Sightsavers deworming programme, Cameroon

GiveWell schistosomiasis (SCH) and soil transmitted helminths (STH) project

Year four annual report: April 2020 – March 2021

Country: Cameroon
Location: Far North, North, East, West, Adamaoua, Littoral and South regions
Start dates:
Far North, North, West: MDA Start date April 2018, Project Year 3. MDA delivered in Dec 2020 - Jan 2021.
East and Adamaoua: Start date April 2019, Project Year 2. MDA delivered in Dec 2020 - Jan 2021.
Littoral and South regions: Start date April 2020, Project Year 1. MDA delivered Dec 2020 - Jan 2021.

Project goal: To contribute to the reduction in prevalence and intensity of schistosomiasis (SCH) and soil transmitted helminths (STH) through MDA.

Project summary

This project year, Sightsavers has been supporting SCH/STH MDA in seven regions of North, Far North, East, West, South, Adamaoua, and Littoral, with funding from GiveWell.

Sightsavers continued to work in five regions with funding from GiveWell provided through Wishlist 3. In addition, further funding through Wishlist 4 has enabled Sightsavers to begin work in the Littoral and South regions for the first time.

This year, COVID-19 has caused major disruption to the implementation of planned project activities in Cameroon. All project activities had to stop in March 2020, when the Cameroon government began to put restrictions on travel and mass gatherings, and schools were closed. From the beginning of June, many restrictive measures were lifted.

A significant drop in COVID-19 positive cases was observed between July and November, while a second wave of the COVID-19 was observed between December 2020 and April 2021. As of the 12th May 2021, there have been 76,756 confirmed cases with 3,736 active cases, 71,790 recoveries and 1,230 deaths resulting in a case fatality rate of 1.6. In total, all 190 of the districts in Cameroon have been affected by COVID-19. The vaccination programme is underway in 178 of the 190 districts with 43,651 people already vaccinated against COVID-19. Despite the challenges posed by the pandemic, Cameroon has demonstrated exceptional resilience.

A RAMA process was conducted and approved in September for a SCH/STH mini campaign in 3 health areas in the West Region, as an urgent response to an outbreak of haematuria.

In October 2020, the RAMA process was conducted and approved to resume SCH/STH MDA in all 7 Regions. The MDA for all 7 regions was successfully completed in January 2021. For the CES[1] a separate RAMA process was successfully conducted in April 2021.

[1] previously referred to as TCSs

Project output summary

Output	Indicator	Year 4 Target	Year 4 Actual
Treat school-age children between 5-14 years for SCH and STH through MDA	No. of school-age children between 5-14 years treated for SCH	2,021,883	2,256,170
	No. of school-age children between 5-14 years treated for STH	3,168,146	3,353,135

Total number of school aged children treated: 3,361,900

Activity Narrative

All project activities had to stop in March 2020, as per WHO guidance for MDA. The Cameroon government put restrictions on international travel, urban and inter-urban travels, public transport, and mass gatherings, and schools and non-essential services were closed. From the beginning of June, many restrictive measures were lifted after the implementation of a COVID-19 mitigation strategy based on the rapid detection of cases, contact tracing and effective case management.

The government established a specialized COVID-19 coordination and treatment centres in all regional capitals and management centres in each health district; while social distancing and mandatory wearing of facemasks in public places were instituted. Schools resumed in June for pupils in examination classes, while the other pupils did not return until October. Schools had to take precautionary measures to stop the spread of COVID-19 by limiting the number of students per class and dividing them into groups.

In September 2020, a spike in haematuria cases highlighted an outbreak of SCH in 3 health areas in the West Region (Bamendjing, Chanas and Matta). In these areas, there are many lakes and rivers and MDA has not been implemented for a year due to COVID-19 restrictions. We believe this led to the outbreak. This area was originally targeted for GiveWell funded MDA in 2019, receiving two rounds of MDA due to high prevalence. The MoH asked Sightsavers to support treatment in these districts and a RAMA process was submitted and approved. Sightsavers organised a mini SCH/STH door to door campaign for both SAC and adults. This was delivered between 6 - 20th September.

Local radio communication and door to door awareness raising began one month before treatment and was provided by CDDs and community organisations.

In total, training occurred for 12 health workers, 230 CDDs, 5 journalists and 10 members of 3 Community Based Organisations (CBOs), targeting 33,934 individuals for door-to-door awareness raising (treating 29,441 people for STH and 29,499 for SCH[2]). Among which were 11,318 and 11,316 SAC children treated respectively.

Due to false rumours in Cameroon and in West Africa about COVID, local community journalists were trained on sensitization for both SCH/STH preventive measures and COVID-19 awareness raising, whilst community-based organisations spread the same messages through door-to-door sensitisation. Emphasis was laid on the prevention of open water urination and defecation and the need to abstain from bathing directly in open water bodies.

[2] See project outputs table below for SAC treatment numbers

Following the success of the mini-campaign, in September 2020, the MoH and MoE decided to conduct the national SCH/STH MDA campaign between November 2020 and January 2021. Sightsavers supported the campaign in 91 endemic districts across the seven regions.[3]

In November, following RAMA approval for further MDA activities, training of trainers (ToT) began at the central level, followed by cascaded trainings in the 7 regions and subsequently the endemic districts. The ToT took place from 6th to 7th November, with the aim of training national supervisors on MDA implementation in the context of COVID-19; data collection using DHIS-2 system in some selected districts; and proper management and dispensing of drugs to ensure the safety of beneficiaries. During the training, the RAMA-approved COVID-19 prevention SOPs[4] were implemented and adhered to, these included: mandatory wearing of facemasks for all participants, social distancing of at least 1m, and handwashing stations at the meeting room entrance. Hand sanitizers were provided for all participants.

Sightsavers staff, national level supervisors and the regional NTD coordinators helped facilitate trainings at the regional level, ensuring strict compliance to COVID-19 measures. Those trained included medical officers, data managers, and representatives across primary and secondary education. Every participant was provided with PPE (facemasks and hand sanitisers) and seating was arranged to ensure social distancing as per the RAMA-approved SOP.

At the district level, training continued for inspectors, school principals and managers of health centres. The training was spread out across three days to minimise social interaction and overcrowding. Again, all participants were provided with the necessary PPE and COVID-19 sensitisation leaflets and posters were distributed and displayed to encourage adherence to social distancing and hygiene control practices. In some districts, the meeting venues were not suitable as they lacked appropriate ventilation. In these cases, training was conducted outside or where the heat was too strong, facemasks were worn inside. At the end of the training, participants were provided with their MDA equipment: drugs, data collection forms, markers and dose poles.

In all regions teachers were trained and in Adamaoua, Far North, East and North regions (areas of high numbers of unenrolled SAC), CDDs were also trained to deliver treatment. The new COVID-19-adpated SOPs were presented and differences highlighted such as the administration of drugs on spoons, importance of PPE and handwashing after visiting each household. For praziquantel, CDDs were informed to break the drug in half inside a plastic bag to ensure the correct dosage whilst not touching the drug. Markers were given to schools to identify children who had received MDA to avoid a second dose at community level.

In other countries Ascend provided COVID-19 awareness raising activities, but as Ascend does not operate in Cameroon, this project could not benefit from this. It was important to implement a good communication plan and make full use of community radios before delivering MDA, because people were confused and believed that SCH/STH treatments were for COVID-19.

Communication activities were intensified at all levels of programme implementation. At national level, a launch ceremony was held in late November and was broadcast on multiple platforms. The main message was to encourage MDA uptake whilst also informing of COVID-19 safety measures. At the regional level, journalists were trained on community sensitisation throughout the campaign. A broadcasting strategy was created via message delivery four times per day at key hours along with

[3] Good Neighbours carried out deworming MDA in the central region
[4] Standard Operating Procedures

short radio programmes for at least two weeks before MDA delivery. Funds were provided at the district level to help rebroadcast radio spots on their local stations for maximum coverage. At health area level, managers of health centres were responsible for using local communications like town criers, religious and community leaders.

As in Year 3, drug administration took place in both schools and communities so as to ensure all SAC (5-14 years) received treatment regardless of whether or not they were enrolled in school. COVID-19 guidelines, as outlined in the SOPs, was strictly adhered to, with both SAC and teachers wearing facemasks and socially distancing. School representatives submitted their MDA data to inspectors and the district health service for review.

Data review meetings were held in December 2020 to January 2021, post-MDA delivery, by the district data managers at regional level. The meetings were an opportunity for key stakeholders (MoH, Ministries of Primary and Secondary Education, communities, and municipal councils) to validate the final data set whilst highlighting any particular successes, challenges or learnings from the project activities to create a national report.

Project outputs

Output Indicator	Year 4 Apr 2020 – Mar 2021	
	Year 4 Target	Year 4 Actual
1.1 No. of teachers trained on SCH/STH MDA	**11,465 (TOTAL)** 1,714 (North Region) 2,375 (Far North Region) 547 (West Region) 0 (West- Mini campaign) 974 (East Region) 616 (Adamaoua Region) 3,040 (Littoral Region) 2,199 (South Region)	**11,630* (TOTAL)** 1,722 (North Region) 2,676 (Far North Region) 550 (West Region) 0** (West- Mini campaign) 952 (East Region) 759 (Adamaoua Region) 2,784 (Littoral Region) 2,187 (South Region)
1.2 No. of health workers trained on SCH/STH MDA.	**963 (TOTAL)** 124 (North Region)	**1,126 (TOTAL)** 174 (North Region)

	233 (Far North Region) 57 (West Region) 9 (West – Mini campaign) 98 (East Region) 44 (Adamaoua Region) 263 (Littoral Region) 144 (South Region)	281 (Far North Region) 64 (West Region) 9 (West – Mini campaign)** 109 (East Region) 58 (Adamaoua Region) 265 (Littoral Region) 166 (South Region)
1.3 No. of CDDs trained on SCH/STH MDA	**7,346 (TOTAL)** 2,200 (North Region) 2,800 (Far North Region) 96 (West Region) 134 (West – Mini campaign) 1,500 (East Region) 750 (Adamaoua Region) 0 (Littoral Region) 0 (South Region)	**7,463*** (TOTAL)** 2,018 (North Region) 2,848 (Far North Region) 96** (West Region) 134 (West – Mini campaign) 1,378 (East Region) 757 (Adamaoua Region) 217+ (Littoral Region) 15+ (South Region)
1.4 No. of schools training at least one classroom teacher on school MDA	**11,465 (TOTAL)** 1,714 (North Region) 2,375 (Far North Region)	**11,630 (TOTAL)** 1,722 (North Region) 2,676 (Far North Region)

	547 (West Region) 0 (West- Mini campaign) 974 (East Region) 616 (Adamaoua Region) 3,040 (Littoral Region) 2,199 (South Region)	550 (West Region) 0 (West- Mini campaign) 952 (East Region) 759 (Adamaoua Region) 2,784 (Littoral Region) 2,187 (South Region)
2a.1 No. of school aged children (5-14 years) treated for STH via MDA with mebendazole or albendazole	**3,168,146 (TOTAL)** 558,737 (North Region) 1,054,786 (Far North Region) 100,004 (West Region) 10,019 (West- Mini campaign) 204,754 (East Region) 190,547 (Adamaoua Region) 872,018 (Littoral Region) 177,280 (South Region)	**3,353,135 (TOTAL)** 623,105 (North Region) 1,191,111 (Far North Region) 112,863 (West Region) 11,318 (West- Mini campaign) 236,856 (East Region) 221,538 (Adamaoua Region) 758,259 (Littoral Region) 198,085 (South Region)
2a.2 No. of school aged children treated for SCH via MDA with praziquantel	**2,021,883 (TOTAL)** 558,737 (North Region) 1,054,786 (Far North Region) 59,726 (West Region)	**2,256,170 (TOTAL)** ++ 622,488 (North Region) 1,192,020 (Far North Region) 66,128 (West Region)

	10,019 (West- Mini campaign) 97,362 (East Region) 164,633 (Adamaoua Region) 76,621 (Littoral Region) 0 (South Region)	11,316 (West- Mini campaign) 93,831+++ (East Region) 189,334 (Adamaoua Region) 81,053 (Littoral Region) 0 (South Region)
2a.3 No. of treatment coverage surveys conducted with data disaggregated by age group and gender and school attendance	**7 (TOTAL)** (1 in each Region)	**7 (TOTAL)** (1 in each Region)
2b.1 No. of adults treated for STH	**0 (TOTAL)** 20,667 (West – mini campaign)	**17,643 (TOTAL)** 17,643 (West – mini campaign)
2b.2 No. of adults treated for SCH	**9,792 (TOTAL)** 9,792 (West Region) 20,667 (West – mini campaign) 0 (Adamaoua Region)	**22,002 (TOTAL)** 0 (West Region) 17,643 (West – mini campaign) 4,359^ (Adamaoua Region)
3.1 No. of advocacy meetings conducted with stakeholders on SCH/STH Interventions.	**7 (TOTAL)** 1 (in each Region)	**7 (TOTAL)** 1 (in each Region)

* These numbers include school directors trained directly by the project, cascade training from directors to teachers resulted in the training of 34,890 teachers.
** In some health districts of the West region, a mini-community based campaign for SCH and STH MDA was delivered in response to an outbreak, therefore CDDs instead of teachers were trained.
***In very remote communities with no schools, the project adapted and trained CDD's used for vaccination campaigns to deliver treatments to unenrolled SAC
+ In the Littoral and South regions, additional CDDs were trained to increase community-based MDA, please see more detail below.
++ In the Far North, East and North regions, some health districts treating for STH received additional SCH treatment, please see below for more detail.
+++ In the East region MDA delivery was affected by insufficient time for community-based mop-up activities due to expiring drugs and poor rumour management resulting in reduced uptake, please see more details below.
^ Some young people over the age of 15 were treated in community-based MDA.

A variance analysis was carried out between the targets and the actuals achieved at the end of MDA. Comments and explanations for the variances are described below:

- In the Littoral and South regions, particularly in the urban areas, rapid access to internet facilities resulted in false rumours spreading about the MDA and its links to COVID-19. This led to the refusal to accepting MDA from some schools, parents and pupils. It was realised, after engaging local communities through sensitisation, these parents preferred their children to receive MDA in the community, where they could witness treatment, rather than at schools. In response the health districts were advised to train some CDDs in these regions to distribute the drugs at the community level where these schools were allocated. In addition, more CCDs were trained than planned in order to reach very remote communities, where there are no schools.
- In the Far North, East and North regions, MOH requested the treatment of some health districts which were eligible for STH treatment but not eligible for SCH treatment, to be treated for both diseases. This accounted for the increase in the SCH treatment in these regions. The reason for this approach is that the MoH aims to treat whole region, especially in northern regions, but when analysed by district, only some districts are eligible for treatment based on prevalence data. The MoH usually treats both diseases in these areas, and therefore they had the drugs ordered and available.
- In the West region, 52 cases of haematuria were reported indicating an outbreak in SCH. In response, Sightsavers delivered a mini-campaign of praziquantel and albendazole MDA to target the 3 health areas affected (Bamendjing, Chanas and Matta). This was the first opportunity to resume project activities since the start of the COVID-19 pandemic.
- In Bertoua, Betare-Oya (both East Region) and Ngaoundere Urban district (Adamaoua Region) coverage was below 75%. There was a limited timeframe for MDA delivery due to expiring drugs, this meant there was not the usual amount of time for health districts to conduct mop-up MDA in schools and communities. Additionally, in Betare-Oya health district the district team was unable to sufficiently manage negative rumours about treatment, as the district was receiving praziquantel for the first time, and therefore the SCH MDA target was not reached.

School vs community-based treatments

Cumulatively across all regions, 17% of SAC were treated for STH and 20% for SCH through community-based MDA, with the majority receiving treatment in schools. The lowest proportion of community-based treatment was in the West (1% for SCH and 3% for STH), with the highest in the Adamaoua Region (26% for both STH and SCH), which is in line with the available school enrolment rates in both regions, as discussed in the CES.

Project monitoring and coverage survey activity

In response to COVID-19, field and supervision visits were strictly planned with approval at the national level. To conduct a visit, all travelling supervisors had to present a negative COVID-19 test taken within 24 hours of departure. If any supervisor tested positive, they were to isolate, and their role would be replaced by another colleague. Sightsavers and the MoH provided supervisors with sufficient PPE for the duration of the field visits.

Delays due to COVID-19 resulted in the delay of the Year 4 MDA and therefore the following Coverage Evaluation Surveys (CES). The Sightsavers Cameroon country office has received RAMA approval for the implementation of the CES and the CES for Year 4 MDA is currently under way. The national protocol for the survey including COVID-19 protection measures was shared with all actors involved to ensure awareness and compliance with the COVID-19 adapted survey strategy. Project monitoring documents and checklists were provided to supervisors to assess compliance to the COVID-19 control and mitigation measures as described in the RAMA-approved SOP.

The CES will take place in 14 randomly selected health districts (Mogode, Yagoua, Figuil, Ray Bouba, Ngaoundal, Bankim, Galim, Bamendjou, Loum, Edea, Ambam, Djoum, Abong Mbang, Nguelemendou), two from each of the seven targeted regions which received the most recent round of MDA.

The initial CES training for surveyors was conducted in April 2021. In each region, 25 surveyors participated in the training with 20 continuing onto the CES implementation based on their performance during interviews, pre and post-test and direct observation. The training took two days, followed by six days of smartphone data collection.

Community sensitisation started at least a week before the CES. Households were randomly sampled (with the WHO methodology of probability sampling with segmentation[5]) from the seven regions. All CES implementation activities will be completed in June . Once analysis is complete, a report will be shared with GiveWell, with the results feeding into future MDA planning.

Treatment coverage rates

Outcome Indicator	Year 4 Apr 2020 – Mar 2021	
	Year 4 Milestone	Year 4* Actual
% of all targeted people in targeted health zones treated with praziquantel for SCH (ultimate threshold at least 75%)	75%	83.7%
% of all targeted people in targeted health zones treated with at least one round of albendazole/mebendazole against STH (ultimate threshold at least 75%)	75%	79.4%
% of existing schools in targeted health zones participating in the school deworming programme	95%	100%

*Using updated population data from the Ministry of Health.

Key successes

- High treatment coverage rates for both SCH and STH MDA in all seven regions, with achievements exceeding targets. Of the project districts, 92% of districts achieved the minimum WHO coverage benchmark of 75% for SCH, and 87% of districts achieved it for STH. The main exception was STH MDA in the Littoral region and SCH MDA in the East region, the reasons behind this are addressed below in the challenges section.

[5] https://apps.who.int/iris/bitstream/handle/10665/329376/9789241516464-eng.pdf?ua=1

- Year 3 CES reports were finalised in June 2020 for the 5 targeted regions (Adamaoua, East, Far North, North and West). In total, 18,541 children were interviewed across the 10 heath districts sampled. Overall, 7 of the 10 sampled health districts showed survey coverages exceeding the WHO recommended minimum treatment threshold of 75% for both diseases, while the other three showed >75% for one of the two diseases. The remaining districts with <75% coverage will be explored in the challenges.
- In May 2020 the MoH and other partners reviewed the NTD training modules to update their content and address any shortcomings and learnings from previous campaigns. This included improvements in data management, medication management, side effect reporting and management, increased information on environmental risk management, safeguarding and inclusion.
- Complementing the school-based MDA with community distribution has continued to be an effective means to ensure that non enrolled SAC are reached in their communities.
- Successful implementation of Sightsavers Risk Assessment and Mitigation Action (RAMA) tool to allow the safe resumption of activities.
- Supported the development of the Cameroon National NTD strategic roadmap (2021-2030). This is a key document that will underpin NTD activity in Cameroon. Many of the lessons learned from GiveWell funded work were included in the strategic roadmap.
- The project responded quickly and effectively to an urgent need for treatment in 3 health districts in the West Region due to a spike in haematuria cases and conducted a successful mini-treatment campaign.
- Wishlist 4 partner meetings in South and Littoral Regions in preparation for project commencement included successful piloting of data collection and reporting on the South region. This resulted in successful SCH/STH MDA in the regions for the first time (34 health districts for STH and 4 for schistosomiasis).
- Sensitisation at multiple levels was crucial for the implementation of COVID-19 safe MDA activities. The sensitisation materials were presented in multiple formats from TV and radio to press articles in both the two national languages, plus the main local language to increase accessibility.
- Special measures were taken in the Far North to ensure treatment of SAC in the refugee camp in Manawoao in continuation of successful MDA in Year 3. Sightsavers collaborated with UN agencies working around the camps to organise to ensure essential deworming of children.
- In response to the challenges surrounding inaccurate population data from Years 2 and 3, the MoH was able to provide an adjustment of the total population, taking into consideration the population dynamics of the respective regions, based on CDD census from the malaria campaign. This revised population data provided a more realistic treatment coverage for SCH and STH MDA in Year 4.

Key challenges

- COVID-19
    - Sightsavers offices in the UK and Cameroon were closed at key points in the pandemic. Measures were taken to ensure staff could work from home with visits to the office only granted in critical circumstances and under strict COVID-19 guidelines.
    - False rumours regarding MDA and COVID-19 have spread in some regions despite rigorous sensitisation. This resulted in some schools, teachers and parents refusing to deliver and

accept MDA. The rumours were identified, and Sightsavers worked with the appropriate authorities to address the rumours and enable effective treatment campaigns. In the Littoral and South regions, due to the false rumours parents tended to prefer their children to receive MDA in the communities by community members they know and where they could watch the treatment being delivered, rather than in school. In response, more CDDs were trained to distribute drugs at the community level.

  - COVID-19 mitigating actions such as the provision of PPE and additional community sensitization, whilst crucial to ensure safety has increased the project cost by an additional 3% for the CES and 26% for MDA. Sightsavers has used the underspent budget from previous years to cover this additional cost.
  - In spite of the rigorous processes of the RAMA tool, the CES is being conducted within the allocated timeframe post-MDA delivery whilst maintaining COVID-19 guidelines and procedures.

- In the East and Adamaoua Regions lower treatment coverage was due to lack of mop-up activities to treat children who were missed through school-based MDA, due to expiring drugs.
- Some issues were highlighted at a regional level where schools were delayed sending copies of the MDA reports to the required authorities due to the distance or the upcoming festive period. Teachers did not submit their treatment data before they left for the holidays. In these cases, the district team worked in collaboration with the inspectors who were able to retrieve the reports and this was resolved
- During the MDA review meetings, drug management issues were identified by the inspectors in some health districts in the East Region. In these cases, the school directors were immediately called to clarify the inconsistencies and provide correct MDA data on drug management.

Lessons learned

Between July and September 2020, Cameroon ran the Sightsavers RAMA process to conduct a mini-campaign, which explored the feasibility of carrying out MDA in the context of COVID-19 without a surge in infections rates. All participants (CDDs and health workers) were provided with PPE and no spike in infection rates was seen. Feedback from health and community workers was that providing PPE was a motivation factor to work as they felt protected and safe to work. As part of the RAMA process for the resumption of MDA activities in the seven targeted regions, PPEs (hand sanitiser, face masks and COVID-19 leaflets) were also provided to all field actors.

Intensified communication strategies were delivered to raise awareness and ensure adherence to MDA and proper management of cases and side effects. Maximising sensitisation of communities before MDA was crucial to prevent the spread of false rumours relating to COVID-19 and MDA, as seen previously in Cameroon during the October 2020 distribution of the polio vaccine. Whilst effective in remote areas, false rumours spread in the more urban areas due to access to the internet. A strong communication approach was developed and Sightsavers worked effectively with local authorities to intensify radio messaging, identifying frequent timeslots for effective broadcasts.

Looking ahead to 2021

The Cameroon country office recently received approval to conduct CES activities for STH/SCH through Sightsaver's RAMA process. We are now working to implement the CES in 14 randomly selected health districts from the seven targeted regions, between April and May 2021. Once analysis is complete, a report will be shared later in 2021.

The next round of MDA (Year 5) will commence from Q4 2021 onwards, with sensitisation of communities taking place at least 4 weeks before. We will continue to implement MDA in five regions (Far North, North, East, West, Adamaoua) as included in Wishlist 3 and Wishlist 5 and in 2 regions (Littoral and South) as planned in Wishlist 4, up to March 2023. It is expected that COVID-related PPE will still be required in the next round of MDA and as such the budget will be similar to this year.

Sightsavers will analyse and inform GiveWell of any potential impact of the new Cameroon National NTD strategic roadmap (2021-2030) on our Year 5 treatment plan.

Sightsavers will continue to monitor the COVID-19 situation and review activities on a monthly basis to ensure the safety of both staff and project beneficiaries.

Sightsavers met with World Bank to discuss deworming in Cameroon and planned work. The Cameroon National Programme has submitted a request to World Bank for support for deworming activity for clinical treatment for pre-school aged children in health centres, but there has been no response to this request as yet.