

Sightsavers Deworming Programme – Senegal GiveWell Wishlist 5 Schistosomiasis (SCH) / Soil Transmitted Helminth (STH) Project Narrative

Country: Senegal

Location (region/districts): Dakar, Matam and Sédhiou

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 years¹ within the intervention zone are effectively treated with albendazole and praziquantel as required.

Program implementation areas

Senegal developed a strategic plan (2016-2020) to reduce the impact of neglected tropical diseases (NTDs) resulting in a gradual scaling up of interventions. This strategy has resulted in a significant improvement in the coverage of the mass drug administration (MDA) campaigns over the years.

All districts endemic for onchocerciasis, lymphatic filariasis and trachoma are receiving support, however this is not the case for SCH and STH, where there are still funding gaps. Sightsavers have been notified that the following areas are not currently receiving any SCH/STH treatment due to a lack funding:

- **4 districts of Matam region (Kanel, Ranérou, Thilogne, Matam) requires:**
 - SCH - Annual treatment for all districts (2021, 2022 and 2023).
 - STH - Biennial treatment for all districts (treated in early 2019 so treatment planned for 2021 and 2023²).
- **4 districts of Dakar (Mbao, Rufisque, Guédiawaye, Pikine) requires:**
 - SCH – No treatment currently planned (however Diamniadio district recently identified as potentially endemic, a baseline survey could be conducted, and MDA planned accordingly).
 - STH - Annual treatment for all districts (2021, 2022 and 2023).
- **3 districts of Sédhiou (Boukiling, Goudomp, Sédhiou) requires:**
 - SCH - Annual treatment for Sédhiou district. Possible MDA in 2021 for Boukiling and Goudomp dependent on findings from the 2020 surveillance survey.
 - STH – Biennial treatment for all districts (2021 and 2023).

GiveWell's support would enable SCH and STH MDA for SAC in 11 endemic health districts within the regions of Dakar, Matam and Sédhiou and support the country in achieving its objectives of covering 100% of districts endemic to NTDs. Table 1 below shows the prevalence of SCH and STH and the treatment schedule in these 3 regions.

¹ and adults where prevalence dictates

² treatment still required after initial 5 rounds because baseline reassessment was 5%

Table 1: Prevalence and treatment schedule in program implementation areas

| Region / District | SCH prevalence (basic survey) | SCH treatment schedule | STH prevalence (impact survey) | STH treatment schedule | Total population 2021 | Total SAC population 5-14 years old |
|-----------------------|-------------------------------|------------------------|--------------------------------|------------------------|-----------------------|-------------------------------------|
| Matam Region | | | | | | |
| Kanel | 96% | Annual | 5% | Biennial | 327,863 | 94,523 |
| Matam | 96% | Annual | 5% | Biennial | 265,969 | 76,679 |
| Thilogne | 96% | Annual | 5% | Biennial | 108,633 | 31,319 |
| Ranérou | 96% | Annual | 5% | Biennial | 70,507 | 20,327 |
| Sédhiou Region | | | | | | |
| Boukiling | 0% | - | 6% | Biennial | 193,903 | 55,902 |
| Goudomp | 0% | - | 7% | Biennial | 207,927 | 59,945 |
| Sédhiou | 66% | Annual | 2% | Biennial | 201,578 | 58,115 |
| Dakar Region | | | | | | |
| Guédiawaye* | 1% | - | 71% | Annual | 425,042 | 122,540 |
| Pikine | 0% | - | 53% | Annual | 423,771 | 122,173 |
| Mbao | 0% | - | 50% | Annual | 442,244 | 127,499 |
| Rufisque | 0% | - | 26% | Annual | 285,028 | 82,174 |
| | | | | Total | 2,952,464 | 851,195 |

Year of Study: 2016 Matam, 2018 Sedhiou and 2013 Dakar

* MOH do not consider this area endemic for SCH as the prevalence figure is based one non-resident individual.

Prevalence

GiveWell's continued support will enable SCH and STH MDA activities for the control of SCH and STH meeting the WHO-defined minimum thresholds for MDA eligibility³, however due to previous rounds of treatment, some areas are considered 'treated populations' and as such, the treatment thresholds are lower.

According to WHO treatment guidelines, an impact survey should be conducted after 5-6 years of preventive chemotherapy for SCH and STH in order to guide program adaptation to new epidemiological status of each eligible district. As a result, impact assessment surveys were conducted in 2016 and 2018, by USAID/RTI in Matam Region, and by RTI in Sédhiou Region, respectively, after 5 rounds of SCH/STH MDA.

Despite 5 years of SCH/STH treatment, Matam Region continues to have high SCH prevalence of 96%, requiring additional treatment rounds. Several factors may explain this high prevalence, such as challenges related to access to drinking water, insufficient use of latrines by the population, lack of knowledge of the modes of transmission of the disease by the population, socio-cultural beliefs (example: establishing a link between illness and virility), and insufficient communication on preventive measures. As an organisation we aim to look further into this to identify additional activities that should be implemented in order to improve social mobilization

³ [Helminth control in school age children: a guide for managers of control programmes, Second edition](#), 2011, page 74-75

and Information, Education, and Communication (IEC) materials in order to promote behaviours favourable to the reduction of transmission and the spread of SCH and STH.

For STH, treatment must continue in the districts where prevalence is greater than or equal to 2% after 5 rounds of MDA. This is the case of the districts in Matam and Sédhiou Regions, where 5+ rounds of treatment with albendazole/mebendazole have already taken place, but following the impact surveys from 2016 and 2018, the prevalence of STH was still found to be between 1% and 10%. As such, this is considered a ‘treated’ population on the STH decision tree and biennial MDA is recommended. 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 2a: Treat school aged children between 5-14 years for SCH / STH with MDA.

Output 2b: Treat adults for SCH through MDA where prevalence rates dictate.

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 |
|--|---------|---------|---------|
| No. of teachers trained on SCH/STH MDA | 1,169 | 1,222 | 1,409 |
| No. of health workers trained on SCH/STH MDA | 276 | 231 | 276 |
| No. of CDDs trained on SCH/STH MDA | 1,943 | 1,436 | 2,351 |
| No. of school aged children between 5-14 years treated for SCH | 210,722 | 216,411 | 222,254 |
| No. of school aged children between 5-14 years treated for STH | 638,396 | 349,990 | 673,335 |
| No. of adults treated for SCH | 385,190 | 395,590 | 406,271 |
| No. of adults treated for STH | - | - | - |

Summary of planned budget

| | Year 1 | Year 2 | Year 3 | Total |
|-----------------------|-----------|-----------|-----------|-------------|
| Planned program costs | \$495,293 | \$433,552 | \$521,150 | \$1,449,995 |

Please see attached ‘Wishlist 5 budget’ for more detail.

Implementation

School based treatment distributed by teachers will ensure optimal coverage, considering the high school enrolment rate in the 3 regions, especially in Dakar and Sédhiou⁴. Non-enrolled or absent children will be treated through community-based MDA by community drug distributors (CDDs).

⁴ In 2016, school enrolment rate in Dakar was 102.9%, 73.1% in Matam and 106.4% in Sédhiou (source ANSD 2019).

In the 4 districts of Matam region and in the district of Sédhiou that are co-endemic for SCH and STH, there will be integrated treatment where required, with the combination of praziquantel and albendazole.

- Matam Region: STH MDA completed 2019 and no funds available in 2020 to do MDA, so an integrated STH / SCH MDA is planned for 2021 and 2023, while in 2022 only SCH MDA is planned.
- Sédhiou Region: Sédhiou district - SCH MDA planned for 2022, integrated STH/SCH MDA is planned for 2021 and 2023.

For the 4 districts of the Dakar region and Goudomp and Bounkiling districts of Sédhiou Region, which are endemic only for STH, treatment will be conducted with albendazole.

- Dakar Region: STH MDA planned for 2021, 2022 and 2023 in all four districts.
- Sédhiou Region: Goudomp and Bounkiling districts - STH MDA planned for 2021 and 2023.

Adult treatment, which is recommended by WHO in areas of high SCH prevalence (> 50%), will be part of this program in four districts of Matam Region and 1 district in Sédhiou Region. At the end of this three-year grant, a total number of 1,661,722 school aged children are expected to be treated against STH and 649,387 against SCH.

As part of the routine implementation, behaviour change communication materials will be reviewed and delivered within communities in order to promote behaviours favourable to the reduction of transmission and the spread of SCH and STH. This is particularly important given the high reinfection rates for SCH in the Matam region.

Monitoring and evaluation

Treatment coverage surveys (TCS)⁵ 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.

Follow-up parasitological surveys (surveys at sentinel sites / surveys for the reassessment of baseline prevalence levels) will be supported as needed and, in accordance with guidance from WHO / expert groups. These surveys will a) assess progress towards the control of morbidity / elimination of SCH and STH as a public health problem; b) reassess treatment strategies. However, we have not included the budget for this activity within Wishlist 5 as we are still awaiting updated guidelines from WHO on conducting surveys at a sub-district level.

⁵ now referred to as Coverage Evaluation Surveys (CES) by the WHO

Inputs from partners, governments and other stakeholders

| Partner | History of work with Sightsavers | Role in the project |
|--------------------------------|---|---|
| Ministry of Health | Partnership since 2001 | Coordination Implementing partner |
| Ministry of National Education | Partnership since 2011 | Implementing partner Sensitization for adoption of healthy behaviour |
| OMVS | Since 2016, we belong to the same NGOs coordination mechanism for NTD elimination | Provision of PZQ tablets for adults |
| Pharmaceutical companies | Pharmaceutical companies have been donating drugs to the MoH since 2009 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 previous years there have been other organisations / funders who have helped support the country in its work to tackle SCH and STH however the funding situation has changed.

Currently, the main NTDs partners in Senegal are USAID, FHI360⁶ and Sightsavers. They are focused on LF (MDA and survey), oncho (MDA and survey) and trachoma (surveillance survey, investigations, outreaches, F&E, other).

Regarding SCH/STH, FHI360 only finances SCH/STH MDA in districts that are co-endemic to LF and/or oncho. As such, when oncho/LF MDA is no longer required, the SCH/STH MDA also stops. This has been the case of the Sédhiou region; the districts Goudomp, Sédhiou and Bounkiling were endemic to LF, but since 2018 no LF MDA has been required and as a result, no incidental STH treatment has been delivered⁷. The regions of Dakar and Matam are not endemic to oncho or LF and for this reason haven't received SCH/STH treatment from FHI360.

The 4 districts in Matam region last received SCH/STH MDA in 2019, conducted by OMVS (The Organization for the Development of the Senegal River) / Enda Sante, since then MDA had not been carried out because no other funds have been available.

The last LF MDA round conducted in Sédhiou Region was in 2017, funded by RTI. Dakar Region received the last round of STH MDA in 2017, conducted by RTI, since then no other funds have been available. The table below summarizes the previous SCH/STH MDA rounds in each district.

⁶ In 2019, FHI360 took over from RTI.

⁷ During this period, the district of Sédhiou was not considered endemic to SCH. It was in 2018, after the MDA rounds stopped in the region, that the district of Sédhiou was classified as endemic to SCH.

| Previous MDA Rounds | | | | |
|---------------------------------|--------------------|-----------------------------|-------------------------|-------------------------|
| Region / District | USAID / ChildFund | OMVS / Enda Sante | ChildFund | RTI |
| Matam Region⁸ | | | | |
| Kanel | 2015 (SCH/STH MDA) | 2017 and 2019 (SCH/STH MDA) | - | - |
| Matam | 2015 (SCH/STH MDA) | 2017 and 2019 (SCH/STH MDA) | - | - |
| Thilogne | 2015 (SCH/STH MDA) | 2017 and 2019 (SCH/STH MDA) | - | - |
| Ranéroù | 2015 (SCH/STH MDA) | 2017 and 2019 (SCH/STH MDA) | - | - |
| Sédhiou Region | | | | |
| Boukiling | - | - | 2013 to 2015 (LF MDA) | 2016 and 2017 (LF MDA) |
| Goudomp | - | - | 2013 to 2015 (LF MDA) | 2016 and 2017 (LF MDA) |
| Sédhiou | - | - | 2013 to 2015 (LF MDA) | 2016 and 2017 (LF MDA) |
| Dakar Region⁹ | | | | |
| Guédiawaye | - | - | 2014 and 2015 (STH MDA) | 2016 and 2017 (STH MDA) |
| Pikine | - | - | 2014 and 2015 (STH MDA) | 2016 and 2017 (STH MDA) |
| Mbao | - | - | 2014 and 2015 (STH MDA) | 2016 and 2017 (STH MDA) |
| Rufisque | - | - | 2014 and 2015 (STH MDA) | 2016 and 2017 (STH MDA) |

⁸ No SCH/STH MDA was conducted in Matam Region in 2016, when the Impact Survey was carried out. In 2018, there was no MDA due to the lack of funding.

⁹ After 2017, there was no more MDA due to the lack of funding.