

**IMPROVING HEALTH  
UNLOCKING POTENTIAL**



**FOR A WORLD FREE OF  
PARASITIC WORM INFECTIONS**

[schisto.org](http://schisto.org)



# An introduction to our programmes in Africa

**Jennifer Burrill**  
Programme Advisor

September 2019

# SCI Foundation Goals and approach





**Our vision is a world free of parasitic worm infections.  
Our mission is to support the development of effective  
and sustainable systems that will eliminate parasitic  
worm infections.**

# Our Goals

1.



Those affected by parasitic worm infections receive treatment and care.

2.



Communities change their behaviours to reduce the risk of infection.

3.



Environmental changes are put in place to reduce the transmission of infection.

4.



Everyone has access to all services that can reduce the risk of – and alleviate the problems associated with – infection.



# Our Approach



## 1. Partnerships

**We are collaborative, promoting inclusion and synergy.**

We act as catalysts in the creation of successful cross-sectoral partnerships that generate the greatest impact on disease transmission.

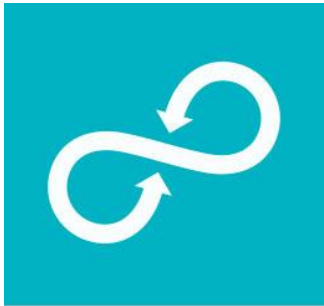


## 2. Operational Excellence and Innovation

**We are agile, adapting to changing local and global environments.**

We aim to constantly improve and innovate, to ensure that we optimise our efforts and use resources most cost-effectively.

# Our Approach



## 3. Sustainability

**We ensure that our work is sustainable and supports broader development.**

**We support governments to strengthen systems and processes, so that they are dynamic, responsive and deliver results.**



## 4. Evidence-based

**We generate evidence to inform decisions and guide our work.**

**We improve processes and develop preferred practices for global health policy. We share knowledge to ensure that everyone can benefit from improved health.**

# The programmes we support:<sup>\*†</sup>



**Can reduce  
parasitic worm  
infections by up to  
60% after one  
round of treatment.**



**Meet treatment  
coverage targets  
set by the WHO.‡**



**Ensure equal  
access to treatment  
regardless of  
wealth status  
or gender.**



**Are committed to  
the attainment of  
9 UN Sustainable  
Development  
Goals.**

<sup>\*</sup> Average results demonstrated for all country programmes where data are available.

<sup>†</sup> For every treatment provided against schistosomiasis, treatments are also offered against intestinal worm infections where both diseases are present. Treatment numbers are for schistosomiasis only and dating from 2010 when the current reporting system was established.

<sup>‡</sup> The World Health Organization has set out that at least 75% of people targeted for treatment, should go on to receive it. SCI-supported programmes reach 76%, on average.



# Background of SCI-supported programmes

# What SCIF does:

**SCIF supports national governments to deliver their schistosomiasis control programmes, including implementation of MDA**

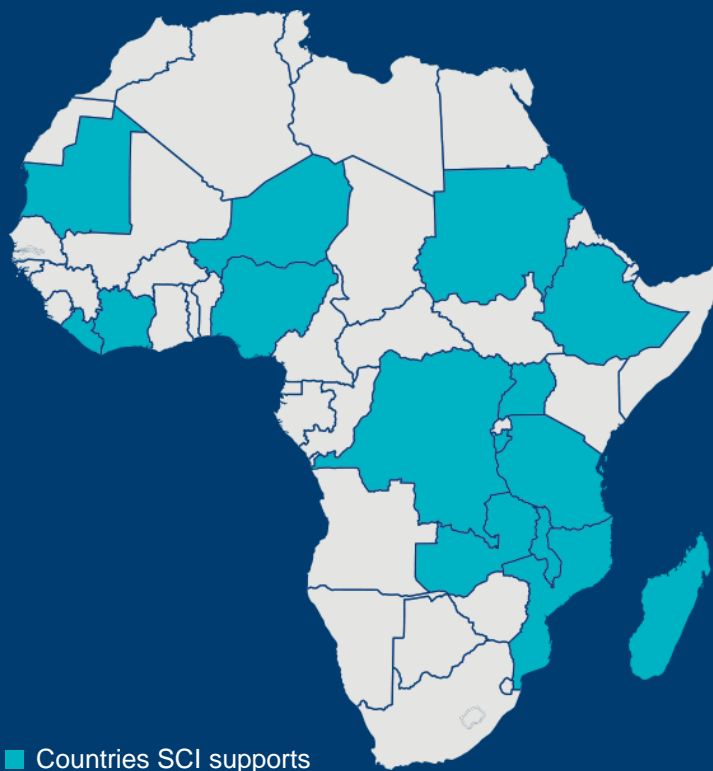
**SCIF works to:**

- Provide technical support for all aspects of the programme
- Support capacity building within national governments
- Support data collection and analysis for evidence-based programming
- Provide financial support (either direct to country or through a fiduciary agent)



# Where we work:

We help governments to deliver programmes in 15 sub-Saharan African countries



# Treatment Programmes

- **Which diseases are treated?** Schistosomiasis and soil transmitted helminths (STH)
- **What medication is used?** Praziquantel treats schistosomiasis and albendazole/mebendazole treats STH
- **Who is treated?** All school-aged children (5-14 years old); adults (>15 years old) may also be targeted depending on factors such as their risk of infection or drug availability
- **How are they treated?** With a strategy known as Mass Drug Administration (MDA): the entire target population is treated together, through a school-based platform and/or community-based platform.



SCIF aims to treat all individuals at risk of infection



SCIF has delivered over 200 million treatments since 2002



# Why is large-scale treatment recommended?

Large-scale treatment is recommended over diagnosing and treating, as:

- Treatments have an excellent safety record, regardless of infection status
- Individual diagnostic methods may be impossible to implement due to cost and logistical implications

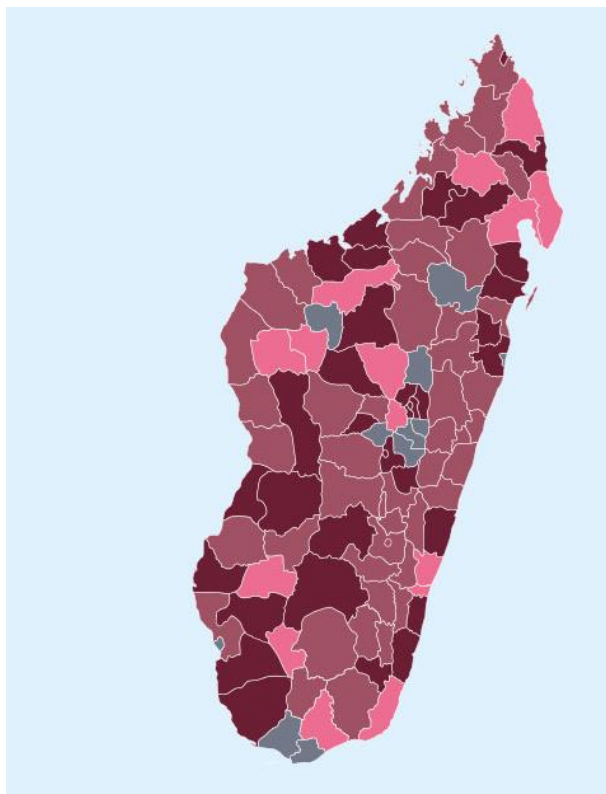
Treatment through schools is efficient.

Using the school infrastructure:

- Provides the opportunity to reach both enrolled and non-enrolled school age children, who are the primary target for treatment programmes

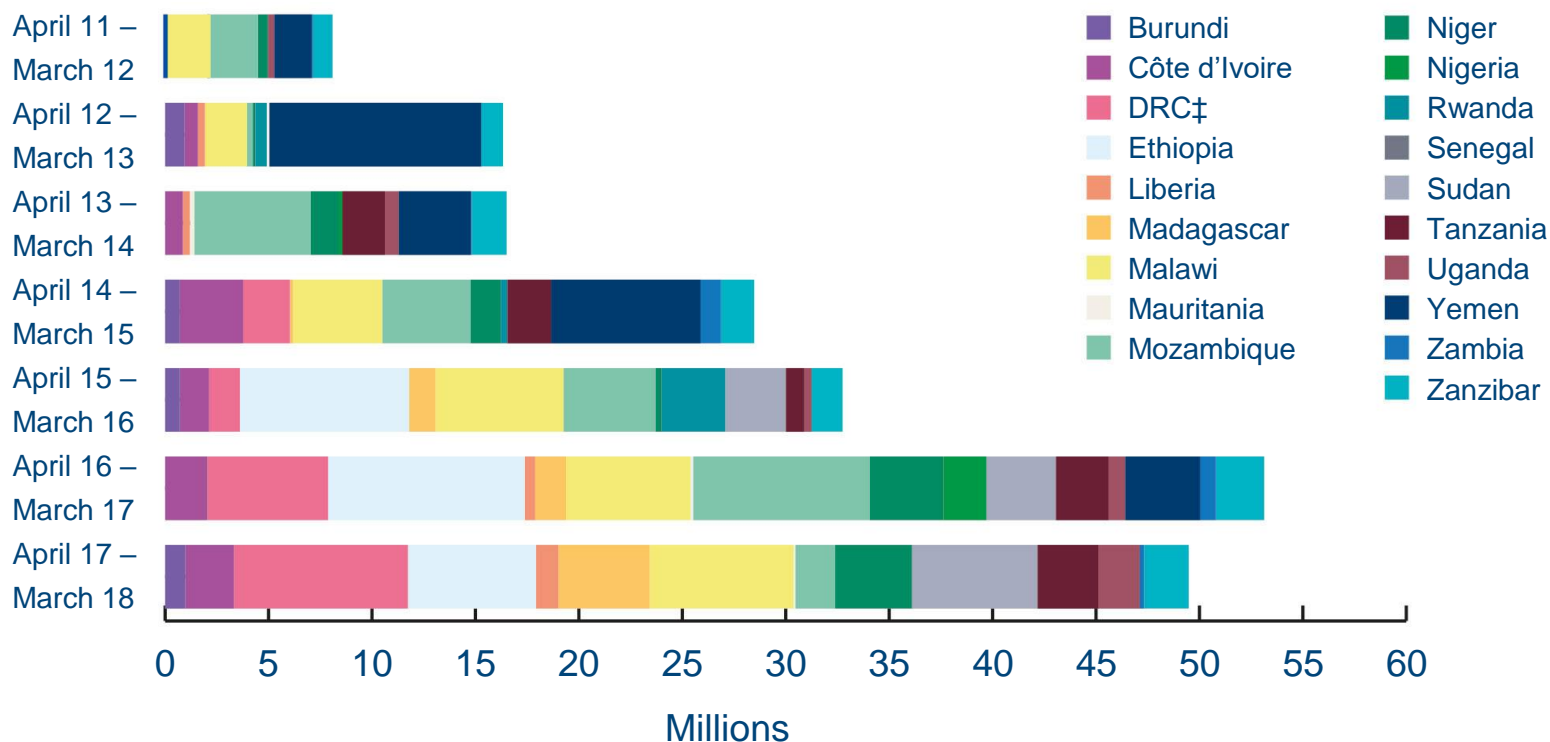


# How often is treatment provided?



| Risk level         | Prevalence   | How often treatment is provided  |
|--------------------|--|--|
| <b>High risk</b>   | <p>≥50% observed cases of infection, e.g. the number of eggs found in stool or urine or</p> <p>≥30% of participants confirmed that they had blood in their urine when asked via a questionnaire</p>                | <p>Treat all school-age children (enrolled and non-enrolled) once a year.</p> <p>Also treat adults considered to be at risk (from special groups to entire communities living in endemic areas).</p>   |
| <b>Medium risk</b> | <p>≥10% but &lt;50% observed cases of infection, e.g. the number of eggs found in stool or urine or</p> <p>&lt;30% of participants confirmed that they had blood in their urine when asked via a questionnaire</p> | <p>Treat all school-age children (enrolled and non-enrolled) once every 2 years.</p> <p>Also treat adults considered to be at risk (special risk groups only).</p>   |
| <b>Low risk</b>    | <p>&lt;10% observed cases of infection, e.g. the number of eggs found in stool or urine</p>  | <p>Treat all school-age children (enrolled and non-enrolled) twice during their primary schooling age (e.g. once on entry and once on exit).</p> <p>Praziquantel should be available in dispensaries and clinics for treatment of suspected cases.</p> |

# Total number of treatments delivered by country\*†



\* Data from FY 17/18 treatment figures as of August 2018. Some countries are expected to receive further treatments which are to be confirmed.

† For every treatment provided against schistosomiasis, treatments are also offered against intestinal worm infections where both diseases are present. Treatment numbers are for schistosomiasis only and dating from 2010 when the current reporting system was established.

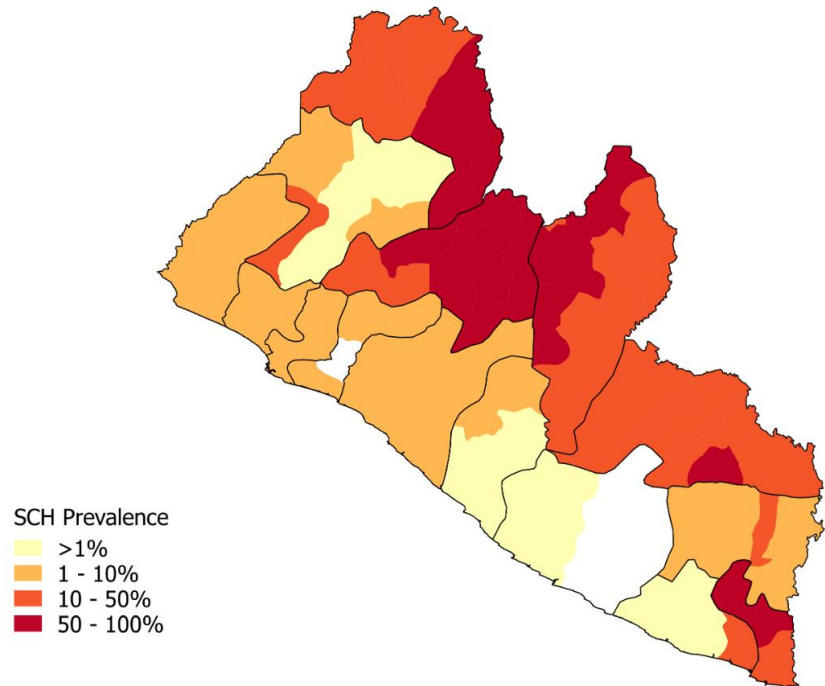
‡ DRC: Democratic Republic of the Congo

# How treatment programmes work



# Risk mapping

- Prior to treatment, we support country governments to **assess the baseline prevalence of infection**
- Our biostatisticians develop **risk maps** showing prevalence across endemic areas
- These maps show **which areas require treatment and at what frequency**



# Steps involved in an MDA treatment programme



Annual planning



Procurement and logistics



Training



Monitoring and evaluation



Treatment and registration



Social mobilisation and sensitisation

# Annual planning

- Each Ministry of Health has national goals for the control and elimination of schistosomiasis and STH
- Before the programme starts each year, Ministry of Health Officials must plan all activities
- With the support of SCI (and sometimes other partners), the Ministry of health develops key planning documents, for example:
  - Work plan
  - Treatment plan
  - Budget
  - Procurement request
- The target population for treatment in each year is estimated based on disease prevalence and population information



# Procurement

Procurement of medication and equipment is essential for the smooth running of the programme

- **Medication:** The treatment plan is used to determine the quantity of drugs required and they are ordered through official channels at the WHO
- **Equipment:** SCIF supports local procurement as much as possible and depending on which specific activities are planned, different items and quantities will be needed. Examples include (but not limited to):
  - Vehicles and fuel
  - Dose poles
  - Treatment registers





# Logistics and drug delivery

The logistics and timing of equipment and drug delivery are planned carefully

Drug delivery is a complex process:

- Drugs are procured internationally and must be ordered in enough time to arrive before the MDA
- Once drugs arrive in country, they must be cleared by customs
- They can then be transported to a central storage facility
- Prior to the MDA, drugs are re-packaged at the central level to be distributed to districts according to quantities needed, and from there to health facilities, schools and communities



# Training

- The Ministry of Health train drug distributors (usually annually) with the support of SCIF
- Training is usually conducted in a cascade manner from central to district to school and community levels

Key personnel involved in treatment delivery and supervision are trained at the central and district level, and can include:

- Health workers
- Community drug distributors
- School teachers
- Volunteers



# Social mobilisation and sensitisation

Key messages are disseminated to increase awareness of the upcoming MDA and publicise the timing and locations of the treatment campaign

- A treatment programme is deemed a success when **75% or more** of the targeted population receive treatment\*
- **Social mobilisation and/or sensitisation** provides messages which encourage people to receive treatment and therefore plays a critical role in ensuring treatment reaches those most in need
- Multiple platforms: radio, print media, town criers, community engagement



\* The World Health Organization has set out that at least 75% of people targeted for treatment, should go on to receive it.

# Treatment and registration

- **Where does treatment take place?** Treatment can be distributed through schools or at a central point in the community, for both children and adults
- **How is dose determined?** A “dose pole” is a very simple tool used to determine the correct number of tablets for a child or adult
- **Who provides the treatment?** Because the tools are simple, treatment can be delivered with only minimal training by volunteers such as teachers or trusted members of the community
- **Why are participants registered?** All those treated are registered to enable monitoring and evaluation of the treatment campaign





# Monitoring and evaluation

- Prevalence and intensity of infection are assessed routinely through impact surveys
- The performance of treatment delivery is evaluated by measuring the **treatment coverage** (the percentage of school-age children who were targeted for treatment who go on to receive it)\*
- Costs are closely monitored and **cost-per-treatment** determined
- This all helps determine what key adaptations may be needed to ensure that programmes have the **highest impact**



\* The World Health Organization has set out that at least 75% of people targeted for treatment, should go on to receive it.

# Challenges faced

- Many locations are remote and may be difficult to reach due to **poor road conditions or a lack of transport infrastructure**
- Travel may also be inhibited due to factors such as rainy season
- Some populations are more difficult to reach, for example **children who do not attend school** may not be able to access school-based MDAs



Reaching remote locations



Hard-to-reach populations

# Challenges faced (cont.)

Countries are at different stages and the specific context and political situation in each country can impact MDA campaigns

- Situations influencing implementation can include anything from political and civil unrest to natural disasters or disease outbreaks
- Lack of resources is also a challenge, both in terms of human resources, infrastructure and drugs for some populations
- Community perceptions, such as mistrust of treatment, fear of side effects, myths and misconceptions.



Political unrest

Huffington Post (Burundi)



Disease outbreaks

Guardian (DRC)



Thank you for listening!



[schisto.org](http://schisto.org)

