Carter Center Hosts Conference on the Eradicability of Onchocerciasis

Sixty-four experts met at The Carter Center on Jan. 22-24, 2002, to explore whether onchocerciasis (river blindness) is eradicable with current knowledge and tools. The conference was organized with the World Health Organization and supported by funding from the Bill & Melinda Gates Foundation. Dr. Donald Hopkins, associate executive director, The Carter Center, and Dr. Maria Neira, Control, Prevention and Eradication, WHO, co-chaired the meeting, with Dr. Achim Hörauf of the Bernhard Nocht Institute for Tropical Medicine chairing the section of the proceedings focused on research needs. The conference considered the spectrum of programmatic strategies and activities against river blindness executed over the last 25 years and heard expert reports covering a variety of disciplines in medicine, research, and social science. President Carter attended a portion of the meeting on Jan. 24.

Ethiopian Lions Fight Against Blinding Trachoma

In January 2002, Lions Clubs International’s SightFirst Advisory Committee awarded local Lions Clubs in Ethiopia a grant worth more than $178,000 for trichiasis surgery in the South Gondar Zone. This grant will enable the zonal health bureau, which is being assisted by The Carter Center,

continued on Page 2

What’s Inside

Center Assists More Than Eight Million Treatments .......... 3
Gebre Elected Secretary .......... 5
Trachoma Review Held ........... 6
Committee Recommends Increasing Donation ............ 7
Sudan Launches Vision 2020 8
Mali Emphasizes Trachoma Control .................................. 9
Ghana Trachoma Review Completed ....................... 10
Nigeria Expands Lymphatic Filariasis Program .......... 10
Global Health News ............. 11

Participants discuss onchocerciasis eradication at a conference held at The Carter Center and co-chaired by the World Health Organization.

continued on Page 2
River Blindness

Conference
continued from Page 1

The conference concluded that onchocerciasis is not eradicable now using current tools due to the major barriers to eradication in Africa. However, the conference also concluded that regional eradication is possible in the Americas and possibly Yemen and some sites in Africa. It recommended that programs active in these areas aim for eradication of onchocerciasis from these sites as soon as possible. The conference also recommended that areas in West Africa made free of onchocerciasis transmission through vector control be made free of transmission after the Onchocerciasis Control Program closes later this year.

No evidence for emergence of ivermectin resistance in onchocerciasis was noted, despite 15 years of intensive use of Mectizan®. However, ivermectin resistance was still considered a potential future threat to the great progress and considerable investment made so far in research and control against this disease. The conference recommended a continued investment in research for replacement drugs should resistance emerge, in particular for additional research in developing macrofilaricides, drugs which could kill the adult O. volvulus parasite. Mectizan does not kill adult O. volvulus parasites and so must be given for many years to prevent development of skin and eye disease in infected persons.

There would be benefits to setting an eventual goal of eradicating onchocerciasis in the future if the development of new tools could reasonably assure success. In the meantime, continued distribution of ivermectin will keep onchocerciasis controlled to a point where it is no longer a public health problem or constraint to economic development.

Ethiopian Lions
continued from Page 1

to correct trichiasis, the painful and blinding eyelid defect caused by chronic trachoma, as part of its implementation of the full SAFE strategy.

Ethiopia is believed to have the world’s highest rate of trachoma. The signing of the Lions-Carter Center SightFirst Initiative in 1999 allowed The Carter Center to begin assisting the Amhara Regional Health Bureau in Ethiopia to control blinding trachoma in the South Gondar Zone, as well as providing assistance for trachoma control in Sudan and onchocerciasis control in Ethiopia and 10 other countries. A trachoma-prevalence survey, conducted with support from The Carter Center early in 2001, confirmed that the rates of inflammatory trachoma and trichiasis in South Gondar Zone are among the highest recorded in the world. That survey estimated that 36,000 persons have trichiasis and are in need of surgery to relieve their suffering and prevent blindness. A subsequent community needs assessment showed that community members are aware of trichiasis surgery but are blocked from having it done due to poverty, inaccessibility of health centers, or lack of qualified surgeons. Presented with that startling information, the Lions Clubs of Ethiopia, led by Lions District 411 Governor Dr. Tebebe Yemane Berhane, submitted their proposal to Lions International. Over the three-year grant period, the Amhara Regional Health Bureau (ARHB) plans to:

- Train 40 eye nurses as trichiasis surgeons,
- Provide the necessary equipment for trichiasis surgery, and
- Facilitate community mobilization and health education campaigns to promote trachoma control activities.

The goal of this project is to enable the ARHB to do 9,000 surgeries to correct trichiasis. These surgeries will be done both through outreach campaigns (eye camps) and in health centers.

Lions Clubs of Ethiopia are already well known and appreciated throughout Ethiopia through their other blindness prevention efforts. Among other things, they fund hospital ophthalmic units, eye health training and regular cataract surgery campaigns. This grant is the first SightFirst grant to fund trichiasis surgery in Ethiopia.
Carter Center Assists More Than Eight Million Treatments in 2001
Hosts Sixth Annual Review Meeting

In 2001, The Carter Center assisted in providing 8,019,378 Mectizan® treatments, or 95 percent of the annual treatment objective, in 11 countries. These figures represent an increase of 11 percent over treatments assisted in 2000. Of the treatments assisted in 2001, 97 percent were accomplished in partnership with the Lions Clubs International Foundation and with help of local Lions. Most treatments in Africa were in collaboration with the Africa Program for Onchocerciasis Control.

Hosting the sixth annual review meeting for Global 2000 River Blindness Programs in Atlanta from Feb. 26-28, 2001, The Carter Center discussed 2001 treatment returns, training activities, 2002 annual treatment objectives, ultimate treatment goals, sustainability issues, Mectizan logistics, epidemiological assessment activities, operations research, and administrative issues. This year’s meeting also addressed the importance of timely and complete monthly reporting.

In attendance this year were Global 2000 River Blindness Program country representatives Dr. Albert Eyamba, Cameroon; Mr. Teshome Gebre, Ethiopia; Dr. Moses Katabarawa, Uganda; Dr. Emmanuel Miri, Nigeria; and resident technical advisors in Sudan, Mr. Mark Pelletier in Khartoum and Ms. Kelly Callahan in Nairobi. Dr. Mauricio Sauerbrey presented progress made by programs in the six river blindness–affected countries in the Americas served by the Onchocerciasis Elimination Program for the Americas. Other technical staff members included Drs. Jeremiah Ngondi, Nairobi; Kenneth Korve, Nigeria; and Nimzing Jip, Nigeria. Special guests included Professor Mamoun Homeida, chairman, National Onchocerciasis Task Force, Sudan; Ms. Irene Mueller, program manager, HealthNet International, Sudan; Ms. Rebecca Teel Daou, Lions Clubs International Foundation; Dr. Bellario Ahoy

continued on Page 4
Ngong, chief health officer and chairman of South Sudan Onchocerciasis Task Force; Dr. Steve Blount and Mr. Ross Cox, Office of Global Health, CDC; Drs. Bjorn Thylefors, Mary Alleman, and Nana Twum Danso, Mectizan Donation Program; Drs. James Maguire, Mark Eberhard, David Addiss, Ali Khan, and Tovi Lehmann, Division of Parasitic Diseases, CDC; and other distinguished observers. Dr. Frank Richards, technical director, Global 2000 River Blindness Program, chaired the meeting.

A summary of treatment reports from the different program areas follows:

**Nigeria**

The Global 2000 River Blindness Program, in collaboration with the Lions Clubs International Foundation and the African Program for Onchocerciasis Control, assisted in treating 4,782,280 persons with Mectizan in 2001. This was 102 percent of the annual treatment objective, and a two percent increase in treatments compared to 2000. Treatment activities in Plateau and Nasarawa States continued to show the advantages of integrating treatments and health education activities for onchocerciasis, lymphatic filariasis, and schistosomiasis.

**Uganda**

The program in Uganda treated 932,147 people with Mectizan in 2001 in collaboration with the Lions Clubs International Foundation. This figure was 99 percent of their ultimate treatment goal and an increase in treatments of three percent compared to 2000.

**Cameroon**

A total of 926,644 persons were treated in Cameroon with Global 2000 River Blindness Program/Lions Clubs International Foundation assistance in 2001. This figure was 86 percent of the annual treatment objective and an 11 percent increase in treatments compared to 2000. Of the 2001 treatments, 75 percent, or 698,223, were achieved in collaboration with the Lions Clubs International Foundation in the West Province, while 228,421 were treated in the African Program for Onchocerciasis Control-supported North Province project.

**Ethiopia**

In its first year of mass Mectizan distribution, a total of 233,352 persons were treated with Global 2000 River Blindness Program/Lions Clubs International Foundation assistance in Ethiopia. The Ethiopian program will continue to grow rapidly, with an annual treatment objective of 548,437 for 2002.

**Sudan**

Despite the civil war, the Sudan program increased treatments in 2001 (563,068) by 10 percent over 2000 (510,157). Of all treatments in Sudan in 2001, Global 2000 River Blindness Program/Lions Clubs International Foundation assisted 443,082 or 79 percent. Eighty percent, or 352,269, were administered in areas controlled by the Government of Sudan. Treatment in opposition-held areas increased by 75 percent compared to 2000. The increase in treatments was achieved in areas assisted by the International Medical Corps.

**The Americas**

In the Onchocerciasis Elimination Program for the Americas, the strategy is to provide two Mectizan...
River Blindness

Gebre Elected Secretary of the National Onchocerciasis Task Force of Ethiopia

In 2000, a National Onchocerciasis Task Force (NOTF) was established by the Ministry of Health to oversee onchocerciasis activities in Ethiopia. In 2001, Mr. Teshome Gebre, the Carter Center’s country representative in Ethiopia, was elected to serve as the first secretary to the NOTF. Congratulations to Mr. Teshome on this honor!

The NOTF has been pivotal in the launching and growth of the Ethiopian fight against river blindness. The program was launched in December of 2000 and initiated treatments in March of 2001 in Kaffa and Sheka zones of the Southern Nations, Nationalities, and Peoples Region (SNNPR). Ethiopia met 111 percent of their 2001 objective by treating 233,352 persons. Most recently the NOTF received approval for funding and technical support from APOC projects for two new Mectizan distribution projects.

Mr. Teshome Gebre speaks during a training session about onchocerciasis and the strategy of community-directed treatment with ivermectin.

in the Bench Maji Zone of the SNNPR and in North Gondar Zone of the Amhara Region.

Programs in Colombia, Ecuador, Brazil, and Mexico achieved 100 percent, 91 percent, 90 percent, and 88 percent coverage of their ultimate treatment goal (2) respectively, exceeding the 85 percent goal for semiannual coverage in the region. Ultimate treatment goal (2) coverage in Guatemala and Venezuela, 83 percent and 53 percent respectively, both improved over 2000, but Venezuela remains far behind all other countries in the region.

River Blindness References


Trachoma

Third Annual Review of Carter Center-Assisted Trachoma Control Programs Held at Center

The third annual program review for Carter Center-assisted trachoma control programs was held at The Carter Center on March 11-12, 2002. Fifty-four persons from 12 countries attended the meeting, representing six trachoma control programs, the Conrad N. Hilton Foundation, Lions Clubs International and Pfizer, Inc. Other partner organizations represented included the U.S. Centers for Disease Control and Prevention, Helen Keller Worldwide, World Vision International, the International Trachoma Initiative, the Medical Research Council, London School of Hygiene and Tropical Medicine, and the World Health Organization.

National Trachoma Control Program coordinators Dr. Maria Hagan, Ghana; Dr. Doulaye Sacko, Mali; Dr. Abdou Amza, Niger; and Professor Mamoun Homeida, Sudan, presented on their programs’ progress and challenges in 2001 and visions for 2002. In addition, Mr. Teshome Gebre, Carter Center representative, Ethiopia, and Dr. Nimzing Jip, Carter Center trachoma control program manager, Nigeria, represented the regional programs with which they work. Dr. Bellario Ahoy Ngong, chief health officer and chairman of South Sudan Onchocerciasis Task Force, and Ms. Kelly Callahan, the Carter Center’s resident technical advisor in Nairobi, Kenya, represented trachoma control activities in Operation Lifeline Sudan/South-supported areas of Sudan.

This year the program review was structured to focus discussion on specific aspects of the SAFE strategy. On the first day, personal and environmental hygiene (F and E) activities were discussed. On the second day, surgery and antibiotic (S and A) activities were discussed. Presentations on special topics were made by Mr. Paul Emerson on flies and trachoma control, by Ms. Dana Lee on the use of Quicken™ software to track drug distribution, and by Ms. Laura Lester on the way the Carter Center’s Ethiopia Public Health Training Initiative is developing a module for teaching trachoma control in public health schools.

Other topics of discussion included a proposal for standardizing monitoring, evaluation, and surveillance activities based on a recent WHO meeting and experience from participating trachoma control programs. Participants worked diligently to quantify activities from 2001 (see Figure 2) and to set firm targets for interventions in 2002 (see Table 2).

The presentations confirmed that impressive progress was made in developing national and regional trachoma control programs in 2001 and showed much better planning for the year ahead. The high level of the discussions promises to lead to better control of trachoma transmission by flies and improved program monitoring and evaluation. The theme of the program review set the tone for field activities in 2002: Increase clean faces, decrease flies! ★
Trachoma Expert Committee Recommends Increasing Zithromax Donation for Sudan

On April 10, 2002, the Trachoma Expert Committee of the International Trachoma Initiative (ITI), the advisory committee for the ITI, met at the ITI’s headquarters in New York City. In that meeting, the TEC recommended increasing the Pfizer, Inc., donation of Zithromax® to the Sudan program. This generous donation will allow the Sudan Trachoma Control Program to expand antibiotic treatments as part of a comprehensive SAFE strategy to control blinding trachoma.

Recommendations from the committee are used by the ITI Board of Directors in making decisions, including targeting donations of Zithromax to trachoma-endemic countries. In the April meeting, the committee reviewed information from a recent supervisory visit to Sudan by Dr. Peter Kilima, ITI regional director, and a report from the Sudan program, including the national plan of action for 2002-2003. The Trachoma Expert Committee unanimously voted to recommend to the ITI Board of Directors that the Sudan Trachoma Control Program be given additional treatment doses of Zithromax. This will allow the program to treat 574,000 persons in 2002 and 2003 in areas supported by the Federal Ministry of Health. In Operation Lifeline Sudan-supported areas, the program will increase the number of persons treated from 40,000 in 2002, to 100,000 in 2003.

A health worker distributes Zithromax® in Sudan.

Trachoma References


Emerson PM, Lindsay SW, Walraven GE, Dibba SM, Lowe KO, Bailey RL. “The Flies and Eyes Project Design and methods of a cluster-randomised intervention study to confirm the importance of flies as trachoma vectors in The Gambia and to test a sustainable method of fly control using pit latrines.” Ophthalmic Epidemiology. 9(2):105-17, 2002 Apr.


Sudan Launches Vision 2020

The Sudan Ministry of Health and its partners in prevention of blindness launched Vision 2020 – the Right to Sight in a five-day workshop in Khartoum beginning Feb. 11, 2002. The workshop brought together health workers, leaders of the visually impaired community, governmental and nongovernmental organizations, donors, and politicians to review existing data on blindness in Sudan, identify needs, and coordinate future activities to prevent or treat blindness. The most prominent participants included Vice President (Professor) Moses Machar, Minister of Health Dr. Ahmed Bilal Osman, and Prince Abdel Aziz Bin Ahmed Bin Abdel Aziz Al Saud. All three pledged their support for prevention of blindness activities. In an extraordinary gesture, Prince Abdel Aziz, chairman of Vision 2020 – the Right to Sight for the Eastern Mediterranean Region, pledged his personal support for the

Participants in a five-day workshop in Khartoum launched the Sudanese Vision 2020 – the Right to Sight.
prevention of blindness in Sudan.

Vision 2020 – the Right to Sight targets the major causes of preventable or treatable blindness: cataract, trachoma, onchocerciasis, and preventable childhood blindness. The workshop built on those diseases, adding discussions on low vision, glaucoma, and rehabilitation of the visually impaired. This landmark meeting was organized and hosted by the private Academy of Medical Science and Technology, under the direction of Professor Mamoun Homeida. Professor Homeida is the national coordinator of Sudan’s Trachoma Control Program and chairman of the National Onchocerciasis Task Force.

The workshop was facilitated by Professor Charles Mackenzie, Michigan State University; Dr. Daniel Eya’Ale, World Health Organization; Mr. Matthias Spaeth, Christoffel-Blindenmission; and Dr. James Zingeser, The Carter Center.

The workshop produced draft reports from regional work groups identifying needs and suggesting plans of action for each target disease. The final report will lay the foundation for coordinating prevention of blindness activities throughout Sudan within the framework of Vision 2020 – the Right to Sight, coordinating and supporting the ongoing efforts of key partners such as the Federal Ministry of Health, the Academy of Medical Science and Technology, WHO, The Carter Center, International Trachoma Initiative and Christoffel-Blindenmission.

Mali’s National Blindness Prevention Week Emphasizes Trachoma Control

The National Blindness Control Program of Mali celebrated its second Blindness Prevention Week, Oct. 11-17, 2001, the week that included World Sight Day. This year’s theme was Let’s Fight Trachoma Together.

Blindness Prevention Week was launched in a ceremony held in Bamako’s Convention Center by Minister of Health, Dr. Traoré Fatoumata Nafo, and Minister of Social Development and the Aged, Mrs. Diakité Fatoumata N’Diaye. The launching also included the appearance on national television by Dr. Doulaye Sacko, national coordinator of Mali’s Blindness Prevention Program, to highlight the week’s events. A press conference was held to discuss the control of blinding trachoma. The press conference was co-directed by Mr. Ismaila Konaté, president of the Malian Federation of Handicapped Persons (FEMAH), and Mr. Cheikma Diawara, president of Lions International Zone 152 of District 403.

Other events during the week included a roundtable discussion on childhood blindness and a White Cane award ceremony. The presidents of the Malian Lions and Rotary Clubs, Handicap International, and the Raoul Follereau Association (France) officially declared their support for Vision 2020: the Right to Sight.

Malian national television broadcast films on blindness prevention with emphasis on trachoma control.

Activities were held in trachoma-endemic villages to highlight Mali’s Trachoma Control Program. A model trachoma prevention lesson, developed in collaboration with the Helen Keller Worldwide School Health Project, was given in the Districts of Bougouni and Kati, in Sikasso and Koulikoro Regions, respectively. In addition, the second round of Zithromax® distribution took place in the village of Ferékoroba, where the National Trachoma Control Program was launched in 1999 by former U.S. President Jimmy Carter and former Malian head of state, General Amadou Toumani Touré (now president-elect of Mali). The Malian Ministry of Health plans to implement the SAFE strategy to control blinding trachoma in all endemic villages.

Dancing and other activities were part of Mali Sight Week 2002.
First Ghana Trachoma Control Program Review Completed

The first Ghana Trachoma Control Program Review was held in Kumasi, Ghana, on Dec. 12-13, 2001. Ministry of Health participants included Dr. George Amofo, director of Public Health, Dr. Maria Hagan, director of Eye Health, the heads of disease control and surveillance, and trachoma control program staff from the Northern and Upper West Regions. In addition, representatives of The Carter Center, the International Trachoma Initiative, Swiss Red Cross, UNICEF and WHO also attended the review.

The objectives of the meeting were:

- Review progress made in trachoma control activities during the past year
- Discuss program success and challenges in implementation of the SAFE strategy, with an emphasis on the F & E components
- Promote the expansion of program activities to other trachoma-endemic communities within the project districts
- Develop a plan of action for the year 2002, including specific targets and indicators for monitoring and evaluation

The Ghana Trachoma Control Program is implementing trachoma control activities in 225 trachoma-endemic villages in two districts of the Upper West Region and three districts in the Northern Region. Health education activities are ongoing in all these villages through theater, radio, posters, playing cards, and pictures. The program has trained community health workers, environmental health officers, teachers and volunteers to do community education and mobilization activities in trachoma-endemic communities.

During the past year, 71,438 persons, or 81 percent of the target population, were treated with Zithromax®, donated by Pfizer, Inc. Over 7,000 persons who were ineligible for Zithromax treatment were given tetracycline ointment. Surgical outreach campaigns corrected trichiasis in 336 persons, 67 percent of the program target for 2001.

In 2002, the Ghana Trachoma Control Program plans to strengthen its current activities and expand to include other trachoma-endemic communities in the two program regions. Challenges in program implementation included poor data management and reporting, insufficient supervision to endemic communities, and inadequate surgical supplies. The program plans to hold the next program review meeting at the end of 2002.

Nigeria Treats More Than 670,000 for Lymphatic Filariasis in 2001

The Lymphatic Filariasis Elimination program in Plateau and Nasarawa States, Nigeria, continued its expansion under the direction of Dr. Abel Eige of The Carter Center and Dr. M.Y. Jinadu of the Federal Ministry of Health. During 2001, 675,681 people received health education and combined treatments of albendazole and Mectizan® (ivermectin) in Plateau and Nasarawa States in central Nigeria. This was an increase of more than 400 percent from year 2000, when 159,555 persons were treated. The cumulative number of persons treated since this project began is 835,236.

In 2002, the program expects to provide health education and treatment activities to 2.4 million persons. As of May 2002, the ministries of health of Plateau and Nasarawa States have treated 570,311, 23 percent of that goal.

It is estimated that 120 million people are infected with lymphatic filariasis worldwide. About 90 million of Nigeria’s 120 million population are thought to be at risk of infection, making Nigeria the third most affected country in the world, after India and Indonesia. In addition to the Bill & Melinda Gates Foundation, GlaxoSmithKline, Merck & Co., Inc., and other generous donors provide support for the program to The Carter Center.
Meetings

Gates LF Grant Review Committee Meeting

Dr. Abel Eigege presented the Carter Center-assisted lymphatic filariasis treatment activities in Plateau and Nasarawa States at the Gates Grant Review Committee meeting, which was held Feb. 5-6, 2002, in Annecy, France, to examine the progress of projects after their first year of financial support from the Bill & Melinda Gates Foundation. Dr. Frank Richards and Mr. Craig Withers also attended the meeting. Dr. Eigege highlighted the need for a secure drug logistical system for procuring the Mectizan and albendazole tablets to support the rapid expansion of the program (which has an ultimate treatment goal of 3.6 million by the end of 2003).

Dr. Eigege highlighted the need for a secure drug logistical system for procuring the Mectizan® and albendazole tablets to support the rapid expansion of the lymphatic filariasis program in Nigeria.

19th Session of the NGDO Coordination Group for Onchocerciasis Control

Dr. Rachel Barwick represented The Carter Center at the 19th session of the Nongovernmental Development Organizations Coordination Group for Onchocerciasis Control (NGDO Group) held in Durban, South Africa, from Feb. 15-16, 2002. Dr. Adrian Hopkins (Christoffel-Blindenmission) reported during the meeting on issues related to successful Mectizan distribution in areas of conflict and insecurity. The meeting was coordinated with the planning meeting of the Regional Assembly of the International Agency for the Prevention of Blindness (IAPB)/Vision 2020, which immediately followed the NGDO session. During the IAPB/Vision 2020 meeting, Ms. Pamela Drameh, coordinator of the NGDO Group, reported on the 10 years of contributions to onchocerciasis control by NGDOs.

Lions District 411 Annual Convention

Carter Center/Ethiopia country representative, Mr. Teshome Gebre, and Dr. James Zingeser attended the Lions District 411 Convention, which was held in Addis Ababa from April 25-28, 2002. In the opening ceremony, Dr. Zingeser read a letter from former U.S. President Jimmy Carter to District Governor Dr. Tebebe Y. Berhan, thanking the Lions of District 411 for their generosity and hard work in prevention of blindness efforts. District Governor Tebebe chaired the convention, which featured reports on the strong collaboration among Lions, The Carter Center, and Christoffel-Blindenmission (CBM).

President Carter proudly displays the award presented by Lions in Ethiopia to The Carter Center.
River Blindness

In the late 1980s, the pharmaceutical Merck & Co. discovered that ivermectin was an effective and safe means of fighting river blindness. Merck offered Mectizan® free of charge to governments and non-governmental organizations such as The Carter Center in an initiative that today is widely considered as a model of the way in which industry, international organizations, donors, and national ministries of health can work together to achieve a common goal. Since 1996, the Center’s River Blindness Program has delivered more than 35 million treatments of Mectizan.

Trachoma

Worldwide, most inflammatory trachoma patients are children, and 75 percent of people blinded by trachoma are women. A blinding disease that has plagued humankind since the 27th century B.C.E., the disease can be controlled through improved personal and environmental hygiene, the F and E components of the SAFE strategy. Since 1998, experts at The Carter Center, capitalizing on experience gained in both the Guinea Worm Eradication and River Blindness Programs, have focused on primary prevention through educating and mobilizing communities. Today, The Carter Center fights trachoma in Ghana, Mali, Niger, Sudan, Ethiopia, Nigeria, and Yemen.

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