

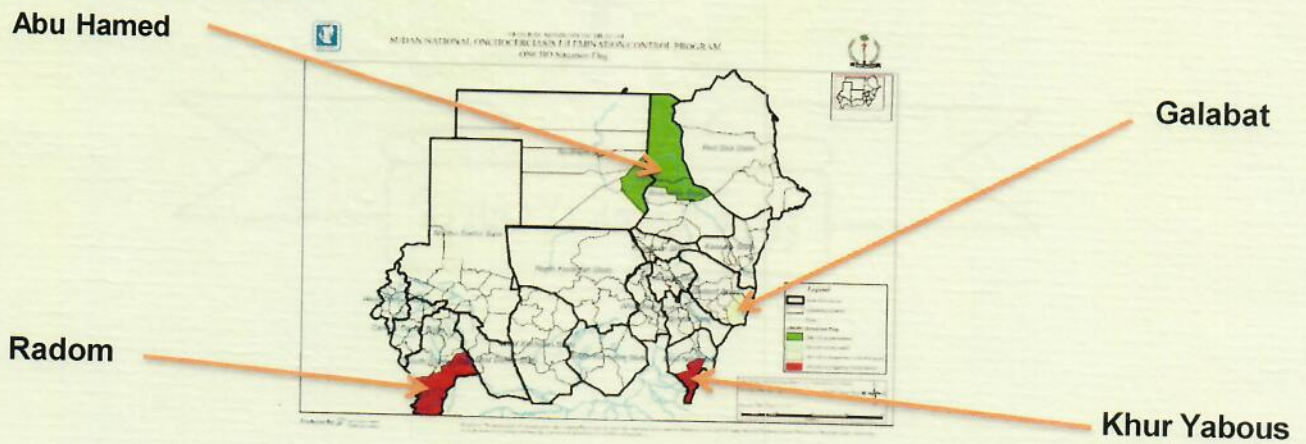


Khartoum, February 07, 2023

Sudan Declares elimination of River Blindness in Al-Galabat focus in Gedarif State. Another stunning success after eliminating in Abu Hamad focus of River Nile State.

River Blindness (onchocerciasis) is a parasitic disease that affects the eye and skin in human beings. It is caused by the filarial worms known as *Onchocerca volvulus*, a parasite that can live up to 14 years in the human body. The disease is transmitted by the black (*Simulium*) fly, which is known locally in River Nile State as 'Kunteeb'. The fly breeds in fast flowing waters such as cataracts, waterfalls and fast streams. Over 99% of the disease is transmitted in sub-Sahara Africa. The disease is also known in Central and South America where efforts have been largely successful. In Asia, it is only found in Yemen. Globally, it is estimated that about 17 million people were already affected by this disease, and about 120 million at risk of contracting this infection. At least, 270, 000 people worldwide are estimated to be blind due to River blindness, and about half a million persons visually impaired. This definitely has a direct effect on the economic situation of the affected countries.

Map of Program Area:



In Sudan, the disease in the 1980s was found to afflict 37% of the population in Abu Hamad in River Nile State, 60% in Al-Galabat in Gedarif State, 65% in Al-Radom in South Darfur State, and about 40% in Khor Yabous in Blue Nile State. Blindness caused by onchocerciasis is not common in Sudan as the serious skin disease known as "Sowda", which is a major public health problem.

Annual mass treatment for river blindness with ivermectin (Mectizan®), donated by Merck & Co) began in Sudan in 1998 in Abu Hamad, as well as sporadically in Al-Radom in South Darfur due to civil conflict. Mass treatment in Al-Galabat in Gedarif State commenced in 2007, but the affected population in Khor Yabous in southern Blue Nile State has never received treatment due to the civil conflict. Abu Hamad focus which was the northern most river blindness focus globally and the largest known in Sudan was eliminated in 2015 after shifting from annual mass treatment to twice per year in 2007. This was a strategic decision made by the Federal Ministry of Health, as the country independently choose to shift its focus on river blindness control to nationwide elimination.

Al-Galabat is located along Atbara River, in eastern Sudan very close to the Ethiopian border. The area afflicted with river blindness was approximately 175 km long and 15 Km wide, extending from Al-Galabat south to Sharpop, and about 120 Km from Gedarif City (capital of State). Annual mass treatment in Al-Galabat began in 2007, and in 2011 switched to twice per year treatment until 2015 when laboratory studies on blood and vectors from the area showed that the transmission of the disease was interrupted. However, stopping mass treatment could not be done since the focus extended into Metema area of Ethiopia, which was at the time was endemic. In the interest of the strong bi-lateral cooperation between Sudan and Ethiopia, Sudan agreed to continue distributing Mectizan® until similar laboratory studies showed that the transmission had also been interrupted in Metema. At that time both country programs continued to meet and share information. In late 2017, Sudan and Ethiopia met to review all the results and concluded that the World Health Organization (WHO) guidelines for halting mass treatment interventions had been achieved. This great success means that about 150,000 people in Al-Galabat no longer require treatment, beginning in 2018.



In addition, more than 1.1 million people in the Metema in Ethiopia will no longer require treatment as well. However, Post Treatment Surveillance (PTS) must continue for 3-5 years to assure that transmission of the infection does not return. Once PTS is completed the disease can be declared eliminated in these specific locations. For Sudan to be verified by the WHO as free from river blindness, all endemic areas in the country must have eliminated transmission of the disease, including endemic locations of neighboring countries that border to Sudan.

In 2017 the lab results reflected the success of the program in elimination of river blindness from the focus, these results met with the WHO criteria to stop treatment which was declared in 2018. After three years of stop treatment in June 2021 and early 2022 black flies were collected from three sentinel sites with a total of 9,148, while the WHO criteria need a minimum of six thousand flies. In Feb 2022 a total 4,479 Dry Blood Spots (DBS) were collected from school children under the age of ten years and above five years.

The assessment of black flies for *Onchocerca Volvulus* infected stage 1-2 stage larvae in the vector body by using 0-150 Polymer Chain Reaction Protocol had revealed in zero infection as below than allowed rate which is less than infected 0.1/1000 or 0.05/2000 parous flies.

The Dry Blood Spots were analyzed for OV16 antibodies, and the result was ZERO positive while the minimum allowed by WHO is 0.1%, this means that our OV16 result met the WHO criteria 2016.

Based on these results, the Government of Sudan represented by the Acting Federal Ministry of Health announced that the laboratory results after three years of Post Treatment surveillance (PTS) in Galabat sub-focus has achieved the allowed results according to the standards of the World Health Organization, so hereby we declare the elimination of transmission of onchocerciasis (river blindness) in Galabat sub-focus.

As Galabat sub-focus is cross bordering with Metema focus in Ethiopia and due to the recrudescence of river blindness in Metema sub focus, Sudan Ministry of Health decided to go for Post Elimination Surveillance (PES) in Galabat sub-focus to detect any recrudescence might appear.



This is the second declaration of elimination of onchocerciasis in Sudan after Abu Hamed focus. So, this is a real historical day for all Sudanese who should be proud of.

Now we must continue our work to interrupt transmission and completing Post Treatment Surveillance in the other remaining two foci; Radom and Kur Yabous, with help of our partners: The Carter Center and END FUND, and WHO at the time when we will request for the verification of river blindness elimination in Sudan.

The Federal Ministry of Health would like to thank the government of Sudan and Gedarif State for their support of the river blindness elimination program, The Carter Center for its financial and technical support, Merck & Co. for the supply of free Mectizan®, program personnel and researchers who were actively involved in the fight against river blindness and the Ethiopian Authorities. The affected communities and their locality and administration units who worked tirelessly in order to eliminate river blindness are also highly appreciated.

May Allah grant you health and wellness....

Dr. Heithm Mohammed Ibrahim Awadlla
Acting Federal Minister of Health

