not receive BCG vaccine, among the 12-23 month old children

Received None/One DPT Dose

Did not receive two or more dose of DPT, among the 12-23 month old children

Received None/One Polio Dose

Did not receive two or more polio doses, among the 12-23 month old children

Didn't Receive Measles Vaccine

Did not receive measles vaccine, among the 12-23 month old children

Mid-upper-arm-circumference (MUAC) less than 125 mm

Children with 70-124 mm mid-upper arm circumference (MUAC)

Disability / Impairment among Children under 5

Children with 'Hearing /Vision' impairment, 'Hand / Leg' disability, 'Speaking' or 'Mental' retardation, among 12-59 month old children

Definitions

Part B: Definitions of terminology used in the Questionnaire For Children 5 to 17 years of Age

Not enrolled in School in 1999

Children 5-17 years of age not enrolled in school, irrespective of gender

Attended less than 4 Days in Last Week (among enrolled)

Among the enrolled children, the number (percent) of children who did not attend school for more than 4 days

Never enrolled in Past (among not enrolled)

Among the non-enrolled children, the number (percent) of children never enrolled

Had Problem with Night Vision

Children of 5-17 years with problem in night vision

Disability / Impairment among Young Children

Children 5-17 years of age with 'Hearing / Vision' impairment, 'Hand / Leg' disability, 'Speaking' or 'Mental' retardation

Did Domestic Chores

Number of children 5-17 years of age engaged in domestic chores at least half of a day

Did Productive Works

Number of children 5-17 years of age engaged in productive work for the household at least half of a day

Part D: Definitions of terminology used in the Questionnaire For Households

Last Delivery Not in Health Facility

Last delivery occurred either 'At Home' or 'any other place, other than a Health Facility'

Delivery Assisted by Untrained persons

The delivery was assisted by 'Untrained TBA', 'Family members' or 'Others'

Did not Receive TT vaccine

Did not receive tetanus-toxioid (TT) vaccine during the last pregnancy

Advice / Service Not Taken from Doctor / Trained TBA

Did not take any advice / service from 'Doctor / Nurse / Midwife' or 'Trained TBA' other than TT during the last pregnancy

Problem with Vision During this Pregnancy

Any difficulty in vision during last pregnancy either in 'Day time', 'Evening' or at 'Night'

Definitions

Part D Continued: Definitions of terminology used in the Questionnaire For Households

Did not Receive Vitamin-A After Delivery

Did not receive any Vitamin-A dose in the first two months after delivery

Not Drinking from Pump / Protected Spring During Dry Season

Household drinking water source in dry season is either 'Open well / Spring', 'River / Stream' or 'Pond / Canal'

Not Drinking from Pump / Protected Spring During Cultivation

Household drinking water source during cultivation is either 'Open well / Spring', 'River / Stream' or 'Pond / Canal'

Family Food was not of Own Produce / Purchase

Since last harvest, the household was dependent on 'Wild food', 'Loan' or 'Relief / Assistance'; i.e. they could not afford 'Own produced food' or 'Purchase food' for the family

Family did not Take Standard Food Yesterday

Household members either took 'Wild food' or 'No food' in the preceding day of interview

Family did not Take Standard Food During Worst Days

Household members either took 'Wild food' or 'No food' in the worst period since last harvest

Household does not Have Livestock

The household does not possess any kind of livestock, either 'Owned' or 'Kept'

Household does not Use Salt

Household does not use salt

Non-iodized Salt Used Among the Salt User

Use of non-iodized salt in the salt using household

Unaware of Humanitarian Agencies

Not aware of any humanitarian agencies working in the area

Did not Get Any Benefit (Those Aware of Agencies)

Did not get any sort of benefit from the agencies. This was asked to those who know about the activities of the NGOs

Household Members Defecate in Open Place

Household members does not use 'Improved pit latrine' or 'Traditional pit latrine'

Latrine Used but Not Owned by the Household

The household is using an 'Improved pit latrine' or 'Traditional pit latrine', but it is not in their dwelling unit

Definitions

Definitions and Special Notes of Selected Indicators

Diarrhoea within last 15 days

The percentage of children under five who had three or more episodes of loose or watery stools per day or blood in stool in the 15 days preceding the date of interview.

Diarrhoea treatment practices

Percentage of diarrhoea cases managed by the use of ORS, Salt/Sugar solution/ any other fluid prepared at home, modern or traditional medicines or any other practices, used at home, as one of the "types of treatment". Does not include plain drinking water (multiple responses possible).

Source of treatment of diarrhoea

Source of treatment of the episode of diarrhoea that took place in the last 15 days. Percentage of cases that received any treatment. This includes the health facility or qualified allopathic practitioner, unqualified village practitioners, self/family etc. (multiple responses possible).

ORT use rate

The percentage of all cases of diarrhoea episodes in the last 15 days that received increased amounts of fluid and continued feeding. Increased fluid includes all home-made fluids, ORS and water. Continued feeding includes all foods and breastfeeding with increased or same quantity. Water is considered as ORT in cases where feeding is continued.

ORS/Sugar-salt use rate

Percentage of diarrhoea episodes in under-five age group treated with oral rehydration salts (ORS) and/or sugar-salt solution.

Source of Treatment/advice during ARI (care seeking for ARI)

The percentage of ARI episode (cough/cold with difficult/fast breathing) in under-five age group children, that received treatment or advice from different sources like health facility, village practitioner, self/family or others.

Medicine provided by Health Facility during fever episode

The percentage of fever episodes in last 15 days among children aged less than five years that received some medicine from the health facility. The responses include Paracetamol, chloroquine, Fansider and others. Some did not know the type of medicine given.

Exclusive breastfeeding rate (less than 4 months)

The percentage of children aged less than 4 months who were breastfeeding exclusively from birth to the date of interview. Non-exclusive breastfeeding includes feeding the infant honey, water or any other food given as per-lactial food only once after birth. But it does not include water or any other food except breast milk and medicine in case of illness (excluding ORS).

Timely Supplementation Rate (6-9 months)

The percentage of children aged 6-9 months who are receiving breast milk and complementary food.

Definitions

Definitions and Special Notes of Selected Indicators Continued

Continued breastfeeding rate at two years

The percentage of children aged 20-23 months who were breastfeeding continuously from birth to the date of interview with or without supplementation. (Summary Table)

Continued breastfeeding rate at fifteen months

The percentage of children aged 12-15 months who were breastfeeding continuously from birth to the date of interview with or without supplementation. (Summary Table)

Duration of continued breastfeeding

The duration of breastfeeding (exclusive or not) in children who are currently in the age group of 13-59 months.

BCG vaccination coverage

Percentage of children aged 12-23 months immunized against tuberculosis with one dose of BCG.

DPT vaccination coverage

Percentage of children aged 12-23 months immunized against diphtheria, pertusis and tetanus with one, two or three doses (DPT3).

OPV (Polio) vaccination coverage

Percentage of children aged 12-23 months immunized against poliomyelitis with one, two or three doses (OPV3).

Measles vaccination

Percentage of children aged 12-23 months given one dose of Measles vaccine within 9 to 12 months of age.

Prevalence of severe malnutrition

The percentage of children aged 12-59 months who have a mid-upper arm circumference of less than 12.5 cm. This figure represents the prevalence of severe malnutrition.

Vitamin A administration

The percentage of children aged 6-59 months who received one or more doses of Vitamin A within six months preceding interview.

Disability (12-59 months)

Percentage of 12-59 months children who had physical or mental disabilities (multiple responses possible).

Disability (5-17 years)

Percentage of 5-17 years children who had physical or mental disabilities (multiple responses possible).

Place of last delivery

The percentage of deliveries that occurred in the last year, by the place of occurrence i.e. health center/hospital, home or any other place.

Last delivery assisted by

The percentage of deliveries in the last year assisted by trained personnel i.e. doctor, trained health worker, midwife or trained traditional birth attendant.

Definitions

Definitions and Special Notes of Selected Indicators Continued

Tetanus Toxoid during last pregnancy

Percentage of women in the last year from the date of interview who received one or more doses of TT during this pregnancy.

Ante-natal care

Percentage of mothers who delivered their last child within one year the date of interview and received ante-natal care in the form of advice or service (excluding TT) from any source during the pregnancy period.

Mothers with night blindness

The percentage of mothers who delivered their last child within the one year preceding the date of interview who suffered from night blindness during their last pregnancy.

Source of drinking water

The percentage of households collecting drinking water from various sources. Does not take into consideration the amount of water collected, the time taken for water collection, nor the distance of the water source from the house. Multiple sources were considered for the same house.

Iodized salt consumption

The percentage of households using iodized salt as assessed by using starch solution. Strong color change of salt after using starch solution indicates "strong iodized", weak change as "weak" and none as "not iodized".

Type of latrine

The percentage of households with sanitary latrines denotes those households where at least one member uses either an improved pit latrine or a traditional pit latrine. Open-air defecation is considered unsanitary (multiple responses possible).

Knowledge of mother to child transmission of HIV

The percentage of women who correctly identify the means of transmission of HIV from mother to child.

Annex 4: Questionnaire

Questionnaire

UNICEF OPERATION LIFELINE SUDAN
(SOUTHERN SECTOR)

DATA COLLECTION FORM
MULTIPLE INDICATOR CLUSTER SURVEY 1999

Please do not fill the boxes - official use only.

Reg. No:
Stratum: Rural 1 Urban 2
Region:
Payam:
Chief:
Gol / Community Leader / Headmen:

Cluster Number:
County/State:
Tribe:
Sub-chief:
Village:

Interviewer, please do fill form number and date boxes.

Total Number of Gol/Community Leaders/Headmen under selected Sub-Chief
Total Number of Households under selected Gol/Community Leaders/Headmen

Form No: 1, 2, 3, 4, 5, 6 Date (Day/Month/Year):

Interviewer (Full Name): Supervisor (Full Name):

Last questions to all respondents.

Q. Are any of the respondents able to say whether a child or woman from this area has been abducted?

If yes, how many and when Children - how many? When?
Women - how many? When?

Q. Are any of the respondents aware of any children who are working as soldier?

If yes, how many children are they aware of Since when?

Questionnaire

HOUSEHOLD NUMBER:				Name of Head of Household (in full):				
				For persons age 15 or over	For children under age 15			
Line Number	Name	Male or Female	Age 1 = 0 - 4 2 = 5 - 17 3 = 18+	Reading Card 1 = Easily 2 = Difficulty 3 = Not at all	Is natural mother alive?	If alive does mother live in household?	Is natural father alive?	If alive does father live in Household?
LINE		M F	AGE	E D N	Y N DK	Y N	Y N DK	Y N
01		1 2	1 2 3	1 2 3	1 2 9	1 2	1 2 9	1 2
02		1 2	1 2 3	1 2 3	1 2 9	1 2	1 2 9	1 2
03		1 2	1 2 3	1 2 3	1 2 9	1 2	1 2 9	1 2
04		1 2	1 2 3	1 2 3	1 2 9	1 2	1 2 9	1 2
05		1 2	1 2 3	1 2 3	1 2 9	1 2	1 2 9	1 2
06		1 2	1 2 3	1 2 3	1 2 9	1 2	1 2 9	1 2
07		1 2	1 2 3	1 2 3	1 2 9	1 2	1 2 9	1 2
08		1 2	1 2 3	1 2 3	1 2 9	1 2	1 2 9	1 2
09		1 2	1 2 3	1 2 3	1 2 9	1 2	1 2 9	1 2
10		1 2	1 2 3	1 2 3	1 2 9	1 2	1 2 9	1 2

Questionnaire

Part A: For Children Under 5 Years of Age

Interviewer: in some cases there may be more than one mother/caretaker in the same household. If this is the case, then start with the mother/caretaker of the youngest child and collect information regarding all her children under 5 years before proceeding to the next mother.

Serial Number: _____
 Household Number: _____
 Child's Name: _____
 Mother's Line Number: _____
 Child's Line Number: _____

- Q. 1. Sex of the child
 A. 1. 1 - Boy 2 - Girl
- Q. 2. Age of the child
 A. 2. ____ months
- Q. 3. Was there any loose motion in last 15 days for 3 or more times in a day?
 A. 3. 1 - Yes 2 - No
- Q. 4. If 'yes', what type of treatment was received by the child (if none skip to 6)?
 A. 4. 1 - None 2 - ORS 3 - Salt/Sugar Solution 4 - Home Fluids 5 - Modern Medicine 6 - Traditional Medicine 7 - Other
- Q. 5. Who treated the child during this loose motion?
 A. 5. 1 - Health Facility 2 - Village Practice 3 - Self/family 4 - Other
- Q. 6. How much liquid was given to the child during loose motion, compared to normal?
 A. 6. 1 - More 2 - Same 3 - Less 4 - None
- Q. 7. How much solid/usual food was given to the child during loose motion, compared to normal?
 A. 7. 1 - More 2 - Same 3 - Less 4 - None
- Q. 8. Has (name) had an illness with a cough at any time in the last two weeks, that is since (day of the week) of the week before last?
 A. 8. 1 - Yes 2 - No 3 - Don't Know
- Q. 9. When (name) had an illness with a cough, did he/she breathe faster than usual with short, quick breathes or have difficult breathing?
 A. 9. 1 - Yes 2 - No 3 - Don't Know
- Q. 10. Did you seek advice or treatment for the illness outside home? If 'yes', from where did you seek care?
 A. 10. 1 - Health Facility 2 - Village Practice 3 - Self/family 4 - Other

Questionnaire

Part A Continued: For Children Under 5 Years of Age

- Q. 11. In the last two weeks, has (name) been ill with a fever?
A. 11. 1 - Yes 2 - No 3 - Don't Know
- Q. 12. Did (name) take a medicine for fever or malaria that was provided at/by the health facility?
A. 12. 1 - Yes 2 - No 3 - Don't Know
- Q. 13. What medicine (name) was provided/ prescribed at the health facility?
A. 13. 1 - Paracetamol 2 - Chloroquine 3 - Fansidar 4 - Not Known 5 - Others
- Q. 14. Did (name) sleep under a mosquito net last night?
A. 14. 1 - Yes 2 - No
- Q. 15. How long was the child breast feed (in months)?
If 'no', code 00. If still breast feeding, code 96.
- Q. 16. Since this time yesterday, did she/he receive anything other than breast milk? If yes what was that?
A. 16. 1 - Cows Milk 2 - Fruit Juice 3 - Porridge 4 - Other Food 5 - None
- Q. 17. How long was the child exclusively breast fed (in months)? (For 0-23 months child)
If 'no', code 00. If still breast feeding code 96.
- Q. 18. Did the child receive Vitamin-A within the last six months (since April)? (show capsule) (For 6-59 months child)
A. 18. 1 - Yes 2 - No (If the child is <12 months go to next child)
- Q. 19. Has the child received BCG vaccine against Tuberculosis? (For 12-23 months child; if child 24 months or older skip to q.24)
A. 19. 1 - Yes (Scar) 2 - Yes (Card) 3 - No
- Q. 20. How many doses of DPT has the child received? (For 12-23 months child only)
- Q. 21. How many doses of Polio vaccine has the child received? (For 12-23 months child)
- Q. 22. Has the child received measles vaccine? (For 12-23 months child)
A. 22. 1 - Yes 2 - No
- Q. 23. (If 'yes' in q22), Was it before one year of age or after?
A. 23. 1 - Before 2 - After
- Q. 24. Please measure the mid upper arm circumference of the child and record in mm (For 1-4 year/12-59 months children)
- Q. 25. Does the child have any difficulty in hearing, vision, walking/moving (leg or hand), speaking, understanding (mentally dull or slow)? (For 1-4 year/12-59 months children)
A. 25. 1 - Hearing/Vision 2 - Hand/Leg 3 - Speaking 4 - Mental

Questionnaire

Part B: For Children 5 to 17 Years of Age

Interviewer: in some cases there may be more than one mother/caretaker in the same household. If this is the case, then start with the mother/caretaker of the youngest child (among 5 - 17 years) and collect information regarding all her children 5 - 17 years before proceeding to the next mother.

Serial Number: _____
Household Number: _____
Child's Name: _____
Mother's Line Number: _____
Child's Line Number: _____

- Q. 1. Sex of the child
A. 1. 1 - Boy 2 - Girl
- Q. 2. Age of the child
A. 2. ____ years
- Q. 3. Was s/he admitted/registered in a school in 1999? If no, go to q6
A. 3. 1 - Yes 2 - No
- Q. 4. Class/Grade in which s/he is registered (in 1999)?
- Q. 5. How many days did s/he attend school in the last five school days?
- Q. 6. If the child is not registered in school at present, has s/he ever attended school in the past?
A. 6. 1 - Yes 2 - No
- Q. 7. If yes, Why did the child leave the school?
A. 7. 1 - Domestic Chores 2 - Productive Work 3 - No Books/Pencils 4 - Short of Clothes 5 - Others
- Q. 8. Does s/he have any problem in seeing/vision during evening or night only?
A. 8. 1 - Yes 2 - No
- Q. 9. Compared to other children, does the child have any difficulty in hearing, vision, walking/moving (leg or hand), speaking, understanding?
A. 9. 1 - Hearing/Vision 2 - Hand/Leg 3 - Speaking 4 - Mental
- Q. 10. During the past week, whether (name) did domestic chores, if any, for the household, for at least half a day on average?
A. 10. 1 - Yes 2 - No
- Q. 11. During the past week, whether (name) did some productive works, if any, for the household, for at least half a day on average?
A. 11. 1 - Yes 2 - No
- Note: Domestic chores include fetching water, washing clothes or utensils, cleaning the compound, cooking etc. Productive work include assist the parents in agriculture, livestock or business, cattle rearing, milking, selling goods for the family, gardening etc. which give some direct economic benefit to the family.

Questionnaire

Part C: For Men/Women over 18 years of Age

Interviewer: male interviewers, ask these questions to the youngest male member of the household among those 18 years or more, and female interviewers ask these questions to the youngest female member of the house of the same age.

Serial Number: _____
Household Number: _____
Man's/Woman's Name: _____
Man's/Woman's Line Number: _____

- Q. 1. Have you ever heard of the virus HIV or an illness called AIDS? (If no, go to part-D)
A. 1. 1-Yes 2- No 3- Don't Know
- Q. 2. What problems will one suffer after getting infected with AIDS?
A. 2. 1- Lose Immunity 2- Death 3- Don't Know
- Q. 3. Is this disease by any way related to Sex? (If yes proceed to q4, otherwise go to part-D)
A. 3. 1-Yes 2- No 3- Don't Know
- Q. 4. How can AIDS be spread among human beings?
A. 4. 1- Sex with person with AIDS 2- Indiscriminate Sex 3- Unprotected Sex 4- Through Blood 5- Using Syringe/Needle 6- Don't Know
- Q. 5. How can one be protected from this AIDS disease or HIV virus?
A. 5. 1- No sex with person with AIDS/HIV 2- Avoid more than one sex partner 3- Not using syringe/needle 4- Taking refined blood 5- Using a condom 6- Don't Know
- Q. 6. Can the AIDS virus be transmitted from a mother to a child? If yes, then when or how?
A. 6. 1- During Pregnancy 2- During Delivery 3- Through Breast-feeding 4- No 5- Don't Know

Questionnaire

Part D: For Households

Interviewer: in some cases there may be more than one mother/caretaker in the same household. If this is the case, then start with the mother/caretaker of the youngest child and collect information regarding all her children under 5 years before proceeding to the next mother.

Serial Number: _____
Household Number: _____

- Q. 1. Was there any live birth during the last one year? If 'no' skip to q9. If yes, Mother line number (If the mother is died code 66, if disappeared, code 77)
A. 1. 1- Yes 2- No
- Q. 2. Was it the first delivery for this mother?
A. 2. 1- Yes 2- No
- Q. 3. Place of the last delivery.
A. 3. 1- Health Facility 2- Home Delivery 3- Other
- Q. 4. Who assisted during this delivery?
A. 4. 1- Doctor/Nurse/Midwife 2- Traditional Birth Attendant 3- Untraditional Birth Attendant 4- Family 5- Other
- Q. 5. Did you receive doses of Tetanus-Toxoid (TT) during this pregnancy? If yes how many doses?
Q. 6. Did you take any advice or service (excluding TT) during this pregnancy? If 'yes', whom did you see?
A. 6. 1- Doctor/Nurse/Midwife 2- Traditional Birth Attendant 3- Untraditional Birth Attendant 4- Other 5- No advice/service
- Q. 7. During this pregnancy did you have difficulty with your vision during daylight, evening or night?
A. 7. 1- Yes (day) 2- Yes (evening) 3- Yes (night) 4- No
- Q. 8. Did you receive any vitamin-A in the first two months after delivery?
A. 8. 1- Yes 2- No
- Q. 9. What is the source of drinking water during the dry season?
A. 9. 1- Pump 2- Protected Spring 3- Open well/spring 4- River/Stream 5- Pond/Canal
- Q. 10. What is the source of drinking water during the cultivation season?
A. 10. 1- Pump 2- Protected Spring 3- Open well/spring 4- River/Stream 5- Pond/Canal
- Q. 11. What has been the source of food for your family/household since the last harvest?
A. 11. 1- Own Produce 2- Wild Food 3- Purchase 4- Loan 5- Relief/Assistance

Questionnaire

Part D Continued: For Households

- Q. 12. What was the food for the household members yesterday?
A. 12. 1- Standard Food 2- Wild Food 3- No Food
- Q. 13. Before the harvest, in a day at the worst time, what was the food for the household members?
A. 13. 1- Standard Food 2- Wild Food 3- No Food
- Q. 14. Does the household keep any livestock? If yes, which animals? (If No, go to Q15)
Of the animals kept, which, if any, are owned by the household? (If None, go to Q15)
A. 14. 1- Cattle Kept 2- Sheep/Goats Kept 3- Chickens Kept 4- Others Kept 5- Cattle Owned 6- Sheep/Goats Owned 7- Chickens Owned 8- Others Owned
- Q. 15. Where do you get your salt from? (if any) If no salt, go to Q17
A. 15. 1- Northern Sudan 2- Locally Made 3- Kenya/Uganda 4- No Salt
- Q. 16. We would like to check whether the salt use in your household is iodized?
A. 16. 1- Non-Iodized 2- Iodized (weak) 3- Iodized (strong)
- Q. 17. Are you aware of any humanitarian agencies working in your area? If no, go to 19?
A. 17. 1- Yes 2- No
- Q. 18. Since last harvest, have you benefitted from the activities of these agencies? If so, which activities?
A. 18. 1- Food Relief 2- Health/Nutrition 3- Veterinary 4- Water Sanitation 5- Education 6- Seed/Tools/Equipment 7- None
- Q. 19. In your society, do children have rights?
A. 19. 1- Yes 2- No
- Q. 20. Are you aware of the Convention of the Rights of the Child?
A. 20. 1- Yes 2- No
- Q. 21. Can you please list some of the rights that children should have?
A. 21. 1- Food 2- Security/Protection 3- Education 4- Health 5- Other
- Q. 22. Type of latrine used by the household members?
A. 22. 1- Improved Pit Latrine 2- Traditional Pit Latrine 3- Open Defecation
- Q. 23. Is this facility located within your dwelling, or yard or compound?
A. 23. 1- Yes 2- No
- Q. 24. Can you tell me 3 most important things that you like to see happen in your area?
A. 24. 1- Water Source 2- Health Facility 3- Education 4- Food Relief 5- Other

Annex 5: Convention on the Rights of the Child

Preamble

The Convention on the Rights of the Child was adopted and opened for signature, ratification and accession by General Assembly resolution 44/25 of 20 November 1989. It entered into force 2 September 1990, in accordance with article 49.

The States Parties to the present Convention,

Considering that, in accordance with the principles proclaimed in the Charter of the United Nations, recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world,

Bearing in mind that the peoples of the United Nations have, in the Charter, reaffirmed their faith in fundamental human rights and in the dignity and worth of the human person and have determined to promote social progress and better standards of life in larger freedom,

Recognizing that the United Nations has, in the Universal Declaration of Human Rights and in the International Covenants on Human Rights, proclaimed and agreed that everyone is entitled to all the rights and freedoms set forth therein, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status,

Recalling that, in the Universal Declaration of Human Rights, the United Nations has proclaimed that childhood is entitled to special care and assistance,

Convinced that the family, as the fundamental group of society and the natural environment for the growth and well-being of all its members and particularly children, should be afforded the necessary protection and assistance so that it can fully assume its responsibilities within the community,

Recognizing that the child, for the full and harmonious development of his or her personality, should grow up in a family environment, in an atmosphere of happiness, love and understanding,

Considering that the child should be fully prepared to live an individual life in society and brought up in the spirit of the ideals proclaimed in the Charter of the United Nations and in particular in the spirit of peace, dignity, tolerance, freedom, equality and solidarity,

Preamble

Bearing in mind that the need to extend particular care to the child has been stated in the Geneva Declaration of the Rights of the Child of 1924 and in the Declaration of the Rights of the Child adopted by the General Assembly on 20 November 1959 and recognized in the Universal Declaration of Human Rights, in the International Covenant on Civil and Political Rights (in particular in articles 23 and 24), in the International Covenant on Economic, Social and Cultural Rights (in particular in article 10) and in the statutes and relevant instruments of specialized agencies and international organizations concerned with the welfare of children,

Bearing in mind that, as indicated in the Declaration of the Rights of the Child, "the child, by reason of his physical and mental immaturity, needs special safeguards and care, including appropriate legal protection, before as well as after birth",

Recalling the provisions of the Declaration on Social and Legal Principles relating to the Protection and Welfare of Children, with Special Reference to Foster Placement and Adoption Nationally and Internationally; the United Nations Standard Minimum Rules for the Administration of Juvenile Justice (The Beijing Rules); and the Declaration on the Protection of Women and Children in Emergency and Armed Conflict,

Recognizing that, in all countries in the world, there are children living in exceptionally difficult conditions and that such children need special consideration,

Taking due account of the importance of the traditions and cultural values of each people for the protection and harmonious development of the child,

Recognizing the importance of international co-operation for improving the living conditions of children in every country, in particular in the developing countries,

Have agreed as follows:

Part I of the CRC

Article 1

For the purposes of the present Convention, a child means every human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier.

Article 2

1. States Parties shall respect and ensure the rights set forth in the present Convention to each child within their jurisdiction without discrimination of any kind, irrespective of the child's or his or her parent's or legal guardian's race, colour, sex, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.

2. States Parties shall take all appropriate measures to ensure that the child is protected against all forms of discrimination or punishment on the basis of the status, activities, expressed opinions, or beliefs of the child's parents, legal guardians, or family members.

Article 3

1. In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration.

2. States Parties undertake to ensure the child such protection and care as is necessary for his or her well-being, taking into account the rights and duties of his or her parents, legal guardians, or other individuals legally responsible for him or her; and, to this end, shall take all appropriate legislative and administrative measures.

3. States Parties shall ensure that the institutions, services and facilities responsible for the care or protection of children shall conform with the standards established by competent authorities, particularly in the areas of safety, health, in the number and suitability of their staff, as well as competent supervision.

Article 4

States Parties shall undertake all appropriate legislative, administrative and other measures for the implementation of the rights recognized in the present Convention. With regard to economic, social and cultural rights, States Parties shall undertake such measures to the maximum extent of their available resources and, where needed, within the framework of international co-operation.

Part I of the CRC

Article 5

States Parties shall respect the responsibilities, rights and duties of parents or, where applicable, the members of the extended family or community as provided for by local custom, legal guardians or other persons legally responsible for the child, to provide, in a manner consistent with the evolving capacities of the child, appropriate direction and guidance in the exercise by the child of the rights recognized in the present Convention.

Article 6

1. States Parties recognize that every child has the inherent right to life.
2. States Parties shall ensure to the maximum extent possible the survival and development of the child.

Article 7

1. The child shall be registered immediately after birth and shall have the right from birth to a name, the right to acquire a nationality and, as far as possible, the right to know and be cared for by his or her parents.
2. States Parties shall ensure the implementation of these rights in accordance with their national law and their obligations under the relevant international instruments in this field, in particular where the child would otherwise be stateless.

Article 8

1. States Parties undertake to respect the right of the child to preserve his or her identity, including nationality, name and family relations as recognized by law without unlawful interference.
2. Where a child is illegally deprived of some or all of the elements of his or her identity, States Parties shall provide appropriate assistance and protection, with a view to re-establishing speedily his or her identity.

Article 9

1. States Parties shall ensure that a child shall not be separated from his or her parents against their will, except when competent authorities subject to judicial review determine, in accordance with applicable law and procedures, that such separation is necessary for

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the best interests of the child. Such determination may be necessary in a particular case such as one involving abuse or neglect of the child by the parents, or one where the parents are living separately and a decision must be made as to the child's place of residence.

2. In any proceedings pursuant to paragraph 1 of the present article, all interested parties shall be given an opportunity to participate in the proceedings and make their views known.

3. States Parties shall respect the right of the child who is separated from one or both parents to maintain personal relations and direct contact with both parents on a regular basis, except if it is contrary to the child's best interests. 4. Where such separation results from any action initiated by a State Party, such as the detention, imprisonment, exile, deportation or death (including death arising from any cause while the person is in the custody of the State) of one or both parents or of the child, that State Party shall, upon request, provide the parents, the child or, if appropriate, another member of the family with the essential information concerning the whereabouts of the absent member(s) of the family unless the provision of the information would be detrimental to the well-being of the child. States Parties shall further ensure that the submission of such a request shall of itself entail no adverse consequences for the person(s) concerned.

Article 10

1. In accordance with the obligation of States Parties under article 9, paragraph 1, applications by a child or his or her parents to enter or leave a State Party for the purpose of family reunification shall be dealt with by States Parties in a positive, humane and expeditious manner. States Parties shall further ensure that the submission of such a request shall entail no adverse consequences for the applicants and for the members of their family.

2. A child whose parents reside in different States shall have the right to maintain on a regular basis, save in exceptional circumstances personal relations and direct contacts with both parents. Towards that end and in accordance with the obligation of States Parties under article 9, paragraph 1, States Parties shall respect the right of the child and his or her parents to leave any country, including their own and to enter their own country. The right to leave any country shall be subject only to such restrictions as are prescribed by law and which are necessary to protect the national security, public order (ordre public), public health or morals or the rights and freedoms of others and are consistent with the other rights recognized in the present Convention.

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Article 11

1. States Parties shall take measures to combat the illicit transfer and non-return of children abroad.
2. To this end, States Parties shall promote the conclusion of bilateral or multilateral agreements or accession to existing agreements.

Article 12

1. States Parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.
2. For this purpose, the child shall in particular be provided the opportunity to be heard in any judicial and administrative proceedings affecting the child, either directly, or through a representative or an appropriate body, in a manner consistent with the procedural rules of national law.

Article 13

1. The child shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of the child's choice.
2. The exercise of this right may be subject to certain restrictions, but these shall only be such as are provided by law and are necessary:
 - (a) For respect of the rights or reputations of others; or
 - (b) For the protection of national security or of public order (ordre public), or of public health or morals.

Article 14

1. States Parties shall respect the right of the child to freedom of thought, conscience and religion.
2. States Parties shall respect the rights and duties of the parents and, when applicable, legal guardians, to provide direction to the child in the exercise of his or her right in a manner consistent with the evolving capacities of the child.
3. Freedom to manifest one's religion or beliefs may be subject only to such limitations as are prescribed by law and are necessary to protect public safety, order, health or morals, or the fundamental rights and freedoms of others.

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Article 15

1. States Parties recognize the rights of the child to freedom of association and to freedom of peaceful assembly.
2. No restrictions may be placed on the exercise of these rights other than those imposed in conformity with the law and which are necessary in a democratic society in the interests of national security or public safety, public order (ordre public), the protection of public health or morals or the protection of the rights and freedoms of others.

Article 16

1. No child shall be subjected to arbitrary or unlawful interference with his or her privacy, family, home or correspondence, nor to unlawful attacks on his or her honour and reputation.
2. The child has the right to the protection of the law against such interference or attacks.

Article 17

- States Parties recognize the important function performed by the mass media and shall ensure that the child has access to information and material from a diversity of national and international sources, especially those aimed at the promotion of his or her social, spiritual and moral well-being and physical and mental health. To this end, States Parties shall:
- (a) Encourage the mass media to disseminate information and material of social and cultural benefit to the child and in accordance with the spirit of article 29;
 - (b) Encourage international co-operation in the production, exchange and dissemination of such information and material from a diversity of cultural, national and international sources;
 - (c) Encourage the production and dissemination of children's books;
 - (d) Encourage the mass media to have particular regard to the linguistic needs of the child who belongs to a minority group or who is indigenous;
 - (e) Encourage the development of appropriate guidelines for the protection of the child from information and material injurious to his or her well-being, bearing in mind the provisions of articles 13 and 18.

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Article 18

1. States Parties shall use their best efforts to ensure recognition of the principle that both parents have common responsibilities for the upbringing and development of the child. Parents or, as the case may be, legal guardians, have the primary responsibility for the upbringing and development of the child. The best interests of the child will be their basic concern.
2. For the purpose of guaranteeing and promoting the rights set forth in the present Convention, States Parties shall render appropriate assistance to parents and legal guardians in the performance of their child-rearing responsibilities and shall ensure the development of institutions, facilities and services for the care of children.
3. States Parties shall take all appropriate measures to ensure that children of working parents have the right to benefit from child-care services and facilities for which they are eligible.

Article 19

1. States Parties shall take all appropriate legislative, administrative, social and educational measures to protect the child from all forms of physical or mental violence, injury or abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse, while in the care of parent(s), legal guardian(s) or any other person who has the care of the child.
2. Such protective measures should, as appropriate, include effective procedures for the establishment of social programmes to provide necessary support for the child and for those who have the care of the child, as well as for other forms of prevention and for identification, reporting, referral, investigation, treatment and follow-up of instances of child maltreatment described heretofore, and, as appropriate, for judicial involvement.

Article 20

1. A child temporarily or permanently deprived of his or her family environment, or in whose own best interests cannot be allowed to remain in that environment, shall be entitled to special protection and assistance provided by the State.
2. States Parties shall in accordance with their national laws ensure alternative care for such a child.
3. Such care could include, inter alia, foster placement, kafalah of Islamic law, adoption or if necessary placement in suitable institutions for the care of children. When considering solutions, due regard shall be paid to the desirability of continuity in a child's upbringing and to the child's ethnic, religious, cultural and linguistic background.

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Article 21

- States Parties that recognize and/or permit the system of adoption shall ensure that the best interests of the child shall be the paramount consideration and they shall:
- (a) Ensure that the adoption of a child is authorized only by competent authorities who determine, in accordance with applicable law and procedures and on the basis of all pertinent and reliable information, that the adoption is permissible in view of the child's status concerning parents, relatives and legal guardians and that, if required, the persons concerned have given their informed consent to the adoption on the basis of such counselling as may be necessary;
 - (b) Recognize that inter-country adoption may be considered as an alternative means of child's care, if the child cannot be placed in a foster or an adoptive family or cannot in any suitable manner be cared for in the child's country of origin;
 - (c) Ensure that the child concerned by inter-country adoption enjoys safeguards and standards equivalent to those existing in the case of national adoption;
 - (d) Take all appropriate measures to ensure that, in inter-country adoption, the placement does not result in improper financial gain for those involved in it;
 - (e) Promote, where appropriate, the objectives of the present article by concluding bilateral or multilateral arrangements or agreements and endeavour, within this framework, to ensure that the placement of the child in another country is carried out by competent authorities or organs.

Article 22

1. States Parties shall take appropriate measures to ensure that a child who is seeking refugee status or who is considered a refugee in accordance with applicable international or domestic law and procedures shall, whether unaccompanied or accompanied by his or her parents or by any other person, receive appropriate protection and humanitarian assistance in the enjoyment of applicable rights set forth in the present Convention and in other international human rights or humanitarian instruments to which the said States are Parties.
2. For this purpose, States Parties shall provide, as they consider appropriate, co-operation in any efforts by the United Nations and other competent intergovernmental organizations or non-governmental organizations co-operating with the United Nations to protect and assist such a child and to trace the parents or other members of the family of any refugee child in order to obtain information necessary for reunification with his or her family. In cases where no parents or other members of the family can be found, the child shall be accorded the same protection as any other child permanently or temporarily deprived of his or her family environment for any reason, as set forth in the present Convention.

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Article 23

1. States Parties recognize that a mentally or physically disabled child should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child's active participation in the community.
2. States Parties recognize the right of the disabled child to special care and shall encourage and ensure the extension, subject to available resources, to the eligible child and those responsible for his or her care, of assistance for which application is made and which is appropriate to the child's condition and to the circumstances of the parents or others caring for the child.
3. Recognizing the special needs of a disabled child, assistance extended in accordance with paragraph 2 of the present article shall be provided free of charge, whenever possible, taking into account the financial resources of the parents or others caring for the child and shall be designed to ensure that the disabled child has effective access to and receives education, training, health care services, rehabilitation services, preparation for employment and recreation opportunities in a manner conducive to the child's achieving the fullest possible social integration and individual development, including his or her cultural and spiritual development.
4. States Parties shall promote, in the spirit of international cooperation, the exchange of appropriate information in the field of preventive health care and of medical, psychological and functional treatment of disabled children, including dissemination of and access to information concerning methods of rehabilitation, education and vocational services, with the aim of enabling States Parties to improve their capabilities and skills and to widen their experience in these areas. In this regard, particular account shall be taken of the needs of developing countries.

Article 24

1. States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services.
2. States Parties shall pursue full implementation of this right and, in particular, shall take appropriate measures:
 - (a) To diminish infant and child mortality;
 - (b) To ensure the provision of necessary medical assistance and health care to all children with emphasis on the development of primary health care;

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- (c) To combat disease and malnutrition, including within the framework of primary health care, through, inter alia, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution;
- (d) To ensure appropriate pre-natal and post-natal health care for mothers;
- (e) To ensure that all segments of society, in particular parents and children, are informed, have access to education and are supported in the use of basic knowledge of child health and nutrition, the advantages of breastfeeding, hygiene and environmental sanitation and the prevention of accidents;
- (f) To develop preventive health care, guidance for parents and family planning education and services.
3. States Parties shall take all effective and appropriate measures with a view to abolishing traditional practices prejudicial to the health of children.
4. States Parties undertake to promote and encourage international co-operation with a view to achieving progressively the full realization of the right recognized in the present article. In this regard, particular account shall be taken of the needs of developing countries.

Article 25

States Parties recognize the right of a child who has been placed by the competent authorities for the purposes of care, protection or treatment of his or her physical or mental health, to a periodic review of the treatment provided to the child and all other circumstances relevant to his or her placement.

Article 26

1. States Parties shall recognize for every child the right to benefit from social security, including social insurance and shall take the necessary measures to achieve the full realization of this right in accordance with their national law.
2. The benefits should, where appropriate, be granted, taking into account the resources and the circumstances of the child and persons having responsibility for the maintenance of the child, as well as any other consideration relevant to an application for benefits made by or on behalf of the child.

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Article 27

1. States Parties recognize the right of every child to a standard of living adequate for the child's physical, mental, spiritual, moral and social development.
2. The parent(s) or others responsible for the child have the primary responsibility to secure, within their abilities and financial capacities, the conditions of living necessary for the child's development.
3. States Parties, in accordance with national conditions and within their means, shall take appropriate measures to assist parents and others responsible for the child to implement this right and shall in case of need provide material assistance and support programmes, particularly with regard to nutrition, clothing and housing.
4. States Parties shall take all appropriate measures to secure the recovery of maintenance for the child from the parents or other persons having financial responsibility for the child, both within the State Party and from abroad. In particular, where the person having financial responsibility for the child lives in a State different from that of the child, States Parties shall promote the accession to international agreements or the conclusion of such agreements, as well as the making of other appropriate arrangements.

Article 28

1. States Parties recognize the right of the child to education and with a view to achieving this right progressively and on the basis of equal opportunity, they shall, in particular:
 - (a) Make primary education compulsory and available free to all;
 - (b) Encourage the development of different forms of secondary education, including general and vocational education, make them available and accessible to every child and take appropriate measures such as the introduction of free education and offering financial assistance in case of need;
 - (c) Make higher education accessible to all on the basis of capacity by every appropriate means;
 - (d) Make educational and vocational information and guidance available and accessible to all children;
 - (e) Take measures to encourage regular attendance at schools and the reduction of drop-out rates.
2. States Parties shall take all appropriate measures to ensure that school discipline is administered in a manner consistent with the child's human dignity and in conformity with the present Convention.

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3. States Parties shall promote and encourage international cooperation in matters relating to education, in particular with a view to contributing to the elimination of ignorance and illiteracy throughout the world and facilitating access to scientific and technical knowledge and modern teaching methods. In this regard, particular account shall be taken of the needs of developing countries.

Article 29

1. States Parties agree that the education of the child shall be directed to:
 - (a) The development of the child's personality, talents and mental and physical abilities to their fullest potential;
 - (b) The development of respect for human rights and fundamental freedoms, and for the principles enshrined in the Charter of the United Nations;
 - (c) The development of respect for the child's parents, his or her own cultural identity, language and values, for the national values of the country in which the child is living, the country from which he or she may originate, and for civilizations different from his or her own;
 - (d) The preparation of the child for responsible life in a free society, in the spirit of understanding, peace, tolerance, equality of sexes, and friendship among all peoples, ethnic, national and religious groups and persons of indigenous origin;
 - (e) The development of respect for the natural environment.
2. No part of the present article or article 28 shall be construed so as to interfere with the liberty of individuals and bodies to establish and direct educational institutions, subject always to the observance of the principle set forth in paragraph 1 of the present article and to the requirements that the education given in such institutions shall conform to such minimum standards as may be laid down by the State.

Article 30

- In those States in which ethnic, religious or linguistic minorities or persons of indigenous origin exist, a child belonging to such a minority or who is indigenous shall not be denied the right, in community with other members of his or her group, to enjoy his or her own culture, to profess and practise his or her own religion, or to use his or her own language.

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Article 31

1. States Parties recognize the right of the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts.
2. States Parties shall respect and promote the right of the child to participate fully in cultural and artistic life and shall encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activity.

Article 32

1. States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development.
2. States Parties shall take legislative, administrative, social and educational measures to ensure the implementation of the present article. To this end and having regard to the relevant provisions of other international instruments, States Parties shall in particular: (a) Provide for a minimum age or minimum ages for admission to employment;
- (b) Provide for appropriate regulation of the hours and conditions of employment;
- (c) Provide for appropriate penalties or other sanctions to ensure the effective enforcement of the present article.

Article 33

States Parties shall take all appropriate measures, including legislative, administrative, social and educational measures, to protect children from the illicit use of narcotic drugs and psychotropic substances as defined in the relevant international treaties and to prevent the use of children in the illicit production and trafficking of such substances.

Article 34

States Parties undertake to protect the child from all forms of sexual exploitation and sexual abuse. For these purposes, States Parties shall in particular take all appropriate national, bilateral and multilateral measures to prevent:

- (a) The inducement or coercion of a child to engage in any unlawful sexual activity;
- (b) The exploitative use of children in prostitution or other unlawful sexual practices;
- (c) The exploitative use of children in pornographic performances and materials.

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Article 35

States Parties shall take all appropriate national, bilateral and multilateral measures to prevent the abduction of, the sale of or traffic in children for any purpose or in any form.

Article 36

States Parties shall protect the child against all other forms of exploitation prejudicial to any aspects of the child's welfare.

Article 37

States Parties shall ensure that:

- (a) No child shall be subjected to torture or other cruel, inhuman or degrading treatment or punishment. Neither capital punishment nor life imprisonment without possibility of release shall be imposed for offences committed by persons below eighteen years of age;
- (b) No child shall be deprived of his or her liberty unlawfully or arbitrarily. The arrest, detention or imprisonment of a child shall be in conformity with the law and shall be used only as a measure of last resort and for the shortest appropriate period of time;
- (c) Every child deprived of liberty shall be treated with humanity and respect for the inherent dignity of the human person and in a manner which takes into account the needs of persons of his or her age. In particular, every child deprived of liberty shall be separated from adults unless it is considered in the child's best interest not to do so and shall have the right to maintain contact with his or her family through correspondence and visits, save in exceptional circumstances;
- (d) Every child deprived of his or her liberty shall have the right to prompt access to legal and other appropriate assistance, as well as the right to challenge the legality of the deprivation of his or her liberty before a court or other competent, independent and impartial authority and to a prompt decision on any such action.

Article 38

1. States Parties undertake to respect and to ensure respect for rules of international humanitarian law applicable to them in armed conflicts which are relevant to the child.
2. States Parties shall take all feasible measures to ensure that persons who have not attained the age of fifteen years do not take a

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direct part in hostilities.

3. States Parties shall refrain from recruiting any person who has not attained the age of fifteen years into their armed forces. In recruiting among those persons who have attained the age of fifteen years but who have not attained the age of eighteen years, States Parties shall endeavour to give priority to those who are oldest.

4. In accordance with their obligations under international humanitarian law to protect the civilian population in armed conflicts, States Parties shall take all feasible measures to ensure protection and care of children who are affected by an armed conflict.

Article 39

States Parties shall take all appropriate measures to promote physical and psychological recovery and social reintegration of a child victim of: any form of neglect, exploitation, or abuse; torture or any other form of cruel, inhuman or degrading treatment or punishment; or armed conflicts. Such recovery and reintegration shall take place in an environment which fosters the health, self-respect and dignity of the child.

Article 40

1. States Parties recognize the right of every child alleged as, accused of, or recognized as having infringed the penal law to be treated in a manner consistent with the promotion of the child's sense of dignity and worth, which reinforces the child's respect for the human rights and fundamental freedoms of others and which takes into account the child's age and the desirability of promoting the child's reintegration and the child's assuming a constructive role in society.

2. To this end and having regard to the relevant provisions of international instruments, States Parties shall, in particular, ensure that:

(a) No child shall be alleged as, be accused of, or recognized as having infringed the penal law by reason of acts or omissions that were not prohibited by national or international law at the time they were committed;

(b) Every child alleged as or accused of having infringed the penal law has at least the following guarantees:

(i) To be presumed innocent until proven guilty according to law;

(ii) To be informed promptly and directly of the charges against him or her, and, if appropriate, through his or her parents or legal guardians and to have legal or other appropriate assistance in the preparation and presentation of his or her defence;

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(iii) To have the matter determined without delay by a competent, independent and impartial authority or judicial body in a fair hearing according to law, in the presence of legal or other appropriate assistance and, unless it is considered not to be in the best interest of the child, in particular, taking into account his or her age or situation, his or her parents or legal guardians;

(iv) Not to be compelled to give testimony or to confess guilt; to examine or have examined adverse witnesses and to obtain the participation and examination of witnesses on his or her behalf under conditions of equality;

(v) If considered to have infringed the penal law, to have this decision and any measures imposed in consequence thereof reviewed by a higher competent, independent and impartial authority or judicial body according to law;

(vi) To have the free assistance of an interpreter if the child cannot understand or speak the language used;

(vii) To have his or her privacy fully respected at all stages of the proceedings. 3. States Parties shall seek to promote the establishment of laws, procedures, authorities and institutions specifically applicable to children alleged as, accused of, or recognized as having infringed the penal law, and, in particular:

(a) The establishment of a minimum age below which children shall be presumed not to have the capacity to infringe the penal law;

(b) Whenever appropriate and desirable, measures for dealing with such children without resorting to judicial proceedings, providing that human rights and legal safeguards are fully respected.

4. A variety of dispositions, such as care, guidance and supervision orders; counselling; probation; foster care; education and vocational training programmes and other alternatives to institutional care shall be available to ensure that children are dealt with in a manner appropriate to their well-being and proportionate both to their circumstances and the offence.

Article 41

Nothing in the present Convention shall affect any provisions which are more conducive to the realization of the rights of the child and which may be contained in:

(a) The law of a State party; or

(b) International law in force for that State.

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Article 42

States Parties undertake to make the principles and provisions of the Convention widely known, by appropriate and active means, to adults and children alike.

Article 43

1. For the purpose of examining the progress made by States Parties in achieving the realization of the obligations undertaken in the present Convention, there shall be established a Committee on the Rights of the Child, which shall carry out the functions hereinafter provided.

2. The Committee shall consist of ten experts of high moral standing and recognized competence in the field covered by this Convention. The members of the Committee shall be elected by States Parties from among their nationals and shall serve in their personal capacity, consideration being given to equitable geographical distribution, as well as to the principal legal systems.

3. The members of the Committee shall be elected by secret ballot from a list of persons nominated by States Parties. Each State Party may nominate one person from among its own nationals.

4. The initial election to the Committee shall be held no later than six months after the date of the entry into force of the present Convention and thereafter every second year. At least four months before the date of each election, the Secretary-General of the United Nations shall address a letter to States Parties inviting them to submit their nominations within two months. The Secretary-General shall subsequently prepare a list in alphabetical order of all persons thus nominated, indicating States Parties which have nominated them and shall submit it to the States Parties to the present Convention.

5. The elections shall be held at meetings of States Parties convened by the Secretary-General at United Nations Headquarters. At those meetings, for which two thirds of States Parties shall constitute a quorum, the persons elected to the Committee shall be those who obtain the largest number of votes and an absolute majority of the votes of the representatives of States Parties present and voting.

6. The members of the Committee shall be elected for a term of four years. They shall be eligible for re-election if renominated. The term of five of the members elected at the first election shall expire at the end of two years; immediately after the first election, the names of these five members shall be chosen by lot by the Chairman of the meeting.

7. If a member of the Committee dies or resigns or declares that for any other cause he or she can no longer perform the duties of the

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Committee, the State Party which nominated the member shall appoint another expert from among its nationals to serve for the remainder of the term, subject to the approval of the Committee.

8. The Committee shall establish its own rules of procedure.

9. The Committee shall elect its officers for a period of two years.

10. The meetings of the Committee shall normally be held at United Nations Headquarters or at any other convenient place as determined by the Committee. The Committee shall normally meet annually. The duration of the meetings of the Committee shall be determined and reviewed, if necessary, by a meeting of the States Parties to the present Convention, subject to the approval of the General Assembly.

11. The Secretary-General of the United Nations shall provide the necessary staff and facilities for the effective performance of the functions of the Committee under the present Convention.

12. With the approval of the General Assembly, the members of the Committee established under the present Convention shall receive emoluments from United Nations resources on such terms and conditions as the Assembly may decide.

Article 44

1. States Parties undertake to submit to the Committee, through the Secretary-General of the United Nations, reports on the measures they have adopted which give effect to the rights recognized herein and on the progress made on the enjoyment of those rights:

(a) Within two years of the entry into force of the Convention for the State Party concerned;

(b) Thereafter every five years.

2. Reports made under the present article shall indicate factors and difficulties, if any, affecting the degree of fulfilment of the obligations under the present Convention. Reports shall also contain sufficient information to provide the Committee with a comprehensive understanding of the implementation of the Convention in the country concerned.

3. A State Party which has submitted a comprehensive initial report to the Committee need not, in its subsequent reports submitted in accordance with paragraph 1 (b) of the present article, repeat basic information previously provided.

4. The Committee may request from States Parties further information relevant to the implementation of the Convention.

5. The Committee shall submit to the General Assembly, through the Economic and Social Council, every two years, reports on its activities.

6. States Parties shall make their reports widely available to the public in their own countries.

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Article 45

In order to foster the effective implementation of the Convention and to encourage international co-operation in the field covered by the Convention:

- (a) The specialized agencies, the United Nations Children's Fund and other United Nations organs shall be entitled to be represented at the consideration of the implementation of such provisions of the present Convention as fall within the scope of their mandate. The Committee may invite the specialized agencies, the United Nations Children's Fund and other competent bodies as it may consider appropriate to provide expert advice on the implementation of the Convention in areas falling within the scope of their respective mandates. The Committee may invite the specialized agencies, the United Nations Children's Fund and other United Nations organs to submit reports on the implementation of the Convention in areas falling within the scope of their activities;
- (b) The Committee shall transmit, as it may consider appropriate, to the specialized agencies, the United Nations Children's Fund and other competent bodies, any reports from States Parties that contain a request, or indicate a need, for technical advice or assistance, along with the Committee's observations and suggestions, if any, on these requests or indications;
- (c) The Committee may recommend to the General Assembly to request the Secretary-General to undertake on its behalf studies on specific issues relating to the rights of the child;
- (d) The Committee may make suggestions and general recommendations based on information received pursuant to articles 44 and 45 of the present Convention. Such suggestions and general recommendations shall be transmitted to any State Party concerned and reported to the General Assembly, together with comments, if any, from States Parties.

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Article 46

The present Convention shall be open for signature by all States.

Article 47

The present Convention is subject to ratification. Instruments of ratification shall be deposited with the Secretary-General of the United Nations.

Article 48

The present Convention shall remain open for accession by any State. The instruments of accession shall be deposited with the Secretary-General of the United Nations.

Article 49

1. The present Convention shall enter into force on the thirtieth day following the date of deposit with the Secretary-General of the United Nations of the twentieth instrument of ratification or accession.
2. For each State ratifying or acceding to the Convention after the deposit of the twentieth instrument of ratification or accession, the Convention shall enter into force on the thirtieth day after the deposit by such State of its instrument of ratification or accession.

Article 50

1. Any State Party may propose an amendment and file it with the Secretary-General of the United Nations. The Secretary-General shall thereupon communicate the proposed amendment to States Parties, with a request that they indicate whether they favour a conference of States Parties for the purpose of considering and voting upon the proposals. In the event that, within four months from the date of such communication, at least one third of the States Parties favour such a conference, the Secretary-General shall convene the conference under the auspices of the United Nations. Any amendment adopted by a majority of States Parties present and voting at the conference shall be submitted to the General Assembly for approval.
2. An amendment adopted in accordance with paragraph 1 of the present article shall enter into force when it has been approved by the General Assembly of the United Nations and accepted by a two-thirds majority of States Parties.

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3. When an amendment enters into force, it shall be binding on those States Parties which have accepted it, other States Parties still being bound by the provisions of the present Convention and any earlier amendments which they have accepted.

Article 51

1. The Secretary-General of the United Nations shall receive and circulate to all States the text of reservations made by States at the time of ratification or accession.

2. A reservation incompatible with the object and purpose of the present Convention shall not be permitted.

3. Reservations may be withdrawn at any time by notification to that effect addressed to the Secretary-General of the United Nations, who shall then inform all States. Such notification shall take effect on the date on which it is received by the Secretary-General

Article 52

A State Party may denounce the present Convention by written notification to the Secretary-General of the United Nations. Denunciation becomes effective one year after the date of receipt of the notification by the Secretary-General.

Article 53

The Secretary-General of the United Nations is designated as the depositary of the present Convention.

Article 54

The original of the present Convention, of which the Arabic, Chinese, English, French, Russian and Spanish texts are equally authentic, shall be deposited with the Secretary-General of the United Nations.

In witness thereof the undersigned plenipotentiaries, being duly authorized thereto by their respective governments, have signed the present Convention.