World Health Organization
REGIONAL OFFICE FOR Africa

EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES

AFRICAN PEOPLE FREE OF NEGLECTED TROPICAL DISEASES

ESPEN

2019 ANNUAL REPORT

SUMMARY

2019

44 COUNTRIES SUPPORTED

700+ INDIVIDUALS TRAINED

236,427,988 TABLETS SAVED FROM WASTE

PREVENTIVE CHEMOTHERAPY

778 DISTRICTS

61,258,027 INDIVIDUALS TARGETED

ESPEN COLLECT

8 COUNTRIES

1,615 SURVEYS

PORTAL

153 COUNTRIES

9,255 USERS

Dr. Maria Rebollo Polo, ESPEN Team Leader (left)
Dr. Matshidiso Moeti, WHO Regional Director for Africa (right)

FOREWORD

Dear Friends,

In the past year, member states and partners have reached more than 61 million people with preventive medicines through the Expanded Special Project for Elimination on Neglected Tropical Diseases (ESPEN). This dramatic achievement builds on the giant strides and unprecedented collaboration that have taken place since the partnership was launched in 2016. I commend everyone involved in making this happen.

Partnerships and country ownership are crucial in addressing neglected tropical diseases (NTDs). These diseases affect the poorest and most vulnerable people, and it is imperative that we ensure no one is left behind. All stakeholders have roles to play, and together we can transform millions of lives.

By leveraging the strengths of member states, nongovernmental organisations, private companies, researchers, local communities and health care programmes, ESPEN is delivering impactful and sustainable action in the fight against NTDs.

Achieving our common vision of an Africa free of NTDs requires concerted efforts in critical areas. We need political commitment and investment to ensure health systems are resilient. In doing so, we can accelerate momentum towards attaining universal health coverage and beating NTDs.

With the launch of the World NTD Roadmap 2021–2030, 2020 is a milestone year for NTDs. As such, this annual report is a timely review of our progress and will inform the actions that lie ahead.

I would like to thank our partners, countries and programme managers who champion ESPEN's work daily in countries, districts and communities.

I look forward to our continued collaboration towards achieving universal health coverage and an Africa free of NTDs.

Dr. Matshidiso Moeti
WHO Regional Director for Africa

As NTD programme managers, we work to protect people from the diseases of poverty and neglect and empower the communities we serve. We started 2019 with great optimism, as another year to work towards making the world a healthier place, igniting hope for children, men and women in Africa who are at risk of these diseases, so

that families and communities could thrive. Despite the long road that remains ahead of us, 2019 has seen considerable progress towards achieving our goals of control and elimination of neglected tropical diseases. In July 2019, we gathered in Addis Ababa for our annual meeting, the very place where the Addis Ababa NTD commitment was signed. We call for the implementation of the commitments entered by our ministers for increased domestic funding, multisectoral approaches in the implementation of NTD programmes, long-term strategies for NTDs, data use and health system strengthening.

We call on our African leaders to commit to increased domestic funding, country ownership and sustainability of NTD interventions.

As we start the new decade—with 2020 being a crucial year for NTDs—the momentum continues to grow. The Kigali NTD Malaria Summit in June 2020 will set the global agenda and action needed for the eradication, elimination and control of NTDs in line with the 2030 SDG targets, and will provide an important milestone to demonstrate Africans' ability to incite change in their communities for an Africa free of NTDs once and for all. Together, we are moving closer to bridging the gaps and reducing the burden of NTDs in Africa. Therefore, we call on world leaders, governments, the private sector and communities to pledge their support and dedicate their efforts to the fight against NTDs. Together, we can and we must fight and defeat this public health problem. Obviously, there is still much to be done, but with persistent, powerful, effective and efficient collaboration, including strong partnerships, we will triumph in conquering NTDs in Africa. Join us as we stand up and speak out against neglected tropical diseases!

NTD Programme Managers, Africa

AIDS	Acquired immunodeficiency syndrome
CAR	Central African Republic
CIND	Country integrated NTD database
DALYs	Disability-adjusted life years
DBS	Dried blood spot
DEC	Diethylcarbamazine
DRC	Democratic Republic of the Congo
DRG	Trachoma Dossier Review Group
ELISA	Enzyme-linked immunosorbent assay
ESPEN	Expanded Special Project for the Elimination of Neglected Tropical Diseases
FGS	Female genital schistosomiasis
FTS	Filariasis test strip
GET2020	Global Elimination of Trachoma 2020 meetings
GIS	Geographic information system
GPELF	Global Programme to Eliminate Lymphatic Filariasis
GPW13	Thirteenth General Programme of Work
HQ	Headquarters
ICT	Immunochromatographic test
IDA	Ivermectin, DEC, and Albendazole
INCAS	Institution-based Network on China-Africa Collaboration on Schistosomiasis
IUs	Implementation units
JAP	Joint Application Package
LF	Lymphatic filariasis
LSHTM	London School of Hygiene & Tropical Medicine
MDA	Mass drug administration
MMDP	Morbidity management and disability prevention
NGOs	Nongovernmental organization
NPO	National professional officer
NTD	Neglected tropical diseases
OEM	Onchocerciasis elimination mapping
ONCHO	Onchocerciasis
OTS	Onchocerciasis Technical Advisory Subgroup
PC-NTDs	Neglected tropical diseases amenable to preventive chemotherapy
PZQ	Praziquantel
RPRG	Regional Programme Review Group for Preventive Chemotherapy
SAFE strategy	Surgery for TT, antibiotics to clear bacterial infection, facial cleanliness and environmental improvement
SCH	Schistosomiasis
SCM	Supply chain management
SDGs	Sustainable Development Goals
SOP	Standard operating procedures
STH	Soil-transmitted helminthiasis
STP	São Tomé and Príncipe
TAS	Transmission assessment surveys
TEC	Trachoma Expert Committee
TIPAC	Tool for Integrated Planning and Costing
TIS	Trachoma Impact Survey
TT	Trachomatous trichiasis
UN	United Nations
USAID	The United States Agency for International Development
WHO-AFRO	World Health Organization Regional Office for Africa

THIS YEAR'S REPORT AT A GLANCE

This third annual report summarises the key achievements that resulted from ESPEN's support to countries in 2019.

SCALING UP:

Increased geographical coverage towards the achievement of 100% geographical coverage.

SUPPORTED IMPLEMENTATION OF MDA FOR THE 5 PC-NTDs

26 countries
61,258,027 individuals targeted
778 districts

SÃO TOMÉ AND PRINCIPE IMPLEMENTED TRIPLE THERAPY FOR LF FOR THE FIRST TIME

7 implementation units
148,460 people treated
72% epidemiological coverage

LF, SCH, STH, ONCHO, TRACHOMA MAPPING AND CONFIRMATORY MAPPING IN

309 implementation units in
9 countries

PRELIMINARY INVESTIGATIONS

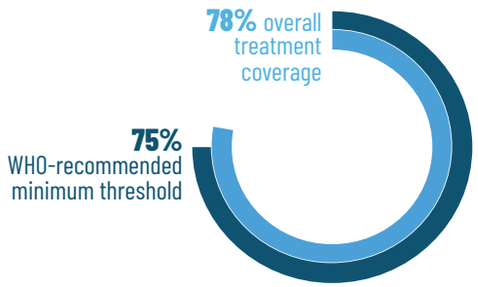
in Angola, Botswana, and Namibia
were conducted to establish endemicity status for trachoma, with tailored recommendations for mapping in 2020.

SUBNATIONAL ANALYSIS OF SCH MAPPING DATA TO OPTIMISE MDA WAS CONDUCTED IN 22 COUNTRIES

1.4 million school-age-children
were missing treatment, while
5.5 million tablets
of praziquantel were distributed in areas where they were not needed.

IN SOUTH SOUDAN:

187,490 school-age children targeted
147,138 school-aged-children treated



IN THE SPIRIT OF LEAVING NO ONE BEHIND, A HIGH-LEVEL MEETING ON ONCHOCERCIASIS IN AREAS CO-ENDEMIC FOR LOIASIS WAS ORGANISED,

Regional and international experts identified several strategies that could facilitate the implementation of mass drug administration in areas not currently eligible for it.

A TRAINING FOCUSED ON BUILDING IN-COUNTRY CAPACITY WAS PROVIDED IN VARIOUS AREAS,

for more than
700 individuals.

SCALE DOWN

the number of people requiring preventive chemotherapy

- In 2019, ESPEN supported **Mauritania** to start developing its trachoma elimination dossier.
- In December 2019, **Malawi** completed a dossier to validate the elimination of lymphatic filariasis as a public health problem. The dossier was submitted to ESPEN, which provided technical and financial support for this important milestone. An ad hoc committee reviewed the dossier and was endorsed and validated by the WHO Regional Office for Africa, followed by the WHO HQ.
- In the **Democratic Republic of the Congo**, trachoma impact surveys were conducted in 18 districts.
- 54 pre-transmission assessment surveys (pre-TAS) in six countries (**Comoros**, **Democratic Republic of the Congo**, **Kenya**, **Nigeria**, **Sierra Leone** and the **United Republic of Tanzania**) were conducted.
- As part of the entomological monitoring of onchocerciasis interventions, ESPEN Laboratory analysed 203,391 black flies trapped in **Burkina Faso** and **Senegal**.
- To evaluate the performance of the Ov16 enzyme-linked immunosorbent assay (ELISA) serological test, a total of 3,586 dried blood spots (DBS) from **Burkina Faso** and **Guinea-Bissau** were analysed at ESPEN Laboratory.
- After conducting a high coverage mass drug administration consistently for six years through ESPEN support, **Zimbabwe** conducted an impact assessment survey for schistosomiasis and soil-transmitted helminthiasis. The results showed a significant reduction in the diseases' prevalence at district and national levels. The prevalence of schistosomiasis reduced from 23.0% to 5.0%. The number of districts with prevalence of S. haematobium heavy infection intensity (≥50e/ml) >1% reduced from 48 to 12. While eight districts had prevalence of heavy infection intensities > 1% for S. mansoni at baseline survey, after six rounds of MDA, elimination of S. mansoni as a public health problem has been achieved in all Zimbabwean districts.

STRENGTHEN INFORMATION SYSTEMS

for evidence-based decision-making

- ESPEN conducted country data support missions in 17 countries.
- Using the outcomes of the country support missions, ESPEN developed a workbook to project preventive chemotherapy interventions required in each implementation unit for the next five years. This tool is a resource available to country NTD programmes to support data-driven decision-making over the next 10 years.
- The ESPEN Portal, launched in 2017, now has 3,508 maps, as well as underlying datasets for all NTDs amenable to preventive chemotherapy (PC-NTDs).
- 9,255 users from 153 countries (51 of them in Africa) visited the ESPEN Portal during 19,362 sessions.
- During the reporting period, 1,615 surveys from eight countries used the ESPEN Collect platform.

IMPROVE THE EFFECTIVE USE OF DONATED MEDICINES

through enhanced supply chain management

- ESPEN conducted supply chain support missions in four countries (**Cameroon**, **Mozambique**, **Niger** and **Rwanda**).
- Through the supply chain support missions and Joint Application Package (JAP) review, a total of 236,427,988 tablets were saved, with an estimated worth of US $18,554,266.
- ESPEN provided technical support and guidance to improve the supply chain, make the best use of NTD donated medicines, and increase the timeliness and accuracy of data in country JAP applications. By the end of 2019, 45 JAPs were reviewed, of which 24 were cleared.

PARTNERSHIPS

for coordination and resource mobilisation

- ESPEN mobilised eight major donors, including the US Agency for International Development (USAID), MSD, Germany, UK Department for International Development (DFID), Japan Ministry of Health, Korea International Cooperation Agency (KOICA), Swiss Agency for Development and Cooperation (SDC), and the Bill & Melinda Gates Foundation.
- All eight provided US $31.5 million in catalytic funding for ESPEN over a period of four years.
- ESPEN brought programme managers and their partners together in Addis in June 2019.
- ESPEN and the Regional NTD Programme gathered almost 300 participants, including representatives from the WHO HQ and WHO-AFRO, RPRG members, programme managers from ministries of health, country NPOs, and partners, for the Second National Programme Managers meeting

BOX 1

OUR **VISION**

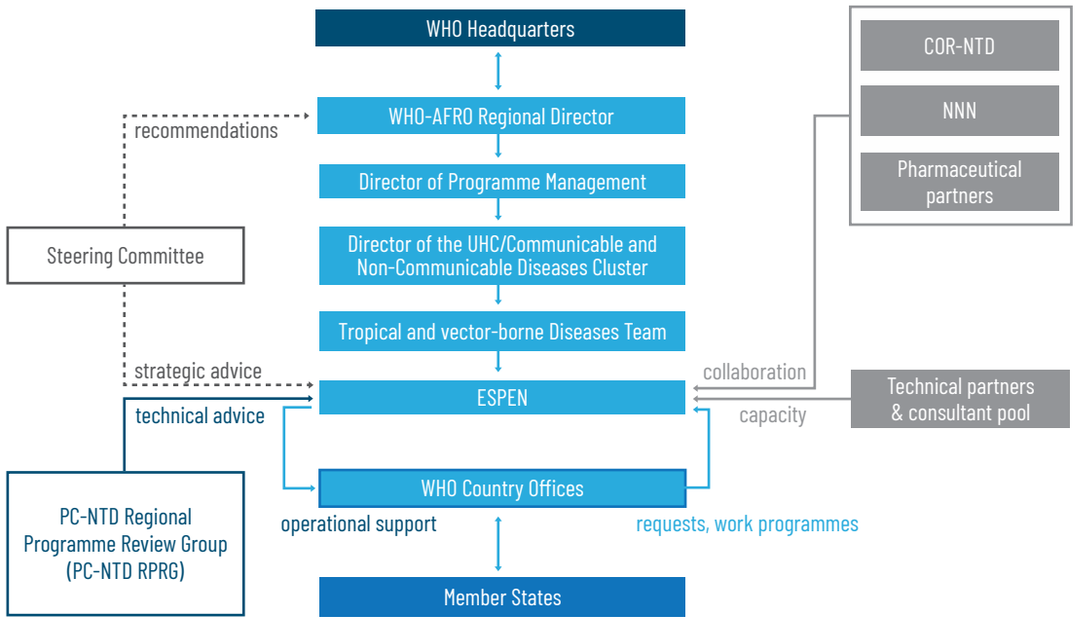
AFRICAN PEOPLE
FREE OF NTDs

OUR **MISSION**

TO ACCELERATE THE
ELIMINATION OF NTDS
TO PROTECT 600 MILLION
PEOPLE OF AFRICA

THE NEW WHO AFRICAN
REGION ORGANIZATIONAL CHART

ESPEN is under Universal Health Coverage/Communicable & Non-Communicable Diseases (UHC/UNC) Cluster.



ABOUT ESPEN

The World Health Organization (WHO) launched The Expanded Special Project for the Elimination of Neglected Tropical Diseases (ESPEN) in 2016 as one of WHO-AFRO's flagship projects to help African countries reduce the burden of neglected tropical diseases.

Established in the spirit of partnership between endemic African countries, ESPEN works to reduce the burden of NTDs and remain on track to control and eliminate the five NTDs amenable to preventive chemotherapy: onchocerciasis, lymphatic filariasis (LF), schistosomiasis (SCH), soil-transmitted helminthiasis (STH) and trachoma. ESPEN's core team, based at WHO-AFRO in Brazzaville, focuses on evidence-based decision-making towards the control and elimination of NTDs. In line with the WHO's mission, ESPEN provides leadership on NTD matters by working with the member states and in collaboration with partners; supports evidence-based policy options by providing technical support, catalysing change and building sustainable institutional capacity; shapes the research agenda and stimulates the generation, translation and dissemination of valuable knowledge; and monitors NTD elimination progress and trends. Facilitating country ownership and leadership of NTD programmes and contributing to the broader WHO targets of long-term health systems strengthening are deeply embedded within ESPEN's core functions. ESPEN was established in the spirit of mutual accountability and trust, where partners support each other to execute an aligned set of activities to achieve shared goals.

ESPEN works with governments, United Nations agencies, global and regional partners, nongovernmental organisations, and the private sector. This alliance has led to the scaling up of NTD interventions, and the prevention and reduction of illness and death from the five NTDs amenable to preventive chemotherapy. With the global community increasingly committing to the fight against NTDs, including research and development, we are in a better position than ever before to reduce the NTD burden using proven polices and strategies of prevention, treatment and elimination. But as far as we have come, there is still much to be done.

At ESPEN, our mission is to support member states to accelerate the elimination of PC-NTDs to protect the 600 million people of Africa. This report describes the 2019 annual performance of ESPEN, emphasising key achievements.

FIG. 1

CORE VALUES

COUNTRY-OWNED INITIATIVE
Countries strengthen their health system and build an integrated, tailored approach, leading the effort to reach NTD elimination with the support of partners

TRANSPARENCY
Timely information sharing

PARTNERSHIP
We are a group of like-minded partners form both public and private sectors fighting for the elimination of NTDs in Africa

LEADERSHIP
As a part of WHO-AFRO, ESPEN stands ready to provide technical expertise to countries and partners

VALUE FOR MONEY
- **Economy:** Quality interventions at a minimal cost
- **Effectiveness:** Flexible and able to adapt to a changing environment
- **Efficiency:** Quality data for smarter decision-making
- **Equity:** Access to NTD services to all partners

FIG. 2

OBJECTIVES

SCALING UP
Increasing geographical coverage among populations requiring treatment.

SCALING DOWN
Reducing the number of people requiring preventive chemotherapy.

PARTNERSHIP
Effective partnership and coordination with countries and key stakeholders.

EFFECTIVE USE OF DONATED MEDICINES
Improve effective use of donated medicines through enhanced supply chain management.

STRENGTHENING INFORMATION SYSTEMS
Strengthening information systems for evidence-based decision-making.

RESOURCE MOBILIZATION
Strategic advocacy, communication and resource mobilisation.

SUPPORTED COUNTRIES

26 Mass drug administrations
22 Data analyses for optimisation of MDA against SCH
19 Data and supply chain missions
18 Mapping and impact surveys

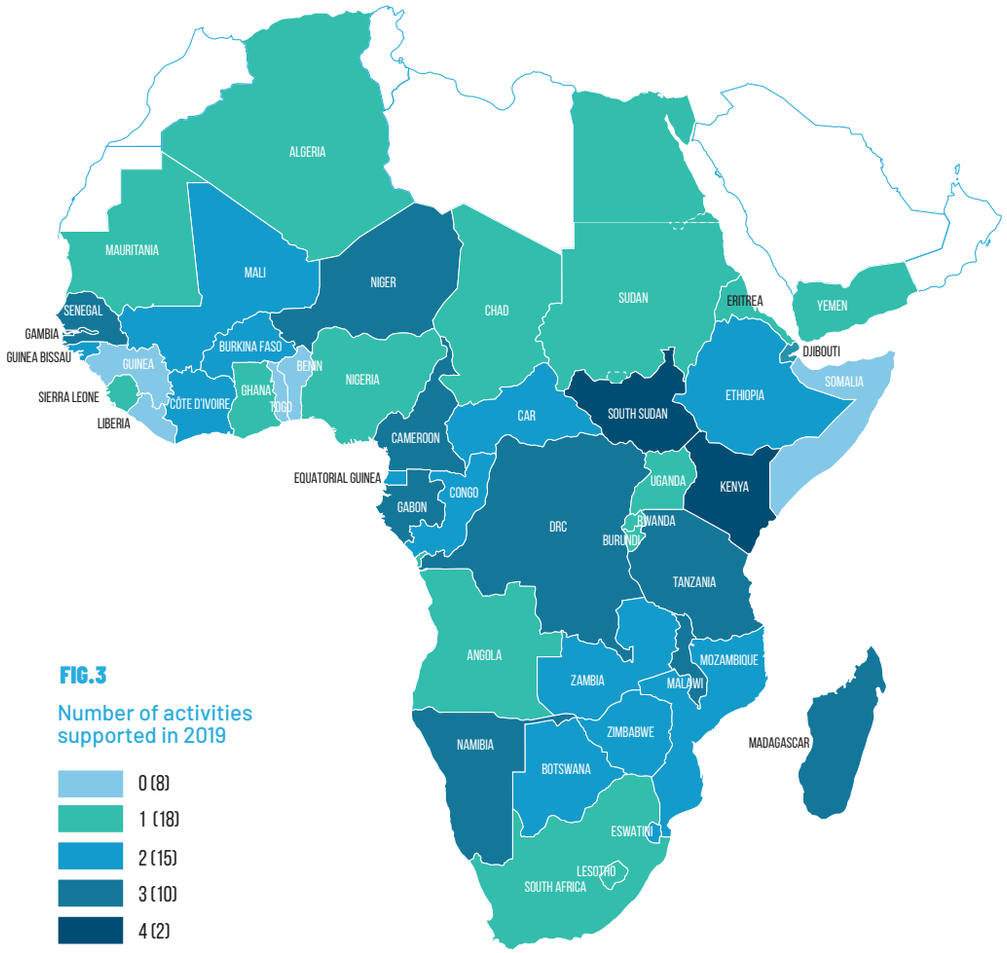
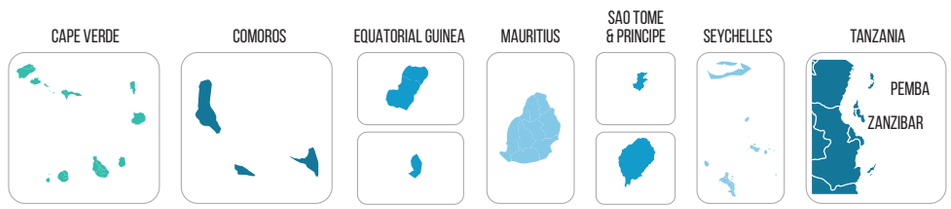


FIG.3

Number of activities supported in 2019

- 0 (8)
- 1 (18)
- 2 (15)
- 3 (10)
- 4 (2)



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INTRODUCTION

TABLE 1

HOW PROGRESS IN REDUCING NTDS CONTRIBUTES TO ACHIEVING THE SDGs.

Sources: United Nations [2] and Bangert et al, 2017 [3]

This is the third ESPEN annual report since the project launched in 2016. It includes a summary of the major accomplishments of ESPEN in the control and elimination of NTDs in ESPEN's mandate countries in 2019.

ESPEN's work is in line with SDG Target 3.3 to end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases by 2030. The indicator that tracks the progress against Target 3.3.5 is the number of people requiring interventions against neglected tropical diseases. Increased universal access to NTD prevention and treatment services for populations at risk will contribute to the attainment of SDG Goal 3.8, universal health coverage.

1 NO POVERTY

The disabling and debilitating effects of NTDs prevent affected individuals from providing for their families and contributing to the economic development of their countries and generate a significant care burden. At the household level, this results in generations becoming trapped in a cycle of increased medical costs, poverty and disease. Investing in NTD control and elimination increases human capital and contributes to growth. By preventing the development of disease, NTD programmes reduce exposure to the debilitating physical and mental health effects of NTDs and reduce the financial burdens that are brought on when households are forced to seek medical care and lose earnings.

2 ZERO HUNGER

Controlling and eliminating NTDs contributes to improved agricultural productivity, increased food security and better nutritional status for affected communities, particularly women and children. Sustained investment in NTD control and elimination contributes to the safety and quality of food and an increased return on investment.

3 GOOD HEALTH AND WELL-BEING

Scaling up NTD interventions contributes to the achievement of universal health coverage. Preventing NTDs reduces morbidity, disability and mortality. Reducing the burden of NTDs contributes significantly to improved child health and development.

4 QUALITY EDUCATION

NTDs can cause stigma and reduce school attendance, performance and cognitive ability. Reducing NTDs contributes to school attendance, improved performance and cognitive ability. In later years, it will also contribute to better wage-earning capacity.

5 GENDER EQUALITY

While NTDs impose a heavy burden on both sexes, there has been increased recognition of the disproportionate impact of some NTDs on the health of girls and women. Women and girls who are free from NTDs and the burden of caring for family members with NTDs experience increased school completion rates, more participation in decision-making and more participation in the workforce.

6 CLEAN WATER AND SANITATION

Availability of improved water and sanitation services reduces the rate of vector breeding and NTD transmission. NTD prevention efforts such as environmental management and use of sanitation facilities can contribute to further health benefits.

7 AFFORDABLE AND CLEAN ENERGY

Sustainable energy strategies that integrate rural energy needs offer considerable opportunities for the long-term control of parasitic diseases and improved quality of life. The electrification of NTD endemic areas means people spend more time indoors, where vectors can be controlled through the use of bed nets and insecticides. It also means people have enough energy to cook foods and reduce the consumption of raw foods. Sustainable and affordable energy infrastructure development will likely result in reducing the burden of NTDs.

8 DECENT WORK AND ECONOMIC GROWTH

Reducing the burden of NTDs has a significant impact on individuals' employment prospects and, by extension, national productivity. Interventions to control NTDs promise significant economic payoffs outside the health sector—in agricultural productivity and educational benefits—so should be considered as investments in human capital and economic growth.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

By reducing the impact of infrastructure and industrial development on the transmission of NTDs, the benefits of development can be harnessed. Research and innovation can help produce new interventions for eliminating NTDs.

10 REDUCED INEQUALITY

Inequality in disease prevalence across socioeconomic groups is a hallmark of NTDs. Interventions aimed at the most disadvantaged and marginalised populations reduce this inequality and help make sure that no one is left behind.

11 SUSTAINABLE CITIES AND COMMUNITIES

Building sustainable and resilient cities reduces the burden of NTDs through better access to water and sanitation, improved housing, and reduced breeding of vectors. Improved infrastructure increases access to NTD interventions. Actively removing breeding sites through community-based interventions ensures cities are resilient to vector breeding threats.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Chemicals are frequently used to combat mosquitos, which are responsible for the transmission of NTDs. The sustainable use and management of chemicals is ensured through continued pesticide safety and efficacy evaluation.

13 CLIMATE ACTION

Vector-borne NTD epidemics and transmission rates increase with climate change. Efforts to mitigate the effects of climate change will help in the elimination and control of NTDs, and working to control NTDs will help in stopping climate change.

14 LIFE BELOW WATER

Clean bodies of water are important to maintain food security and good sanitation. NTD interventions such as water treatment programs and educational services for affected communities can address the problem of contaminated water.

15 LIFE ON LAND

Deforestation leads to the proliferation of vector-borne diseases, affecting people who work or live near forests. Active vector control and providing educational services to affected communities can mitigate the impact of disease vector proliferation.

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

NTD epidemics frequently occur during times of war and crisis. Advocating for interventions for affected populations in times of crisis can be used as a tool to promote peace. Investment in NTDs contributes to inclusive societies.

17 PARTNERSHIPS FOR THE GOALS

The strong, inclusive, global, multisectoral partnerships formed to control and eliminate NTDs can have a positive effect on humanitarian development. Public–private partnerships for NTD interventions have been critical and effective. In 2015 alone, pharmaceutical companies donated an estimated 2.4 billion tablets, to prevent and treat NTDs, enough for 1.5 billion treatments. Experience gained from working on these partnerships can be used to build partnerships for other SDG themes.

17

16

World Health Organization

ESPEN's work also contributes to the WHO's GPW13 [1] Triple Billion targets by scaling up NTD prevention and treatment services for the 600 million African people at risk of NTDs and contributing to the attainment of universal health coverage. Furthermore, by preventing disability, stigma and associated mental illness due to NTDs, ESPEN contributes to an increased number of people enjoying an improved quality of life. By improving access to NTD interventions in conflict-affected countries, ESPEN helps mitigate the impact of health emergencies on populations.

THE WHO TRIPLE BILLION TARGETS AND THE CONTRIBUTION OF NTD CONTROL AND ELIMINATION

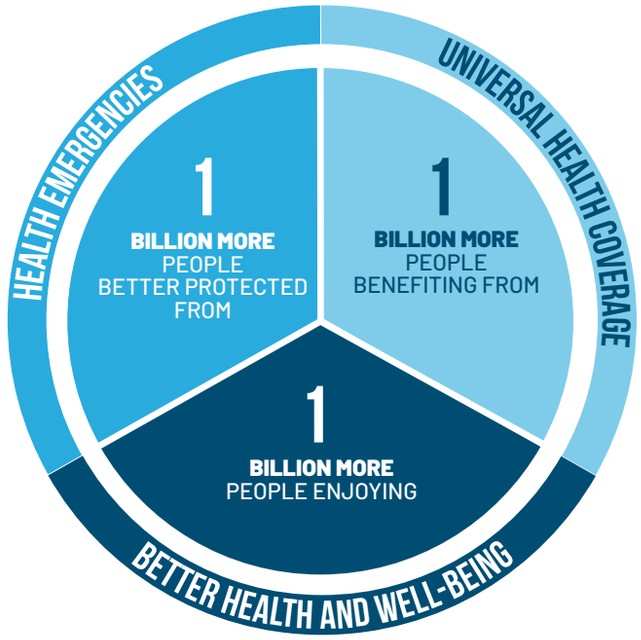

FIG. 4

The WHO Triple Billion targets and the contribution of NTD control and elimination.

The three intersected targets in the GPW13 aim for one billion more people benefiting from Universal Health Coverage; one billion more people better protected from health emergencies; and one billion more people enjoying better health and well-being.

Source: WHO (2018) [1].

ACHIEVING UNIVERSAL HEALTH COVERAGE	ADDRESSING HEALTH EMERGENCIES	PROMOTING HEALTHIER POPULATIONS
ESPEN supports countries and partners in scaling up NTD prevention and treatment services through propor approach to create access for 600 million African people at risk of NTDs and contribute to attainment of Universal Health Coverage.	ESPEN works with countries to improve access to NTD interventions in conflict-affected areas and help mitigate the impact of health emergencies on the population.	ESPEN works with governments and partners on interventions focusing on preventing and treating disability, stigma and attendant mental illness due to NTDs, and contributes to more people enjoying better health and well-being.

NEGLECTED TROPICAL DISEASES IN AFRICA

NTDs are a group of diseases that primarily affect the poor and most marginalised communities in the world.

Globally, there are 1.76 billion people requiring preventive chemotherapy for NTDs[4, 5]. NTDs lead to long-term disability and economic loss for affected individuals and families, who suffer from disfigurement, impaired childhood growth and development, adverse pregnancy outcomes, and reduced productive capacity. A study estimated that achieving the target of controlling and eliminating the five PC-NTDs will lead to $564 billion in productivity gains and result in 328 million averted disability-adjusted life years (DALYs) worldwide [6]. For every $1 invested in fighting NTDs, there are $27 to $42 in economic benefits [6]. This makes NTD investments one of the "best buys" for health [6]. **Although Africa is home to only 17% of the world's population, it carries 39% of the global burden of NTDs—the largest worldwide**. [7] A total of 44 African nations are endemic for at least one PC-NTD and 42 countries are endemic for at least two.

Despite the high morbidity burden of these diseases, they've received little attention internationally and have been disregarded for a long time, with no tools or strategies being developed to overcome them [8]. The publication of the WHO Roadmap on NTDs and the London Declaration in 2012 changed the global landscape and architecture of NTD interventions, particularly for the five most prevalent NTDs: LF, ONCHO, SCH, STH and trachoma [8, 9].

Since 2012, significant progress has been made in Africa, notably the scale-up of mass drug administration for the five PC-NTDs. Following the launch of the WHO Roadmap on NTDs, there was an unprecedented increase in capacity of MDA for LF, schistosomiasis, STH and trachoma through ESPEN and partners' support. The use of MDA to deliver preventive chemotherapy has had the greatest impact on those at risk for NTDs and the NTD programme in general. The unique approach of its delivery mobilised the global community, including the pharmaceutical industry. The approach empowered communities and created an important health delivery system that can be integrated with other interventions.

Of the **52** ESPEN-supported countries, **50** are endemic for at least one PC-NTD, with an estimated **600 million** million people requiring preventive chemotherapy.

Significant progress has been achieved globally in the fight against NTDs since the launch of the WHO Roadmap on NTDs in 2012 and the London Declaration.

Highlights include the elimination of lymphatic filariasis as a public health problem in 17 countries, including Egypt, Malawi, Togo and Yemen, which are under ESPEN's mandate, and the elimination of trachoma as a public health problem in nine countries, including Ghana, which is under ESPEN's mandate.

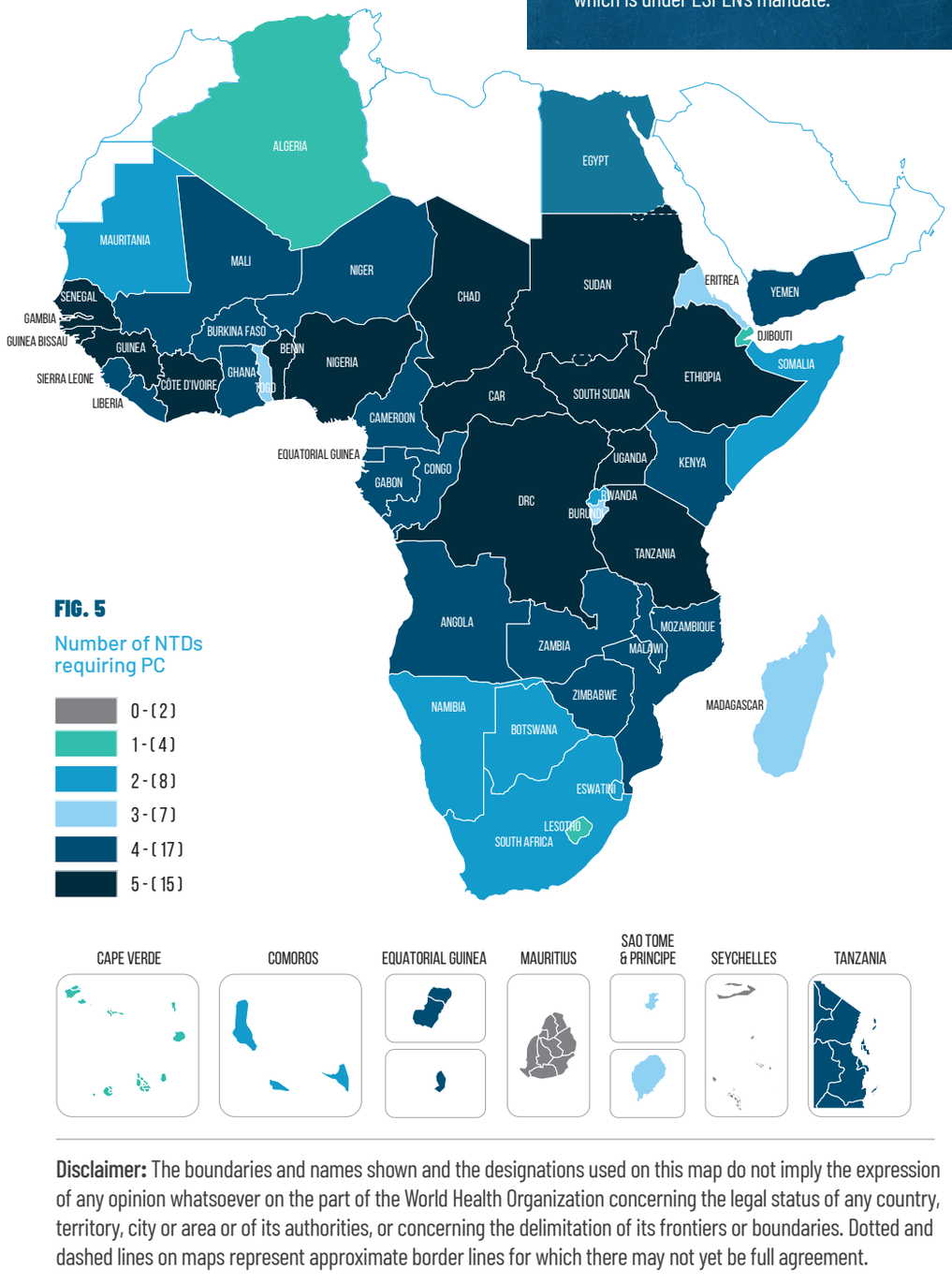

FIG. 5

Number of NTDs requiring PC

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LYMPHATIC FILARIASIS

1.1. SUMMARY

ESPEN's major achievements in LF control in 2019 include:

- ESPEN supported eight countries (**Comoros**, **Democratic Republic of the Congo**, **Equatorial Guinea**, **Eritrea**, **Republic of Congo, Nigeria**, **Madagascar**, and **São Tomé and Príncipe**) for LF MDA targeting 18,009,135 individuals in 136 implementation units. All of them received treatment.
- Of the eight ESPEN-supported countries, at least four achieved 100% geographical coverage for LF MDA in 2019.
- Malawi completed and submitted an elimination dossier in December 2019 to validate the elimination of LF as a public health problem in the country. ESPEN supported the development of the dossier by providing technical and financial support and then identified independent reviewers. The dossier was reviewed and endorsed by WHO-AFRO and submitted to WHO HQ for validation. In 2020, WHO HQ validated the elimination of LF in Malawi as a public health problem.
- A triple drug therapy known as IDA, containing diethylcarbamizine (DEC), albendazole (ALB) and ivermectin (IVM) has been scaled up to 100% geographical coverage in São Tomé and Príncipe.

1.2. INTRODUCTION

LF, more commonly known as elephantiasis, is a painful, debilitating and disfiguring disease caused by infection from parasitic worms and transmitted by mosquitos [10]. In 2019, 33 ESPEN-supported countries were considered endemic for LF and either requiring MDA or under surveillance to validate whether elimination targets had been achieved.

Of these countries, **Cameroon** and **Malawi** have stopped MDA in all endemic districts and are under surveillance. In 2019, MDA was required in 31 countries in at least one implementation unit, with an estimated 341 million people requiring MDA. To meet the elimination target, MDA must be delivered in every endemic implementation unit.

Of the 31 countries, 23 have conducted MDA in all endemic implementation units, with at least one round of MDA reaching 100% geographical coverage. In six countries, MDA has not been implemented yet in all endemic implementation units. Two countries (**Equatorial Guinea** and **Gabon**) have not started MDA. ESPEN will provide financial support to start MDA in these two countries, and they are planning to launch LF MDA in 2020.

1.3. MAPPING

As of the beginning of 2019, all LF-endemic countries in the region were mapped and only three (**Central African Republic**, **Equatorial Guinea** and **South Sudan**) had mapping gaps due to security issues. In 2019, ESPEN supported mapping and confirmatory mapping of LF in 139 implementation units in five countries (**Angola**, **Central African Republic**, **Kenya**, **Madagascar** and **South Sudan**).

Confirmatory mapping in **Madagascar** is supported in 32 implementation units. Although mapping was done in 2001 in **Madagascar**, for various reasons there was no MDA in these 32 IUs. Because of this, coupled with a very low prevalence of LF in the mapped IUs, confirmatory mapping was conducted in districts with a prevalence of 1% or greater in 2019. As of the end of 2019, mapping of LF has been completed in almost all AFRO countries except a district in **Equatorial Guinea** (Annonbon), which is not yet mapped due to inaccessibility. ESPEN supported countries with financial, technical and logistical support, as well as the procurement and distribution of filariasis test strips (FTS) and positive controls, in order to complete the mapping.

Mapping of LF using a standard methodology (i.e., selecting two villages per implementation unit and testing 100 individuals using an immunochromatographic test (ICT) or FTS) was conducted in **Angola** in 2015. **Angola** is endemic for loiasis, and studies have confirmed the presence of cross-reactivity between ICT LF positivity and loiasis/mansonellosis presence. This means that people with loiasis could show false-positive results for LF when ICTs are used. Due to this discovery during the mapping in 2015, night blood smears and dry blood spots were collected for further analysis from those individuals who tested positive for LF using an ICT and residing in loiasis endemic districts.

In July 2019, ESPEN sent a team to support SCH and STH mapping in **Angola**. While in the field, the team read 4,074 blood smear slides that had been collected and fixed during the 2015/2016 mapping. The team found no LF-causing parasites in the blood smear slides but instead found parasites for loiasis and Mansonella perstans. Therefore, ESPEN is working to provide guidance on the endemicity of LF in **Angola** based on the ICT results and night blood smear reading results.

1_Benin, Burkina Faso, Chad, Comoros, Congo, Côte d'Ivoire, Eritrea, Ethiopia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Mali, Mozambique, Niger, Senegal, São Tomé and Príncipe, Sierra Leone, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.
2_Angola, Central African Republic, Democratic Republic of the Congo, Madagascar, Nigeria and South Sudan

SCALING UP MASS DRUG ADMINISTRATION

Mass drug administration

In 2019, four endemic countries in Africa (**Equatorial Guinea**, **Gabon**, **Zambia** and **Zimbabwe**) did not implement MDA. **Equatorial Guinea** and **Gabon** have still not started MDA. These countries are co- endemic for onchocerciasis and loiasis, and the survey conducted in 2015-2016 also confirmed the endemicity of LF. Therefore, it was not possible to treat the community with ivermectin. In line with the global recommendation, treatment using albendazole twice a year was advised for these two countries. Due to logistical problems, MDA was not started in 2019. It is scheduled for early 2020 and postponed again due to the COVID-19 crisis.

ESPEN supported the implementation of ivermectin, DEC and albendazole (IDA) in São Tomé and Príncipe. IDA was implemented in seven implementation units, and a total of 148,460 people were treated, reaching 72% epidemiological coverage. All the treated implementation units achieved effective coverage. The results were further validated with a coverage survey that indicated 74% coverage. ESPEN provided technical and financial.

Support for the implementation of the IDA (see Box 2).

BOX 2

SCALING UP TRIPLE THERAPY IN AFRICA TO ACCELERATE THE ELIMINATION OF LYMPHATIC FILARIASIS

In 2017, large randomised community studies in four countries found that the combination of ivermectin, DEC and albendazole, known as IDA, is as safe where onchocerciasis is not co-endemic with LF as the two-drug regimen (DEC and albendazole) that is used during MDA. The studies also found that it clears microfilaria more efficiently from the blood than the two-drug regimen. Subsequently, the WHO published a guideline called "Alternative mass drug administration regimen to eliminate lymphatic filariasis." IDA treatment has the potential to reduce the time to treat and break the transmission of LF.

In May 2018, the WHO convened a technical meeting in Nairobi on IDA in Africa. The meeting identified seven countries on the continent eligible for IDA: Comoros, Eritrea, Kenya, Madagascar, São Tomé and Príncipe, Zambia, and Zimbabwe. Kenya, the first country to implement IDA in Africa, had implemented IDA in three sub-counties targeting 278,291 individuals and treated 252,930 by the end of 2018. All three sub-counties achieved coverage of greater than 80%. In 2019, São Tomé and Príncipe implemented IDA in seven implementation units, and a total of 148,460 people were treated with 72% epidemiological coverage. All the treated implementation units achieved effective coverage. The results were further validated with a coverage survey that indicated 74% coverage. In 2020, the rollout of IDA is planned in Eritrea and Madagascar.

Comoros will be implementing a two-drug therapy in 2020. The transmission assessment survey is planned for 2020 and the rollout of IDA is scheduled for 2021. ESPEN will organise an advocacy mission on the importance of IDA in 2020. Zambia has had more than three effective rounds of MDA with DA and was found to be noneligible for IDA at this stage. Zimbabwe has 39 endemic implementation units. In 2016 and 2017, LF MDA was conducted there, with a geographical coverage of 100% using the two-drug regimen. The country achieved 78.6% and 48.3% treatment coverage in 2016 and 2017 respectively. Nonetheless, the country discontinued MDA in 2018 and 2019. ESPEN is advocating for restarting the treatment using the IDA regimen, but Zimbabwe would like to assess the current status of the disease before restarting.

Scaling up morbidity management and disability prevention (MMDP)

MMDP is the second pillar of the WHO's Global Programme to Eliminate Lymphatic Filariasis (GPELF) [12]. People with LF morbidity should be provided with access to basic care for LF-related morbidities in LF endemic areas. In addition to training LF-endemic countries on MMDP in 2018, in 2019 ESPEN provided training on MMDP to LF officers and NTD managers from eight countries that didn't receive training the previous year (**Angola**, **Comoros**, **Chad**, **Central African Republic**, **Democratic Republic of the Congo**, **Equatorial Guinea** and the **Republic of Congo**) to scale up the interventions and ensure MMDP access. Training focused on lymphoedema and hydrocele management. As of the end of 2019, all AFRO LF-endemic countries are trained on MMDP.

1.4. SCALE DOWN: REDUCING INFECTION AND DISCONTINUING MASS DRUG ADMINISTRATION

- Transmission assessment surveys (TAS) and pre-TAS: Before stopping MDA, the prevalence of infection should be reduced to below 1% microfilaraemia or 2% antigenemia in sentinel and spot-check (also known as pre-TAS) communities considered at high risk; and LF transmission assessment surveys should be passed. TAS is implemented to decide whether to stop MDA by confirming whether the infection has been sustained below elimination thresholds after MDA. In 2019, ESPEN supported 54 pre-TAS in six countries (**Comoros**, **Democratic Republic of the Congo**, **Kenya**, **Nigeria**, **Sierra Leone** and the **United Republic of Tanzania**). ESPEN provided financial and technical support for the surveys to ensure they met set standards of quality. Before conducting TAS, countries are required to get approval from the Regional Programme Review Group for Preventive Chemotherapy (RPRG) to go ahead with the implementation of the surveys. Since the RPRG is under restructuring, the ESPEN team has reviewed and approved survey requests in 2019. The team reviewed 81 TAS and provided feedback for five countries before they implemented the surveys.
- Validation process: Malawi's dossier was reviewed and endorsed by WHO-AFRO and submitted to WHO-HQ for validation. Validation was signed by WHO in the first quarter of 2020. As countries progress towards elimination, ESPEN is also supporting countries in the preparation of the dossier. Studies have documented that the prevalence of LF infection in The Gambia was among the highest in Africa in the 1950s [14, 15]. Nonetheless, different surveys conducted in 1975 and 1976 revealed a significant decline in LF endemicity in the absence of MDA [16]. A robust study conducted in 2013 using the TAS methodology confirmed the transmission interruption of LF in The Gambia [17]. The study concluded that "our results are unequivocal in confirming the absence of transmission of LF in all 21 districts surveyed using WHO-recommended statistically robust and validated tool" [17]. The studies attributed the decline in prevalence to a significant reduction in mosquito density through the widespread use of insecticidal nets. Although The Gambia has been reclassified as nonendemic for LF in 2015, the country is still not validated as eliminating LF as a public health problem [18]. The country must ensure access to MMDP and surveillance, and it must prepare a dossier to be validated for eliminating LF as a public health problem.

1.5. TECHNICAL SUPPORT AND LEADERSHIP

ESPEN provided technical support for IDA implementation in **São Tomé and Príncipe** and guided the LF programme in Kenya on the implementation modalities of the LF programme. In addition to country support for LF elimination, ESPEN played an important role at the regional and global levels for the elimination of LF by participating in technical meetings.

ESPEN contributed to the Global IDA meeting in Bangkok, Thailand, in July 2019, where IDA implementation experiences in **Kenya** and **São Tomé and Príncipe** were shared. ESPEN staff contributed to the development of webinars on transmission assessment survey best practices, which were organised by USAID's Act to End NTDs West and FHI360. The material is available online at https://fhi360.adobeconnect.com/puthxfpwi55c

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ONCHOCERCIASIS

1.1. SUMMARY

ESPEN's major achievements in onchocerciasis control in 2019 include:

- ESPEN supported MDA in five countries (**Burundi, Democratic Republic of the Congo, Malawi, Republic of Congo and Yemen**) targeting 9,520,171 people in 99 implementation units. **Yemen** treated more than half a million people for onchocerciasis in 33 districts despite civil unrest.
- ESPEN built capacity to scale up onchocerciasis elimination mapping in 11 countries (**Chad**, **Côte d'Ivoire**, **Democratic Republic of the Congo**, **Ethiopia**, **Equatorial Guinea**, **Kenya**, **Mali**, **Nigeria**, **Republic of Congo**, **Sudan** and **Senegal**).
- In support of scaling up MDA and ensuring no onchocerciasis-endemic district is left behind, in June 2019 ESPEN organised a policy dialogue on onchocerciasis in areas co- endemic for loiasis.
- An onchocerciasis breeding site assessment was conducted in the northwest and southeast regions of Liberia.
- ESPEN Laboratory analysed 203,391 black flies trapped in **Burkina Faso** and **Senegal**.
- As part of the evaluation of the performance of the Ov16 ELISA serological test, a total of 3,586 dried blood spots from **Burkina Faso** and **Guinea-Bissau** were analysed at the ESPEN Laboratory.

1.2. INTRODUCTION

Onchocerciasis is caused by the parasitic worm Onchocerca volvulus [19]. It is commonly called «river blindness» because the parasite is transmitted through the repeated bites of black flies of the genus Simulium, which breed along rivers and streams in areas where there is fast-moving water and because the infection can result in vision loss and blindness [20]. Among ESPEN mandate countries, 32 are endemic for onchocerciasis, with more than 227 million people at risk. Of these, four countries (**Kenya**, **Mozambique**, **Niger** and **Rwanda**) are not considered to require preventive chemotherapy. Nonetheless, these countries need to conduct onchocerciasis elimination mapping (OEM) to demonstrate no active transmission in areas never exposed to ivermectin treatment where transmission of ONCHO is not considered unsuitable. In 2019, MDA was required in 28 of ESPEN's mandate countries. Three countries (**Ethiopia**, **Nigeria** and **Uganda**) stopped MDA in at least one subnational area after meeting the criteria of the 2016 WHO guidelines and started post-treatment surveillance [20].

1.3. MAPPING

In 2009, the target for the onchocerciasis programme began to shift from control to elimination [19]. Subnational achievements in some African countries have demonstrated that annual or semi-annual MDA could break transmission and lead to elimination. As a result, there was a shift of focus from controlling morbidity to interrupting transmission of onchocerciasis [19]. This has required the global programme for the elimination of onchocerciasis to address several longstanding challenges. To achieve elimination throughout ESPEN mandate countries, all areas not currently under ivermectin treatment where transmission of ONCHO is ongoing must be identified and treatment guaranteed. Under the previous control strategy, foci with moderate to high levels of transmission were targeted for treatment. Areas with low-prevalence settings were not included in the interventions. To address this gap, ESPEN initiated onchocerciasis elimination mapping. In 2019, ESPEN supported the scale-up of OEM through capacity building in 11 countries (**Chad**, **Côte d'Ivoire**, **Democratic Republic of the Congo**, **Ethiopia**, **Equatorial Guinea**, **Kenya**, **Mali**, **Nigeria**, **Republic of Congo**, **Sudan** and **Senegal**). Training was provided to experts from these countries for five days in **Brazzaville**, **Republic of Congo**. OEM mapping was conducted in 19 implementation units in **Equatorial Guinea**. In all the trained countries, OEM will be scaled up in 2020, although this activity may be delayed due to the ongoing COVID-19 crisis.

1.4. SCALE UP MASS DRUG ADMINISTRATION

In 2019, ESPEN supported MDA in five countries (**Burundi**, **Democratic Republic of the Congo**, **Malawi**, **Republic of Congo** and **Yemen**) targeting 9,520,171 people from 99 districts. Through ESPEN support, Yemen conducted MDA in 33 districts of its eight governorates in January 2019. This MDA campaign was led by the Yemen Ministry of Public Health and the WHO. Of the 528,420 people targeted in all eight governorates, 474,027 were reached and treated, achieving 90% treatment coverage. A total of 1,177,524 ivermectin tablets from the Mectizan Donation Programme were distributed during the campaign.

In June 2019, ESPEN hosted a meeting on onchocerciasis in areas co-endemic for loiasis. The 29 regional and international experts in attendance identified several strategies that could facilitate the implementation of MDA in those areas not currently eligible for MDA. The experts identified important operational research to help develop recommendations for their use in programmes. (See Box 3.).

1_ Angola, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Equatorial Guinea, Ethiopia, Gabon, Ghana, Guinea, Guinea-Bissau, Liberia, Malawi, Mali, Niger, Senegal, Sierra Leone, South Sudan, Sudan, Togo, Uganda, United Republic of Tanzania, Yemen.

BOX 3

WORLD HEALTH ORGANIZATION MEETING ON LOIASIS IN ONCHOCERCIASIS-ENDEMIC AREAS

One of the several longstanding challenges of the onchocerciasis elimination program has been how to implement mass treatment with ivermectin in areas that have little onchocerciasis-associated morbidity but have ongoing transmission and are co-endemic for loiasis. To eliminate onchocerciasis, MDA of ivermectin needs to be repeated for 10-12 years or more. Because of the risk of dangerous side effects, a new strategy is needed in order to be able to distribute ivermectin safely in areas co-endemic for river blindness and loiasis but where MDA programmes have not been started.

The World Health Organization Onchocerciasis Technical Advisory Subgroup (OTS) recommended examining the bioethical implications of potential treatment strategies in this setting. In response to that request, ESPEN convened a diverse group of stakeholders to review the available tools and strategies as well as different options for developing a decision-making strategy as a first step towards the completion of a comprehensive strategy. The meeting took place June 24-26 2019, in Brazzaville, Republic of Congo, and was attended by 29 experts, including seven NTD programme managers from the loiasis co-endemic countries in the African region.

The participants discussed the gaps in understanding the overlap of onchocerciasis and loiasis; the risk of SAEs in co-endemic areas; current tools and strategies for reducing the risk of more severe adverse events; the implications of scenarios that employ different combinations of diagnostic tools; epidemiologic approaches and risk-mitigation strategies; the roles and specific accountabilities of each partner organisation for ivermectin-based MDA and associated serious adverse events; and the most appropriate decision-making process to allow the MDA campaigns to proceed, including the type and level of input from affected communities. The regional and international experts identified numerous approaches that could enable the delivery of MDA in those areas not currently qualified for MDA. The experts also identified several operational research questions to test the recommendations.

SCALE DOWN: REDUCING INFECTION AND DISCONTINUING MASS DRUG ADMINISTRATION

As part of the vector control intervention for onchocerciasis, a back fly breeding site assessment was conducted in Liberia.

ESPEN Laboratory

Scaling down preventive chemotherapy once interruption of disease transmission has been established is a priority objective for ESPEN. The ESPEN Laboratory is paramount in providing onchocerciasis surveillance data for informed decision-making in support of this objective. To this end, the ESPEN Laboratory has the following objectives:

- Enhancing NTD laboratory capacity in Africa
- Providing NTD laboratory quality control and quality assurance
- Analysing samples to support countries where national laboratories do not have sufficient capacity
- Being a repository of laboratory data for the African region and supporting countries on the analysis and use of laboratory data
- Assisting countries in the procurement and storage of diagnostics and laboratory reagents such as OV16 ELISA, OV 16RDT, Kato Katz, FTS, etc.

In 2019, the activities of the ESPEN Laboratory mainly focused on the analysis of adult black flies for infectivity rates with the Onchocerca volvulus parasite and detection of the IgG4 antibody against O. volvulus Ov-16 antigen from eluted dry blood spots by ELISA. As part of capacity building, training of technicians from countries participating in onchocerciasis activity was conducted. In 2019, the ESPEN Laboratory analysed 102,879 black flies trapped in **Senegal** and 100,512 black flies from **Burkina Faso**. The pool screening method was employed. Infection was determined by a PCR-ELISA procedure of the O-150 DNA repeats present in the O. volvulus parasite. Individual results from **Senegal** and **Burkina Faso** are presented in Table 2.

TABLE 2

2019 POOL SCREENING RESULTS OF SAMPLES COLLECTED IN SENEGAL AND BURKINA FASO

COUNTRIES	TRANSMISSION ZONE	NUMBER OF BLACK FLIES ANALYSED	INFECTIVITY RATE (10-3)	CONFIDENCE INTERVAL (10-3)
SENEGAL	River Basins of Falémé	47,371	0.195476	0.08333-0.37987
	River Basins of Gambie	55,508	0.2997	0.161626-0.5004
BURKINA FASO	River Basins of Comoé and Volta	100,512	0.0498	0.0150-0.1176

Serology

The Ov16 ELISA is recommended by WHO guidelines for demonstrating the interruption of transmission of O. volvulus. Most Ov16 ELISA methods utilise dried blood spots as the input sample type. DBS samples are relatively stable and can be easily collected and transported to a central facility for testing later. Therefore, the ESPEN Laboratory was involved in the evaluation of the performance of the Ov16 ELISA serological test in an African lab setting. As part of this evaluation, a total of 3,586 DBSs (1,028 from **Burkina Faso** and 2,558 from **Guinea-Bissau**) were analysed at the ESPEN Laboratory in 2019. The results obtained supported the use of Ov-16 for diagnosis of onchocerciasis in Africa.

Laboratory capacity building

Elimination of onchocerciasis requires robust entomological surveys for monitoring progress and interrupting transmission. Capacity building training was provided to participants on identifying breeding site maps and transmission zones, selecting first-line communities and, ultimately, determining vector collection sites. The training also equipped participants with skills in identifying the Simulium damnosum collection of samples.

In 2019, with the financial support of the End Fund, a technician from the ESPEN Laboratory trained the focal points of NTD programmes from four regions of **Mali**. The ESPEN Laboratory trained technicians from the Onchocerciasis/Lymphatic Filariasis National Laboratory in Niamey, **Niger**, on pool screening. In June 2019, the ESPEN Laboratory participated in a capacity building workshop organised by WHO HQ in collaboration with the Ministry of Health of Zanzibar, **United Republic of Tanzania**. The workshop was geared towards strengthening laboratory capacity for the diagnosis of NTDs and was held at the Public Health Laboratory in Pemba/Zanziba. ESPEN Laboratory provided two facilitators. In total, there were 35 participants drawn from **Ethiopia**, **Iran**, **Italy**, **Kenya**, **Somalia**, **South Sudan**, **Rwanda**, **Zanzibar** and **Tanzania mainland**.

ESPEN lab established communication with coordinators of countries participating in onchocerciasis activities in West Africa to harmonise laboratory activities, technology transfers and the sharing of data. Working very closely with the Task Force for Global Health NTD Laboratory Coordinating Bureau (NLCB) in the United States (https://www.ntdsupport.org/resources/ntd-laboratory-coordinating-bureau-nlcb) and other partners, ESPEN is playing a central role in establishing a network of national laboratories involved in the diagnosis of all neglected tropical diseases in Africa. ESPEN Laboratory may also serve as an ancillary storage site for kits, reagents and equipment for in-need countries and a data repository for laboratory surveillance for NTDs.

1.5. TECHNICAL SUPPORT AND LEADERSHIP IN ONCHOCERCIASIS

In 2019, ESPEN played an important role at the regional and global levels. ESPEN hosted a meeting on onchocerciasis in areas co-endemic for loiasis, where regional and international experts identified several strategies that could facilitate the implementation of MDA in those areas not currently eligible for MDA. ESPEN conducted a technical meeting on onchocerciasis elimination mapping based on the guidance provided by the onchocerciasis technical advisory subgroup. Through its laboratory in Ouagadougou, Burkina Faso, ESPEN continued to play an important role in supporting countries in building lab capacity across the region.

SCHISTOSOMIASIS AND SOIL-TRANSMITTED HELMINTHIASIS

1.1. SUMMARY

ESPEN's major achievements in SCH and STH control in 2019 include:

- ESPEN supported the scale-up of MDA for STH in 15 countries (**Cameroon**, **Cape Verde**, **Congo**, **Democratic Republic of the Congo**, **eSwatini**, **Equatorial Guinea**, **Gabon**, **Gambia**, **Kenya**, **Lesotho**, **Namibia**, **Nigeria**, **Senegal**, **São Tomé and Príncipe**, and **Zambia**) in 488 IUs targeting 21,390,340 people.
- ESPEN supported the scale-up of SCH MDA in 14 countries (**Cameroon**, **Democratic Republic of the Congo**, **Egypt**, **Eritrea**, **Gambia**, **Kenya**, **Mauritania**, **Namibia**, **Nigeria**, **Senegal**, **South Sudan**, **São Tomé and Príncipe**, and **Zambia**) in 354 IUs targeting 24,231,435 people.
- Of the ESPEN mandate countries, at least 12 achieved 100% geographical coverage for STH MDA in 2019 and 13 for SCH.
- ESPEN supported 22 countries to conduct subnational analysis of schistosomiasis mapping data to optimise MDA. The analysis showed that 1.4 million school-age children are missing treatment and 5.5 million tablets of praziquantel were distributed in areas where they are not needed.
- ESPEN led the completion of baseline endemicity mapping for STH/SCH throughout Africa by supporting mapping in the last three remaining countries (**Angola**, **South Africa** and **South Sudan**) in 151 health districts, bringing the AFRO Mapping Project for STH and SCH to a successful completion.
- All data is now publicly available at the ESPEN Portal (http://espen.afro.who.int).

1.2. INTRODUCTION

Schistosomiasis is a disease caused by an infection acquired when humans come into contact with freshwater bodies infested with infected snails. It usually results in diarrhoea and blood in the stool; enlargement of the liver and the spleen and portal hypertension are common in advanced cases.

Schistosome eggs embolise to the uterus, cervix and lower genital tract of girls and women to form fibrotic nodules known as "sandy patches" that result in a condition known as female genital schistosomiasis (FGS), which is associated with bleeding and pain, as well as social stigma and depression. In 2019, 45 of ESPEN mandate countries were endemic for schistosomiasis, and three of them (**Botswana**, **Equatorial Guinea** and **South Africa**) had not started treatment by the end of 2019. ESPEN has been working with these countries to support processes that will lead to implementing urgent SCH control.

Botswana has made significant progress in procuring adequate PZQ that will be distributed at the community level, while planning is going on in **Equatorial Guinea** with ESPEN-supported country missions. **South Africa** is working on an investment case for including domestic funding for MDA in the government budget. The aim is to ensure that all countries implement schistosomiasis control by the second quarter of 2020 if the current COVID-19 crisis allows.

STH infections are intestinal infections that are transmitted by contamination of soil with human excreta. The infections are caused by Ascaris lumbricoides (roundworms), Trichuris trichiura (whipworms), Necator americanus and Ancylostoma duodenale (hookworms) [21, 22]. In 2019, 44 of ESPEN-supported countries were requiring preventive chemotherapy for STH in at least one implementation unit. Of the countries requiring MDA, all except **Equatorial Guinea** started MDA. Despite a successful MDA campaign between 2012 and 2017, Zimbabwe did not implement MDA for the last two years (2018 and 2019).

1.3. SCALE-UP OF INTERVENTIONS

Mapping

EESPEN contributed to the completion of STH/SCH mapping across Africa by the end of 2019. In 2019, ESPEN supported mapping in 151 health districts in three countries (**Angola**, **South Africa** and **South Sudan**). **Angola** finalised the mapping of SCH/STH in 125 municipalities.

In the same year, ESPEN supported **South Africa** to complete SCH/STH mapping in the three provinces of Free State, Western Cape and Northern Cape in 14 districts. In **South Sudan**, ESPEN supported SCH/STH mapping in 12 counties. All the countries, with the exception of **South Africa**, successfully utilised ESPEN Collect, allowing for real-time support in data management by ESPEN data staff. In **Angola** and **South Sudan**, the finalisation of SCH/STH mapping was integrated with Guinea worm disease tracing.

Mass drug administration

In 2019, ESPEN supported the scale-up of MDA for STH in 15 countries (**Cameroon**, **Cape Verde**, **Congo**, **Democratic Republic of the Congo**, **eSwatini**, **Equatorial Guinea**, **Gabon**, **Gambia**, **Kenya Lesotho**, **Namibia**, **Nigeria**, **Senegal**, **São Tomé and Príncipe**, and **Zambia**) in 488 IUs targeting 21,390,340 people.

1. Cameroon, Cape Verde, Congo, Democratic Republic of Congo, eSwatini, Gabon, Gambia, Kenya, Lesotho, Namibia, Senegal and São Tomé and Príncipe.
2. Cameroon, Democratic Republic of Congo, Egypt, Equatorial Guinea, Eritrea, Gambia, Kenya, Mauritania, Namibia, Nigeria, Senegal, South Sudan and São Tomé and Príncipe.

BOX 4

SOUTH SUDAN LAUNCHED SCHISTOSOMIASIS CONTROL PROGRAMME

South Sudan, one of the countries endemic for schistosomiasis, had no documented MDA against schistosomiasis implemented. In 2019, ESPEN supported the implementation of MDA for schistosomiasis for the first time. The Ministry of Health in **South Sudan** conducted the first MDA in eight counties. Of the 187,490 targeted school-age children, 147,138 were treated, with an overall treatment coverage of 78%, which is just above the WHO recommended minimum threshold of 75%. However, of the eight IUs, five achieved treatment coverage above 75%.

Democratic Republic of the Congo, **Egypt**, **Equatorial Guinea**, **Eritrea**, **Gambia**, **Kenya**, **Mauritania**, **Namibia**, **Nigeria**, **Senegal**, **South Sudan**, **São Tomé and Príncipe**, and **Zambia**) in 354 IUs targeting 24,231,435 people. Except for **Zambia**, all the other countries implemented MDA for both SCH and STH in 2019. Zambia did not implement MDA due to logistical issues.

BOX 5

DATA ANALYSIS FOR OPTIMISATION OF MDA AGAINST SCHISTOSOMIASIS

Schistosomiasis is often a focal disease, and the medicine used for MDA is a scarce resource. Despite the generous support of 250 million tablets of praziquantel by MSD annually for SAC, a large gap still exists for praziquantel availability for adults at risk. For schistosomiasis, the baseline endemicity mapping was done by collecting stool and/or urine samples in a sub-sample of schools per district, and sampling children per school. The eligibility of the district for MDA is then determined by the mean prevalence that allows the entire district to be classified as endemic (high, moderate or low) or nonendemic. Using the mean has its limitations, because whenever an average is used to represent the district, the results become distorted, as variations at lower levels are masked. The current MDA strategy for many countries has been to treat all eligible individuals in endemic districts or implementation units. This strategy, which does not take into account the focal nature of its distribution, can lead to overtreatment in some areas, or worse, undertreatment or no treatment in areas that need it most. When highly endemic areas are surrounded by areas with no transmission, that makes the mean prevalence drop. This can cause several issues, including wasted medicines and resources, treatment fatigue in populations with no perceived need and noncompliance (i.e., communities refuse to take donated medicines), and persistence of morbidity in focal areas with high prevalence where the mean prevalence is low.

ESPEN initiated a consultative process to support countries to conduct subdistrict data analysis to identify areas at the lowest possible administrative levels (subdistrict) requiring treatment and those that do not require treatment, with the aim of optimising the use of praziquantel using available epidemiological data. ESPEN supported the consolidation of prevalence data in endemic countries to supplement data available from the ESPEN Portal and supported 22 countries (Burkina Faso, Côte d'Ivoire, Cameroon, Central African Republic, Chad, DRC, Ethiopia, Gabon, Ghana, Kenya, Madagascar, Malawi, Mali, Niger, Namibia, Nigeria, Senegal, South Sudan, Tanzania, Uganda, Zambia and Zimbabwe) in analysing the data for more focalised implementation of MDA to a subdistrict level and other interventions. Countries prioritised for the support so far are those with significant populations requiring treatment of more than 2.5 million people, with the rest of the countries to be targeted in 2020. Data analysis is completed for these 22 countries and validation at the country level is continuing, while additional support at the country level will be needed for Ethiopia and Nigeria.

A total of 107 individuals participated in the data training. For each country, the participants included the national programme officers, monitoring and evaluation officers, and/or data managers.

Based on the analysis and preliminary data in the 22 countries, the current strategy of treating all school-age children in an endemic district shows that up to 7.6 million school-age children are adequately treated, while 1.4 million children in endemic areas are missing treatment, and 2.2 million children are being treated unnecessarily. This translates to 5.5 million tablets of praziquantel being distributed annually in areas where they are not needed.

To support countries, ESPEN has developed two data support tools for this analysis. The subdistrict data analysis tool supports the analysis of available subdistrict data for decisions at these lower administrative levels, while the local knowledge on disease epidemiology tool complements data knowledge gaps in unknown endemicity. These tools are available for download on the ESPEN Portal (http:// espen.afro.who.int). So far, four countries (Malawi, Mali, South Sudan and Uganda) have completed their data validation at the country level and are now planning their next interventions at the subdistrict level.

1.4. SCALE DOWN: REDUCING INFECTION AND DISCONTINUING MASS DRUG ADMINISTRATION

Zimbabwe had conducted a high coverage MDA consistently for six years, and the RPRG had recommended an impact assessment survey to decide if an adjusted strategy for MDA was needed. With ESPEN support, **Zimbabwe** conducted an SCH/STH impact assessment survey nationwide.

The survey has been completed and data analysis is going on. With ESPEN's support, **Zimbabwe** also held a stakeholders' consultative workshop in September 2019 in Victoria Falls to review the impact assessment data together with all adjacent sectors and plan for a multisector adjusted plan moving forward. All 74 districts in 10 endemic provinces were targeted for the survey, which was conducted in 279 schools that had participated in the baseline survey, as well as an additional 56 sentinel schools. The survey involved 13,950 children.

The results showed a significant reduction in STH disease prevalence at the district and national levels. The prevalence of schistosomiasis reduced from 23.0% to 5.0%. The number of districts with prevalence of S. haematobium heavy infection intensity (≥50e/ml) >1% reduced from 48 to 12. While eight districts had prevalence of heavy infection intensities > 1% for S. mansoni in the baseline survey, after six rounds of MDA, elimination of S. mansoni as a public health problem was achieved in all Zimbabwean districts. For STH prevalence, levels dropped from 6% to 1% for STH on average, but at baseline there were five districts with STH prevalence >20% and none at the end-line survey.

Nevertheless, hotspots persist from various site-level data, calling for more focalized targeting of adjusted interventions in the country's SCH/STH program plan. Based on the results of the impact assessment in eight districts where the prevalence is ≥ 2% and < 10%, administering a round of PZQ anthelminthic treatment every two years for the next four years was recommended. In 66 districts where the prevalence is <2%, no PZQ MDA intervention was recommended.

IMPACT ASSESSMENT RESULTS OF SOIL-TRANSMITTED HELMINTHIASIS (STH) IN ZIMBABWE BY PROVINCE.

Zimbabwe implemented MDA for STH for six consecutive years (2012-2017). Based on the RPRG recommendations, the country conducted an impact survey in 2018-2019. The figure below shows the results of the impact assessment (2018) compared to the baseline (2010).

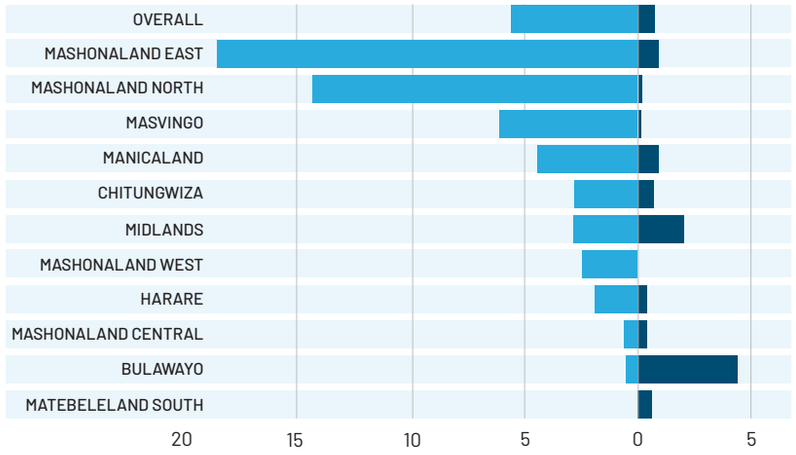


FIG. 6
Prevalence (%)

Baseline
Post MDA

Two other countries, **eSwatini** and **Eritrea**, received technical and financial support from ESPEN to develop impact assessment protocols, sentinel site monitoring protocols, and sentinel sites for monitoring of SCH/STH impact. The WHO recommends a drug efficacy survey as part of monitoring for largescale MDA programmes. As part of the ESPEN-supported SCH/STH impact assessment in Zimbabwe, a layered drug efficacy survey was included.

IMPACT ASSESSMENT RESULTS OF SCHISTOSOMIASIS IN ZIMBABWE BY PROVINCE.

Zimbabwe implemented MDA for SCH for six consecutive years (2012-2017). Based on the RPRG recommendations, the country conducted an impact survey in 2018-2019. The figure below shows the results of the impact assessment (2018) compared to the baseline (2010).

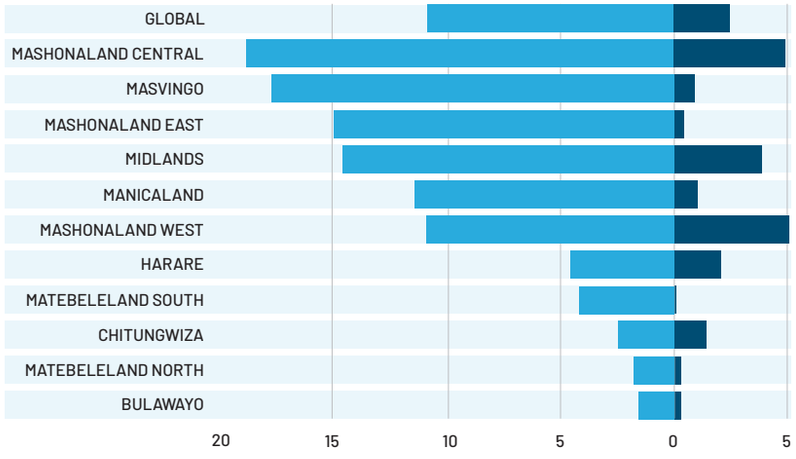


FIG. 7
Prevalence (%)

Baseline
Post MDA

1.5. TECHNICAL SUPPORT AND LEADERSHIP

ESPEN provided a variety of technical support for endemic countries. In collaboration with the Institutional Network on China-Africa Collaboration on Schistosomiasis (INCAS), ESPEN provided training on snail vector distribution assessments and control. The training is the fourth session since the start of the partnership and included updates on participating country progress on INCAS collaboration, updates on infected snail control and a deep dive into the **Ethiopian** intermediate snail ecology.

To support STH/SCH activities in the region, ESPEN identified and provided training for 24 experts across the region alongside 24 WHO National Professional Officers (NPOs) from 24 prioritized countries based on population requiring SCH MDA. This training was aimed at keeping experts from endemic countries and partners aligned and updated on the WHO agenda and control and elimination activities in countries, and ensuring countries get the technical support they need. Experts were provided with a range of WHO and partner tools available for supporting NTD programmes.

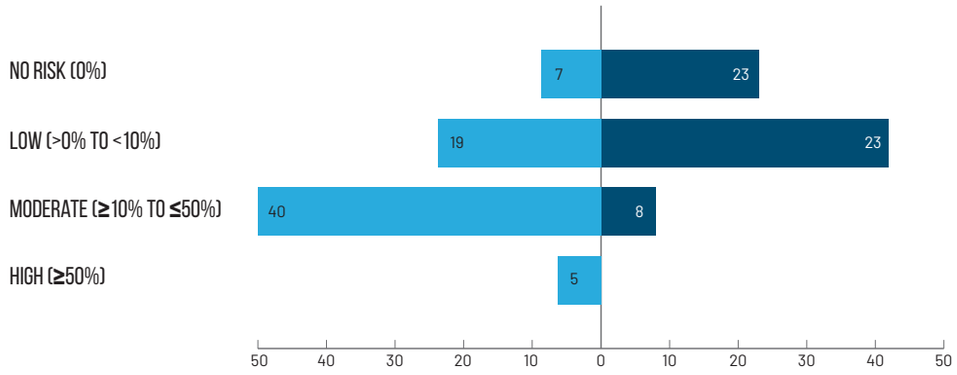
ESPEN is developing the SCH/STH roster of experts in order to have a critical mass of experts who are aligned with the collective NTD control and elimination agenda and available to support NTD programmes, primarily in their countries of origin but also at the regional level. Furthermore, ESPEN contributed to international forums by presenting the progress in the region. ESPEN supported countries technically on developing their SCH/STH elimination strategies, advocacy tools, high-level advocacy and impact assessment. ESPEN also supported countries on the management of severe adverse events following MDA.

IMPACT ASSESSMENT RESULTS OF SCHISTOSOMIASIS IN ZIMBABWE STRATIFICATION OF DISTRICTS INTO SCHISTOSOMIASIS RISK CATEGORIES ACCORDING TO WHO GUIDELINES.

The figure below shows the results of the impact assessment (2018) compared to the baseline (2010).

FIG. 8
Number of Districts

Baseline
Post MDA



TRACHOMA

1.1. SUMMARY

ESPEN's major achievements in trachoma control in 2019 include:

- ESPEN supported trachoma MDA in the **Democratic Republic of the Congo**, **Ethiopia** and **Sudan** in 68 IUs targeting 10,236,410 individuals.
- ESPEN conducted preliminary investigations in collaboration with respective WHO country offices and national ministries of health to establish endemicity of trachoma in 2020.
- ESPEN developed a pre-approved roster of 18 trachoma experts to serve as ad-hoc members of a trachoma elimination dossier review group.
- ESPEN provided support for the development of a trachoma elimination dossier for Mauritania and technical support for the revision of the Togo dossier.
- ESPEN provided support for trachoma impact surveys in 18 health districts in the **Democratic Republic of the Congo**.

1.2. INTRODUCTION

Trachoma is the leading infectious cause of blindness in the world. The infection spreads from person to person through contaminated fingers, fomites and flies that came into contact with discharge from the eyes and nose of an infected person [23, 24]. Repeated infections in early childhood lead to scarring of the inner side of the upper eyelids, resulting in the inward turning of the eyelid margin with the lashes touching the globe, a condition known as trachomatous trichiasis (TT). TT is a very painful condition, as eyelashes rub the cornea with each blinking action, resulting in corneal opacity and eventually in an irreversible visual impairment and blindness. Trachoma is controlled by using the WHO-recommended "SAFE strategy." SAFE stands for surgery for TT, antibiotics to clear the bacterial infection, facial cleanliness, and environmental improvement (especially improved access to water and sanitation) to reduce transmission.

Trachoma is widespread in Africa. Of the 44 endemic countries for trachoma worldwide, 28 (64%) are found on the continent. Of the 52 ESPEN mandate countries, 29 are endemic for trachoma and are known to require interventions, whereas 16 countries are believed to be non-endemic. Four countries (**Angola**, **Botswana**, **Namibia** and **Somalia**) may require intervention, so investigations are needed. The Gambia and Togo claim to have eliminated trachoma. Ghana is the only country in the region to have been validated as having eliminated trachoma as a public health problem.

1.3. SCALING UP OF INTERVENTIONS

Preliminary investigations

Establishment of the endemicity status in three countries (**Angola**, **Botswana** and **Namibia**) is needed to complete the mapping gap for trachoma in the WHO African Region. The status of trachoma endemicity in these three countries is currently labelled as "may require interventions, investigations needed." In 2019, ESPEN conducted the required investigations in collaboration with the respective WHO country offices and national ministries of health to decide on the next steps. Based on the preliminary investigations, the following recommendations were made:

- In **Angola**, formal population-based trachoma prevalence surveys should be conducted in Cunene, Namibe and Benguela provinces in the first survey phase to establish the prevalence of active infection (trachomatous inflammation – follicular (TF)) in children 1–9 years old and the prevalence of TT in those 15 years old and up in each evaluation unit. The reported high prevalence of active trachoma from a previous rapid assessment in the province of Uige could not be confirmed, therefore, conducting a trachoma prevalence survey there is not warranted.
- In **Botswana**, a population-based trachoma prevalence survey is recommended in Ngamiland district to establish the prevalence of TF in 1- to 9-year-olds and of TT in those 15 years old and up, and provide the evidence for inclusion in the trachoma elimination dossier should TT not be a public health problem in the district.
- In **Namibia**, formal population-based trachoma prevalence surveys should be undertaken in the Zambezi and Kunene regions in the first survey phase in order to establish whether the observed existence of active trachoma and TT in the country is of public health significance or not.

ESPEN will support the implementation of mapping in these three countries in the second quarter of 2020 in collaboration with partners.

Mapping

The **Central African Republic** is among the known endemic countries with a mapping gap for trachoma and a need for ESPEN support. In 2019, ESPEN provided that support for the mapping of five EUs in Ouham and Ouham-Pendé. The mapping was initially planned for 2019 but had to be postponed to February 2020 due to challenges within the country. CAR would require doing surveys in four additional EUs to complete trachoma mapping in the country. At the end of 2019, there was a mapping gap of 57 IUs in five countries (**Central African Republic**, **Chad**, **Democratic Republic of the Congo**, **Nigeria** and **South Sudan**)..

Scale-up of mass drug administration

In 2019, ESPEN supported trachoma MDA in the **Democratic Republic of the Congo**, **Ethiopia** and **Sudan** in 68 IUs targeting 10,236,410 individuals. In the DRC, MDA was conducted in 15 health districts targeting 2,989,356 people. In **Ethiopia**, ESPEN supported one round of MDA in 48 districts (19 in Afar, two in Oromia and 27 in Somali) with a TF prevalence of 5% to 9.9% targeting 3,386,298 people. This support would enable Ethiopia, the country with the highest trachoma burden in the world, to reach 100% geographic coverage for trachoma MDA for the first time in its trachoma control history. In **Sudan**, ESPEN supported MDA in five IUs in North Darfur and West Darfur, targeting 3,860,756 people to cover gaps in funding for trachoma MDA.

1.4. SCALE DOWN

Elimination dossier

Trachoma Dossier Review Group (DRG) Roster

As the countries progress in the implementation of the intervention, it is expected that the number of countries submitting national elimination dossiers will increase. In preparation for this, ESPEN has developed a pre-approved roster of 18 trachoma experts to serve as an ad-hoc members of a trachoma elimination dossier review group to be constituted as per the established DRG guidelines.

Support in dossier preparation

ESPEN provided funding to **Mauritania** to help recruit a consultant to support the development of a trachoma elimination dossier for the country. The draft dossier is expected to be finalized in 2020 during a workshop. In addition, ESPEN provided technical support to Togo to help address the issues raised by the DRG in its first review of the country's trachoma elimination dossier.

Impact surveys

In 2019, ESPEN provided funding to support trachoma impact surveys in 18 health districts in the **Democratic Republic of the Congo**.

1.5. TECHNICAL SUPPORT AND LEADERSHIP

In 2019, ESPEN played an important role at the regional and global levels. ESPEN attended and contributed to regional and global fora such as the Carter Center Annual Trachoma Review Meeting, TEC and GET2020 meetings, and the Southern African Cross Border Meeting on NTDs and Trachoma. ESPEN also provided remote and in-person technical support for countries.

TABLE 3

NATIONAL AND ESPEN-SUPPORTED IUS TREATMENT COVERAGE IN ESPEN-SUPPORTED COUNTRIES IN 2018

		ALL IMPLEMENTATION UNITS					
COUNTRY	Disease	Number of IUs requiring PC	Number of IUs treated	Geographic coverage	Population requiring preventive chemotherapy	Number of persons treated	National coverage
Burundi	ONC	11	11	100	1,825,304	1,514,812	83
	STH	46	46	100	4,412,299	4,177,021	94.7
Cameroon	STH	189	189	100	9,879,213	3,312,396	33.5
	SCH	120	22	18.3	4,252,095	538,768	12.7
Chad	LF	22	22	100	4,175,279	3,404,103	81.5
	ONC	30	30	100	4,841,981	4,036,342	83.4
Congo	LF	12	6	50	962,668	250,570	26
	ONC	17	17	100	678,758	548,687	80.8
DRC	LF	245	234	95.5	48,034,533	36,811,289	76.6
	ONC	268	267	99.6	50,388,598	39,752,882	78.9
	STH	304	267	87.8	28,066,104	14,518,423	51.7
	SCH	280	144	51.4	15,793,248	4,479,728	28.4
Eritrea	LF	2	2	100	71,584	62,496	87.3
	SCH	27	8	29.6	269,069	93,818	34.9
eSwatini	SCH	55	50	90.9	271,193	269,107	99.2
	STH	3	31	1033.3	16,659	139,168	835.4
Ethiopia	TRA	668	478	71.6	77,653,062	62,658,840	80.7
Gabon	STH	47	47	100	483,207	128,533	26.6
	SCH	44	44	100	192,879	141,007	73.1
Gambia	SCH	23	22	95.7	123,116	59,394	48.2
	STH	4	1	25	70,776	34,139	48.2
Ghana	SCH	216	49	22.7	10,588,270	1,012,948	9.6
	STH	216	63	29.2	10,875,475	1,245,103	11.4
Lesotho	STH	7	7	100	382,336	197,652	51.7
Malawi	ONC	8	8	100	2,480,265	2,054,160	82.8
Nigeria	SCH	583	253	43.4	25,070,925	6,967,968	27.8
Rwanda	STH	23	23	100	3,715,035	3,666,384	98.7
	SCH	22	22	100	1,179,683	932,153	79
South Sudan	LF	29	6	20.7	5,904,795	1,019,621	17.3
	ONC	46	19	41.3	7,467,149	1,665,161	22.3
	STH	6	3	50	669,157	190,925	28.5
São Tomé and Príncipe	LF	7	7	100	201,784	162,512	80.5
	STH	7	7	100	77,687	68,874	88.7
	SCH	7	2	28.6	38,155	16,835	44.1
Sudan	TRA	18	8	44.4	4,150,403	2,122,507	51.1
Yemen	ONC	33	33	100	628,728	550,131	87.5

	IMPLEMENTATION UNITS SUPPORTED BY ESPEN			
COUNTRY	Number of IUs treated	Population requiring preventive chemotherapy	Number of persons treated	Coverage
Burundi	11	1,825,304	1,514,812	83
	11	1,179,490	1,137,552	96.4
Cameroon	189	9,879,213	3,312,396	33.5
	22	1,006,363	538,768	53.5
Chad	16	3,316,030	2,749,014	82.9
	16	3,316,030	2,749,014	82.9
Congo	6	551,879	250,570	45.4
	16	630,416	508,536	80.7
DRC	34	5,564,798	4,514,445	81.1
	27	4,141,285	3,334,623	80.5
	16	1,160,835	732,673	63.1
	14	634132	341,028	53.8
Eritrea	2	71,584	62,496	87.3
	8	97600	93,818	96.1
eSwatini	50	271,193	269,107	99.2
	31	16,659	139,168	835.4
Ethiopia	42	3,383,196	3,008,856	88.9
Gabon	47	483,207	128,533	26.6
	44	192,879	141,007	73.1
Gambia	22	123,116	59,394	48.2
	1	54961	34,139	62.1
Ghana	49	5023767	1,012,948	20.2
	63	2573208	1,245,103	48.4
Lesotho	7	382,336	197,652	51.7
Malawi	8	2,480,265	2,054,160	82.8
Nigeria	31	1,673,604	834,155	49.8
Rwanda	13	2,051,601	2,026,787	98.8
	13	635,386	546,341	86.0
South Sudan	4	945289	835,793	88.4
	8	1121775	1,012,279	90.2
	3	414745	190,925	46.0
São Tomé and Príncipe	7	201,784	162,512	80.5
	7	77,687	68,874	88.7
	2	31,819	16,835	52.9
Sudan	4	1,445,696	1,567,586	108.4
Yemen	33	628,728	550,131	87.5

LF= Lymphatic Filariasis ONC= Onchocerciasis STH= Soil-Transmitted Helminthiasis SCH= Schistosomiasis TRA=Trachoma DRC= Democratic Republic of the Congo

TABLE 4

POPULATION AND IUS TARGETED FOR MDA SUPPORT WITH ESPEN FUNDING IN 2019

COUNTRY	POPULATION AND IUS TARGETED FOR MDA										BUDGET		
	LF		ONCHO		SCH		STH		TRACHOMA				
	Targe	#IUs	Target	#IUs	Target	#IUs	Target	#IUs	Target	#IUs	COUNTRY	Total #IUs	Total	USD
Burundi			1,606,922	12							Burundi	12	1,606,922	100,000
Cameroon					4,239,553	113	6,812,916	189			Cameroon	189	6,812,916	285,000
Cape Verde							70,845	22			Cape Verde	22	70,845	11,000
Comoros	788,813	17.00									Comoros	17	788,813	2018 Budget¥
Congo	540,634	6	653,241	17			725,950	25			Congo	29	1,674,995	472,250
DRC	6,383,459	46	4,151,033	29	1,731,031	28	2,098,873	34	2,989,356	15	DRC	46	6,383,459	1,600,000
Egypt	-	-	-	-	5,066,393	20	-	-	-	-	Egypt	20	5,066,393	400,000
Eq. Guinea*	909,888	15			131,556	13	371,991	18			Eq. Guinea*	18	909,888	81,720
Eritrea	69,634	2	NA		263,215	27			-	-	Eritrea	29	437,708	269,176.5
eSwatini							106,092	22			eSwatini	22	106,092	10,000
Ethiopia	-	-	-	-	-	-	-	-	3,386,298	48	Ethiopia	48	3,386,298	850,329
Gabon							373,109	47			Gabon	47	373,109	225,577
Gambia					79,346	4	79,346	4			Gambia	4	79,346	17,997
Kenya					1,240,628	11	2,499,764	16			Kenya	16	2,499,764	300,000
Lesotho							449,287	11			Lesotho	11	449,287	175,352
Madagascar	3,883,148	18									Madagascar	18	3,883,148	2018 Budget¥
Malawi			2,480,265	8							Malawi	8	2,480,265	132,416
Mauritania					176,439	11					Mauritania	11	176,439	110,137
Namibia					268,214	12	406,264	22			Namibia	22	406,264	2018 Budget¥
Nigeria	5,227,136	25			4,987,478	40	2,714,245	9			Nigeria	74	12,928,859	361,758
Senegal					2,871,686	22	2,871,686	22			Senegal	22	2,871,686	17,911
South Sudan	-	-	-	-	1,434,099	8	-	-			South Sudan	8	1,434,099	813,464
STP	206,423	7			6,254	5	74,429	7			STP	7	206,423	132,374
Sudan	-	-	-	-	-	-	-	-	3,860,756	5	Sudan	5	3,860,756	472,822
Yemen	-	-	628,710	33	-	-	-	-	-	-	Yemen	33	628,710	406,605
Zambia*					1,735,543	40	1,735,543	40			Zambia*	40	1,735,543	246,876
TOTAL	**18,009,135**	**136**	**9,520,171**	**99**	**24,231,435**	**354**	**21,390,340**	**488**	**10,236,410**	**68**	**TOTAL**	**778**	**61,258,027**	**7,223,587**

* Treatment round postponed to 2020, ¥ The MDA in these countries was planned in 2019 using budget transferred from 2018.

STRENGTHENING INFORMATION MANAGEMENT SYSTEMS

1.1. SUMMARY

ESPEN's major achievements in information management system strengthening in 2019 include:

- **ESPEN conducted country data support missions in 17 countries (Angola, Botswana, Comoros, Republic of Congo, Côte d'Ivoire, eSwatini, Gabon, Gambia, Guinea-Bissau, Kenya, Malawi, Mali, Niger, Rwanda, São Tomé and Príncipe, South Sudan** and **United Republic of Tanzania (mainland and Zanzibar)**
- Using the outcomes of the country support missions, ESPEN developed a workbook to project preventive chemotherapy activities required in each implementation unit for the next five years. This tool is a resource being made available to country NTD programmes to support data-driven decision-making.
- The ESPEN Portal now has 3,508 maps, as well as underlying datasets for all PC-NTDs.
- In 2019, 9,255 users from 153 countries (including 51 countries in Africa) visited the ESPEN Portal during 19,362 sessions.
- 1,615 surveys from eight countries (**Angola**, **Burkina Faso**, **Central African Republic**, **Equatorial Guinea**, **Mozambique**, **Nigeria**, **Sierra Leone** and **South Sudan**) used the ESPEN Collect platform.

1.2. INTRODUCTION

Data-driven decision-making is one of the key pillars of ESPEN. If NTD programmes are to be successful, the collection and use of programme and epidemiological data are critical. The amount of data collected through the NTD programme is enormous, and properly collecting, storing, analysing and using these data might require skilled personnel and platforms. To support countries, ESPEN developed two platforms, ESPEN Portal and ESPEN Collect. ESPEN Portal is an online platform where data on historical and contemporary disease distribution, disease-specific epidemiological surveys, treatment coverage, and other data are stored and openly shared with users. The portal also has a function for developing interactive maps that users can use to visualise online or print. ESPEN Collect is a mobile application platform to collect, store and visualise real-time data. The tool enables the collection of standardized data across disease-specific surveys and improves the quality and timeliness of the data.

BOX 6

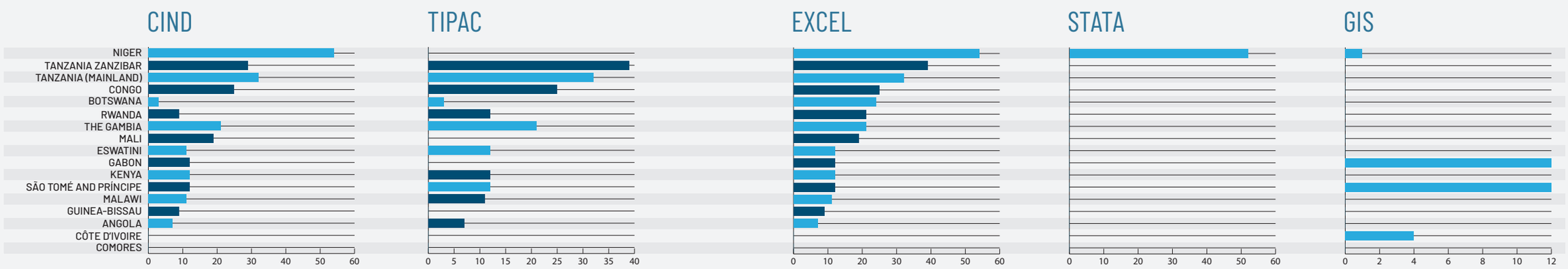
ESPEN SUPPORTED COUNTRIES ON DATA MANAGEMENT

ESPEN has organised country support missions to develop integrated NTD databases by hiring consultants. In each country, ESPEN consultants, in collaboration with the NTD team, developed NTD data flow, a partner matrix, an integrated NTD database and an implementation unit-level microplanning on activities for three years. The following 17 countries were supported: **Angola**, **Botswana**, **Comoros**, **Republic of Congo**, **Côte d'Ivoire**, **eSwatini**, **Gabon**, **Gambia**, **Guinea-Bissau**, **Kenya**, **Malawi**, **Mali**, **Niger**, **Rwanda**, **São Tomé and Príncipe**, **South Sudan**, and **United Republic of Tanzania (mainland** and **Zanzibar)**.

In 2019, ESPEN supported 17 countries (Box 6). For each country two international ESPEN consultants from the prequalified roster were hired and stayed over a two-week period. The purpose of the mission was to capture NTD data flow, fill the partner matrix, set up a country-integrated NTD database (CIND), create a sub-implementation unit demography database, and develop a three-year implementation unit-level preventive chemotherapy plan that includes trends in endemicity status, demographic data, and planned activities. Remote support is being provided to the 17 countries after the missions. The ESPEN consultants, along with the respective country NTD teams and local implementing partners, reviewed historical and contemporary site-level data and revised the endemicity status of implementation units. The team also developed data flow analyses, which will help countries identify the path for the data reporting and act on areas needing intervention. The mission identified historical data that were not captured through the ESPEN Portal. For each country, a CIND and a partner matrix were developed, which will be fed into the ESPEN portal. With the support of the consultants, countries were able to develop a three-year roadmap, which outlines what preventive chemotherapy activities will be conducted in each implementation unit over the coming three-year period, including MDA, impact assessment such as sentinel site surveys, pre-TAS and TAS, post-elimination surveillance, TT-only surveys, TIS, pre-validation surveys, entomological surveys, and other activities. In addition, after developing the database, training was provided for five days to a total of 450 data managers and NTD staff across the 17 countries (see Figure 6).

FIG. 9

NUMBER OF TRAINEES



1.3. ESPEN PORTAL

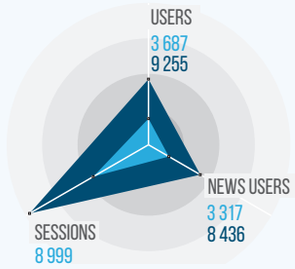
The ESPEN Portal was launched in 2018 and now has 3,508 maps, as well as underlying datasets for all PC-NTDs.

Data is available at both the implementation unit level for endemicity status and treatment coverage, and at the site-level for survey results.

In 2019,
9,255 users
visited the portal from
153 countries
(including 51 countries in Africa) during
19,362 sessions.

FIG. 10

AUDIENCE OF THE ESPEN PORTAL, **2018** AND **2019**



Compared to 2018, this represents a 150% increase in terms of users and a 115% increase in terms of sessions (see graph below). The portal also includes resources such as country NTD master plans, a partner matrix, RPRG reports, ESPEN annual reports and disease elimination dossiers.

In April 2019, the WHO launched global consultations for the new NTD Roadmap 2021-2030. As part of this effort, ESPEN convened a meeting of partner institutions involved in NTD monitoring and evaluation June 3-7, 2019. A total of 11 participants from CNTD/LSTM, Sightsavers, Geneva Global, USAID's Act to End NTDs/East and West, USAID, SCI, the END Fund, KIT and LSHTM reviewed available country data and identified main indicators to be used for developing country summary snapshots. A list of 59 country-level and 39 regional-level indicators were identified. Based on the outcomes of this meeting, ESPEN developed a draft IU-level forecast of PC activities and country summaries. This was shared during the NTD programme managers' meeting in July 2019 in Addis Ababa, Ethiopia. This list of indicators will be used to track regional progress on the NTD Roadmap 2021-2030 and will be available through the ESPEN Portal.

1.4. ESPEN COLLECT

In 2019, a total of 1,668 sites from eight countries used ESPEN platform to conduct disease-specific assessments and baseline mappings. The different surveys conducted using ESPEN Collect were onchocerciasis elimination mapping (30%), baseline mapping (30%), LF pre-TAS (10%), coverage monitoring (10%), breeding site assessment (10%) and ONCHO impact assessment (10%).

More than 237 people were trained on how to use ESPEN Collect for data collection in eight countries: **Angola**, **Burkina Faso**, **Liberia**, **Mozambique**, **Nigeria**, **Republic of Congo**, **Sierra Leone** and **South Sudan**. In addition to disease-specific assessment, ESPEN conducted a pilot project to use ESPEN Collect for routine reporting of treatment data. The pilot has been run in the Republic of Congo in 14 health facilities.

TABLE 5

NUMBER OF SITES SURVEYED USING ESPEN COLLECT SYSTEM

COUNTRY	ONCHO	LF	SCH	STH	SURVEY TYPE
Angola			567	567	Baseline mapping
Burkina Faso		14			LF pre-TAS
Burkina Faso	60	16			Coverage monitoring survey
Central African Republic		9	22	22	Baseline mapping
Equatorial Guinea	70				Onchocerciasis elimination mapping
Mozambique	54				Onchocerciasis elimination mapping
Mozambique	37				Breeding sites assessment
Nigeria	14				Onchocerciasis elimination mapping
Sierra Leone	143				Onchocerciasis impact assessment
South Sudan		37	48	48	Baseline mapping
TOTAL	318	67	615	615	

1.5. IMPLEMENTATION UNIT-LEVEL PREVENTIVE CHEMOTHERAPY FORECAST

Using the outcomes of the country support missions, ESPEN has developed a workbook to project the preventive chemotherapy activities required in each implementation unit for the next five years. This tool provides country and regional dashboards highlighting the number of impact assessment surveys, MDA gaps (geographic and epidemiological) and the estimated cost of MDA. This tool is a resource being made available to country NTD programmes to support data-driven decision-making.

FIG. 11

SAMPLE WORKBOOK

COUNTRY SUMMARY

To be updated when new data from country becomes available

Country	DRC

DRC - TOTAL POPULATION LIVING IN THE IUs BY ENDEMICITY STATUS IN 2020

Statut	LF	ONC
No Endemic	57,654,724	53,098,045
Endemic	46,666,317	51,222,996
Endemic, Stop MDA	-	-
Unknown	-	-

Statut	STH	SCH
No Endemic	3,977,148	28,518,454
Low Prevalence	42,374,753	42,009,784
Moderate Preva	27,159,918	30,589,327
High Prevalence	30,809,222	3,203,476
Unknown	-	-

DRC - NTD COVERAGE GAPS

Indicators	LF	ONC	SCH	STH
Mapping Gap	0	0	0	0
Geographic Gap	11	1	111	37
Coverage Gap	1	0	116	0

DRC - Survey Plan (Number of IUs)

Disease/Survey type	2020	2021	2022	2023	2024	2025
LF						
Mapping	0	0	0	0	0	0
Pré-TAS	54	22	33	99	31	
TAS 1	0	54	22	33	99	31
TAS 2	0	0	0	54	22	33
TAS 3	0	0	0	0	0	54
ONCHO						
Mapping	0	0	0	0	0	0
IA	0	0	0	0	0	0
STH						
Mapping	0	0	0	0	0	0
IA	34	56	28	120	66	34
SCH						
Mapping	0	0	0	0	0	0
IA	18	25	22	100	0	18

COUNTRY SUMMARY

To be updated when new data from country becomes available

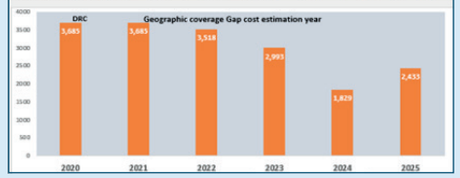
Country	DRC

DRC - Survey Plan (Number of IUs)

Disease/Survey type	2020	2021	2022	2023	2024	2025
LF						
Mapping	0	0	0	0	0	0
Pré-TAS	54	22	33	99	31	
TAS 1	0	54	22	33	99	31
TAS 2	0	0	0	54	22	33
TAS 3	0	0	0	0	0	54
ONCHO						
Mapping	0	0	0	0	0	0
IA	0	0	0	0	0	0
STH						
Mapping	0	0	0	0	0	0
IA	34	56	28	120	66	34
SCH						
Mapping	0	0	0	0	0	0
IA	18	25	22	100	0	18

DRC - MDA COST ESTIMATION (x1000 $US)

	2020	2021	2022	2023	2024	2025
GLOBAL COST	18303	17605	17237	14282	12401	13581
- FILLING GEOGR. COVERAGE	3685	3685	3518	2993	1829	2433
- FILLING EPI. COVERAGE GI	10709	3823	10202	7321	8668	8166



1.6. STRONG PARTNERSHIPS FOR STRONG DATA SYSTEMS

ESPEN has a well-established and strong partnership with the London School of Hygiene and Tropical Medicine (LSHTM), Manta Ray Media, Sightsavers and Standard Code to strengthen data systems in Africa.

The LSHTM provides continued technical support in data management and developing country profiles, including maps. It also provides capacity building training and data analysis support.

Manta Ray Media provided services to develop visualisation methods. Standard Code hosts ESPEN data and developed the automation of the ESPEN Portal and ESPEN Collect. Sightsavers provided two technical staff who are fully dedicated to the implementation of ESPEN Collect and participates in the overall data strategy by providing additional data experts from their staff.

A JAP automation tool is under development to improve the quality, transparency and timeliness of submission and review.

IMPROVING THE EFFECTIVE USE OF DONATED MEDICINES THROUGH ENHANCED SUPPLY CHAIN MANAGEMENT

1.1. SUMMARY

ESPEN's major achievements in supply chain management in 2019 include:

- ESPEN conducted supply chain support missions in four countries (**Cameroon**, **Mozambique**, **Niger** and **Rwanda**).
- The supply chain support missions recovered a total of 35,359,494 tablets with an estimated worth of US $2,864,016.
- Through a JAP review, a total of 201,068,494 tablets were saved at an estimated worth of US $15,690,250.
- ESPEN provided technical support and guidance to enhance the timeliness and accuracy of data through the JAP review process to improve the quality of medicine applications, reducing unnecessary quantities of medicines and re-allocating them where they were most needed. By the end of 2019, 45 JAPs were reviewed and 24 were cleared.

1.2. INTRODUCTION

Mass drug administration, a cornerstone of the NTD programme, is made possible through the generous donation of medicines by pharmaceutical companies and donors. One of ESPEN's primary objectives is to ensure the effective use of these donated medicines through enhanced supply chain management (SCM).

ESPEN has established a robust application system for medicines. Each year, countries are required to submit their progress interments of treatment, epidemiological data and requests for medicine. These data are jointly validated by ESPEN staff and WHO HQ by comparing the previous year's request and progress reports as well as population figures. Through this rigorous exercise, countries are provided feedback to revise their request or provide explanations.

Subsequently, countries submit a refined application, then the ESPEN team approves the applications. ESPEN provides support to countries in applying for donated medicine by prepopulating the Joint Application Package with the information available at the ESPEN Portal. ESPEN also provides support in justifying unaccounted medicines and building the capacity of the country team on supply chain and application procedures.

1.3. SUPPLY CHAIN SUPPORT MISSION

BOX 7

ESPEN-SUPPORTED COUNTRIES ON SUPPLY CHAIN MANAGEMENT

ESPEN staff and WHO HQ jointly organised country supply chain support missions in four countries (**Cameroon**, **Mozambique**, **Niger** and **Rwanda**).

The missions supported the countries in recovering unused and unaccounted for medicines.

35,359,494 tablets were reported in stock for use in 2020. At least US $2,864,016 were saved.

In the last few years, one of the major supply chain challenges has been the inaccuracy of information on the inventory of donated medicines as compared to treatment reports. This resulted in significant amounts of unaccounted medicines. In response, ESPEN and WHO HQ conducted four country supply chain support missions (Table 6).

During the missions, the team conducted document reviews on country progress in service provision, including MDA, confronting the theoretical stock of donations from 2012 with treatment data, and conducting physical inventory verification of available balances of medicines. The missions provided tailored recommendations and conducted advocacy for the countries to reconcile unaccounted medicines in each country. In the four countries, the missions recovered a total of 35,359,494 tablets with an estimated worth of US $2,864,016.

TABLE 6

TABLETS RECOVERED FOLLOWING SUPPLY CHAIN MISSIONS

COUNTRY	ALBENDAZOLE	MEBENDAZOLE	PRAZIQUANTEL
Cameroon	150,000	3,550,000	5,700,000
Mozambique	6,000,000		2,873,553
Niger	7,055,141		10,180,800
Rwanda			
Total tablets saved	13,055,141	3,550,000	18,754,353
	35,359,494		
Cost (USD)	264,103	175,725	2,424,188
	2,864,016		

1.4. SUPPLY CHAIN TECHNICAL GUIDANCE

Each year, countries are required to report on the use of medicines, medicines in stock, MDA progress, and requests for medication for the next year through the JAP form. In 2019, 19 countries were advised to go back and review their medicines in stock, where they found 201,068,494 tablets. This resulted in a significant reduction in medicines ordered unnecessarily (Table 7). By the end of 2019, 24 countries were supported in the JAP application, including help on the consistency of data and inventory guidance to properly account for current stock. This, along with the updated number of people requiring treatment, was used to recalculate the requested amounts of each medicine.

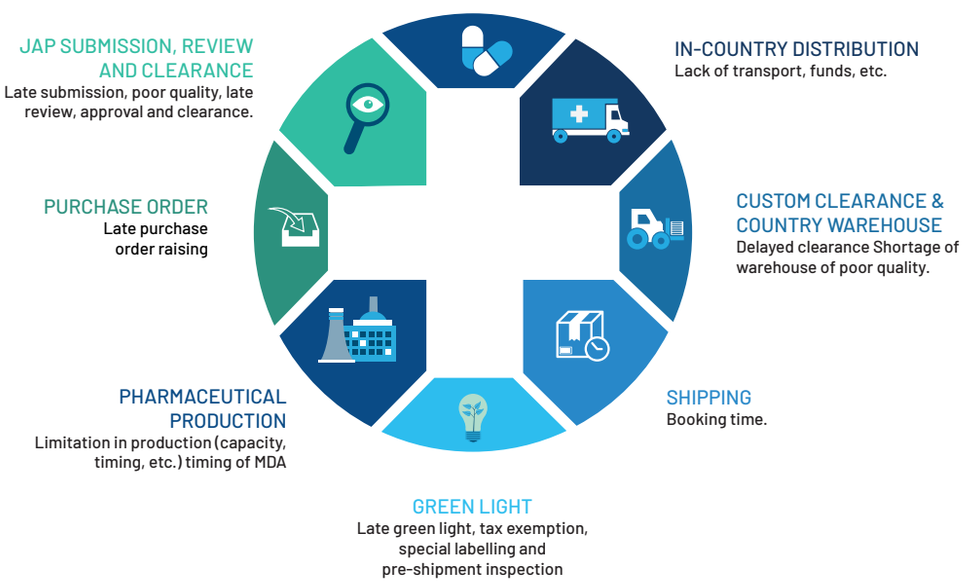
TABLE 7

NUMBER OF TABLETS ACCOUNTED FOR THROUGH COUNTRY JAP REVIEW

MEDICINE	TABLETS INITIALLY REQUIRED	TABLETS CLEARED	TABLETS SAVED	AMOUNT (USD)
Albendazole (LF)	212,098,609	161,359,352	50,739,257	$1,014,785
Albendazole (STH)	39,423,479	38,075,176	1,348,303	$26,966
Mebendazole (STH)	59,233,177	75,511,348	-16,278,171	-$805,769
Praziquantel (SCH)	261,109,020	147,548,876	113,560,145	$14,678,784
Diethylcarbamazine (LF)	52,207,735	508,775	51,698,960	$775,484
TOTAL	**624,072,020**	**423,003,527**	**201,068,494**	**$15,690,250**

Fig. 12

SUPPLY CHAIN-RELATED CHALLENGES



1.5. TECHNICAL SUPPORT AND LEADERSHIP

ESPEN is an active member of the NTD supply chain forum. Through the forum, ESPEN contributed to the review of standard operating procedures (SOPs) on different aspects of the supply chain. ESPEN translated these SOPs to French and Portuguese, and they will be dispatched to countries for wider use to ensure strong supply chain management for NTDs after an inclusive review process with NTD supply chain managers, drugs logistics coordinators and the Supply Chain Forum partners, followed by a cascade training.

PARTNERSHIPS, COORDINATION AND RESOURCE MOBILISATION

1.1. SUMMARY

ESPEN's major achievements in partnerships and resource mobilisation in 2019 include:

- ESPEN mobilised major donors, including the US Agency for International Development, MSD, Germany, UK Department for International Development, the Japan Ministry of Health, the Qatar Fund, Korea International Cooperation Agency, SDC and the Bill & Melinda Gates Foundation. All eight provided catalytic funding in the amount of US $31.5 million for ESPEN over a period of four years.
- ESPEN is playing a leading coordinating mechanism role, including bringing partners together in Addis in February 2019, which led to the creation of the African Leaders Malaria Alliance (ALMA) scorecard for NTDs.
- ESPEN and the Regional NTD Programme gathered almost 300 participants, including representatives from WHO HQ and WHO-AFRO, RPRG members, programme managers from ministries of health, country NPOs, and partners, for the Second National Programme Managers meeting.

1.2. PARTNERSHIPS AND COORDINATION

Strong partnerships and collaboration are a key success driver in action towards elimination of NTDs. To achieve universal health coverage, it is crucial to eliminate these diseases, which goes hand in hand with ESPEN's mission and goals.

An enabling environment to ensure political, social and legislative support of NTD prevention, treatment and care, as well as the time-sensitive goal of NTD elimination, is also core in driving this action. Building on WHO-AFRO's mandate, ESPEN is uniquely positioned as a coordinating mechanism, bringing governments and the rest of the NTD community together to accelerate the elimination of the five PC-NTDs in the African region. ESPEN was critical in bringing together high-level partners in the fight against NTDs in 2019. This included when the African Union announced in February the ALMA scorecard—a mechanism for action and accountability developed primarily for heads of state and government to facilitate the tracking of progress and strengthening accountability for control and elimination across the continent.

Because of this action, the Niger Ministry of Health collaborated with ALMA to design the country's first NTD scorecard this year. It is important that advocacy efforts feed into a stronger national accountability mechanism that will enable countries to show progress and remain on track. This work is now being conducted in Guinea.

ESPEN in the news

In 2019, there were numerous media opportunities to amplify the issue of NTDs and the possibility of eliminating them for good. Media activity has focused on raising awareness of NTDs and encouraging more people to engage in the fight. Traditional media activity in 2019 included a published op-ed signed by Dr. Moeti, promotion of the African Union meeting through a blog on NTDs, a published piece by Dr. Rebollo Polo of ESPEN, and a published op-ed with singer Youssou Ndour committing to the fight against NTDs. In 2019, there were 61 articles relating to ESPEN.

There were other notable influencers who publicly supported ESPEN and the fight against NTDs in 2019. H.E John A. Kufuor, former President of Ghana, published an op-ed on World Health Day and invited African heads of state to join him in the fight against NTDs. He made specific reference to ESPEN and the portal. H.E. Aïssata Issoufou Mahamadou, First Lady of Niger,

highlighted the crucial role of ESPEN in the fight against NTDs in Africa in an op-ed published in the print version of "Jeune Afrique" magazine during the African Union Summit in January 2019. In addition to articles in traditional media, multiple videos were produced, including a video on the elimination of LF as a public health problem in Togo; a video about the elimination of trachoma in Ghana; and a video showcasing the hardship of a young girl, Mansoura Tidjani, affected by schistosomiasis. Such videos are meant to shed light on the progress made at the country level and encourage further investment and collective action in NTD interventions.

In 2019, there was also a collaboration with RFI, a French radio station widely broadcasted in Francophone Africa, to co-produce a radio show dedicated to the fight against NTDs in Africa. The show featured Dr. Moeti, the WHO-AFRO Regional Director, who highlighted the role of ESPEN and the need to eliminate these debilitating diseases.

2019 PC-NTD Programme Manager's meeting

Two years after the first joint PC and Case Management NTD meeting in Libreville in June 2017, ESPEN and the Regional NTD Programme gathered almost 300 participants, including representatives from WHO HQ and WHO-AFRO, RPRG members, programme managers from ministries of health, country NPOs, and partners, for the Second National Programme Managers meeting, co-hosted by the African Union Commission for Social Affairs, in Addis-Ababa Ethiopia, July 16-18, 2019.

This meeting guided the development of the regional NTD strategy and strategic plan for the period 2021-2030, as well as the next five-year phase of ESPEN, with the participation of NTD national programme managers, partner institutions, NGOs and donors, and WHO NTD staff members from three levels. It involved a pre-end-term review of the implementation of the NTD Roadmap 2012-2020 and of the NTD Regional Strategic Plan for 2014-2020.

During the three-day meeting, participants reviewed the regional and national NTD achievements since the last joint meeting in 2017, the challenges and constraints encountered in the region, lessons learned, and best practices adopted. Action points and recommendations to improve the implementation of regional and national annual plans and activities between July 2019 and December 2020 were proposed. Notably, there was a focus on the role of increased domestic financing for NTDs to ensure ownership and sustainability of NTD programmes. Botswana and Mozambique announced significant resources from their national budgets to combat NTDs at the Global Citizen Event in December 2019. They shared their experiences of creating political engagement and discussed with other countries how to increase domestic financing for NTDs. Finally, participants agreed on the development of the NTD regional and national goals, targets and priority interventions in line with the draft global NTD Roadmap 2021-2030.

COR-NTD Secretariat staff members including Ahlam Awad, Mariana Stephens, Nikita McCage, and Waithera Kagira-Watson served as volunteers at the meeting.

The Coalition for Operational Research on Neglected Tropical Diseases (COR-NTD)

Ahead of the Programme Managers meeting, there was a workshop for learning and exchange between African programme managers, researchers and partners working within PC-NTD programmes. It was co-hosted by ESPEN and the Neglected Tropical Diseases Support Center (NTD-SC), which serves as Secretariat of the Coalition for Operational Research on Neglected Tropical Diseases (COR-NTD). Over the course of the one-day workshop, experiences and feedback were shared on existing programmatic tools that have been developed through operational research. Participants also discussed relevant challenges that are impacting the provision of effective mass drug administration and how they could be addressed through operational research.

In total, 158 participants representing 47 different countries attended the meeting. Overall, this event harnessed the energy of programme managers working towards the control and elimination targets set out for their NTDs of interest. Their invaluable input has helped shape the operational research agenda and inform the development and deployment of future tools.

FINANCIAL OVERVIEW

OBJECTIVE 1. SCALE UP MDA

9,796,296 US$

Mapping	1,755,351 US$
MDA	6,891,561 US$
MMDP capacity building	76,919 US$
ONCHO elimination mapping meeting	292,470 US$
Subnational analysis of SCH mapping data to optimize MDA	461,223 US$
Trachoma preliminary investigations	2,418 US$
Building capacity on snail control for SCH	57,034 US$
Other capacity-building activities to scale up	259,319 US$

OBJECTIVE 2. SCALE DOWN

1,542,082 US$

ESPEN Laboratory and strengthening laboratory capacity for diagnosis of NTDs	333,540 US$
Monitoring and evaluation impact assessment	1,106,749 US$
Preparation of elimination dossier	6,552 US$
Other capacity-building activities to scale down	95,242 US$

OBJECTIVE 3. STRENGTHEN INFORMATION SYSTEMS

687,686 US$

Data support and coordination missions / workshops / meetings	221,306 US$
Developing a workbook for PC-NTDs	13,950 US$
ESPEN Portal	36,601 US$

OBJECTIVE 4. SUPPLY CHAIN

42,351 US$

Supply chain support missions	25,701 US$
Supply chain forum and supply chain SOPs	16,650 US$

OBJECTIVE 5. PARTNERSHIPS AND COORDINATION

451,029 US$

Programme Managers, Steering Committee and other coordination meetings	324,388 US$
CDS Director Office support costs	30,755 US$
ESPEN governance bodies review by hera (external company)	55,927 US$
Resource mobilisation strategy	39,960 US$

HUMAN RESOURCES COSTS

2,391,821 US$

PROGRAMME SUPPORT COSTS (PSC)

1,077,206 US$

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Sightsavers
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厚生労働省 Ministry of Health, Labour and Welfare
REACHING the LAST MILE FUND

AND SPECIAL THANKS TO THE 50 MINISTRIES OF HEALTH
AND THEIR EXTRAORDINARY PARTNERS!

We wish Dr. Daniel Ngamije, former WHO NTD National Programme Officer, all the success in his new role as Minister of Health Rwanda.

We strongly believe that under his leadership, ESPEN and the Ministry of Health Rwanda will continue their dynamic relationship and important collaborative efforts.

We are deeply saddened to hear the news that Dr. Yohannes Ghebrat, WHO/Eritrea, has passed away.

Dr. Ghebrat was a leader at the forefront of NTD implementation in Eritrea. The ESPEN team would like to express condolences to his family and friends. May his soul rest in peace.

World Health Organization
REGIONAL OFFICE FOR Africa

ESPEN
EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES