

Date: April 11, 2008

From: WHO Collaborating Center for  
Research, Training and Eradication of Dracunculiasis

Subject: GUINEA WORM WRAP-UP #180

To: Addressees

*Number of uncontained cases of dracunculiasis outside of Sudan so far in 2008: 39 in Ghana; Zero in Mali, Nigeria, and Niger)*

PRESIDENTS CARTER & TOURE AND GENERAL GOWON INSPIRE 8<sup>TH</sup>

The Secretary to the Government of the Federation (SGF), Ambassador Babagana Kingbe, opened the conference officially on behalf of the Nigerian president. Other prominent participants included Nigeria's foreign minister, Nigeria's Minister of Health Dr. Hassan Muhammad Lawal, the ministers of health of Sudan (Dr. Tabita Botors Shokai) and Southern Sudan (Dr. Joseph Monyтуil Wejang), the governor of Niger's Tillaberi Region (Mr. Idder Adamou), a former minister of health of Togo, and WHO Assistant Director General Dr. Hiroki Nakatani. The SGF conveyed the Nigerian president's "warmest welcome" and expressed his appreciation for the help of President Carter and for the examples of President Toure and General Gowon. President Carter congratulated Burkina Faso, Cote d'Ivoire, Ethiopia and Togo as the four most recent countries to interrupt transmission of the disease, and warned the remaining endemic countries against over-confidence. President Toure pledged that Mali will do everything possible to stop transmission of the disease soon. Drs. Donald Hopkins of The Carter Center and Dirk Engels of the World Health Organization (WHO) summarized the current status of the global campaign and of processes to certify countries free of the disease, respectively. National program coordinators of the five remaining endemic countries and the four countries that reported zero indigenous cases for the first time in 2007 each made presentations during the conference, which was co-sponsored by the Government of Nigeria, The Carter Center, UNICEF and WHO. Key recommendations and summaries of the status of the disease in the five endemic countries remaining are reported below.

President and Mrs. Carter hosted the third ceremony to confer Carter Center Awards for Guinea Worm Eradication late on the first afternoon of the conference. Accepting the latest national awards were the Ambassador of Burkina Faso, Mr. Dramane Yameogo; the First Counselor of the Embassy of Cote d'Ivoire, Mr. Soro Kapielletien; the Ambassador of Ethiopia, Mr. Suleiman Dedefo Woshe; and the Former Minister of Health of Togo, Madame Suzanne Aho. Each country received two awards, one each for the head of state and the ministry of health, as well as certificates for each of the present and former national program coordinators and key assistants for the national campaigns. The Awards were designed by the artist Ms. Kim Griffin of Panama City, Florida, and funded by Mr. John Moores, the chairman of The Carter Center's Board of Trustees. President and Mrs. Carter also presented Jimmy and Rosalynn Carter Awards for Guinea Worm Eradication to President Amadou Toumani Toure of Mali "for his invaluable advocacy in support of the battle against Guinea worm disease in all of the endemic francophone countries in Africa since 1993", and to the director of the Southern Sudan Guinea Worm Eradication Program Mr. Makoy Samuel Yibi Logora, "in recognition of his dedicated, relentless and effective leadership since 2006 in the campaign to eradicate Guinea worm disease (dracunculiasis) from Southern Sudan". President Toure dedicated his award to his mother [who

The epidemiologic and intervention indices for Sudan, Ghana and Mali are given in **(Table 1)**. An internal review and adjustment of program data by the SSGWEP has reduced the number of dracunculiasis cases and endemic villages in 2006 from 20,581 to 15,539 and from 3137 to 1763, respectively, so that the adjusted rate of reduction in cases between 2006 and 2007 is now 60%, not 71%. A total of 22,322 villages were under active surveillance in southern Sudan in 2007, with over 28,000 village volunteers, supervisors and other health staff working on the program fulltime. The SSGWEP improved its reporting rate from 63% to 70% between 2006 and 2007, distributed 1,130,467 pipe filters and 490,626 cloth filters, and increased its application of ABATE® Larvicide to cover villages that included 37% of the program's caseload in 2007. The Guinea Worm Task Force remained active in 2007, and 106 wells were drilled in Guinea worm endemic villages of Eastern Equatoria State, mostly by UNICEF. A map showing the incomplete preliminary results of GPS mapping of endemic villages in southern Sudan is shown in **(Figure 2)**. Southern Sudan exported 3 cases to Ethiopia and 3 cases to Uganda in 2007.

Northern Sudan reported 4 alleged cases of Guinea worm disease presumably imported from Southern Sudan during 2007: 2 cases from Northern Bahr Al Ghazal State (1 to South Darfur and 1 to South Kordufan), and 1 case from Unity State. The fourth case was detected, confirmed and contained during an investigation of rumors; the origin of this case was not reported.

A team of twelve persons from the SSGWEP and 565 0 Tqfas n6 team (t.6.5(d2(f)2.2( 9spsc0t9)7-uEg91iAr)TT

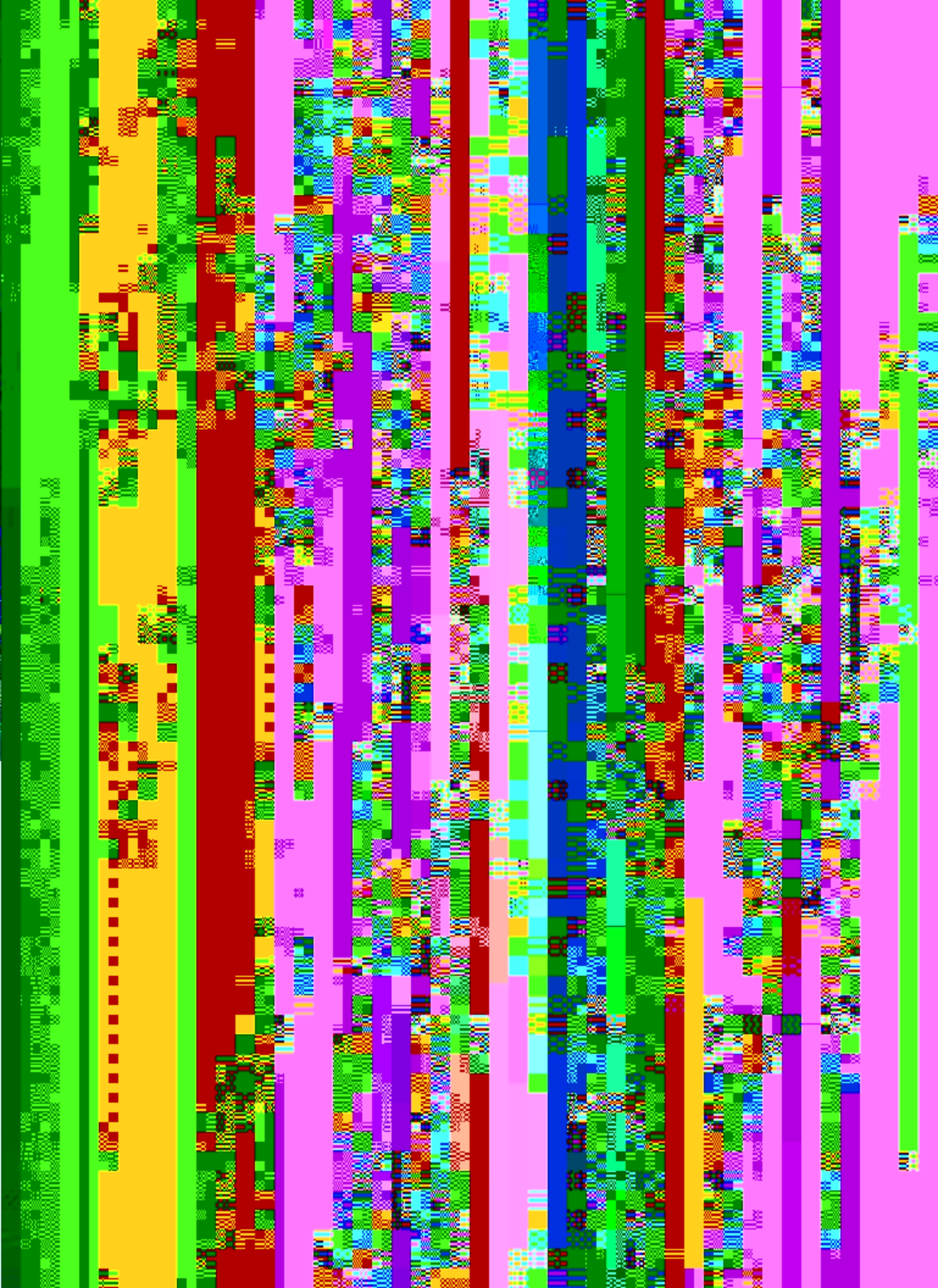
areas of the country, and of completing the project for providing improved water supply to Tamale and Savelugu on time, by August 2008 as scheduled.

**MALI.** Four of Mali's regions (Kayes, Koulikoro, Segou, Sikasso) are now Guinea worm-free, while four others (Gao, Kidal, Mopti, Timbuktu) still have endemic transmission as of 2007 (**Figure 4**). The epidemiologic and intervention indices for Mali's GWEP are summarized in (**Table 1**). Case containment rates were particularly low in Tessalit/Kidal (86 cases; 0% containment), Ansongo/Gao (135; 47%), Gao/Gao (62; 42%), and Gourma Rharous/Timbuktu (16; 63%) Districts. Although the outbreak discovered in Ansongo District of Gao Region in 2007 as a result of follow up to cross notification from Niger's GWEP of an imported case from Mali last year was a surprise, neither insecurity nor lack of resources were limiting factors that might explain the dismal containment rates outside of Kidal, in Gao, Mopti and Timbuktu Regions in 2007. In a private meeting with President Carter in Abuja, President Amadou Toumani Toure of Mali stated his strong intention to intensify the GWEP and accelerate Mali's progress towards eradication. Mali exported 3 cases of dracunculiasis to Niger in 2007.

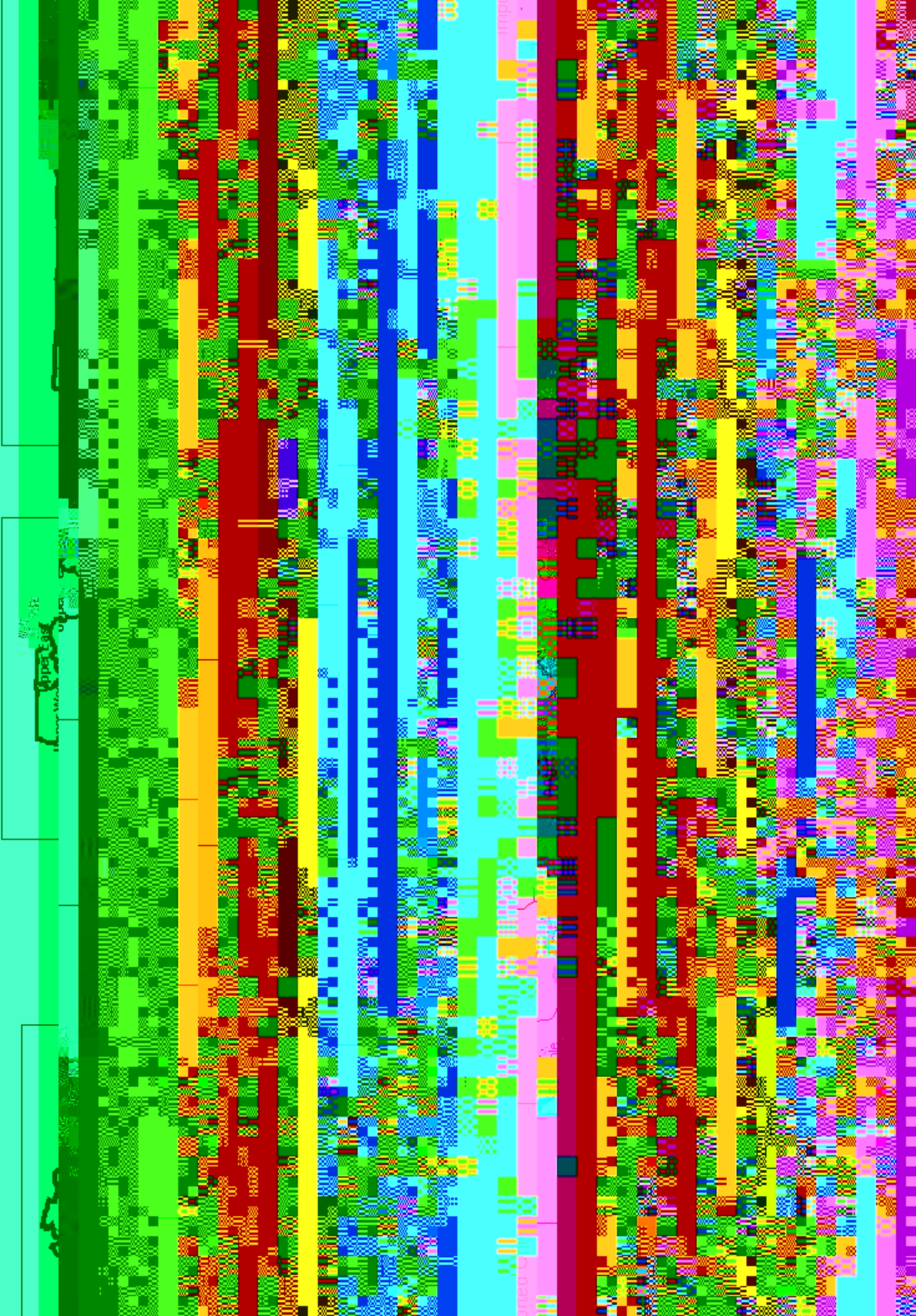
Table 1

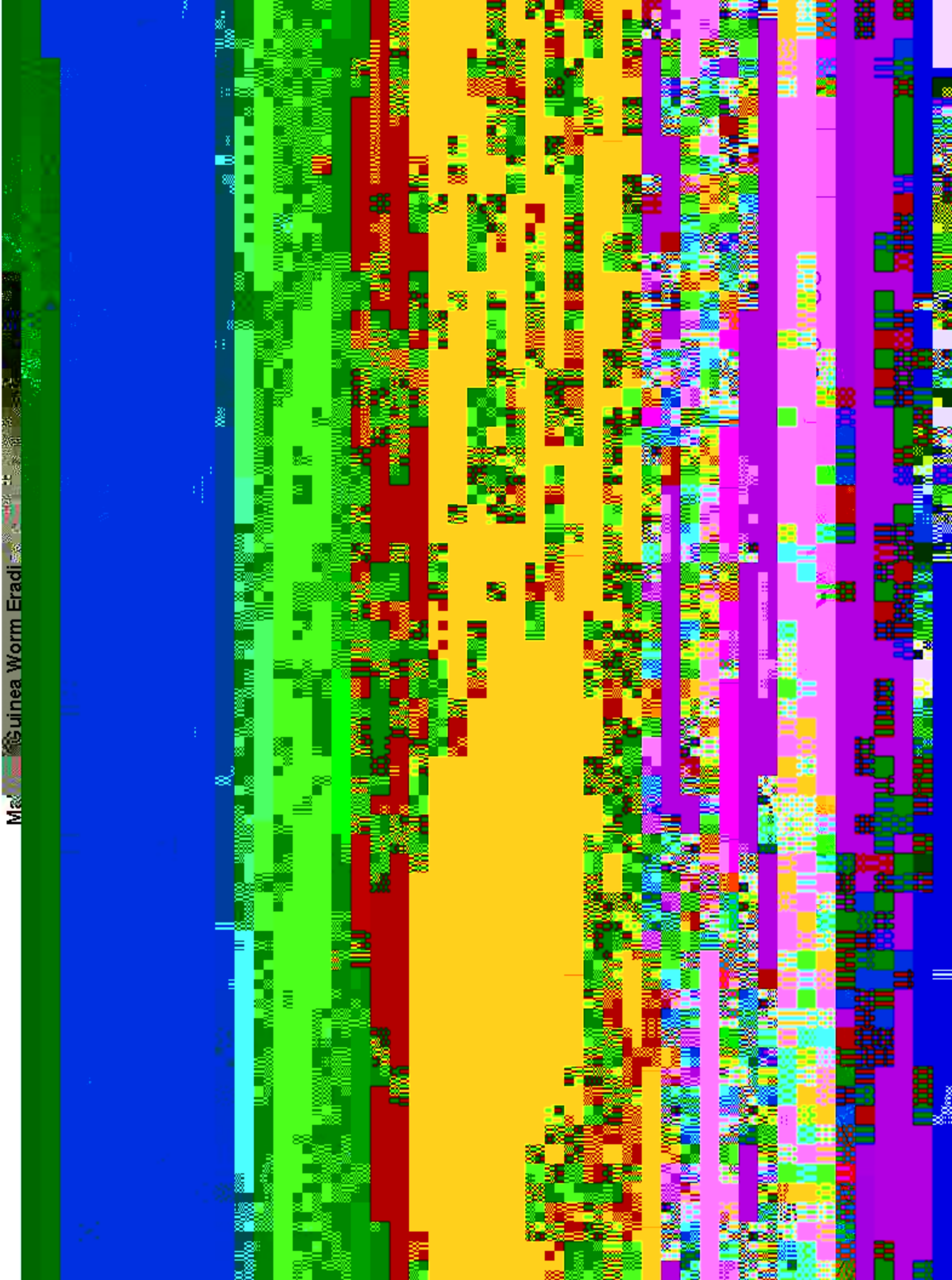
EPIDEMIOLOGIC AND INTERVENTION INDICES IN THREE GWEPs: 2007			
INDEX	SUDAN	GHANA	MALI
Case Containment rate	49%	84%	35%
Number of cases reported	5,815	3,358	313
Number of villages reporting indigenous cases	1,765	180	59
Number of endemic villages where program intervened in 2006 & 2007	3,023	386	113
Reduction in cases in Groups I & II villages (2006-2007)	82%	26%	71%
% of endemic villages receiving Health Education	93%	100%	100%
% of endemic villages with cloth filters in 100% of households	38%	70%	100%
% of endemic villages receiving pipe filters	38%	30%	NR.
% of endemic villages protected with ABATE	10%	65%	90%
% of endemic villages with 1+ sources of safe drinking water	16%	47%	27%
Monthly reporting rate	70%	98%	100%

# Southern Sud



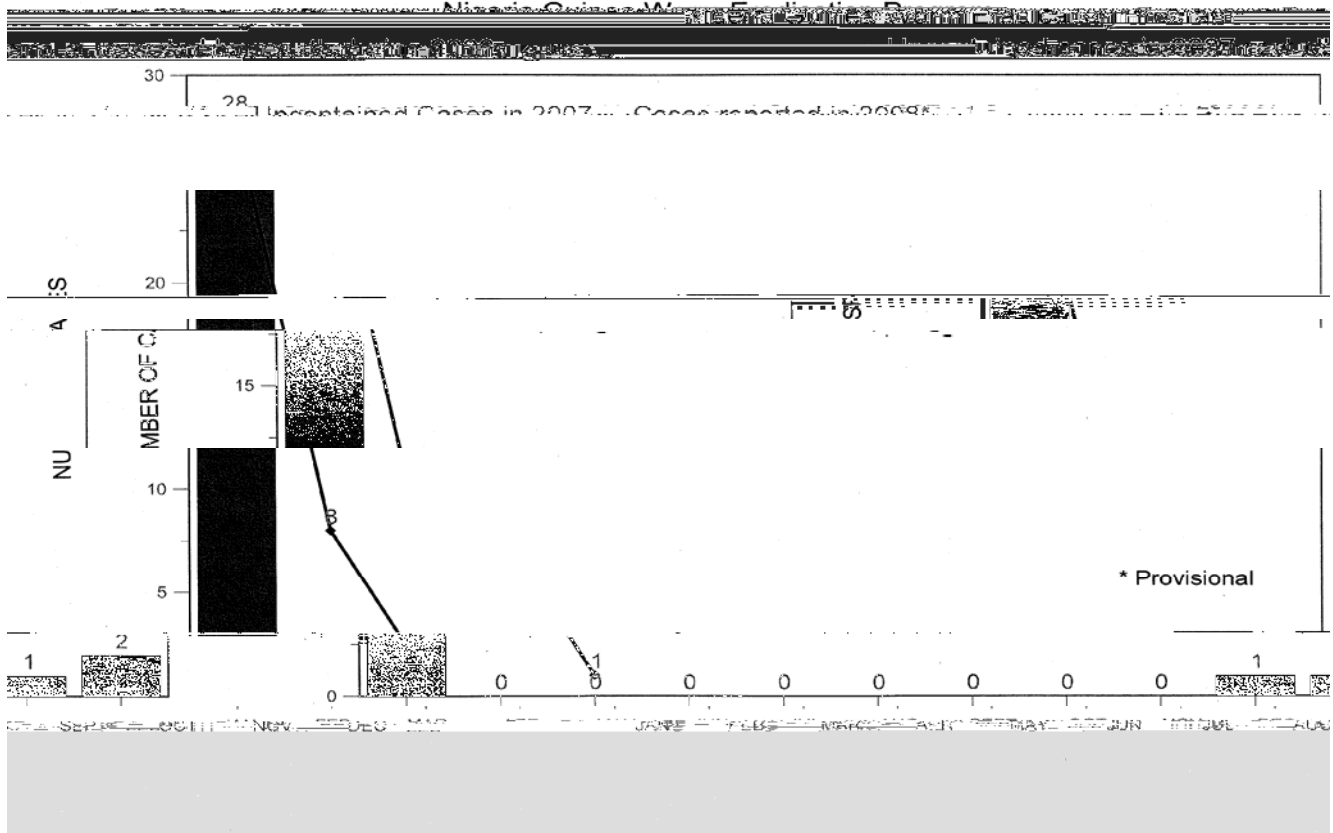






**NIGERIA.** The Nigerian GWEP reported 73 cases of dracunculiasis from four villages in three states (Enugu, Cross River, Ebonyi) in 2007, of which 44 cases (60%) were reportedly contained. In January-March 2008, Nigeria has reported 37 cases from 5 villages in Enugu and Ebonyi States, of which all were contained. Thirty (30) of the cases reported so far in 2008 occurred in Ezza Nkwubor village (Enugu State), and the other 7 cases were imported from that village (Figure 5).

Figure 5



**NIGER.** The Niger GWEP reported 14 cases fro



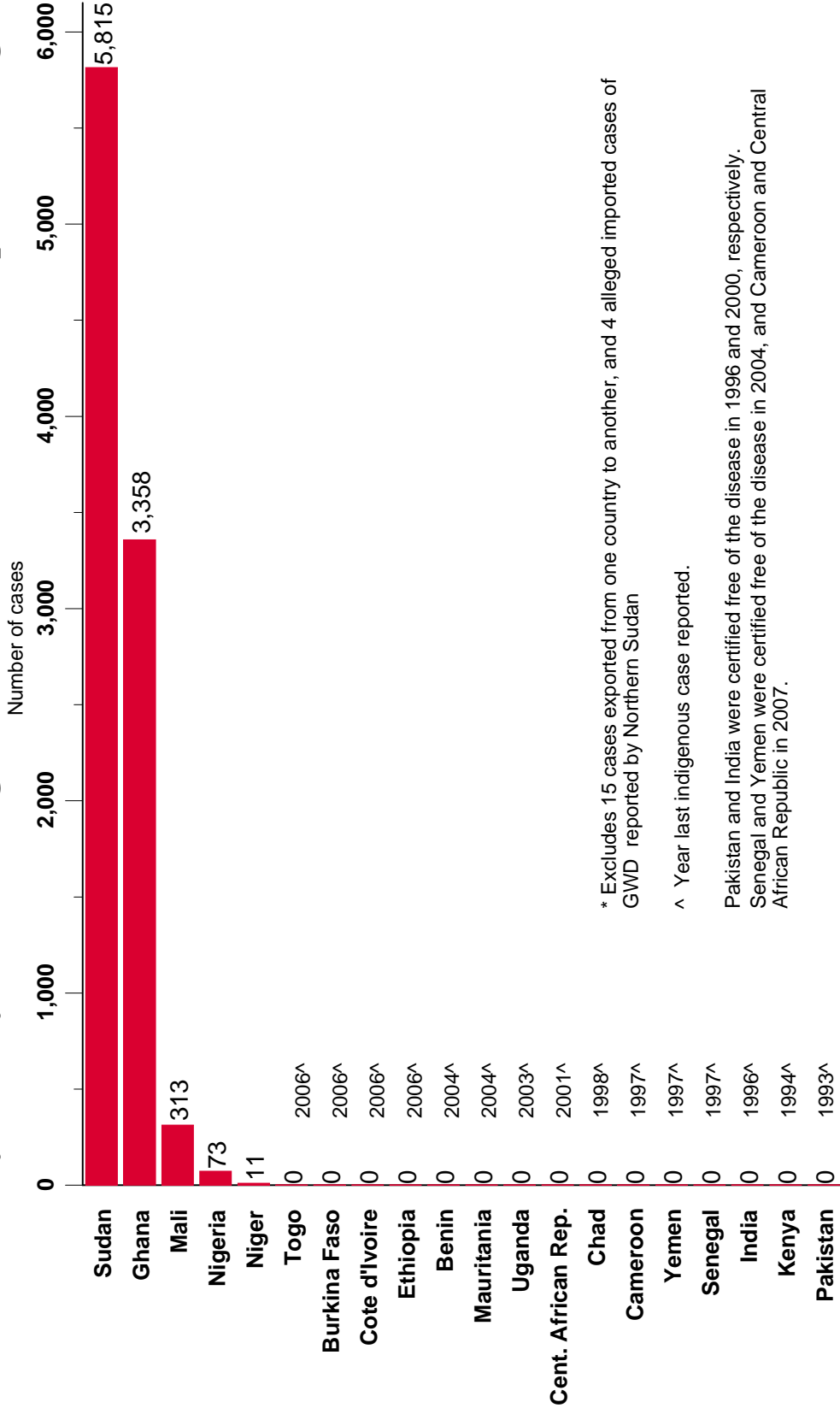
Table 2

Number of Cases Contained and Number Reported by Month during 2007\*  
 (Countries arranged in descending order of cases in 2006)

	NUMBER OF CASES CONTAINED / NUMBER OF CASES REPORTED												TOTAL*	%
	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER		
SUDAN	28 / 192	34 / 146	70 / 208	271 / 503	621 / 1096	626 / 1397	465 / 1001	381 / 619	255 / 413	85 / 148	31 / 65	9 / 27	2876 / 5815	49
GHANA	812 / 1005	631 / 732	442 / 478	248 / 293	233 / 272	185 / 241	91 / 110	38 / 41	15 / 19	22 / 29	56 / 68	64 / 70	2837 / 3358	84
MALI	0 / 0	0 / 0	1 / 1	0 / 0	0 / 0	1 / 1	5 / 7	29 / 120	35 / 68	15 / 27	20 / 79	4 / 10		



# Distribution by Country of 9,570 Indigenous Cases of Dracunculiasis Reported during 2007\*



\* Excludes 15 cases exported from one country to another, and 4 alleged imported cases of GWD reported by Northern Sudan

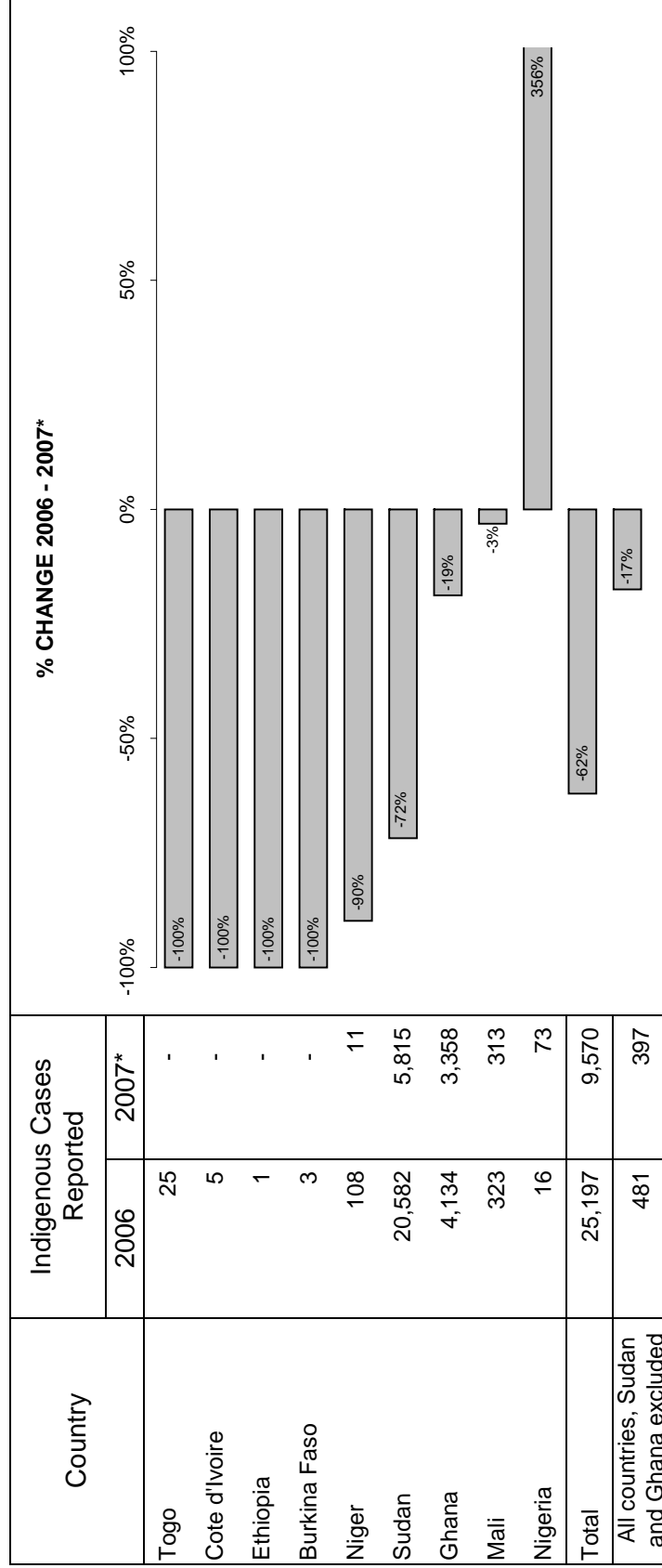
<sup>^</sup> Year last indigenous case reported.

Pakistan and India were certified free of the disease in 1996 and 2000, respectively. Senegal and Yemen were certified free of the disease in 2004, and Cameroon and Central African Republic in 2007.

Figure 7

Updated----->4/9/2008

Number of Indigenous Cases Reported During the Specified Period in 2006 and 2007\*, and Percent Change in Cases Reported



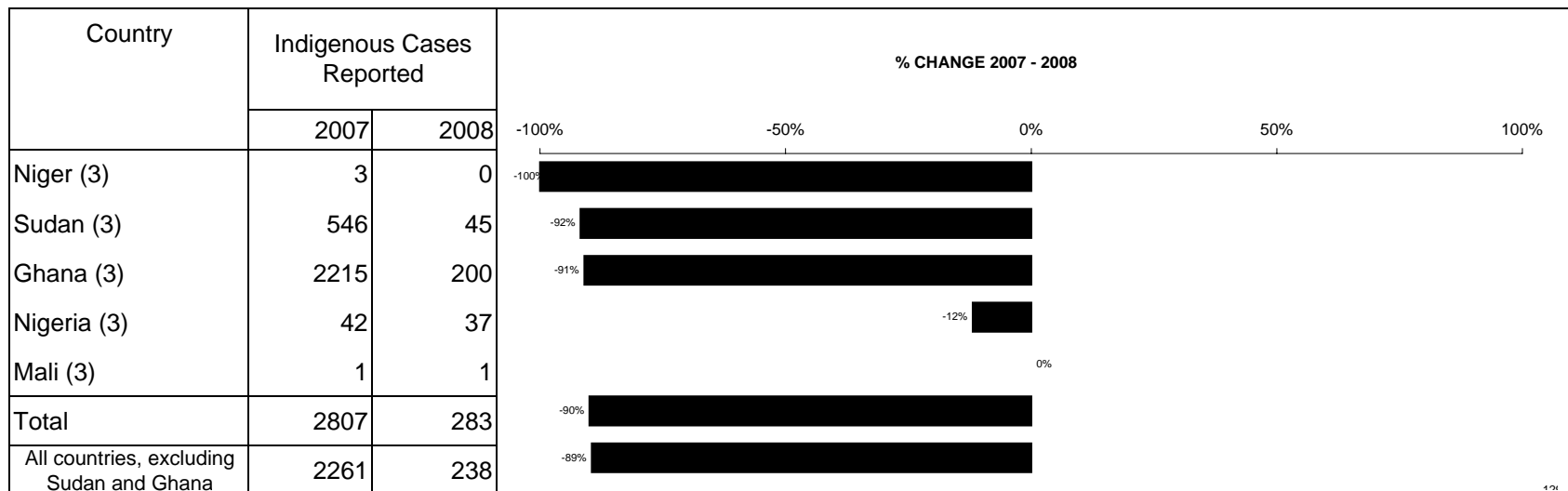
Overall % change outside of Sudan = -19%

\* Excludes 15 cases exported from one country to another



Figure 8

Number of Indigenous Cases Reported During the Specified Period in 2007 and 2008\*, and Percent Change in Cases Reported



Overall % change outside of Sudan = -19%

\* Provisional: excludes 1 case exported from one country to another



## **RECOMMENDATIONS**

- 1. The programs should help prioritize the provision of safe water to Guinea worm areas.**
2. Ministries of Health should consider integrating Guinea worm, Polio and other surveillance systems in non-endemic areas after 2008 transmission season to ensure wide active surveillance of index cases of Gu

**7. The regional and local authorities in endemic areas should contribute more**