

# Sightsavers Deworming Program – Chad GiveWell Wishlist 5 Schistosomiasis (SCH) / Soil Transmitted Helminth (STH) Project Narrative

Country: Chad

Location (region/districts): Priority 1 regions: Logone Occidental, Logone Oriental, Mayo

Kebbi Est, Mayo Kebbi Ouest, Moyen Chari and Tandjilé.

Priority 2 regions: Bahr El Gazel, Batha, Chari Baguirmi, Guéra, Hadjer Lamis, N'Djaména,

Ouaddaï, Salamat, Sila and Wadi Fira.

**Duration of project:** 3 years

Start date: April 2021

#### Goal

Reduction in the prevalence and intensity of SCH and STH amongst school age children.

#### **Outcome**

School aged children (SAC) between 5-14 years within the intervention zone are effectively treated with albendazole and praziquantel as required.

# **Program implementation areas**

Both SCH and STH are among the neglected tropical diseases (NTDs), which remain serious public health problems, posing unacceptable threats to human health and welfare in Chad. The national NTD map of the country shows all 119 districts are endemic with at least one of the five preventive chemotherapy neglected tropical diseases (PC-NTDs): onchocerciasis - 42 districts; lymphatic filariasis - 32 districts; trachoma - 46 districts, SCH - 96 districts and STH - 86 districts.

SCH/STH mapping was conducted in 2015 with funding from The END Fund. Mass Drug Distributions (MDA) for SCH and STH have been implemented since 2017 in areas co-endemic with onchocerciasis / lymphatic filariasis (LF), principally targeting SAC. These interventions were carried out by the National Programme for the Fight against Onchocerciasis and LF in the absence of a national programme dedicated to STH and SCH.

In 2017, The END Fund and ESPEN funded a round of SCH/STH MDA in 7 regions of the country, while in 2018, another round of SCH/STH MDA was conducted by The END Fund in 3 of those 7 regions.

In 2019 a round of deworming treatment was conducted by Ascend West in 6 of these regions (Mayo Kebbi East, Mayo Kebbi West, Logone Occidental, Logone Oriental, Moyen Chari and Tandjile). The final SCH/STH MDA round conducted by Ascend West will be in 2020 in Mayo Kebbi East, Mayo Kebbi West and Tandjile if current COVID-19 restrictions are lifted. All these MDA rounds were done with the support of OPC, a French NGO and long-time partner of the Ministry of Health and Sightsavers<sup>1</sup> in Chad.

For the proposed implementation period, treatment initiation thresholds follow WHO recommendations for the prevalence of each disease at district level. However, for STH, the Ministry of Health has requested that this threshold be lowered from 20% to 10%, as only a small number of districts are to be treated and the activity is fully integrated with SCH<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Sightsavers' trachoma partner since 2013.

<sup>&</sup>lt;sup>2</sup> as per previous reporting to GW, we will indicate which treatments were delivered in areas below the WHO threshold

Two priorities for intervention:

**Priority 1:** SCH/STH MDA in our existing Ascend West operational regions of Logone Occidental, Logone Oriental, Mayo Kebbi Est, Mayo Kebbi Ouest, Moyen Chari and Tandjile. Having previously operated within theses 6 regions we have identified them as our first priority area to scaleup SCH/STH interventions'

- 4 districts of Logone Occidental region (Benamar, Benoye, Laokassy and Moundou) requires:
  - SCH Biennial treatment for Benamar, Benoye and Laokassy and triennial treatment for Moundou. Ascend West provided SCH MDA in 2019 for these districts so we will start our triennial treatment in Moundou will start in 2022.
- 10 districts of Logone Oriental region (Baibokoum, Bebedja, Beboto, Bessao, Bodo, Doba, Donia, Goré, Kara and Larmanaye) requires:
  - STH Annual treatment for Larmanaye, starting in 2022, as Ascend West will provide opportunistic treatment through LF MDA for this district in 2021.
  - SCH Biennial treatment for Baibokoum, Bebedja, Beboto, Bessao, Bodo, Donia, Goré and Larmanaye, and triennial treatment for Doba and Kara. Ascend West provided SCH MDA in 2019 for these districts so we will start our triennial treatment in Doba and Kara in 2022.
- 7 districts of Mayo Kebbi Est region (Bongor, Fianga, Gounou Gaya, Guelinding, Moulkou, Pont Carol and Youé) requires:
  - STH Annual treatment for Bongor, Gounou Gaya and Pont Carol.
  - SCH Annual treatment for Bongor, Fianga and Youé. Biennial treatment for Gounou Gaya and Pont Carol. Triennial treatment in Guelinding and Moulkou, in 2022, as Ascend West conducted MDA in 2019 in these districts.
- 9 districts of Mayo Kebbi Ouest region (Binder, Gagal, Guegou, Guelo, Lagon, Lamé, Lere, Pala and Torrock) requires:
  - SCH Annual treatment for Binder, Guegou, Guelo, Lagon, Lere, Gagal, Lamé, Pala and Torrock.
- 6 districts of Moyen Chari region (Biobe Singako, Danamadji, Korbol, Kyabe, Maro and Sarh) requires:
  - STH Annual treatment for Korbol and Sarh, starting in 2022, as Ascend West will provide opportunistic treatment through LF MDA for these districts in 2021.
  - SCH Biennial treatment for all districts.
- 8 districts of Tandjile region (Batchoro, Bere, Dafra, Donamanga, Guidari, Kelo, Kolon and Lai) requires:
  - SCH Annual treatment for Bere and Kolon. Biennial treatment for Batchoro, Dafra, Donamanga, Guidari, Kelo and Lai.

**Priority 2:** SCH/STH MDA in Bahr El Gazel, Batha, Chari Baguirmi, Guéra, Hadjer Lamis (except the district of Mani due to security issues), N'Djaména, Ouaddai, Salamat, Sila and Wadi Fira.

The above 10 regions are not covered by Ascend West as they are not co-endemic for oncho or LF, the MoH have advised there are currently no other funders of this work. This planned work will cover all regions where there is currently little or no insecurity and where these two diseases are a public health problem<sup>3</sup>.

- 4 districts of Bahr El Gazel region (Chadra, Michemire, Moussoro and Salal) requires:
  - STH Annual treatment for Chadra and Michemire

<sup>&</sup>lt;sup>3</sup> We are covering 16 of 22 regions where SCH/STH are a public health problem.

- SCH Annual treatment for Chadra and Michemire<sup>4</sup>, and biennial treatment for Moussoro and Salal.
- 7 districts of Batha region (Alifa, Assinet, Ati, Djedda, Koundjourou, Oum-Hadjer and Yao) requires:
  - SCH Biennial treatment for all districts.
- 6 districts of Chari Baguirmi region (Ba-IIIi, Bousso, Dourbali, Koulno, Mandélia and Massenya) requires:
  - SCH Annual treatment for Dourbali and Massenya<sup>1</sup>; biennial treatment for Ba-Illi, Bousso, Koulno and Mandélia.
- 5 districts of Guéra region (Barou, Bitkine, Mangalmé, Melfi and Mongo) requires:
  - SCH Annual treatment for Melfi<sup>1</sup> and biennial treatment for Barou, Bitkine, Mangalmé and Mongo.
- 4 districts of Hadjer Lamis region (Bokoro, Gama, Massaguet and Massakory) requires:
  - SCH Biennial treatment for Massakory; annual treatment for Bokoro, Gama and Massaguet.
- 4 districts of N'Djaména (N'Djaména Centre, N'Djaména Est, N'Djaména Nord and N'Djaména Sud) requires:
  - SCH Triennial treatment for all districts.
- 4 districts of Ouaddai region (Abdi, Abeche, Abougoudam and Adré) requires:
  - SCH Biennial treatment for Abdi, Abougoudam and Adré districts; triennial treatment for Abeche.
- 3 districts of Salamat region (Aboudeia, Am-Timan and Haraze) requires:
  - o STH Annual treatment for Aboudeia and Am-Timan.
  - SCH Annual treatment for Aboudeia, biennual treatment for Haraze and triennial treatment for Am-Timan.
- 3 districts of Sila region (Am-dam, Goz-beida and Koukou) requires:
  - STH Annual treatment for Am-Dam; Tissi may be included depending on the survey that will be conducted in October 2020.
  - SCH Biennial treatment for all districts with the same logic for Tissi
- 6 districts of Wadi Fira region (Amzoer, Arada, Biltine, Guéréda, Iriba and Matadjana) requires:
  - STH Annual treatment for Iriba
  - SCH Triennial treatment for all districts; low prevalence in Iriba, Guéréda and Matadjana seem doubtful, so the National Programme have asked to include them in the round of treatment required in the Region.

GiveWell's support of Priority 1 and 2 would enable SCH and STH MDA for SAC in 90 endemic health districts and support the country in achieving its objectives of covering 16 of the 22 regions endemic to NTDs. Table 1 below shows the prevalence of SCH and STH and the treatment schedule in these 16 regions.

Because of security issues the regions of Borkou, Ennedi Est, Ennedi Ouest, Lac and the district of Mani in Hadjer Lamis Region have not been included in our Wishlist 5 submission nor has Mandoul and Kanem regions due to low SCH prevalence. However, SCH/STH prevalence and MDA gaps for these 6 regions were identified and presented in the spreadsheet attached, 'Prevalence and treatments Wishlist 5'.

<sup>&</sup>lt;sup>4</sup> As a precautionary step to ensure our planning/budgeting is correct in anticipation of potential changes in the new SCH MDA guidelines, we are considering annual treatment for SCH for IUs with ≥ 40% prevalence.

Table 1: Prevalence and treatment schedule in program implementation areas

Region / District	SCH prevalence 5	SCH treatment schedule	STH prevalence <sup>6</sup>	STH treatment schedule	Total population 2021	Total SAC population 5-14 years old <sup>7</sup>		
Priority 1	,							
	Logone Occidental							
Benamar	15.20%	Every 2 years	1.60%	Not required	141,064	43,307		
Benoye	18%	Every 2 years	0%	Not required	190,176	58,384		
Laokassy	15.20%	Every 2 years	1.60%	Not required	204,375	62,743		
Moundou	2.40%	Every 3 years	1.20%	Not required	341,411	104,813		
Logone Oriental								
Baibokoum	38.80%	Every 2 years	5.60%	Not required	90,300	27,722		
Bebedja	18%	Every 2 years	2%	Not required	188,946	58,006		
Beboto	11.20%	Every 2 years	3.60%	Not required	103,394	31,742		
Bessao	38.80%	Every 2 years	5.60%	Not required	182,503	56,028		
Bodo	15.60%	Every 2 years	6%	Not required	103,268	31,703		
Doba	6.80%	Every 3 years	6%	Not required	229,534	70,467		
Donia	18%	Every 2 years	2.86%	Not required	88,036	27,027		
Goré	12.80%	Every 2 years	2.86%	Not required	168,883	51,847		
Kara	6.80%	Every 3 years	6%	Not required	65,598	20,138		
Larmanaye	29.20%	Every 2 years	13.20%	Annual	84,176	25,842		
Mayo Kebbi Est								
Bongor	51.26%	Annual	17.30%	Annual	166,488	51,112		
Fianga	71.60%	Annual	3.20%	Not required	151,190	46,415		
Gounou Gaya	34%	Every 2 years	17.60%	Annual	129,417	39,731		
Guelinding	7.2%	Every 3 years	3.66%	Not required	91,285	28,024		
Moulkou	7.2%	Every 3 years	3.66%	Not required	76,359	23,442		
Pont Carol	34.0%	Every 2 years	17.60%	Annual	84,707	26,005		
Youé	71.06%	Annual	3.20%	Not required	69,074	21,206		
Mayo Kebbi Oue	est							
Binder	55.20%	Annual	8%	Not required	83,361	25,592		
Gagal	42.80%	Annual <sup>1</sup>	1%	Not required	150,972	46,348		
Guegou	55.20%	Annual	8%	Not required	42,076	12,917		
Guelo	55.20%	Annual	8%	Not required	53,101	16,302		
Lagon	55.20%	Annual	8%	Not required	84,386	25,906		
Lamé	42.80%	Annual <sup>1</sup>	1%	Not required	90,088	27,657		
Lere	55.20%	Annual	8%	Not required	152,249	46,740		
Pala	42.80%	Annual <sup>1</sup>	1%	Not required	140,458	43,121		
Torrock	42.80%	Annual <sup>1</sup>	1%	Not required	84,671	25,994		

<sup>&</sup>lt;sup>5</sup> 2015 Endemicity Mapping Report

<sup>&</sup>lt;sup>6</sup> same as above.

<sup>&</sup>lt;sup>7</sup> 30.7% of total population.

Moyen Chari						
Biobe Singako	36.80%	Every 2 years	0.40%	Not required	91,744	28,165
Danamadji	11.60%	Every 2 years	0.67%	Not required	308,802	94,802
Korbol	34.40%	Every 2 years	13.60%	Annual	151,440	46,492
Kyabe	19.60%	Every 2 years	3.50%	Not required	124,070	38,089
Maro	11.67%	Every 2 years	0.67%	Not required	266,848	81,922
Sarh	34.40%	Every 2 years	13.60%	Annual	203,698	62,535
Tandjile						
Batchoro	23.20%	Every 2 years	0.40%	Not required	101,359	31,117
Bere	71.60%	Annual	1.20%	Not required	178,338	54,750
Dafra	23.20%	Every 2 years	0.40%	Not required	95,076	29,188
Donamanga	35.20%	Every 2 years	2.40%	Not required	129,442	39,739
Guidari	38.80%	Every 2 years	1.20%	Not required	42,822	13,146
Kelo	23.20%	Every 2 years	0.40%	Not required	234,623	72,029
Kolon	71.60%	Annual	1.20%	Not required	84,647	25,986
Lai	38.80%	Every 2 years	1.20%	Not required	197,198	60,540
				Total	5,888,368	1,807,729
Priority 2						
Bahr El Gazel	_					T
Chadra	47.60%	Annual <sup>1</sup>	16.80%	Annual	100,678	100,678
Michemire	47.60%	Annual <sup>1</sup>	16.80%	Annual	48,326	48,326
Moussoro	38.80%	Every 2 years	0.50%	Not required	201,356	201,356
Salal	38.80%	Every 2 years	0.50%	Not required	52,352	52,352
Batha						
Alifa	21.29%	Every 2 years	2.05%	Not required	114,690	35,210
Assinet	21.29%	Every 2 years	0.00%	Not required	91,752	28,168
Ati	21.29%	Every 2 years	2.05%	Not required	59,639	18,309
Djedda	31.20%	Every 2 years	2.05%	Not required	53,676	16,478
Koundjourou	31.20%	Every 2 years	2.05%	Not required	85,483	26,243
Oum-Hadjer	24.40%	Every 2 years	0%	Not required	183,505	56,336
Yao	31.20%	Every 2 years	0.8%	Not required	175,860	53,989
Chari Baguirmi	_					
Ba-Illi	37.20%	Every 2 years	3.6%	Not required	100,784	30,941
Bousso	30.80%	Every 2 years	3%	Not required	161,354	49,536
Dourbali	50.00%	Annual	0.4%	Not required	174,040	53,430
Koulno	30.80%	Every 2 years	3%	Not required	277,085	85,065
Mandélia	32.40%	Every 2 years	1.5%	Not required	151,636	46,552
Massenya	49.20%	Annual <sup>1</sup>	3.5%	Not required	152,461	46,805
Guéra						
Barou	20.58%	Every 2 years	0%	Not required	70,184	21,546
Bitkine	27.94%	Every 2 years	0%	Not required	262,089	80,461
Mangalmé	26.80%	Every 2 years	0%	Not required	148,562	45,609
Melfi	46.03%	Annual <sup>1</sup>	5.10%	Not required	162,126	49,773

Mongo	20.58%	Every 2 years	0%	Not required	199,753	61,324	
Hadjer Lamis							
Bokoro	77.20%	Annual	0.50%	Not required	253,885	77,943	
Gama	77.20%	Annual	0.50%	Not required	103,725	31,844	
Massaguet	42.40%	Annual <sup>1</sup>	0.40%	Not required	153,284	47,058	
Massakory	20.40%	Every 2 years	0%	Not required	81,626	25,059	
N'Djaména							
N'Djaména Centre	0.80%	Every 3 years	7.20%	Not required	474,341	145,623	
N'Djaména Est	4.80%	Every 3 years	0%	Not required	173,949	53,402	
N'Djaména Nord	5.60%	Every 3 years	0%	Not required	168,589	51,757	
N'Djaména Sud	8%	Every 3 years	1.60%	Not required	672,415	206,431	
Ouaddai							
Abdi	11.20%	Every 2 years	3.20%	Not required	167,305	51,363	
Abeche	9.20%	Every 3 years	0.40%	Not required	377,485	115,888	
Abougoudam	28.80%	Every 2 years	0%	Not required	136,958	42,046	
Adré	27.20%	Every 2 years	0%	Not required	447,120	137,266	
Salamat							
Aboudeia	58.63%	Annual	18.07%	Annual	101,245	31,082	
Am-Timan	4.80%	Every 3 years	18.00%	Annual	285,216	87,561	
Haraze	21.29%	Every 2 years	9%	Not required	86,743	26,630	
Sila							
Am-dam	27.60%	Every 2 years	10%	Annual	5,338	1,639	
Goz-beida	13.20%	Every 2 years	0.67%	Not required	261,283	80,214	
Koukou	12%	Every 2 years	0.80%	Not required	81,947	25,158	
Tissi	Unknown	Not required	Unknown	Not required	139,352	42,781	
Wadi Fira				_			
Amzoer	8.40%	Every 3 years	5.20%	Not required	59,690	18,325	
Arada	8.40%	Every 3 years	5.20%	Not required	42,280	12,980	
Biltine	8.40%	Every 3 years	5.20%	Not required	146,738	45,049	
Guéréda	0.40%	Every 3 years	0%	Not required	109,235	33,535	
Iriba	0%	Every 3 years	11.60%	Annual	96,754	29,704	
Matadjana	2.40%	Every 3 years	3.60%	Not required	31,671	9,723	
				Total	9,598,290	2,946,675	

## **Prevalence**

GiveWell's support will enable SCH and STH MDA activities for the control of SCH and STH meeting the WHO-defined minimum thresholds for MDA eligibility<sup>8</sup>.

Adult treatment, which is recommended by WHO in areas of high SCH prevalence (> 50%), is not included as part of this program as drugs are not currently available in Chad for these treatments.

<sup>&</sup>lt;sup>8</sup> <u>Helminth control in school age children: a guide for managers of control programmes, Second edition</u>, 2011, page 74-75

As mentioned previously, the Chadian MoH choses to treat STH >10% rather than the WHO standard of >20%.

Please see the attached spreadsheet, 'Prevalence and treatments Wishlist 5', for the full prevalence detail and treatment targets by district.

# **Outputs**

**Output 1:** Train health workers, teachers and community members to deliver SCH / STH MDA to schools and endemic communities.

Output 2: Treat school aged children between 5-14 years for SCH / STH with MDA.

**Output 3**: Ministry of Health coordinates and supports implementation of the National NTD Master Plan with focus on SCH and STH in the targeted regions, health districts.

### **Key output indicator targets**

	Year 1	Year 2	Year 3
Priority 1 (only)	Apr'21 -	Apr'22 -	Apr'23 -
	Mar'22	Mar'23	Mar'24
No. of teachers trained on SCH/STH MDA	4,321	3,036	4,626
No. of health workers trained on SCH/STH MDA	492	323	492
No. of school aged children between 5-14 years treated for SCH	1,203,806	557,057	1,294,316
No. of school aged children between 5-14 years treated for STH	85,615	195,584	202,625

	Year 1	Year 2	Year 3
Priority 2 (only)	Apr'21-	Apr'22 -	Apr'23 -
	Mar'22	Mar'23	Mar'24
No. of teachers trained on SCH/STH MDA	4,040	965	2,805
No. of health workers trained on SCH/STH MDA	617	182	484
No. of school aged children between 5-14 years treated for SCH	1,770,289	281,356	1,248,181
No. of school aged children between 5-14 years treated for STH	146,980	152,271	157,753

## Summary of planned budget

	Year 1	Year 2	Year 3	Total
Planned program costs Priority 1 *	\$1,034,188	\$642,198	\$866,230	\$2,542,616
Planned program costs Priority 2	\$993,819	\$357,776	\$936,775	\$2,288,370

<sup>\*</sup> The budget for Priority 1 is higher than Priority 2 due to the higher number of schools to be mobilized during MDA. The cost per treatment will be higher due to the lower number of children in Priority 1 areas Please see attached 'Wishlist 5 budget' for more detail.

### **Implementation**

Chad will follow a school-based approach to SCH/STH MDA, with non-enrolled children being mobilised to attend their nearest school during MDA to receive their treatment. The distribution of drugs will be carried out by teachers in all schools in the targeted districts.

One teacher per school will be selected as a referent and will be trained to be able to implement the treatment in his/her school, supporting his/her colleagues.

Each referent teacher will be trained during a session given by the health centre responsible (RCS) in their zone. The RCS will themselves have been trained, during a session at the district level, provided by trainers of the central level.

School based treatment distributed by teachers will ensure optimal coverage, considering the high school enrolment rate for the primary school<sup>9</sup>.

The distribution process will be supervised by the RCS, the District Medical Officers, the Regional Heath Delegates and two central level teams.

Data collection of treatment will be carried out by the RCS, with the support of the district and regional authorities to compile and report results.

At the end of this three-year grant, a total of 6,697,370 school aged children are expected to have been treated against STH and SCH.

# Monitoring and evaluation

Treatment coverage surveys (TCS)<sup>10</sup> will be used to indicate the success of MDA and will be implemented after each GiveWell funded MDA.

A Quality Standards Assessment Tool (QSAT), used to appraise the program's performance, will be scheduled to take place in 2022.

## Inputs from partners, governments, and other stakeholders

Partner	History of work with Sightsavers	Role in the project
Ministry of Health	Partnership since 2014	Coordination
		Implementing partner
Ministry of National Education	Partnership since 2018	Implementing partner and sensitization for adoption of healthy behaviour
OPC	NGO partner for Oncho/LF/Trachoma/SCH/STH since 2014	Implementing partner
Pharmaceutical companies	Pharmaceutical companies have been donating drugs to the MoH for SCH and STH	Supply of the drugs requested by the MOH on time.
Communities	Support MDA and sensitization within the supported districts	Implementing partners
		Beneficiaries

## Other funding opportunities/fungibility

In 2017, END Fund and ESPEN funded a round of SCH/STH MDA in the regions of Tandjile, Mayo Kebbi East, Mayo Kebbi West, Logone Occidental, Logone Oriental, Mandoul and Moyen Chari. In 2018, the National Program for the Elimination of Onchocerciasis and Lymphatic Filariasis (PNEOFL), funded by END Fund, conducted SCH/STH MDA in the regions of Logone Oriental, Mayo Kebbi West and Tandjilé. Both campaigns were conducted in districts co-endemic to onchocerciasis and/or LF.

<sup>&</sup>lt;sup>9</sup> According to the World Bank, school enrolment rate for the primary school in Chad was 86.8% in 2016.

<sup>&</sup>lt;sup>10</sup> now referred to as Coverage Evaluation Surveys (CES) by the WHO

Ascend West started their Trachoma/Oncho/LF program in Chad in April 2019, while PARSET / The World Bank had planned to conduct SCH/STH MDA in all endemic regions in 2019 and 2020.

The PARSET project (Chad Education Sector Reform Project) run by the Ministry of Education aimed to improve teaching and learning in primary and secondary schools in Chad. However, with no experience in drug distribution they were unable to implement the SCH/STH planned activities in Chad. Since PARSET were not able to conduct deworming treatment, Ascend West chose to incorporate the deworming MDA (despite SCH/STH not being one of their priorities) in their own plans for the regions and districts co-endemic to Oncho/LF just for two years (2019 and 2020). Ascend West have no intention to continue these SCH and STH treatments beyond 2020, meaning there is a funding gap for SCH/STH in these regions in 2021.

Apart from the above, there have been no other interventions for STH/SCH mass treatment and no other partners conducting deworming campaigns in Chad. In the 2000s, there was only a pilot operation on 120 schools throughout the country, conducted by the Ministry of Education, which was not followed up.

The table below summarizes the previous SCH/STH MDA rounds for the districts/regions in Priority 1 and Priority 2.

Previous MDA Rounds							
Region / District	END Fund and ESPEN SCH/STH MDA	END Fund SCH/STH MD	Ascend SCH/STH MDA	Ascend SCH/STH MDA *			
Priority 1							
Logone Occidental	2017		2019				
Logone Oriental	2017	2018	2019				
Mayo Kebbi Est	2017		2019	2020			
Mayo Kebbi Ouest	2017	2018	2019	2020			
Moyen Chari	2017		2019				
Tandjile	2017	2018	2019	2020			
Priority 2							
Bahr El Gazel							
Batha							
Chari Baguirmi	These 10 rea	ions have not pre	viously received S0	CH/STH MDA			
Guéra	These to reg	ions have not pre	viously received oc	or i, o i i i i i i i i i i i i i i i i i			
Hadjer Lamis							
N'Djaména							
Ouaddai							
Salamat							
Sila							
Wadi Fira							