8TH Regional Review Group Meeting of Preventive Chemotherapy NTDs

13th – 14th November 2023

The Grand Lancaster Hotel

Brazzaville (Republic of the Congo)

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Session 4b: Challenges affecting progress – Onchocerciasis and Lymphatic filariasis

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Welcome & Introduction of the Agenda for Day 2

Co-chairs

Dr Elizabeth Osim Elhassan

Dr. (Mr.) Teshome Gebre Kanno, PhD, FASTMH

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8th Regional Programme Review Group Meeting Objectives

- Introduce new members of the PC-NTD RPRG and apprise them of the terms of reference and standard operating procedures
- Provide an overview of regional progress towards global targets of elimination of PC NTDs
- Provide an overview of cross-cutting interventions to support implementation of PC-NTD interventions
- To identify solutions for specific challenges with 4 PC NTDs, encountered by endemic countries

Agenda – Day 2

Session 4b: Challenges affecting progress – Onchocerciasis and Lymphatic filariasis		
08:30 – 08:35	Welcome	Co-chairs
08:35 – 08:55	Onchocerciasis	Didier Bakajika
08:55 – 09:20	Lymphatic Filariasis	Didier Bakajika
09:20 – 10:20	Discussion and RPRG recommendations	RPRG
10:20 – 10:40	Break	
Session 5: Information session on cross-cutting activities: Data Management		
10:40 – 11:40	ESPEN Portal, current country progress analytics, Implementation Unit Planner and RPRG data review tools	ESPEN and Linksbridge
11:40 – 12:20	RPRG interaction with ESPEN portal and discussions	Jorge Cano
12:20 – 12:40	Updates on NTD indicators on ALMA scorecard	ALMA
12:40 – 12:45	Discussions	
12:45 – 13:00	Group Photograph	ESPEN Secretariat
13:00 – 14:00	Lunch Break	

Session 6: Information session on cross-cutting activities: Programme implementation planning		
14:00 – 14:20	Modelling to guide programmatic decision making	CEMA
14:20 – 14:40	Supply Chain Management	Tuan, Le (WHO HQ)
14:40 – 15:00	Discussions	RPRG
15:00 – 15:20	Break	
15:20 – 15:50	Summary of recommendations and actions	Rapporteurs
15:50 – 16:00	Meeting Evaluation – Online	ESPEN
16:00 – 16:15	Vote of Thanks and Closing remarks	RPRG Co-Chairs ESPEN
16:15	Meeting Ends	

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Challenges affecting Onchocerciasis and Lymphatic filariasis progress in the WHO African region

Dr Didier Bakajika

Medical Officer LF/Onchocerciasis

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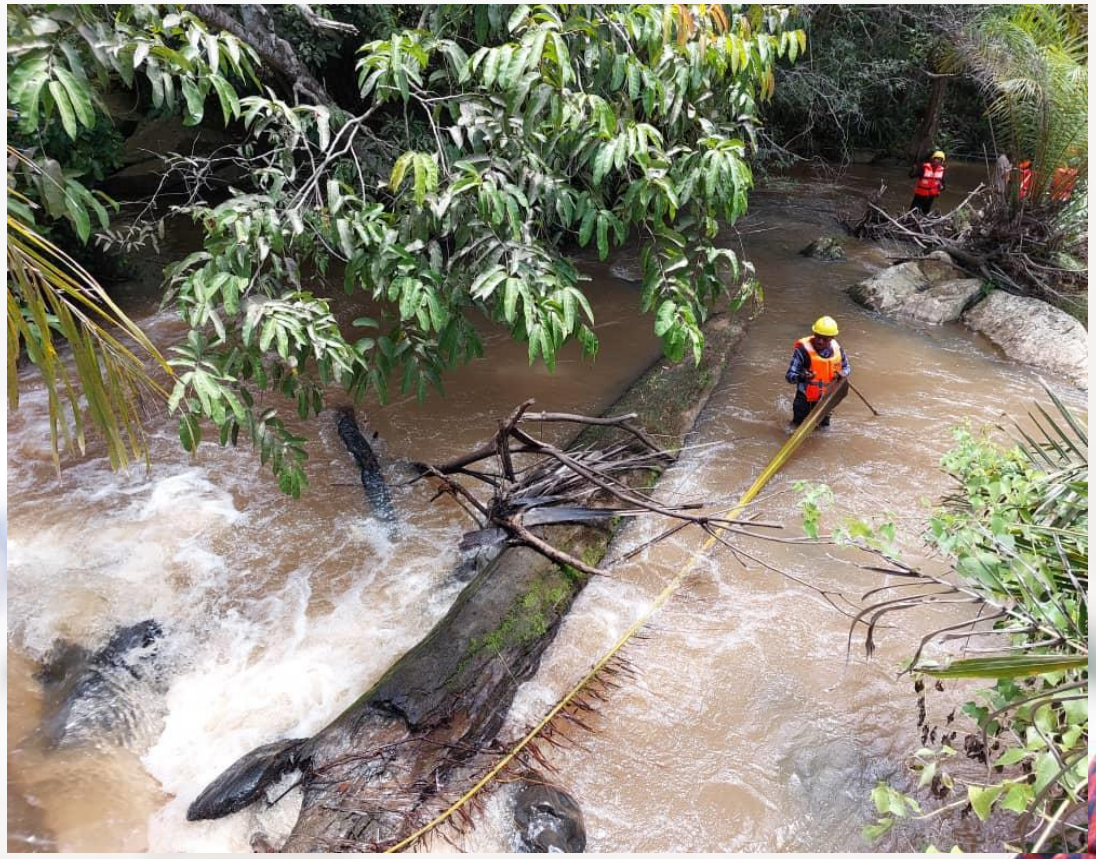
Onchocerciasis



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Onchocerciasis PC Implementation and Elimination Status in AFRO as of 2023

MDA not started	MDA started but not at scale	MDA scaled to all endemic IUs	MDA stopped in at least one focus	Elimination of Transmission Verified
Gabon Kenya+ Rwanda+ Zambia+ Mozambique	Angola CAR Eq. Guinea	Benin Burkina Faso Burundi Cameroon Chad Côte d'Ivoire Congo DR Congo Ghana Guinea Guinea Bissau Liberia Mali Malawi Sierra Leone South Sudan United Rep. of Tanzania	Ethiopia* Nigeria* Senegal* Uganda* Togo*	 None *(Niger – elimination dossier under review)*
5 (16%)	3 (10%)	17 (55%)	5 (16%)	0

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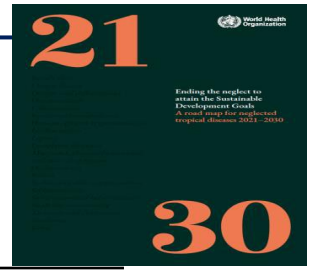
+Not though to need MDA unless OEM identifies

* PTS already started of completed in at least one focus as of now

2030 target and sub targets for Onchocerciasis



Indicator	2020	2023	2025	2030
Number of countries verified for Interruption of Transmission	**4**	**5**	**8**	**12**
Number of countries that stopped MDA for ≥ 1 focus	9	22	24	**34**
Number of countries that stopped MDA for ≥ 50 % of the population	6	10	25	**> 16**
Number of countries that stopped MDA for 100% of the population	5	6	10	**> 12**

Challenges affecting progress

1. Uncompleted mapping (Oncho Elimination mapping)

2. Co-endemicity with loasis in some settings (Angola, Cameroon, CAR, Congo Republic, DRC, Gabon, South Sudan)

3. Implementation of MDA but not at scale

4. Impact assessments due in some IUs but not conducted

5. Funding gaps

Challenges affecting progress (2)

1. **Uncompleted mapping (Onchocerciasis Elimination mapping surveys)**

a. **Formerly known hypo-endemic countries (Kenya, Mozambique, Rwanda, Zambia)**

b. Formerly known hypo-endemic settings in endemic countries

638 IVM naïve vs 523 IUs under LF MDA (1161 IUs with unknown status)

First environmental model for onchocerciasis

- Developed by LBD team from the Institute of Health Metrics and Evaluation (IHME, University of Washington)
- **15,455** records (1975 to 2017) of onchocerciasis presence collected from scientific literature **+ ESPEN data portal** & equal number of background points generated at a distance of 100km from presences and within areas of unknown endemicity status (based on 2017 ESPEN map)
- 10 environmental covariates were used as predictors: AI, distance from rivers, urbanicity, daytime LST, precipitation, slope, elevation, EVI, tasseled cap brighteness & wetness
- Ensemble of models trained with BRT (boosted regression trees)

ESPEN built up models with different parameterization and compare to IHME model

- Prevalence survey data (ESPEN) reclassified as presence (prevalence > 0%, **at least 1 positive case**) and absence (prevalence = 0%).
- Background points were generated using different approaches: random selection in a buffer distance from presences, based on pre-defined surface range envelop (SRE), and around presences to account for geographical bias.
- Preselection of 8 environmental predictors over a suite of 26 predictors (using PCA).
- Ensemble of multiple models constructed with different algorithms, including BRT, RF, GAM and GLM.
- Only ensemble the models that provided a better fit

Onchocerciasis – OEM & Environmental suitability

Environmental suitability indicators:

- The upper bound of the credible interval has been used so that we are taking a conservative approach for the limits of the environmental suitability
- The maximum, median and maximum values of the predicted suitability surface were estimated for every implementation unit.
- **Area considered environmentally suitable:** fraction of the implementation unit area covered by pixels classified as suitable for the transmission of onchocerciasis.
- The estimated median of predicted environmental suitability at IU level was re-classified in categories to ease its interpretation and utilization for OEM decision.

  Þ Median suitability up to 0.15: *Unsuitable*.

  Þ Median suitability >=0.15 to < 0.25: *Very low suitability*

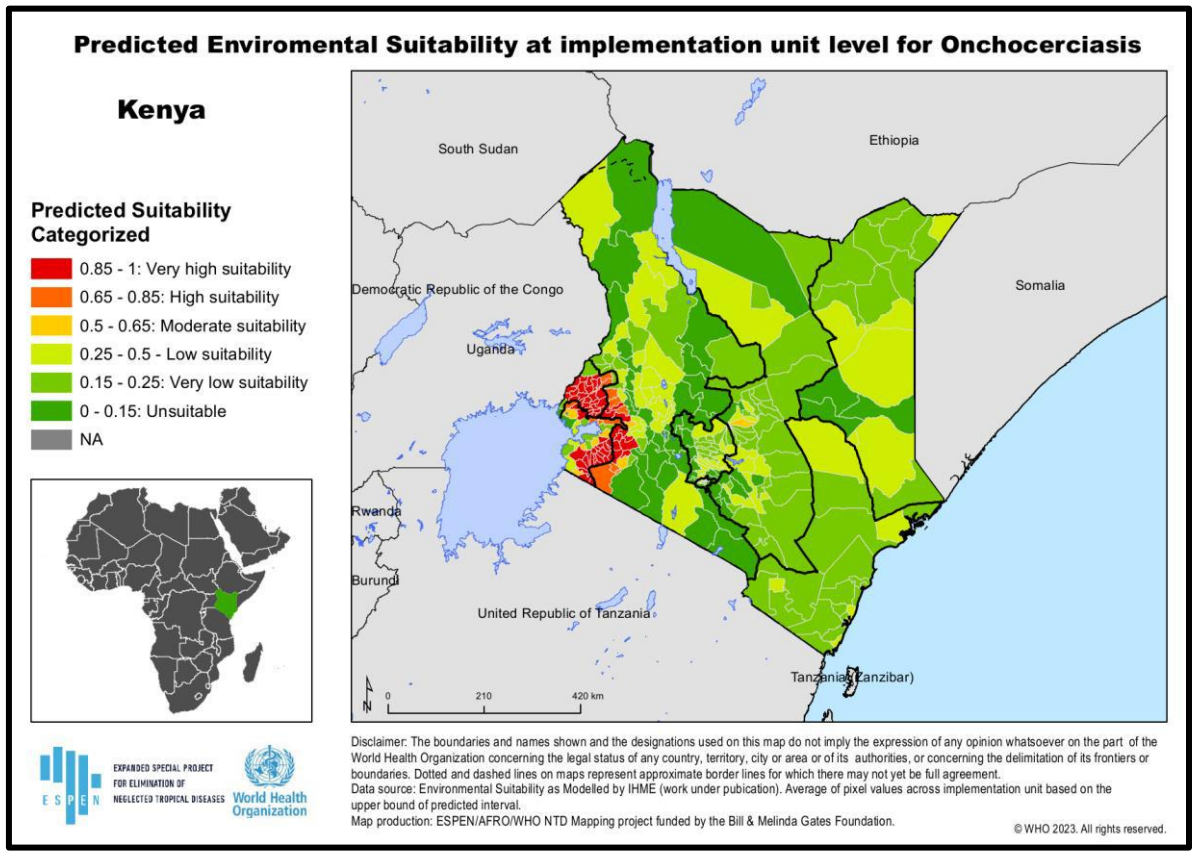
  Þ Median suitability >=0.25 to < 0.50: *Low suitability*

  Þ Median suitability >=0.50 to < 0.65: *Moderate suitability*

  Þ Median suitability >=0.65 to < 0.85: *High suitability*

  Þ Median suitability >=0.85: *Very high suitability*

- In addition, extracted the median and maximum values of predicted nodule prevalence (APOC) and mf prevalence (OCP) by IU


Predicted Enviromental Suitability at implementation unit level for Onchocerciasis
Kenya
Predicted Suitability Categorized
0.85 - 1: Very high suitability
0.65 - 0.85: High suitability
0.5 - 0.65: Moderate suitability
0.25 - 0.5 - Low suitability
0.15 - 0.25: Very low suitability
0 - 0.15: Unsuitable
NA
South Sudan
Ethiopia
Somalia
Democratic Republic of the Congo
Uganda
Rwanda
Burundi
United Republic of Tanzania
Tanzania (Zanzibar)
0
210
420 km
EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES
World Health Organization
Disclaimer: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.
Data source: Environmental Suitability as Modelled by IHME (work under pubication). Average of pixel values across implementation unit based on the upper bound of predicted interval.
Map production: ESPEN/AFRO/WHO NTD Mapping project funded by the Bill & Melinda Gates Foundation.
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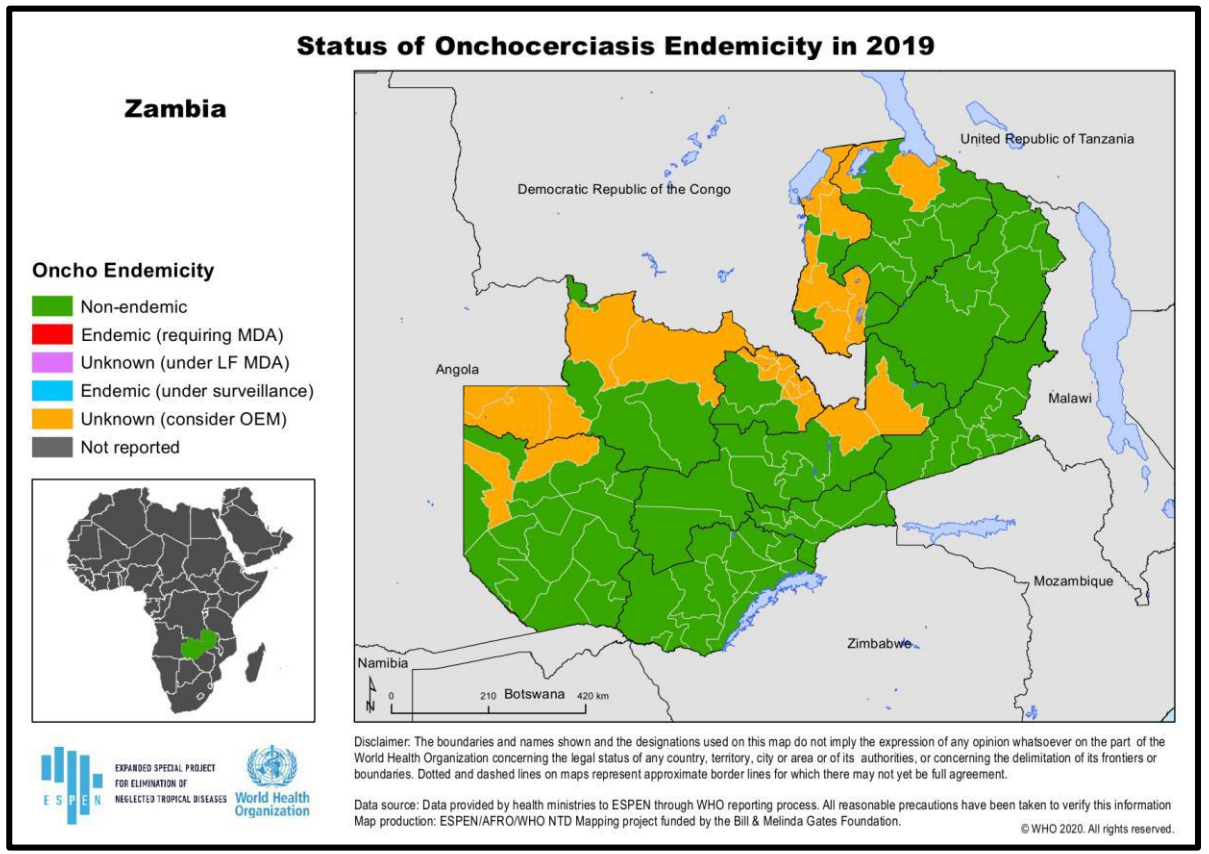
Status of Onchocerciasis Endemicity in 2019
Zambia
Oncho Endemicity
Non-endemic
Endemic (requiring MDA)
Unknown (under LF MDA)
Endemic (under surveillance)
Unknown (consider OEM)
Not reported
United Republic of Tanzania
Democratic Republic of the Congo
Angola
Malawi
Mozambique
Zimbabwe
Namibia
Botswana
0
210
420 km
EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES
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Data source: Data provided by health ministries to ESPEN through WHO reporting process. All reasonable precautions have been taken to verify this information
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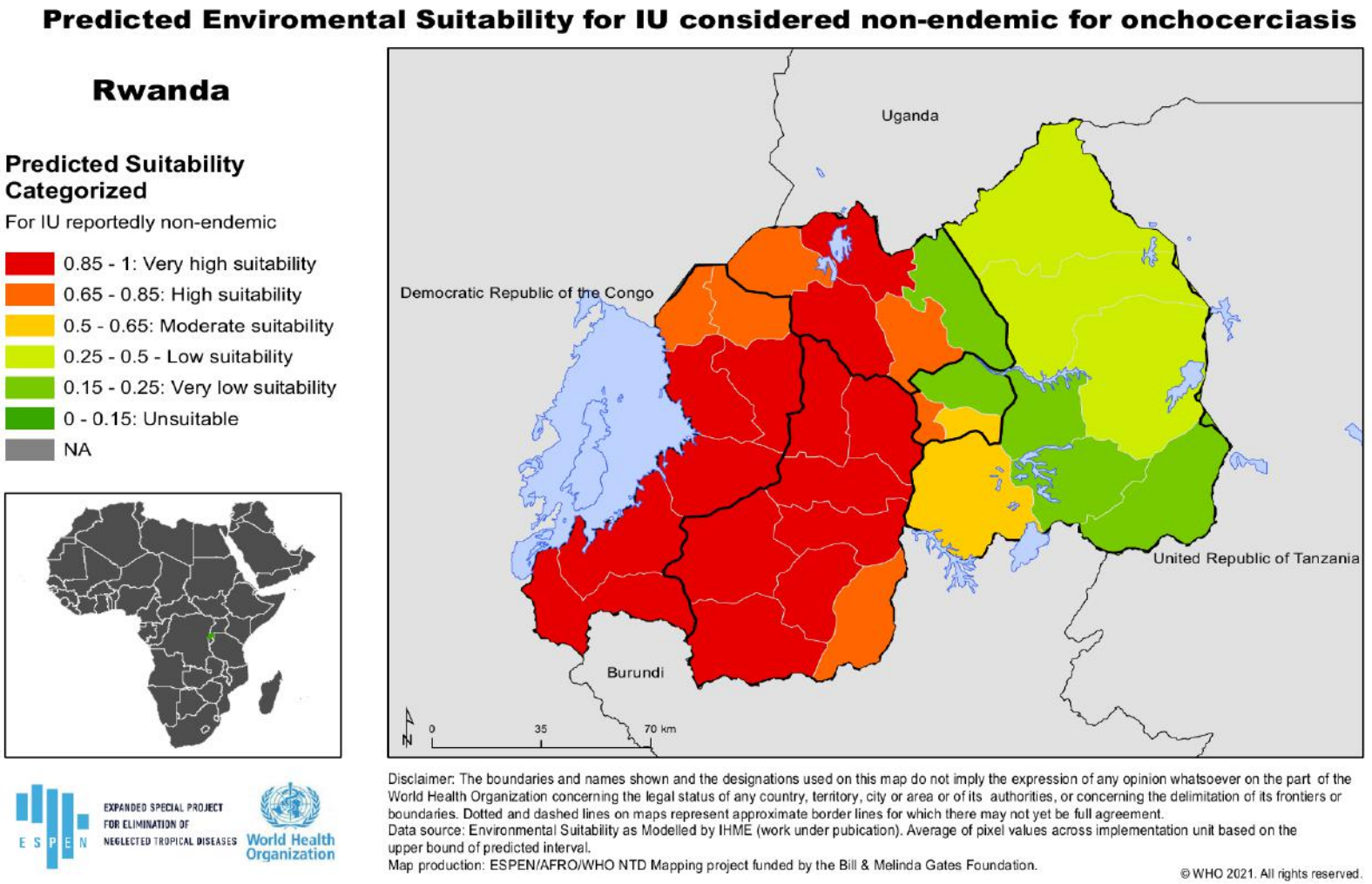
Rwanda

- MoH authorization in 2023
- Materials provided by ESPEN
- Training in Kigali and in the field:
  - ✓ Human landing collection;
  - ✓ Prospection of river
  - ✓ Preparation of carnoy's fixative
  - ✓ Sorting of larvae in the Lab



Field works

Training of trainers

Simulium damnosum s.l. breeding site

Sorting of larvae in the Lab in Kigali

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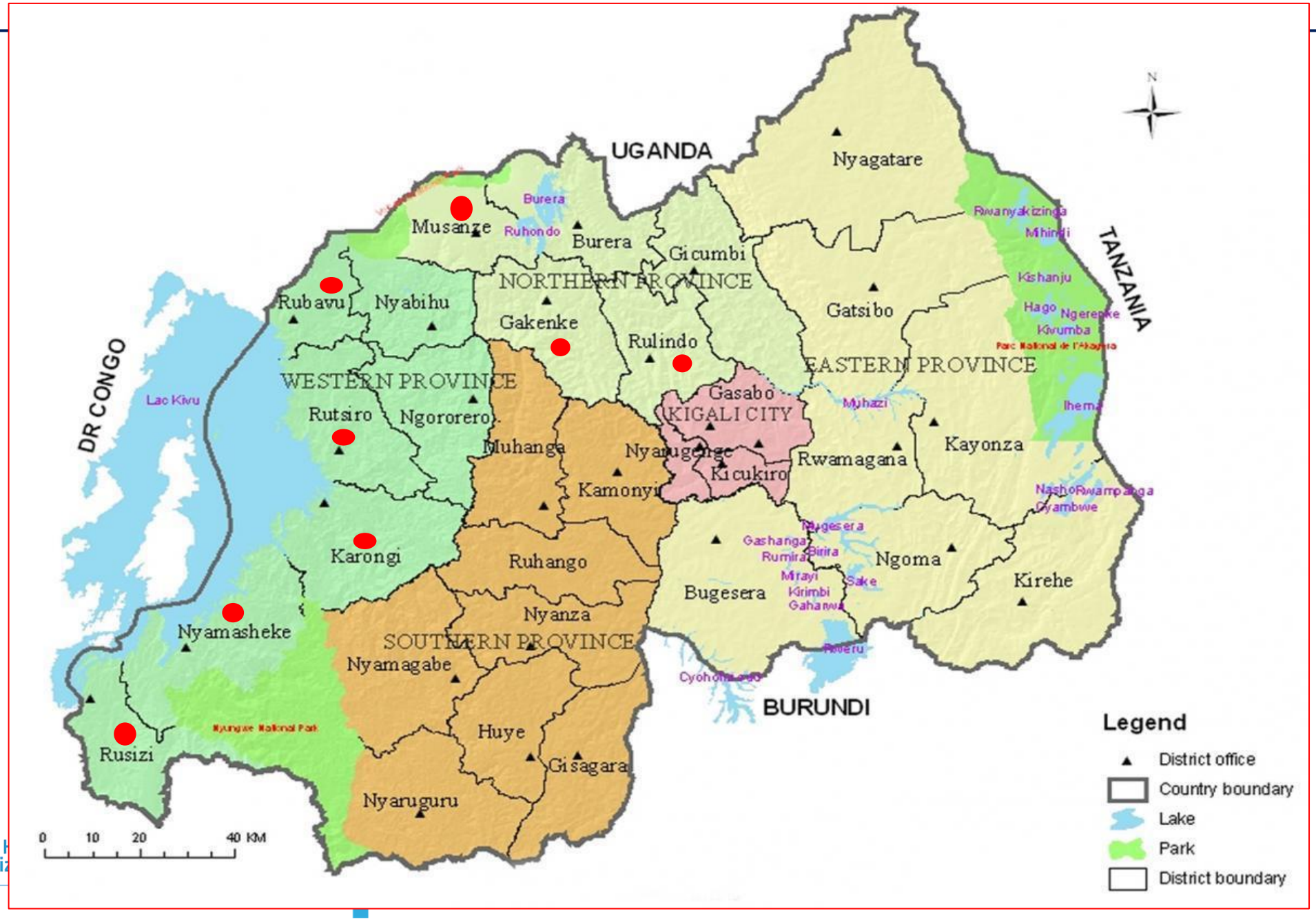
Prospected Districts

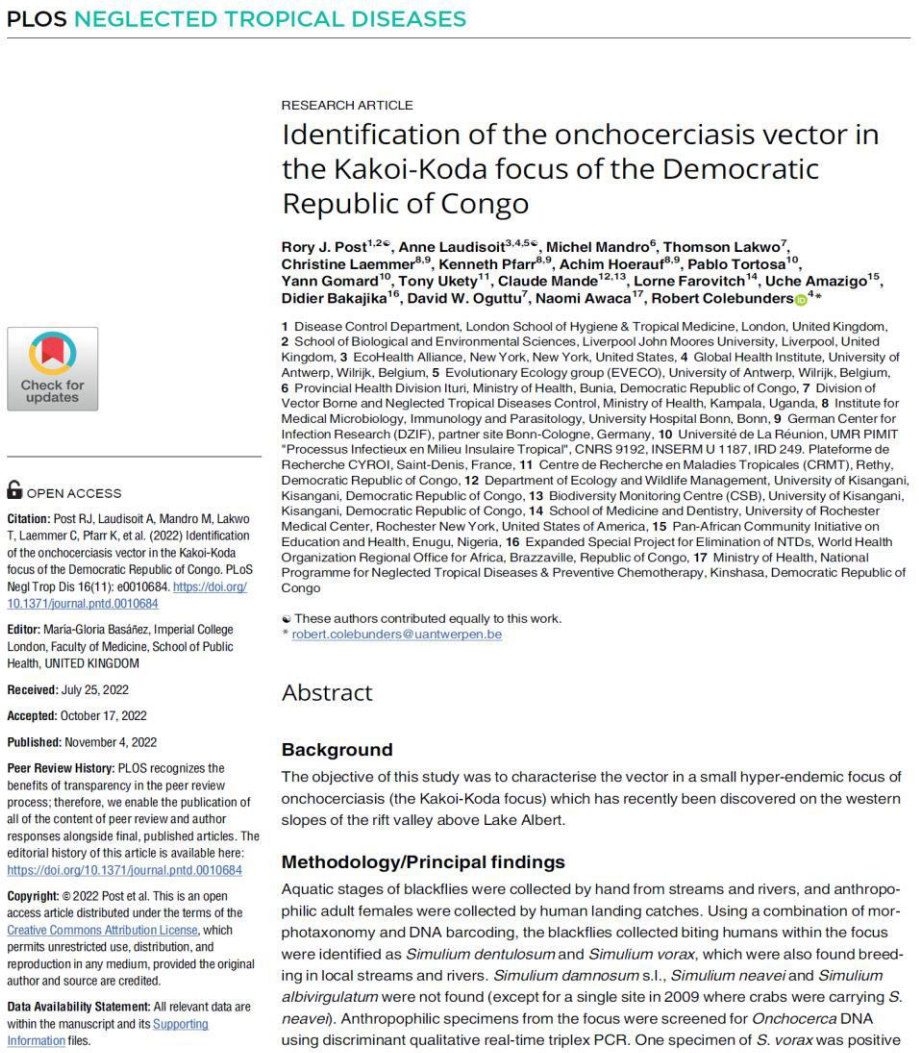


Preliminary results of the prospection

District	# of potential breeding sites prospected	Breeding site positive for *S.damnosum*	comments
Rusizi	3	**1**	**High biting rate**
Nyamasheke	5	0	*Simulium dentulosum*
Karongi	2	0	*Simulium dentulosum*
Rutsiro	5	0	*Simulium dentulosum*
Rubavu	2	0	*Simulium dentulosum*
Musanze	1	0	*Simulium dentulosum*
Rulindo	2	0	*Simulium dentulosum*
Rulindo-Gakenke	1	0	*Simulium dentulosum*
	21	1	

Next steps

- Complete breeding sites assessment next year (rainy season)
- Baseline entomology assessment
- Epidemiology assessment



PLOS NEGLECTED TROPICAL DISEASES

RESEARCH ARTICLE

Identification of the onchocerciasis vector in the Kakoi-Koda focus of the Democratic Republic of Congo

Rory J. Post[1,2☯], Anne Laudisoit[3,4,5☯], Michel Mandro[6], Thomson Lakwo[7], Christine Laemmer[8,9], Kenneth Pfarr[8,9], Achim Hoerauf[8,9], Pablo Tortosa[10], Yann Gomard[10], Tony Ukety[11], Claude Mande[12,13], Lorne Farovitch[14], Uche Amazigo[15], Didier Bakajika[16], David W. Oguttu[7], Naomi Awaca[17], Robert Colebunders[4]*

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OPEN ACCESS

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Data Availability Statement: All relevant data are within the manuscript and its Supporting Information files.

Abstract

Background

The objective of this study was to characterise the vector in a small hyper-endemic focus of onchocerciasis (the Kakoi-Koda focus) which has recently been discovered on the western slopes of the rift valley above Lake Albert.

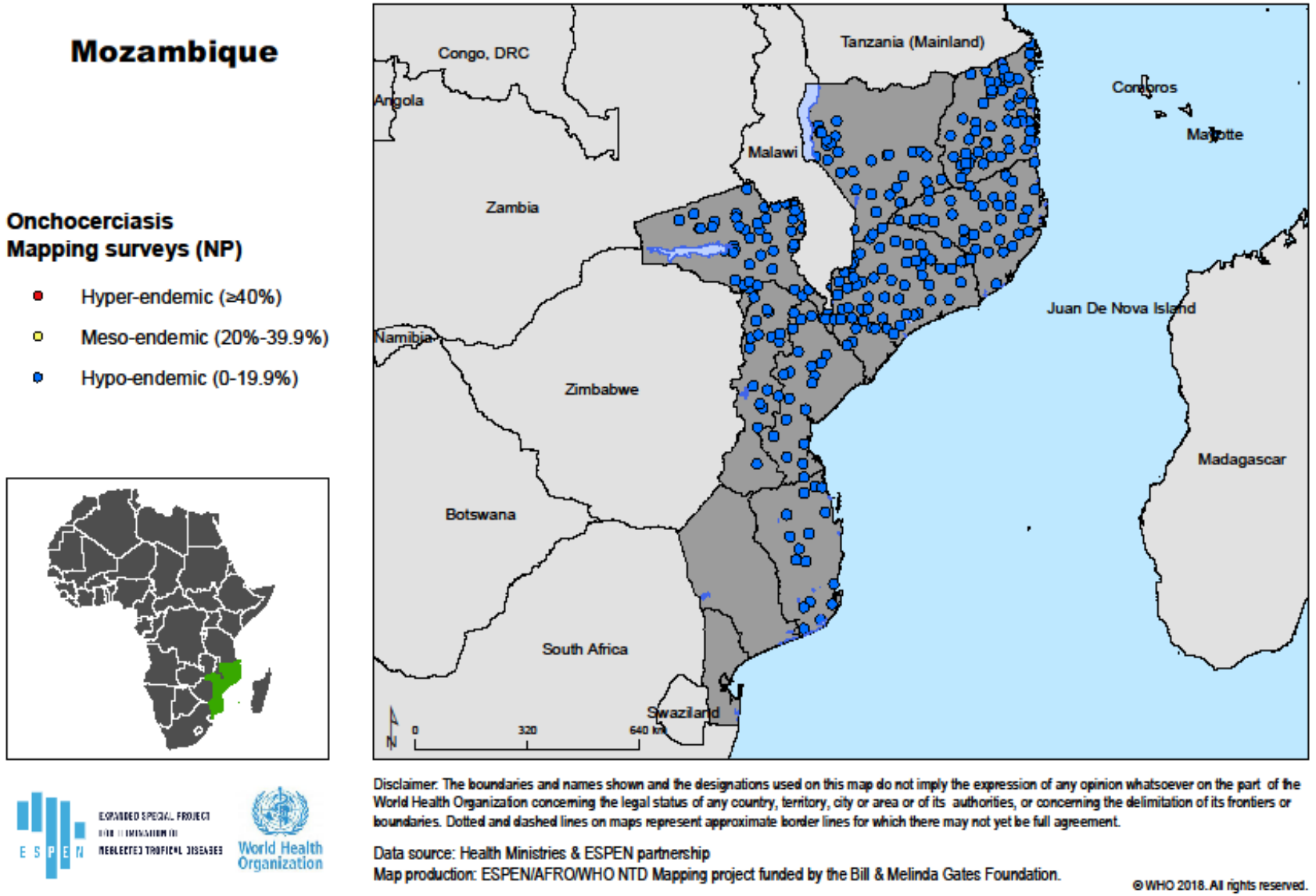
Methodology/Principal findings

Aquatic stages of blackflies were collected by hand from streams and rivers, and anthropophilic adult females were collected by human landing catches. Using a combination of morphotaxonomy and DNA barcoding, the blackflies collected biting humans within the focus were identified as *Simulium dentulosum* and *Simulium vorax*, which were also found breeding in local streams and rivers. *Simulium damnosum* s.l., *Simulium neavei* and *Simulium albivirgulatum* were not found (except for a single site in 2009 where crabs were carrying *S. neavei*). Anthropophilic specimens from the focus were screened for *Onchocerca* DNA using discriminant qualitative real-time triplex PCR. One specimen of *S. vorax* was positive

Mozambique

- Hypoendemic areas (REMO)
- Shares borders with oncho endemic IUs in Malawi
- New paradigm (EoT)
- OEM needed in some foci (Border with Malawi and Tanzania?)

Onchocerciasis endemicity at community level based on nodule palpation (NP): Mapping Surveys



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Data source: Health Ministries & ESPEN partnership
Map production: ESPEN/AFRO/WHO NTD Mapping project funded by the Bill & Melinda Gates Foundation.

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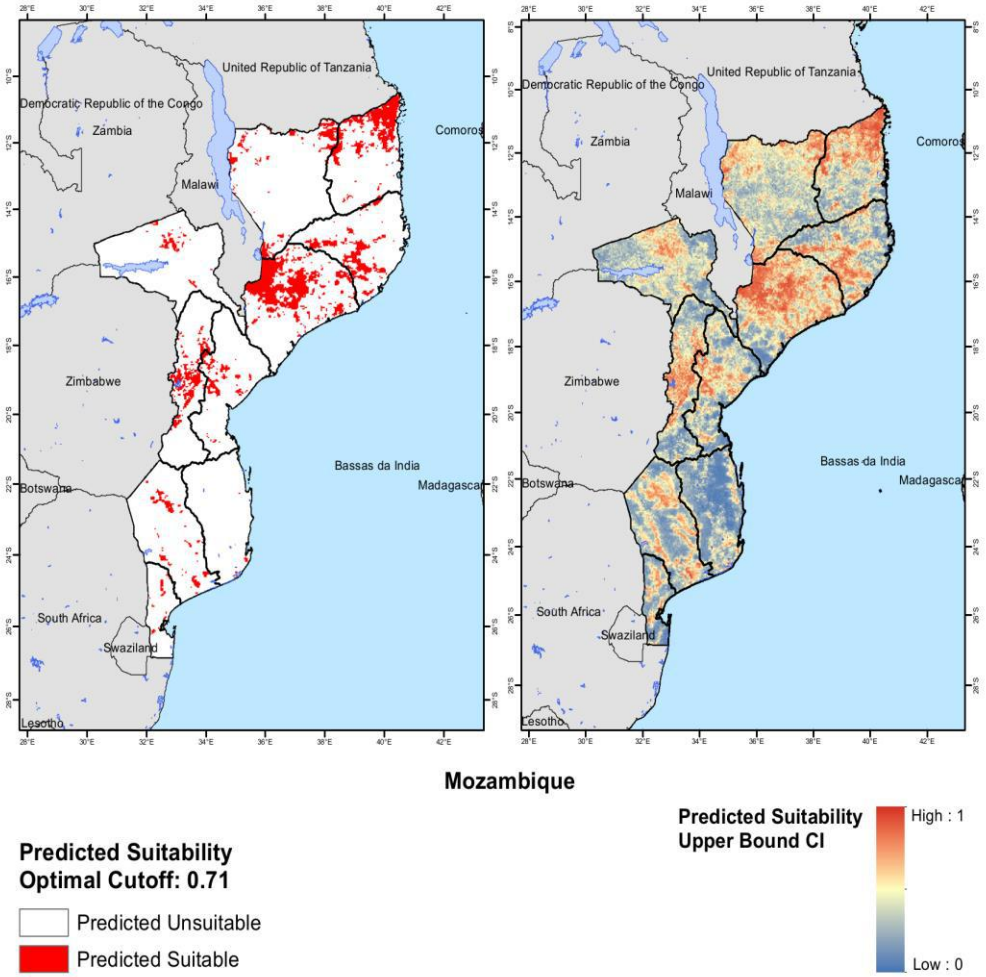
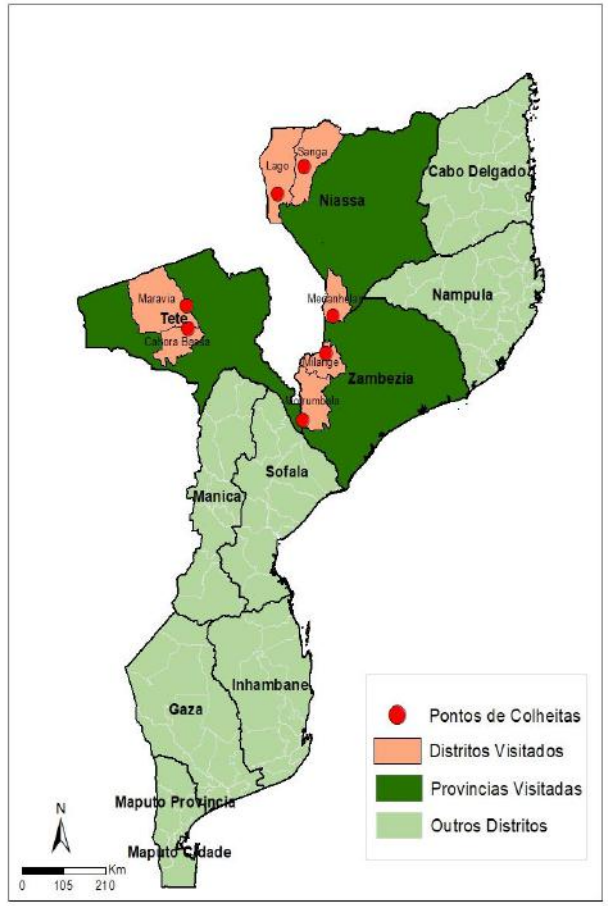
Mozambique

- Financial and technical support (SSI)
- ESPEN collect (ESPEN)
- 7 districts mapped in 3 provinces

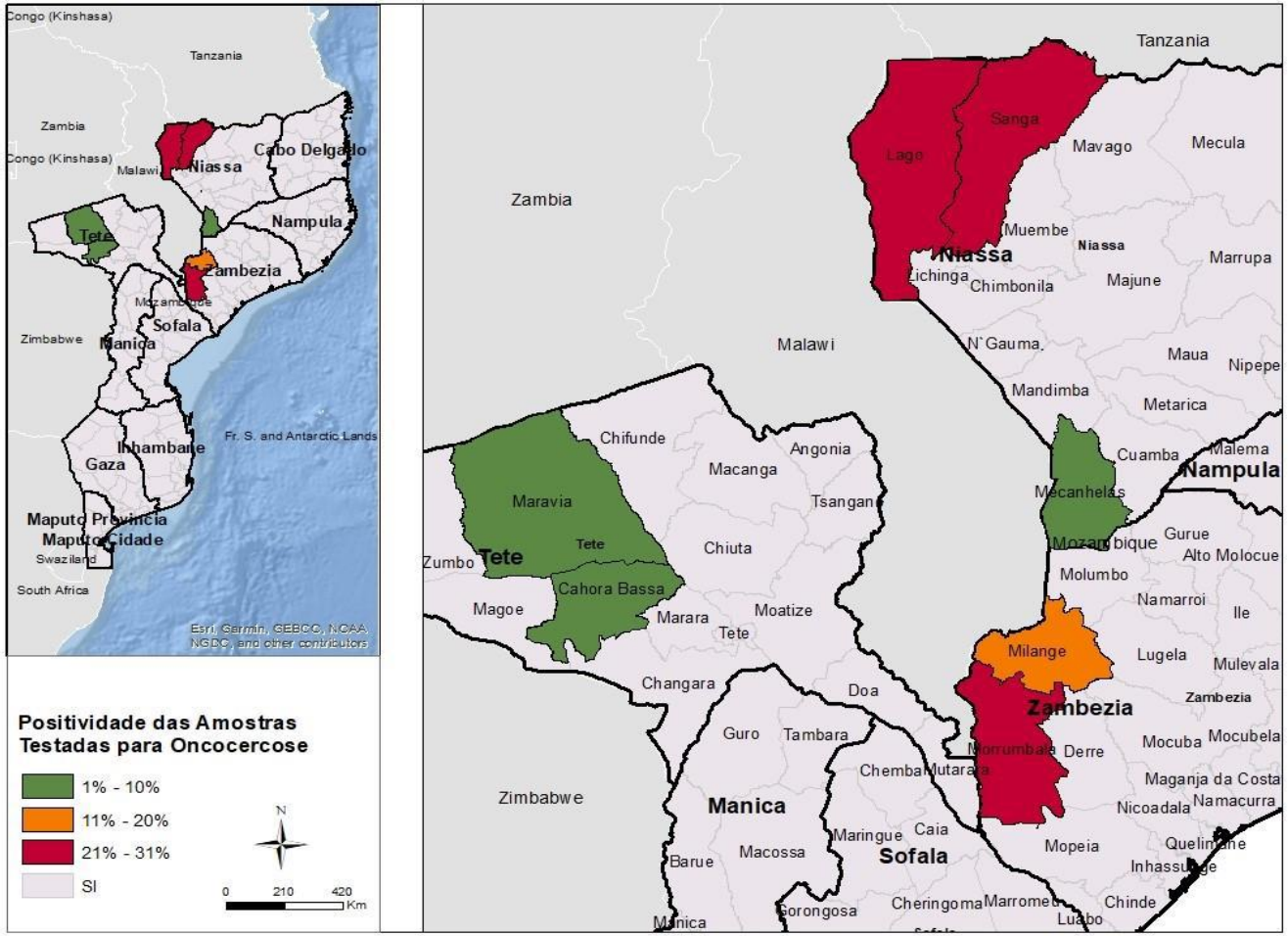




OEM Results

IU name	n (%)
Cahora- Bassa	4 (1.2)
Lago	**86 (25.7)**
Maravia	5 (1.5)
Mecanhelas	3 (0.9)
Milange	**45 (14.1)**
Morrumbala	**86 (25.7)**
Sanga	**103 (30.8)**

- **Ov16 IgG4 ELISA SD**
- **Scale up OEM in suspected areas**



Challenges affecting progress (2)

1. Uncompleted mapping (Onchocerciasis Elimination mapping surveys)

a. Formerly known hypo-endemic countries (Kenya, Mozambique, Rwanda, Zambia)

b. Formerly known hypo-endemic settings in endemic countries

638 IUs IVM naïve vs 523 IUs under LF MDA (1161 IUs with unknown status)

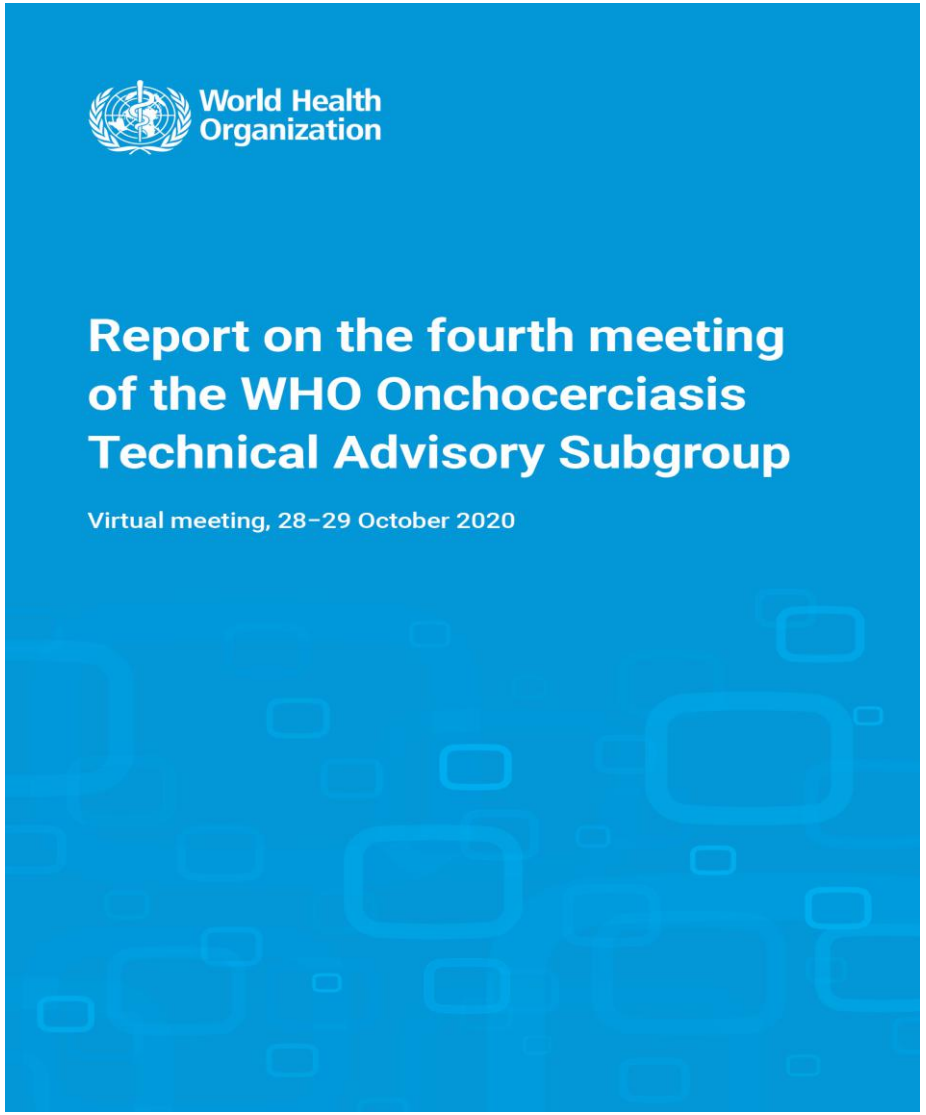
Challenges affecting progress (2)

1. Uncompleted mapping (OEM surveys)

✓**Formerly known hypo-endemic settings in endemic countries**

638 IUs IVM naïve (Classic OEM)

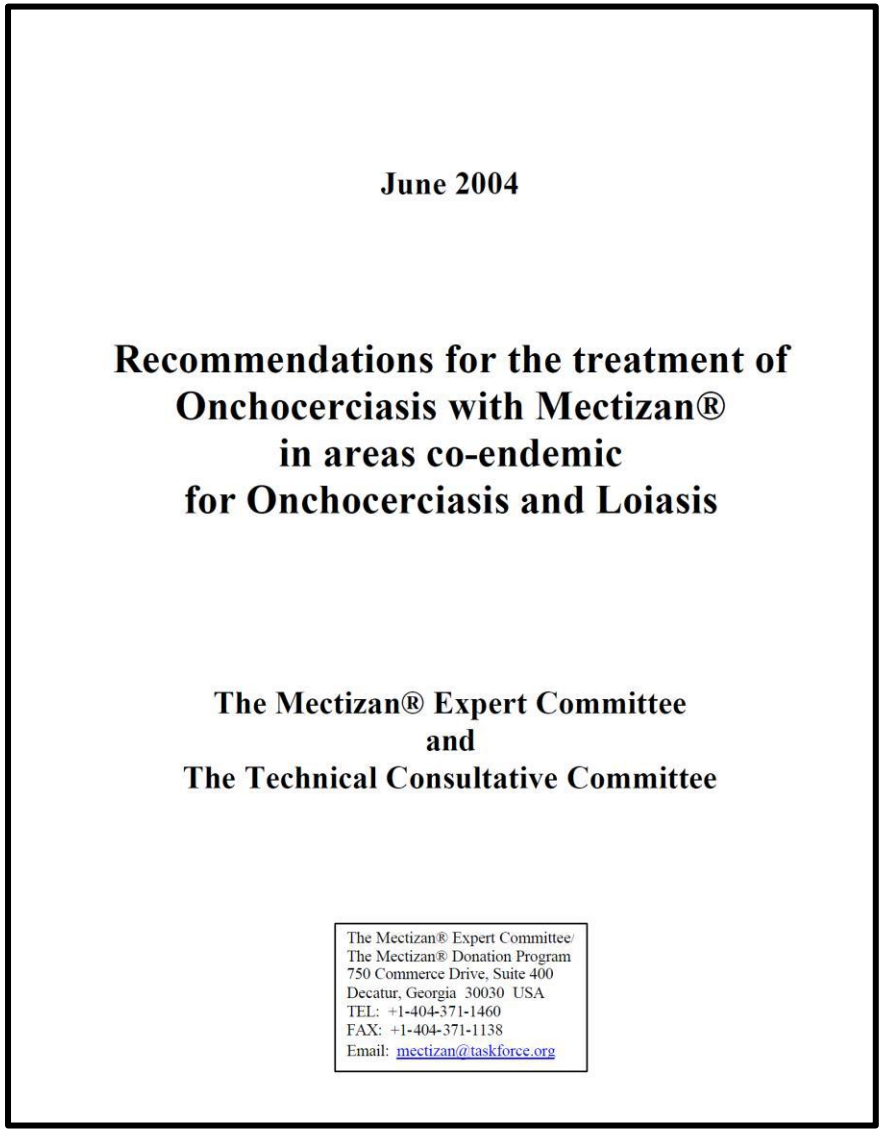
523 IUs under LF MDA (iTAS)



Challenges affecting progress

2. Oncho and Loasis co-endemicity in some settings (Angola, Cameroon, CAR, Congo Republic, DRC, Gabon, South Sudan)

- ✓ IVM MDA in Loa and oncho (Meso & hyper)
- ✓ No IVM MDA in loa and oncho (hypoendemic)
  - Test and treat
  - Test and no Treat



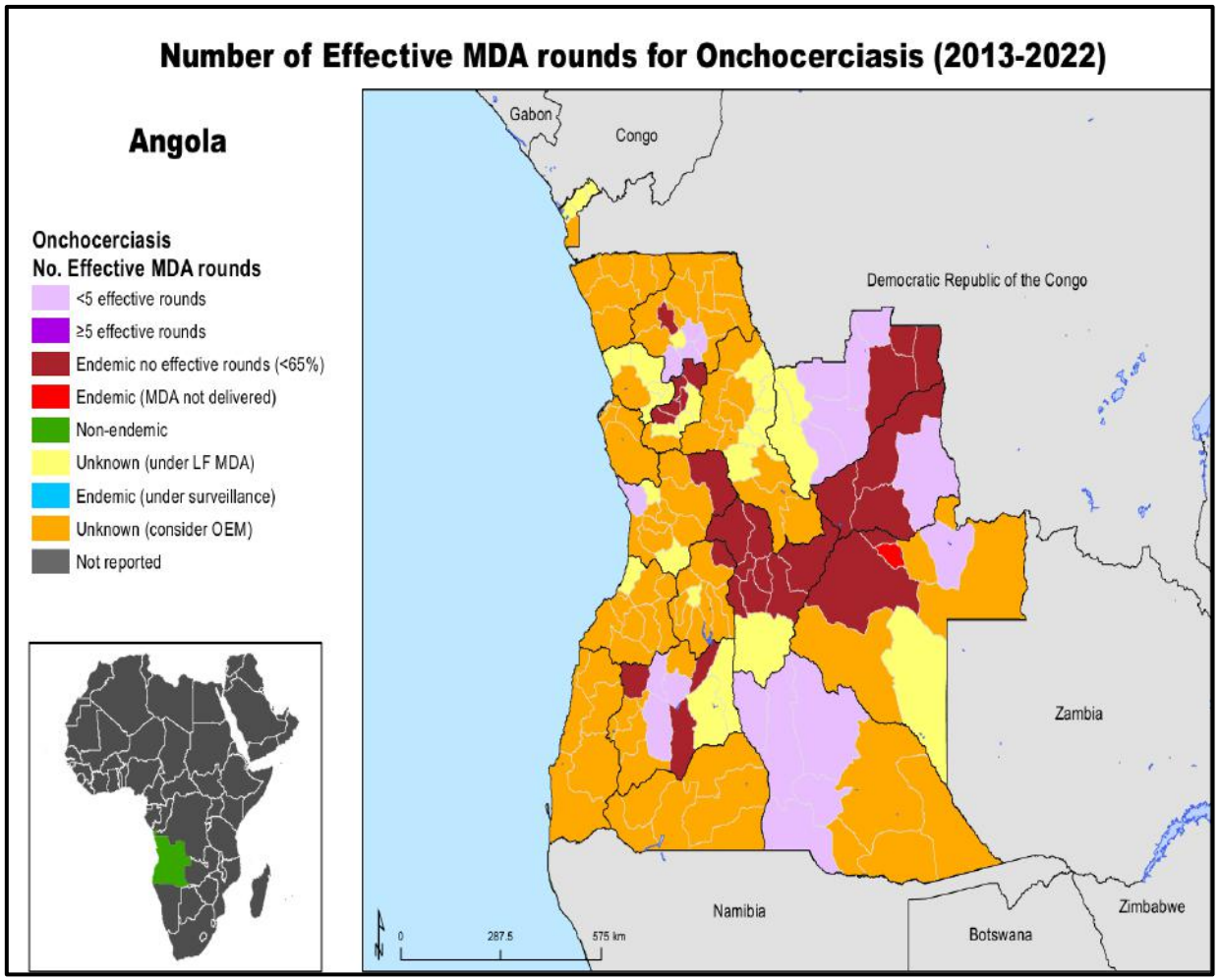
June 2004

Recommendations for the treatment of Onchocerciasis with Mectizan® in areas co-endemic for Onchocerciasis and Loiasis

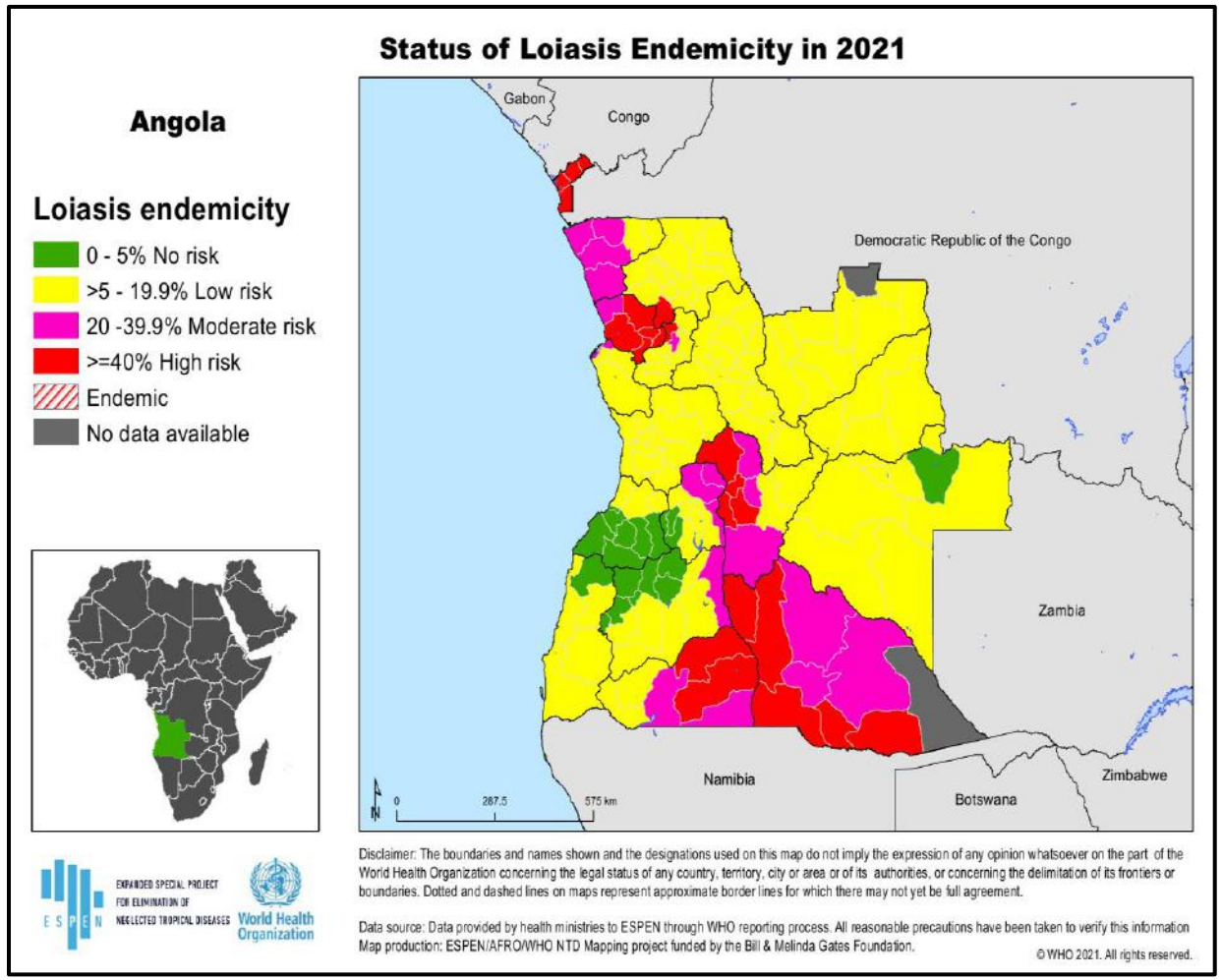
The Mectizan® Expert Committee
and
The Technical Consultative Committee

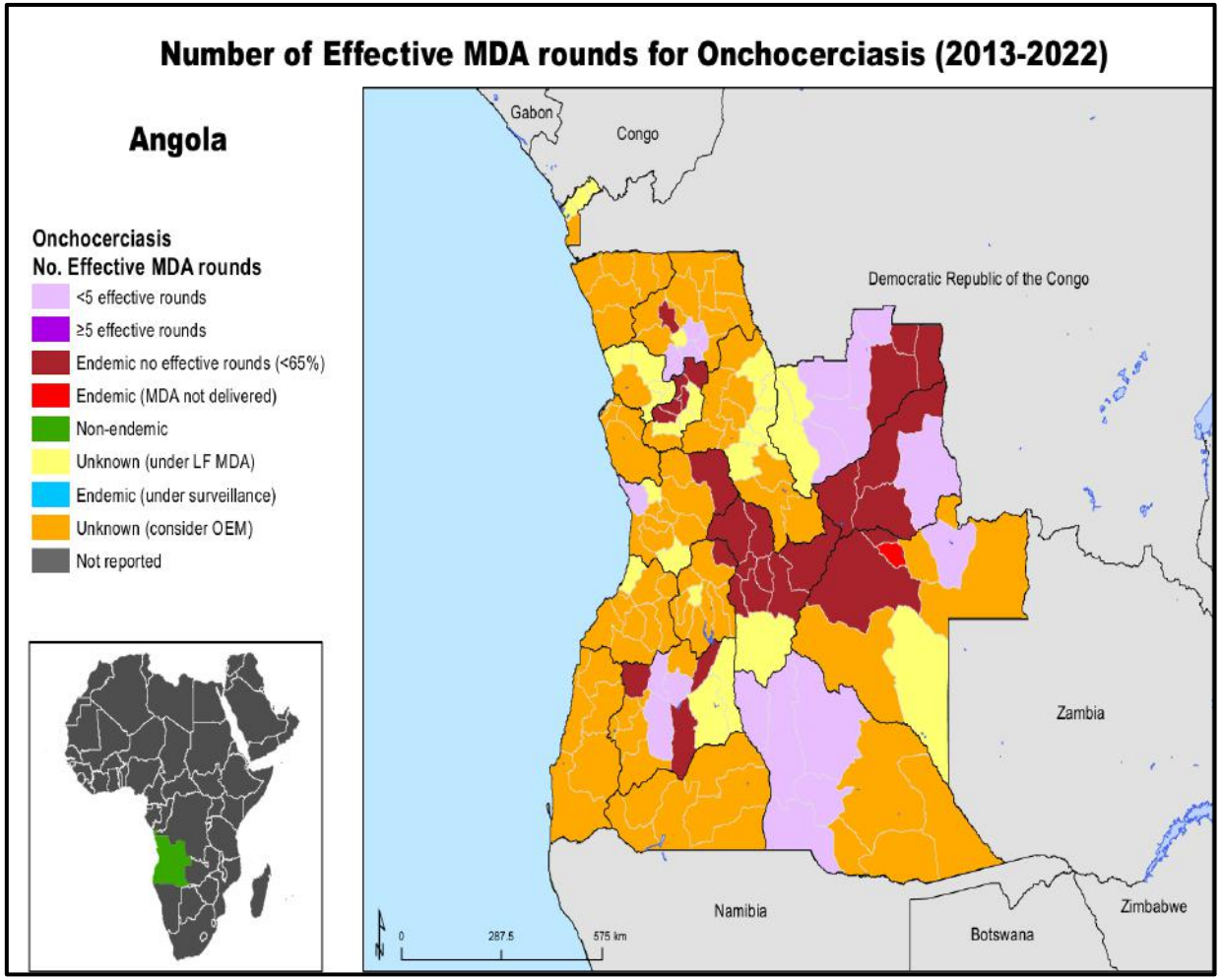
The Mectizan® Expert Committee/
The Mectizan® Donation Program
750 Commerce Drive, Suite 400
Decatur, Georgia 30030 USA
TEL: +1-404-371-1460
FAX: +1-404-371-1138
Email: mectizan@taskforce.org

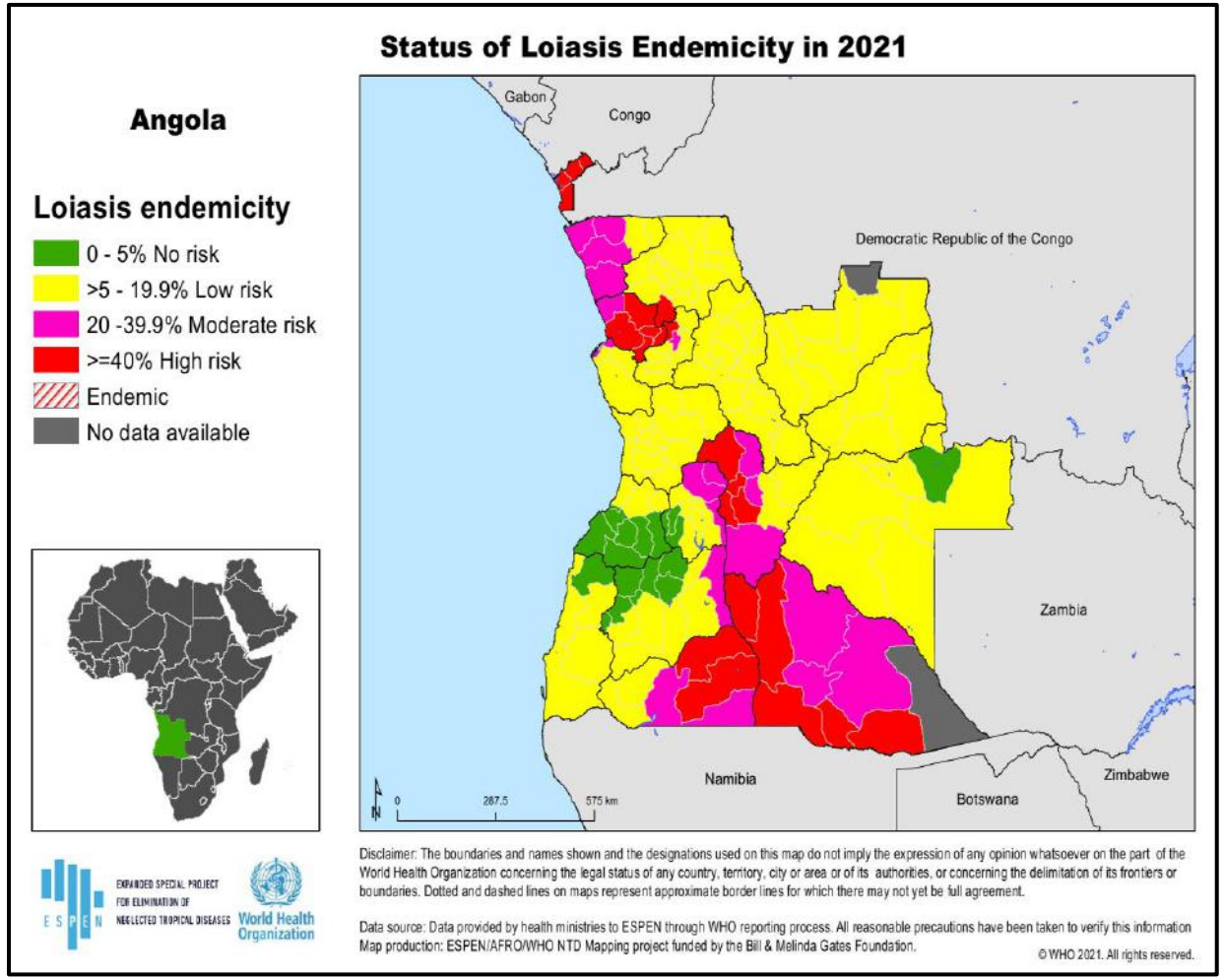
Number of Effective MDA rounds for Onchocerciasis (2013-2022)



Status of Loiasis Endemicity in 2021







Test and not treat strategy

Challenges affecting progress

1. Uncompleted mapping (Oncho Elimination mapping)

2. Oncho and Loasis co-endemicity in some settings (Angola, Cameroon, CAR, Congo Republic, DRC, Gabon, South Sudan)

3. Implementation of MDA but not at scale (Angola, CAR, Eq Guinea)

- Impact assessments due in some IUs but not conducted

Onchocerciasis PC Implementation and Elimination Status in AFRO as of 2023

MDA not started	MDA started but not at scale	MDA scaled to all endemic IUs	MDA stopped in at least one focus	Elimination of Transmission Verified
Gabon Kenya+ Rwanda+ Zambia+ Mozambique	Angola CAR Eq. Guinea	Benin Burkina Faso Burundi Cameroon Chad Côte d'Ivoire Congo DR Congo Ghana Guinea Guinea Bissau Liberia Mali Malawi Sierra Leone South Sudan United Rep. of Tanzania	Ethiopia* Nigeria* Senegal* Uganda* Togo*	 None *(Niger – elimination dossier under review)*
5 (16%)	3 (10%)	17 (55%)	5 (16%)	0

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+Not though to need MDA unless OEM identifies

* PTS already started of completed in at least one focus as of now

Contributing factors and proposed actions needed (Angola)

- Poor political will
- Turnover of staff /limited technical expertise
- No oncho/NTD working group
- Limited resources (Mentor Initiative/END Fund only)

- High level advocacy
- Establish a working group
- Ressource mobilisation

Contributing factors and proposed actions needed(CAR)

- Poor political will
- Political instability/crisis in CAR
- Turnover of staff /poor technical expertise
- No WHO/NPO to provide needed technical supports to the MoH
- Limited resources (No MDA in 2021)

- High level advocacy
- NTD working group highly needed
- Ressource mobilisation
- Scale up MDA using agencies working in hard-to- reach settings (Red Cross, MSF)

Proposed actions (Eq. Guinea)

- High level advocacy
- NTD working group highly needed
- Interventions/actions needed :
  - ✓ Conduct Oncho (OEM) in the mainland
  - ✓ PTS survey (entomology) in Bioko to confirm EoT 7 years after STOP MDA (Long hanging fruit if no oncho in the mainland).

Challenges affecting progress

1. Uncompleted mapping (Oncho Elimination mapping)

2. Oncho and Loasis co-endemicity in some settings (Angola, Cameroon, CAR, Congo Republic, DRC, Gabon, South Sudan)

3. Implementation of MDA but not at scale

4. Impact assessments due in some IUs but not conducted

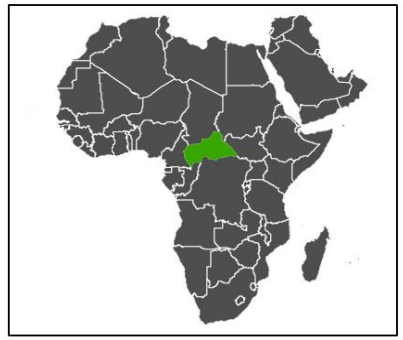
5. Funding gaps

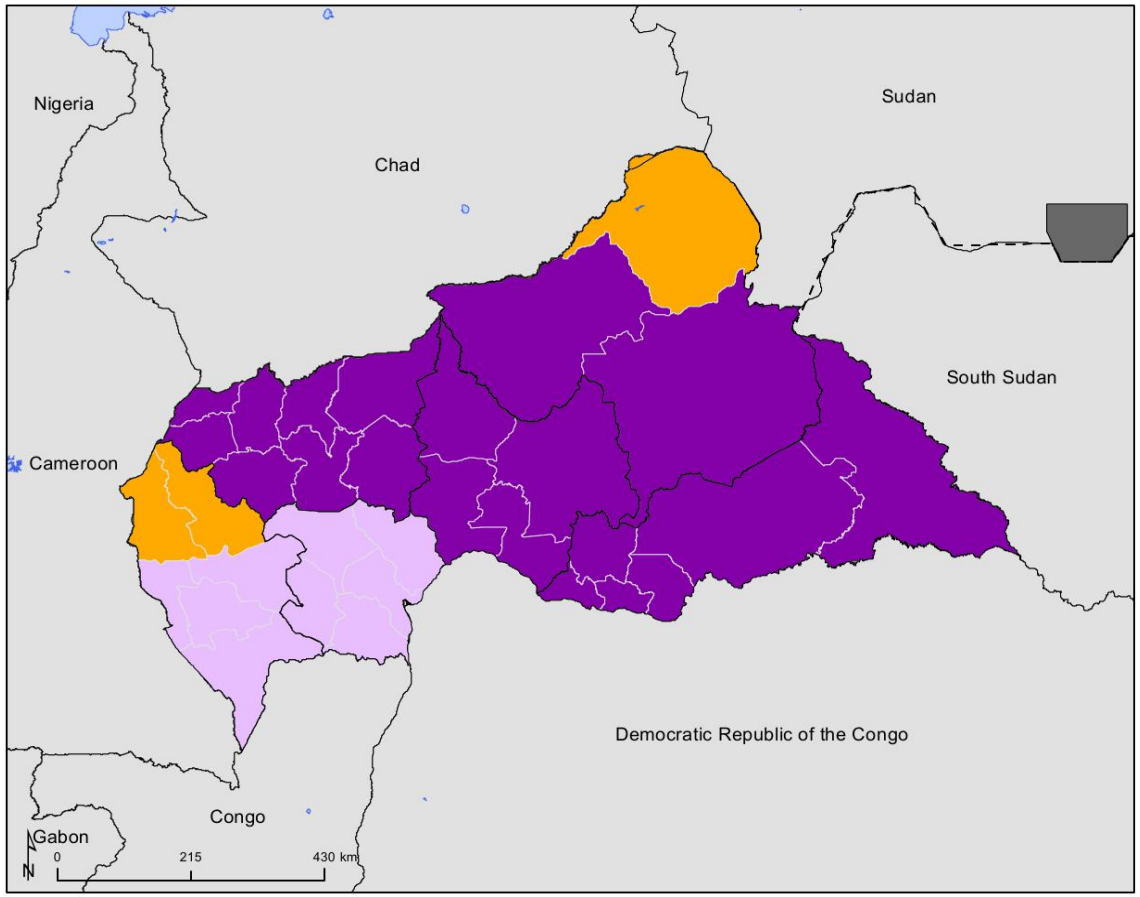
Number of MDA rounds for Onchocerciasis (2000-2022)

CAR

Onchocerciasis
No. MDA rounds

- <5 rounds
- ≥5 - 10 rounds
- ≥10 rounds
- Endemic (MDA not delivered)
- Non-endemic
- Endemic (pending IA)
- Endemic (under surveillance)
- Unknown (under LF MDA)
- Unknown (consider OEM)
- Not reported





EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES

World Health Organization

Disclaimer: The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data source: Data provided by health ministries to ESPEN through WHO reporting process. All reasonable precautions have been taken to verify this information
Map production: ESPEN/AFRO/WHO NTD Mapping project funded by the Bill & Melinda Gates Foundation.

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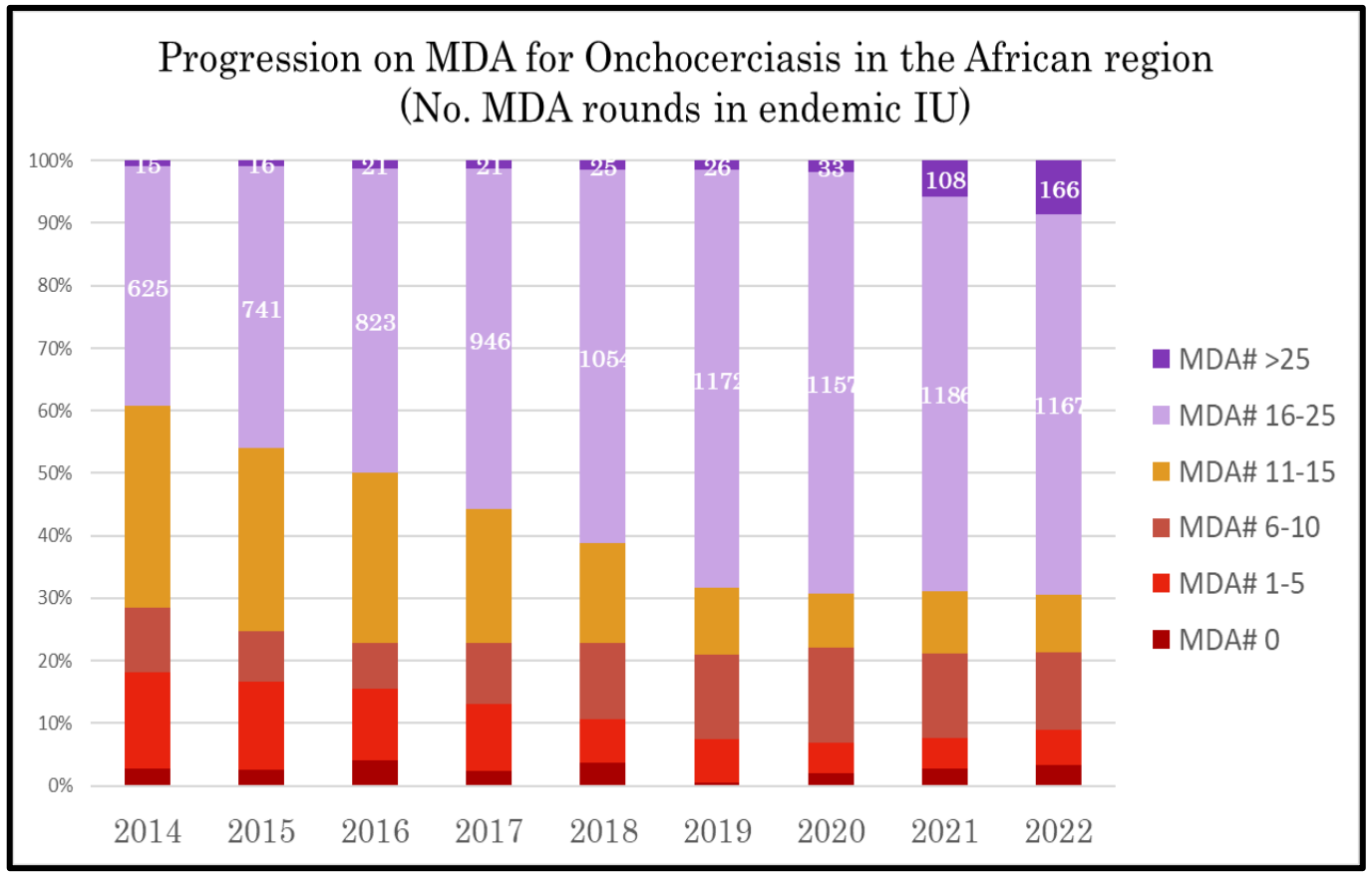
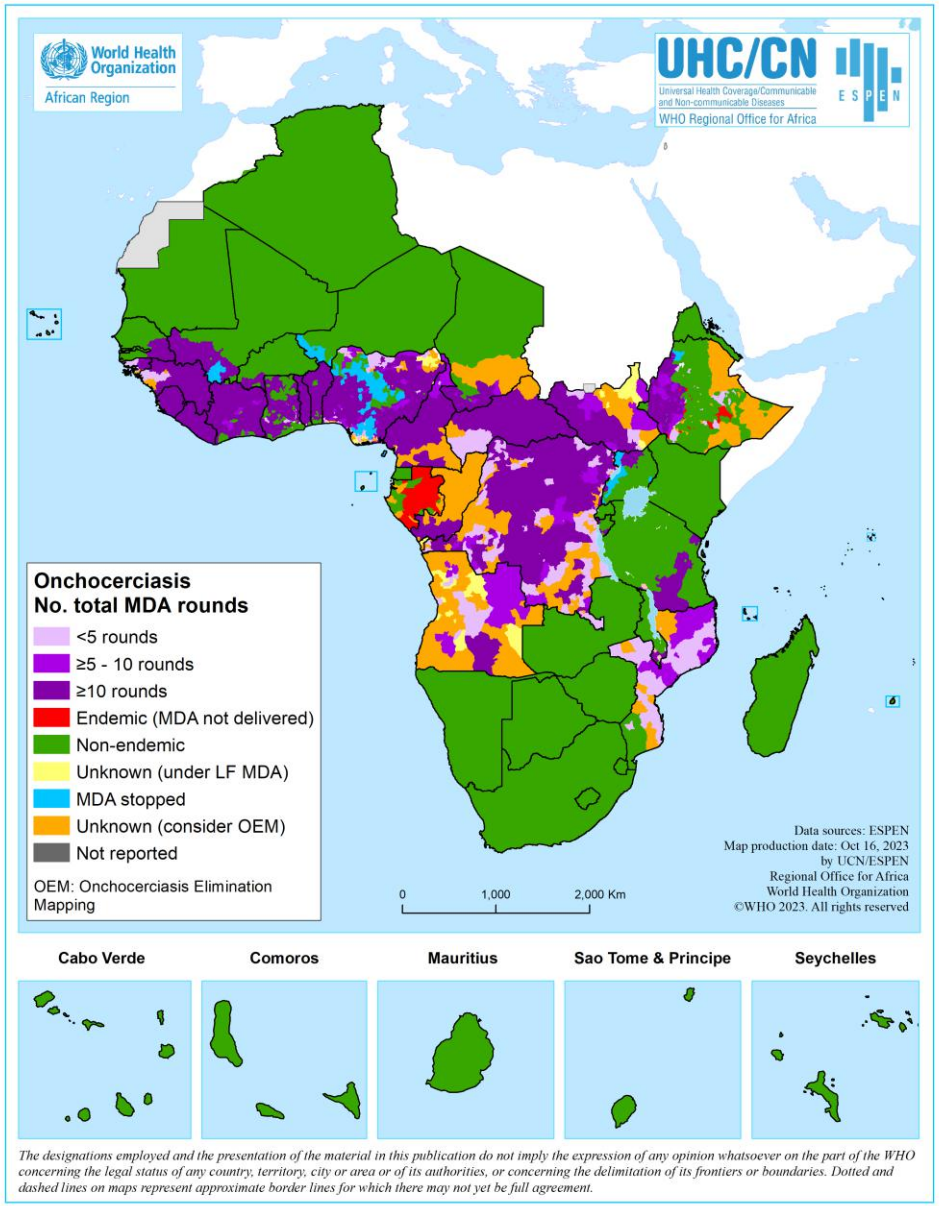
Impact assessment due but not conducted





Challenges affecting progress

1. Uncompleted mapping (Oncho Elimination mapping)

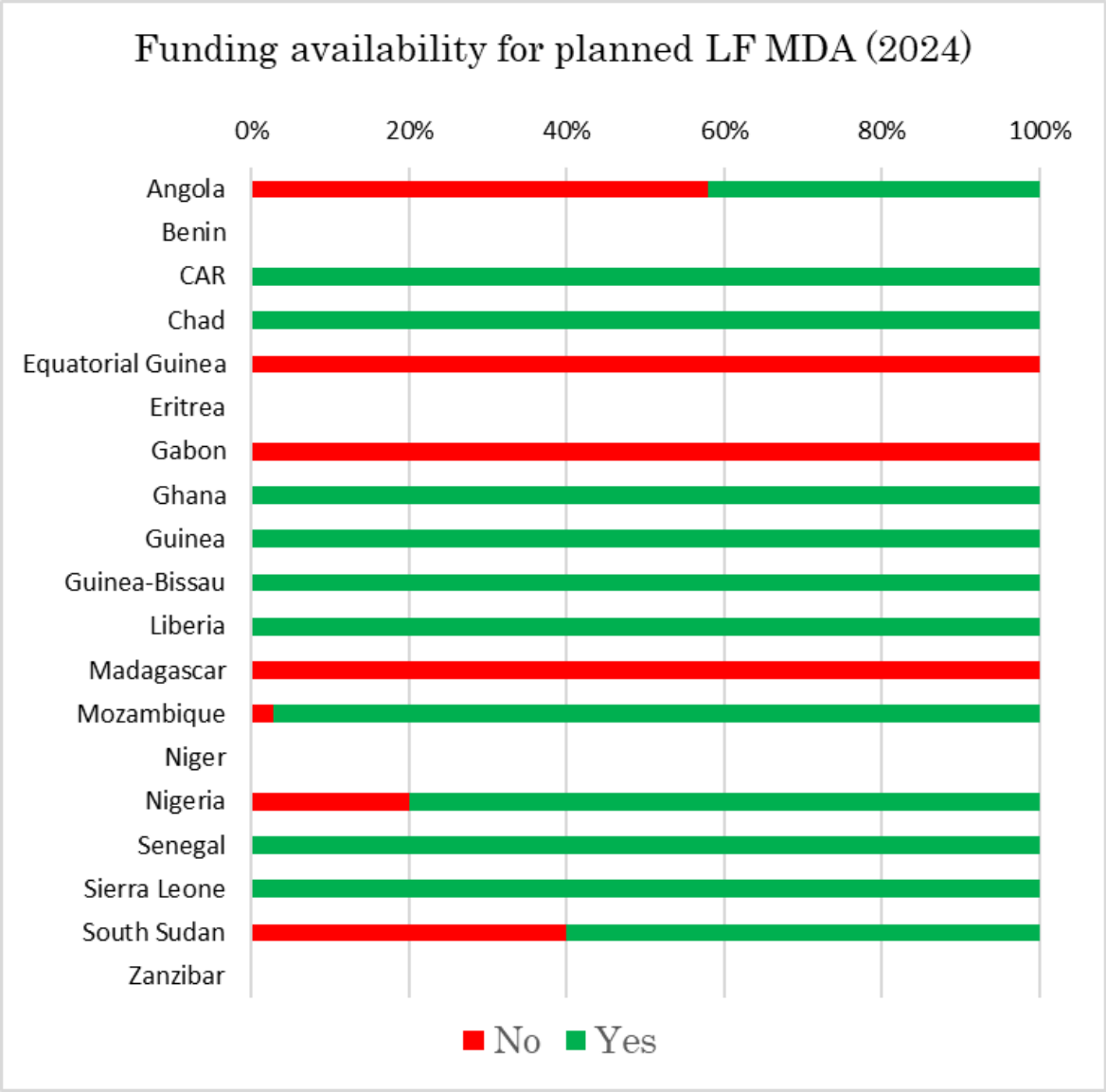
2. Oncho and Loasis co-endemicity in some settings (Angola, Cameroon, CAR, Congo Republic, DRC, Gabon, South Sudan)

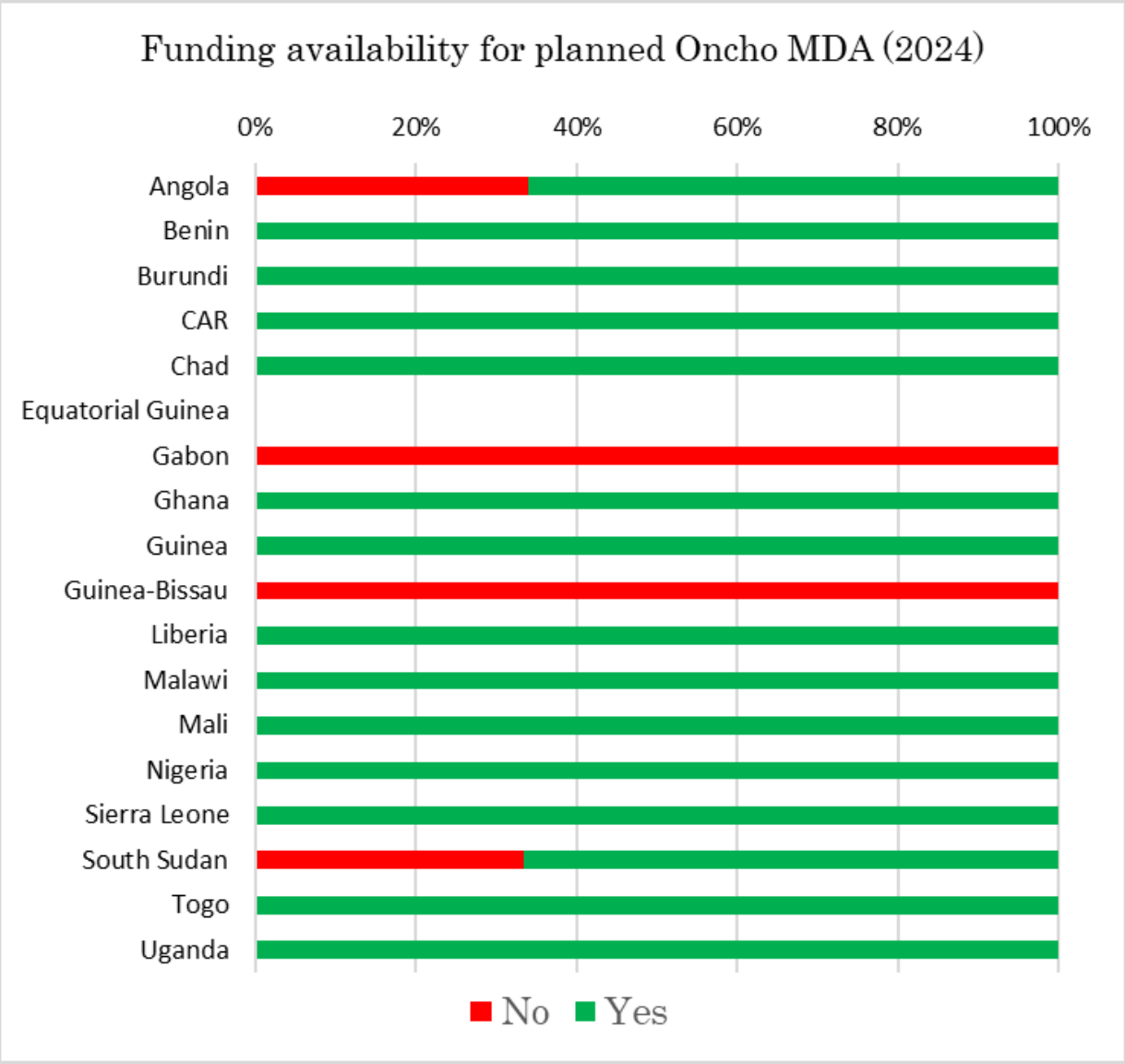
3. Implementation of MDA but not at scale

4. Impact assessments due in some IUs but not conducted

5. Funding gaps

Reported funding gaps for 2024 (MDA & Surveys)





Reported funding gaps for 2024 (MDA & Surveys)

Country	Lymphatic filariasis			Onchocerciasis			STH			Schistosomiasis		
	No. Partners	No. IU MDA	Funding gap MDA (%)	No. Partners	No. IU MDA	Funding gap MDA (%)	No. Partners	No. IU MDA	Funding gap MDA (%)	No. Partners	No. IU MDA	Funding gap MDA (%)
Angola	2	38	58%	1	47	34%	1	91	38%	1	124	29%
Benin	1	0	N/R	2	51	0%	1	31	0%	1	71	0%
Burundi	0	0	N/R	1	12	0%	3	48	0%	2	18	0%
CAR	2	32	0%	2	20	0%	2	19	0%	2	27	0%
Chad	1	25	0%	1	45	0%	1	9	0%	1	57	0%
Equatorial Guinea	0	15	100%	0	0	N/R	0	18	100%	1	2	100%
Eritrea	0	0	N/R	0	0	N/R	0	0	N/R	0	5	100%
Eswatini	0	0	N/R	0	0	N/R	0	3	100%	0	44	100%
Gabon	0	18	100%	0	27	100%	0	47	100%	0	14	100%
Ghana	1	7	0%	1	138	0%	0	0	0%	1	155	0%
Guinea	1	13	0%	1	24	0%	1	17	0%	1	21	0%
Guinea-Bissau	1	65	0%	1	33	100%	1	70	0%	1	24	0%
Liberia	1	4	0%	1	15	0%	1	9	44%	0	8	100%
Madagascar	0	77	100%	0	0	N/R	1	69	0%	1	87	0%
Malawi	0	0	N/R	1	10	0%	1	11	0%	1	28	0%
Mali	0	0	N/R	4	20	0%	0	0	N/R	4	61	0%
Mozambique	1	36	3%	0	0	N/R	1	143	76%	0	153	100%
Niger	1	0	N/R	0	0	N/R	1	1	100%	1	38	53%
Nigeria	2	95	20%	2	391	0%	2	414	8%	2	573	0%
Sao Tome & Principe	0	0	N/R	0	0	N/R	0	7	100%	0	2	100%
Senegal	1	3	0%	0	0	N/R	1	12	0%	1	53	0%
Sierra Leone	2	1	0%	2	14	0%	2	16	0%	2	10	0%
South Sudan	1	50	40%	1	48	33%	1	6	50%	0	38	100%
Tanzania (Zanzibar)	1	11	0%	0	0	N/R	1	11	0%	1	9	0%
The Gambia	0	0	N/R	0	0	N/R	0	4	100%	0	37	100%
Togo	0	0	N/R	1	32	0%	1	38	0%	1	37	0%
Uganda	0	0	N/R	1	12	0%	1	146	0%	0	92	100%
Total		490	35%		939	10%		1240	21%		1788	25%

World Health Organization African Region

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Reported funding gaps for 2024 (MDA & Surveys)

Country	Lymphatic filariasis			Onchocerciasis			STH			Schistosomiasis		
	No. Partners	No. IU M&E	No funding for M&E (%)	No. Partners	No. IU M&E	No funding for M&E (%)	No. Partners	No. IU M&E	No funding for M&E (%)	No. Partners	No. IU M&E	No funding for M&E (%)
Benin	1	4	0%	2	5	0%	1	17	0%	1	43	0%
CAR	2	0	N/R	2	20	0%	2	0	N/R	2	0	N/R
Chad	1	11	100%	1	0	N/R	1	0	N/R	1	0	N/R
Equatorial Guinea	0	0	N/R	0	14	100%	0	0	N/R	1	16	0%
Eritrea	0	3	100%	0	0	N/R	0	0	N/R	0	5	100%
Ghana	1	8	0%	1	81	38%	0	0	N/R	1	34	0%
Guinea	1	16	0%	1	15	100%	1	7	100%	1	12	100%
Guinea-Bissau	1	29	0%	1	19	0%	1	0	N/R	1	0	N/R
Liberia	1	9	0%	1	15	0%	1	15	100%	0	15	100%
Madagascar	0	17	100%	0	0	N/R	1	0	N/R	1	0	N/R
Malawi	0	0	N/R	1	8	0%	1	11	0%	1	0	N/R
Niger	1	48	100%	0	0	N/R	1	13	0%	1	13	0%
Nigeria	2	1	0%	2	1	100%	2	0	N/R	2	0	N/R
Sao Tome & Principe	0	0	N/R	0	0	N/R	0	7	100%	0	7	100%
Senegal	1	7	0%	0	0	N/R	1	11	0%	1	11	0%
Sierra Leone	2	8	0%	2	14	0%	2	16	0%	2	7	0%
South Sudan	1	11	0%	1	0	N/R	1	0	N/R	0	0	N/R
Tanzania (Zanzibar)	1	11	0%	0	0	N/R	1	11	0%	1	1	0%
The Gambia	0	0	N/R	0	0	N/R	0	44	100%	0	44	100%
Togo	0	0	N/R	1	7	0%	1	15	0%	1	15	0%
Uganda	0	0	N/R	1	0	N/R	1	5	0%	0	0	N/R
Total		183	43%		199	31%		172	42%		223	37%

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Lymphatic filariasis

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2030 targets and sub targets for Lymphatic filariasis

Indicator	2020	2023	2025	2030
Number of countries validated for Elimination of LF as PHP	**17**	**23**	**34**	**58**
Number of countries implementing post MDA or post validation surveillance	26	37	40	72
Population requiring MDA (million)		330	180	0

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Lymphatic filariasis PC and Elimination Status in AFRO as of 2023

MDA not started	MDA started but not at scale	MDA scaled to all endemic IUs	MDA stopped in at least one focus	Elimination as Public Health Problem
Gabon	Angola Central African Republic Madagascar	Chad Equatorial Guinea Guinea Guinea Bissau Liberia Sierra Leone South Sudan Zambia Zimbabwe	Benin Burkina Faso Cameroon Comoros Côte d'Ivoire Congo DR Congo Ethiopia Eritrea Ghana Kenya Mali Mozambique Niger Nigeria Senegal Sao Tome and Principe United Rep. of Tanzania Uganda	 Togo (2017) Malawi (2020)
1 (3%)	3 (9%)	9(26%)	19 (56%)	2 (6%)

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Challenges affecting progress

1. **Uncompleted mapping (LF confirmatory mapping)**

2. Implementation of MDA but not at scale

3. Poor implementation of MMDP activities

4. Funding gaps

Uncompleted Mapping surveys

- Confirmation of LF endemicity in Gabon:

  17 districts with at least one FTS+

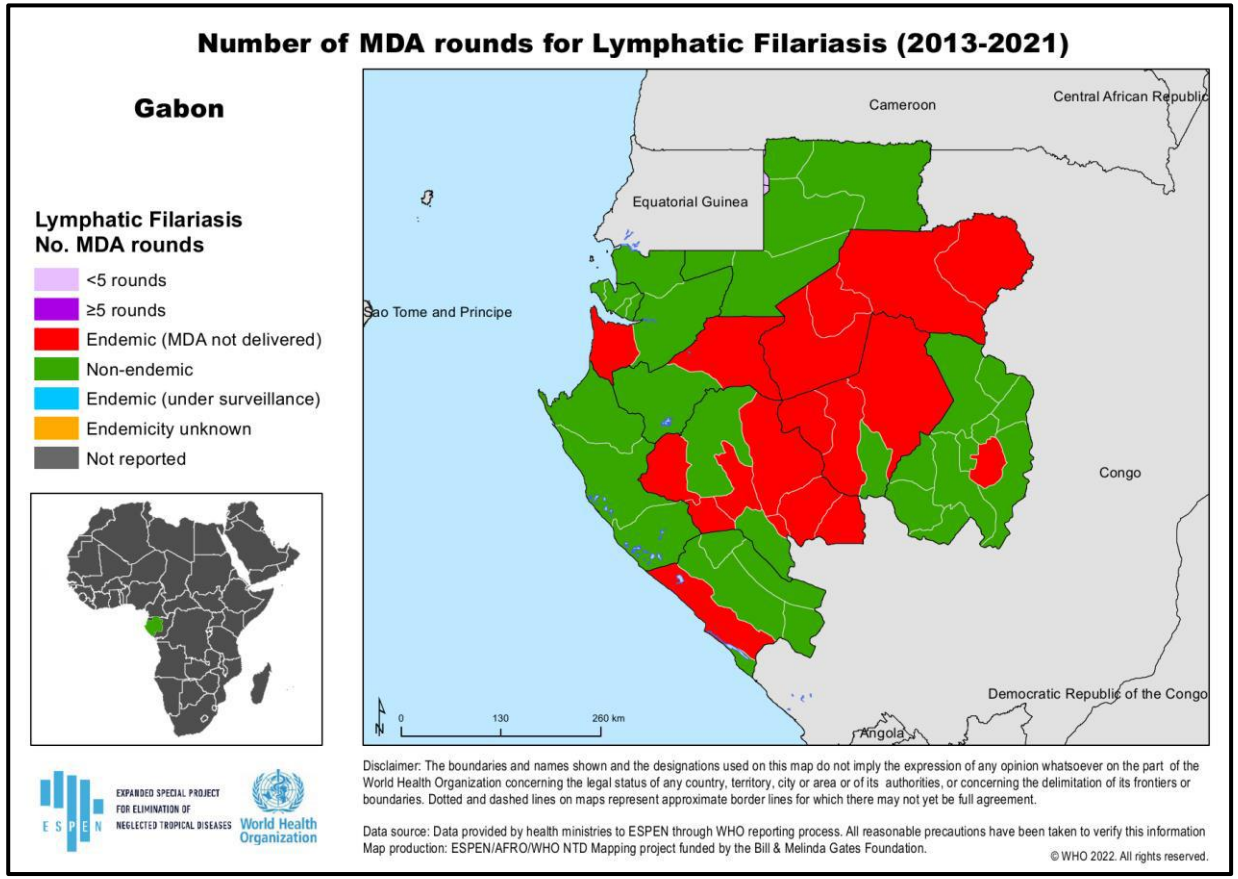
  Country known to have loasis.

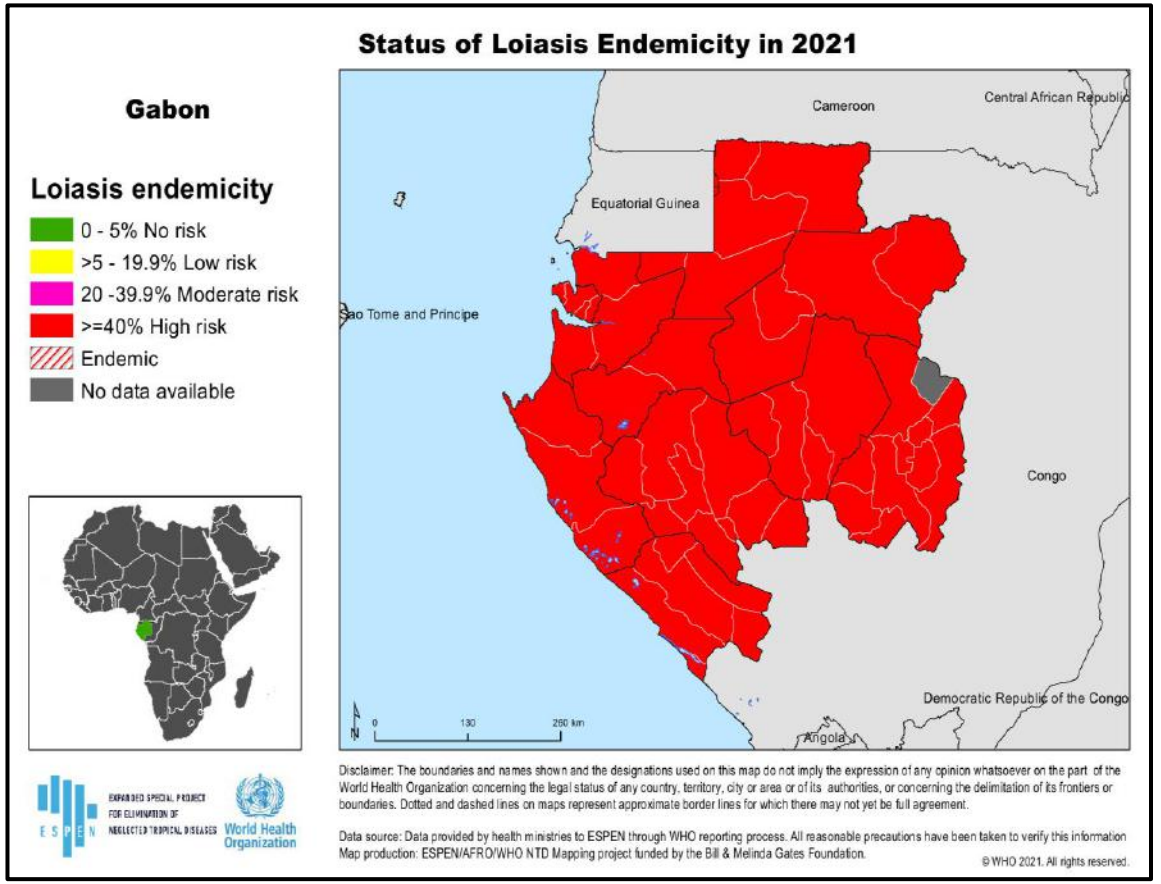
  Cross reaction between *Wuchereria bancrofti* and *Loa loa.*

  Onchocerciasis known to have hypo-endemic IUs (REMO).

Question: Can we advise the program to conduct integrated LF and Oncho mapping surveys?

Gabon





LF Confirmatory mapping highly needed in 17 IUs/Loasis coendemic

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Challenges affecting progress

1. Uncompleted mapping (LF confirmatory mapping)

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1 (3%)	3 (9%)	9(26%)	19 (56%)	2 (6%)

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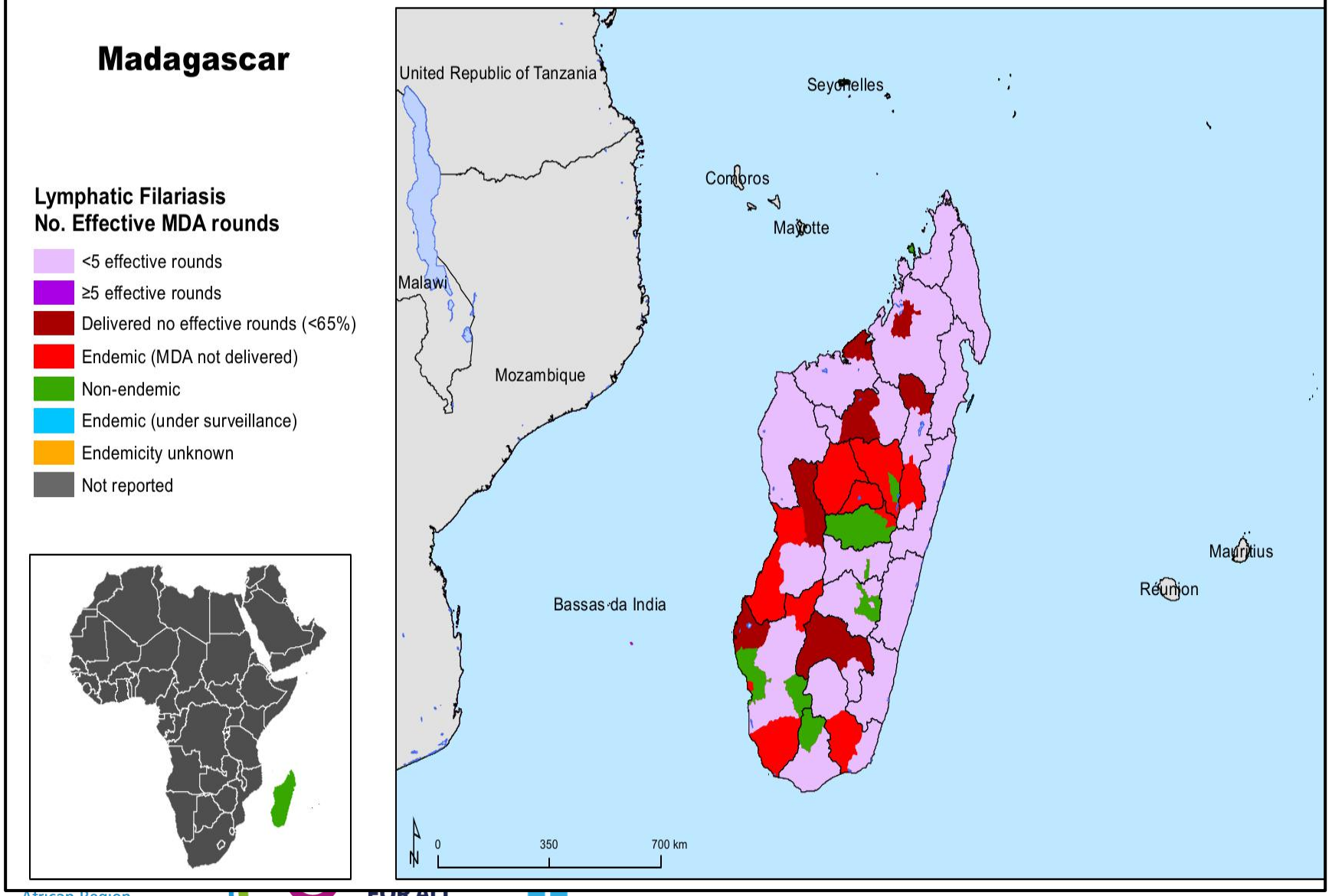
Number of Effective MDA rounds for Lymphatic Filariasis (2013-2021)

Madagascar



- 86 LF endemic districts
- 4 stopped MDA (TAS2/3)
- Low MDA coverage

Contributing factors and needed interventions/actions needed (MAD)

- Poor political will (**Before**)
- Climate (Cyclones from March to June)
- Several plaque outbreaks
- Turnover of staff /poor technical expertise at MoH
- Communities' fatigue (MDA since 2004)
- Limited resources

- Maintain the **current** political will
- Consultant to support the NPO (Planning and implementation of interventions)
- Technical actions needed :

  ✓ Mini-TAS to assess progress and then TAS

  ✓ Improve MDA coverage

  ✓ Scale up MDA using IDA

  ✓ Scale up MMDP

Challenges affecting progress

1. Uncompleted mapping (LF confirmatory mapping)

2. Implementation of MDA but not at scale

3. **Poor implementation of MMDP activities**

4. Funding gaps

Challenges affecting progress

1. Uncompleted mapping (LF confirmatory mapping)

2. Implementation of MDA but not at scale

3. Poor implementation of MMDP activities

4. **Funding gaps**

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Eritrea	0	0	N/R	0	0	N/R	0	0	N/R	0	5	100%
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Ghana	1	7	0%	1	138	0%	0	0	0%	1	155	0%
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Guinea-Bissau	1	65	0%	1	33	100%	1	70	0%	1	24	0%
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Madagascar	0	77	100%	0	0	N/R	1	69	0%	1	87	0%
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Equatorial Guinea	0	0	N/R	0	14	100%	0	0	N/R	1	16	0%
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Liberia	1	9	0%	1	15	0%	1	15	100%	0	15	100%
Madagascar	0	17	100%	0	0	N/R	1	0	N/R	1	0	N/R
Malawi	0	0	N/R	1	8	0%	1	11	0%	1	0	N/R
Niger	1	48	100%	0	0	N/R	1	13	0%	1	13	0%
Nigeria	2	1	0%	2	1	100%	2	0	N/R	2	0	N/R
Sao Tome & Principe	0	0	N/R	0	0	N/R	0	7	100%	0	7	100%
Senegal	1	7	0%	0	0	N/R	1	11	0%	1	11	0%
Sierra Leone	2	8	0%	2	14	0%	2	16	0%	2	7	0%
South Sudan	1	11	0%	1	0	N/R	1	0	N/R	0	0	N/R
Tanzania (Zanzibar)	1	11	0%	0	0	N/R	1	11	0%	1	1	0%
The Gambia	0	0	N/R	0	0	N/R	0	44	100%	0	44	100%
Togo	0	0	N/R	1	7	0%	1	15	0%	1	15	0%
Uganda	0	0	N/R	1	0	N/R	1	5	0%	0	0	N/R
Total		183	43%		199	31%		172	42%		223	37%

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Thank you

For more information, please contact:

Dr Didier Bakajika
Medical Officer LF/Onchocerciasis

bakajikad@who.int

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LF & Onchocerciasis

Discussion and RPRG recommendations

Health Break (20 min)

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Session 5: Information session on cross-cutting activities: Data Management

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Data review tools

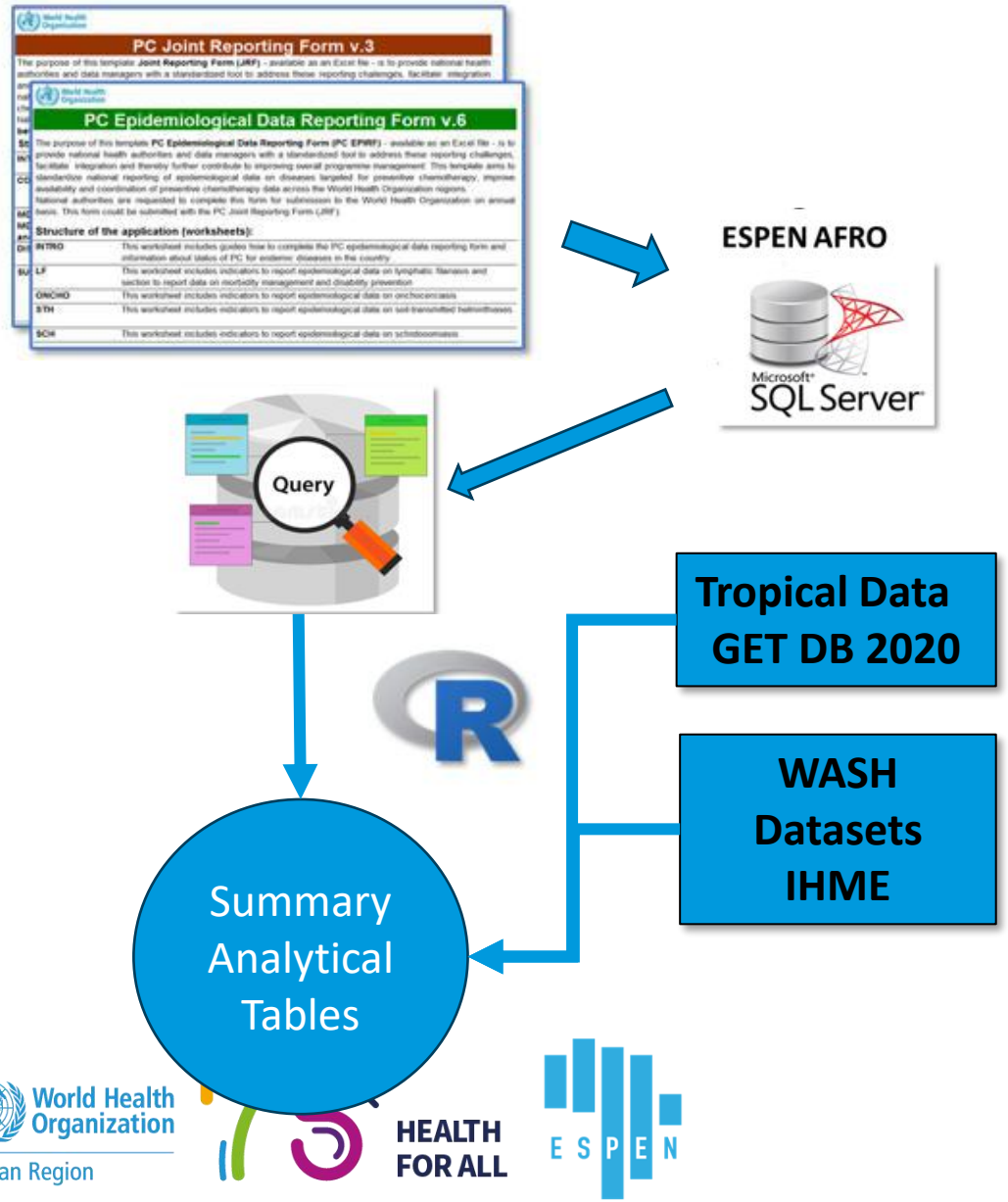
ESPEN Portal, Country Progress Analytics & other resources

Contents

ESPEN NTD Portal:

History & Functionalities

ESPEN NTD Portal - https://espen.afro.who.int/

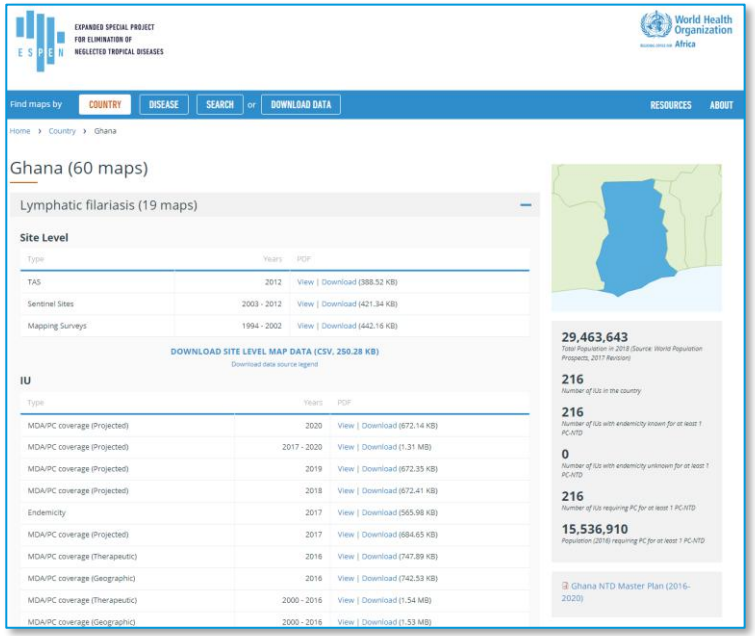


- NTD Data Portal launched by ESPEN in April 2017.
- Aims to be top public NTD data hub.
- **Compiles PC-NTD data** from countries using **JAP** & TEMF reports.
- Helps guide NTD control and elimination strategies.
- Not just data storage:
  - **ESPEN Collect** for data collection.
  - **JAP Upload tool** for data reporting.
  - **Tools** for data visualization: graphs, dashboards, maps.
  - Includes NTD Master Plans, Updated Cartography, Elimination estimates.
- Offers APIs for external app development.

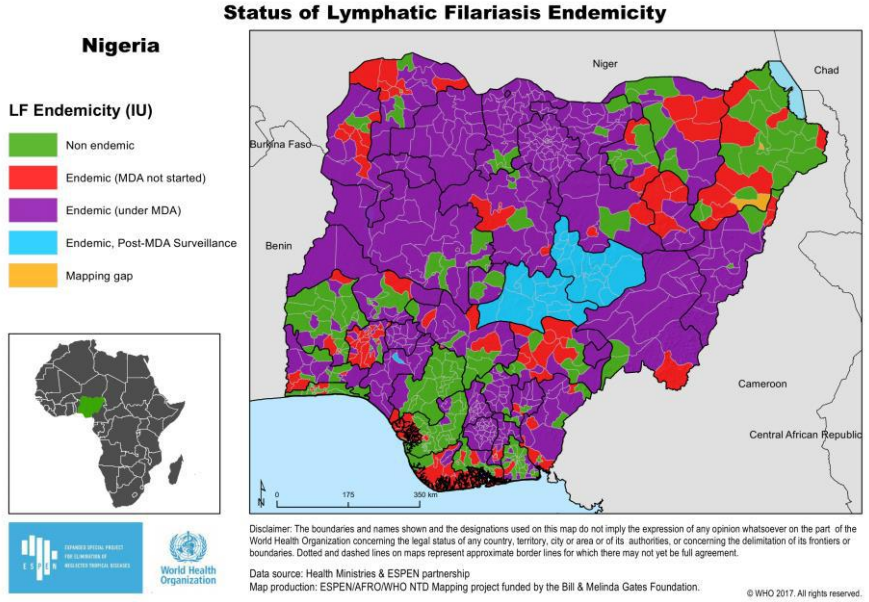
ESPEN Data Portal – v1.0 (2017)

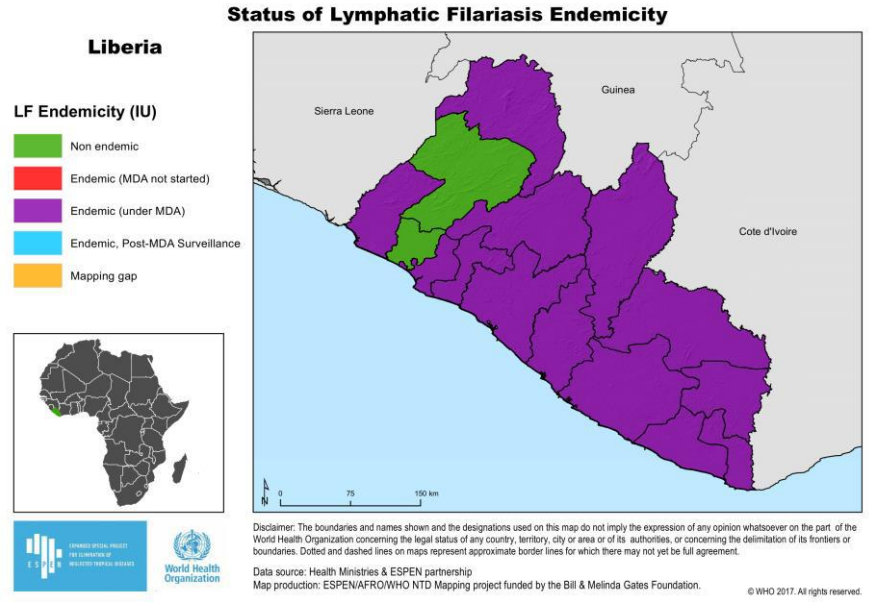
Portal v 1.0

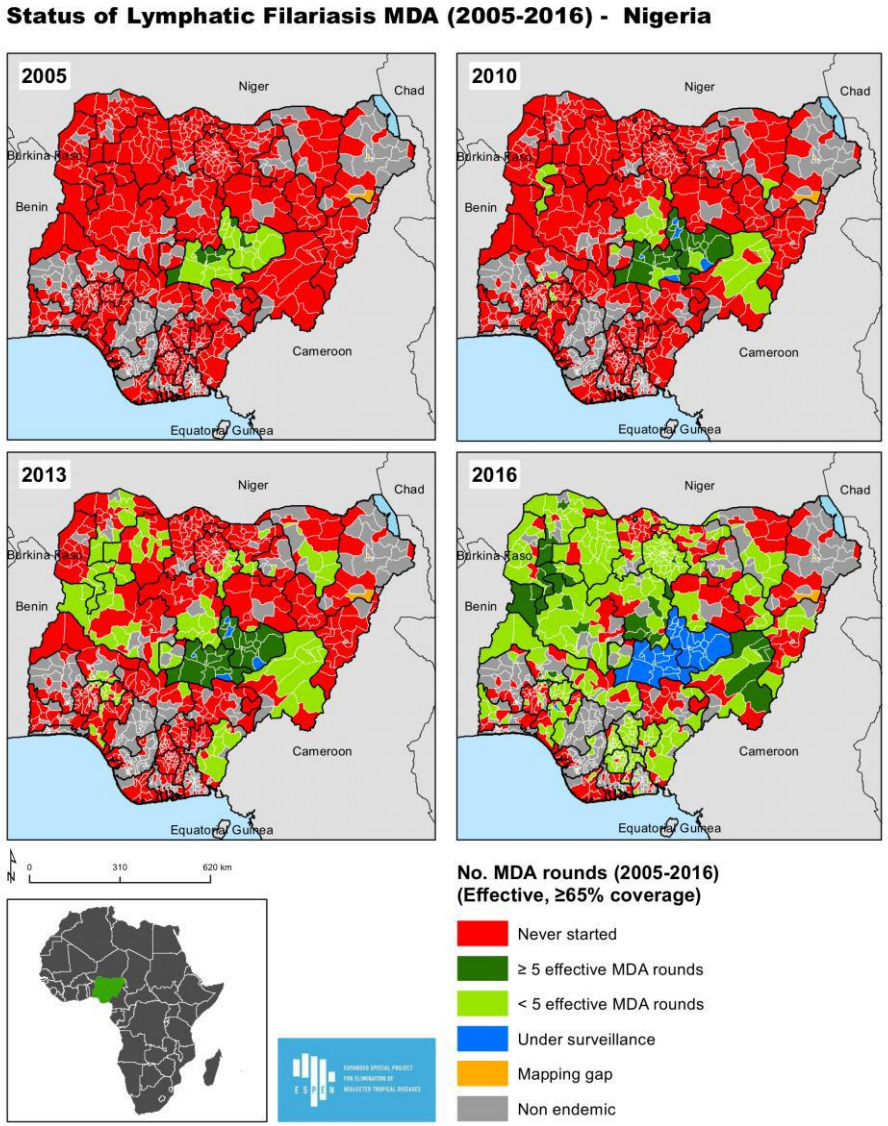
- First version: endemicity maps and data for each of the PC-NTDs.
- There were no data on programme implementation (e.g. populations targeted and treated)
- Maps were available for 43 countries



ESPEN Data Portal – v1.0 (2017)







African Region

ESPEN Data Portal – v3.0 (2022)

https://espen.afro.who.int/

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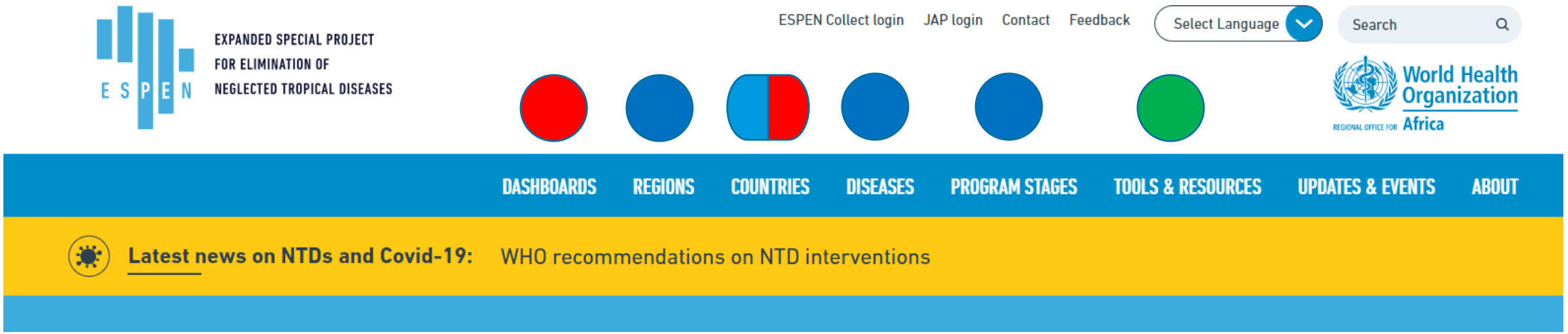
African Region

ESPEN Data Portal: Interface

https://espen.afro.who.int/



Dynamic dashboards: visualization treatment progress and projections

Summary indicators & maps: key treatment and endemicity indicators, dynamic and static maps, and progress charts

Dashboards, Summary indicators & maps: key treatment and endemicity indicators, dynamic and static maps, and interactive dashboards

Other resources: data & map query tools, JAP Upload tool, IU level Cartography, ESPEN Collect, access to APIs library, etc

Regional level statistics

https://espen.afro.who.int/

Western Africa

OVERVIEW | LF | ONC | LOA | SCH | STH | TH | WASH

National summary statistics for 2020

Demographics

1,863	378,475,627	59,684,245
Number of implementation units (IUs)	Total Population	Total PreSAC Population
110,062,025	212,187,622	14
Total SAC Population	Total Adult Population	Number of countries reporting data

Program status *

0 people / 0 IUs	260,904,819 people / 1504 IUs	90,994,803 people / 325 IUs
Population living in IUs with endemicity unknown for at least one PC-NTD	Population requiring PC for at least one PC-NTD	Population living in IUs that have stopped PC for at least one PC-NTD

Delivery of PC in 2020 *

183,264,782 people / 1190 IUs	161,426,434 people / 1190 IUs	426 IUs (28% of all endemic IUs)
Population targeted with PC for at least one NTD	Population treated with PC for at least one NTD	IUs achieving effective coverage for all NTDs requiring PCs

*These statistics exclude trachoma, as data are currently reporting using alternative implementation unit information, making integration unfeasible

Trachoma

102	52 (50%)
Number of IU Requiring PC for trachoma	Number of IU implementing PC for trachoma

Disclaimer: summary indicators provided here have been obtained from countries that have submitted the Joint Report Form (JRF) for the selected year. These indicators have resulted from aggregating estimates provided at implementation unit level.

Select a country

Western Africa comprises 17 countries and is endemic for all five PC-NTDs and loiasis. Most of the region is endemic for LF, or has been historically. Several countries have successfully reduced LF transmission and implement post-MDA surveillance in certain districts. Onchocerciasis occurs throughout the tropical belt covering the southern part of the region. The region is mostly free of Loiasis, although this disease occurs throughout Nigeria. All countries are affected by schistosomiasis and STH, although endemicity levels vary within and between countries.

Western Africa

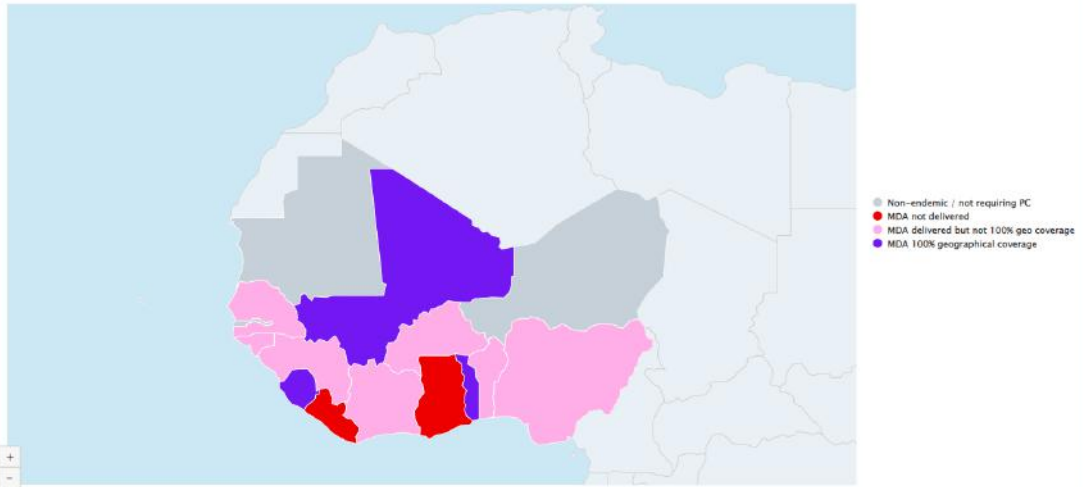
OVERVIEW | LF | ONC | LOA | SCH | STH | TH | WASH

Onchocerciasis

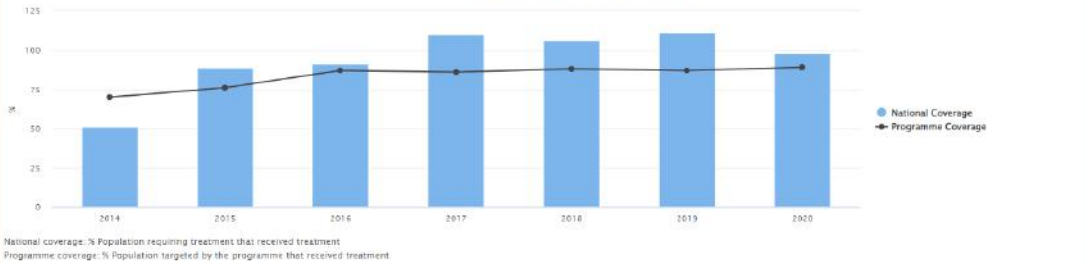
Introduction | Maps

2020

Onchocerciasis program status in Western Africa



PC coverage per year in Western Africa (Onchocerciasis)

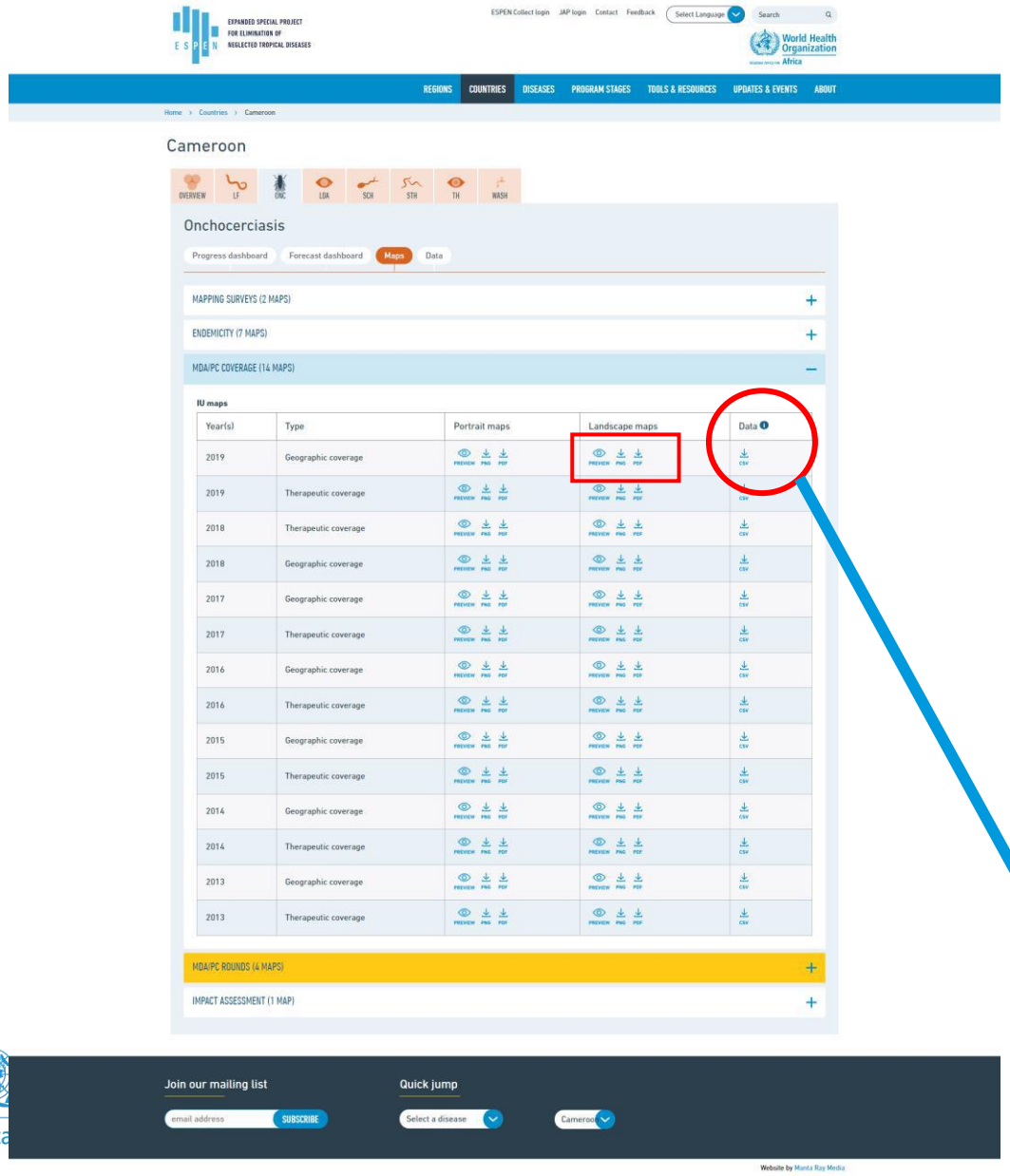


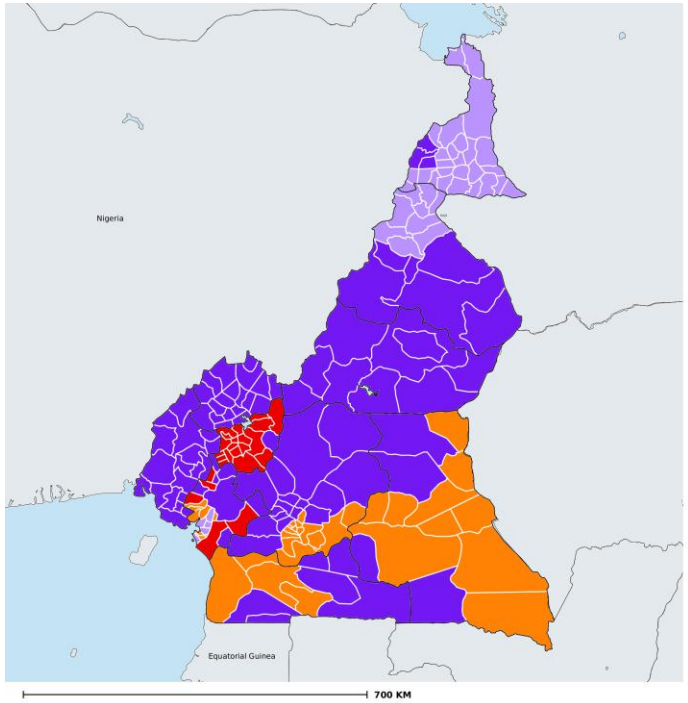
National coverage: % Population requiring treatment that received treatment
Programme coverage: % Population targeted by the programme that received treatment

African

Country level maps

https://espen.afro.who.int/





Cameroon (2019)

Geographic MDA/PC coverage of Onchocerciasis

Onchocerciasis > MDA/PC coverage > Geographic coverage

- Unknown / consider Oncho Elimination mapping
- Not suitable for Onchocerciasis
- Unknown (under LF MDA)
- MDA delivered
- MDA not delivered - Endemic
- Under post-intervention surveillance
- No data available

Boundaries, names and designations used here do not imply expression of WHO opinion concerning the legal status of any country, territory or area, or of its authorities, or concerning delimitation of frontiers or boundaries. Dotted / dashed lines represent approximate border lines for which there may not yet be full agreement.

Data Source:
Data provided by health ministries to ESPEN through WHO reporting processes.
All reasonable precautions have been taken to verify this information

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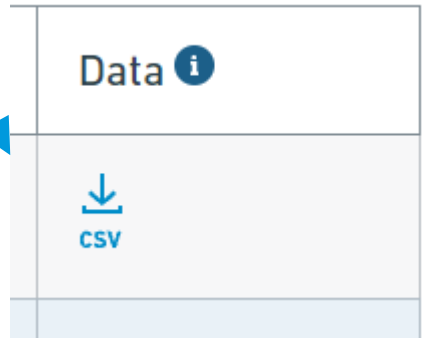
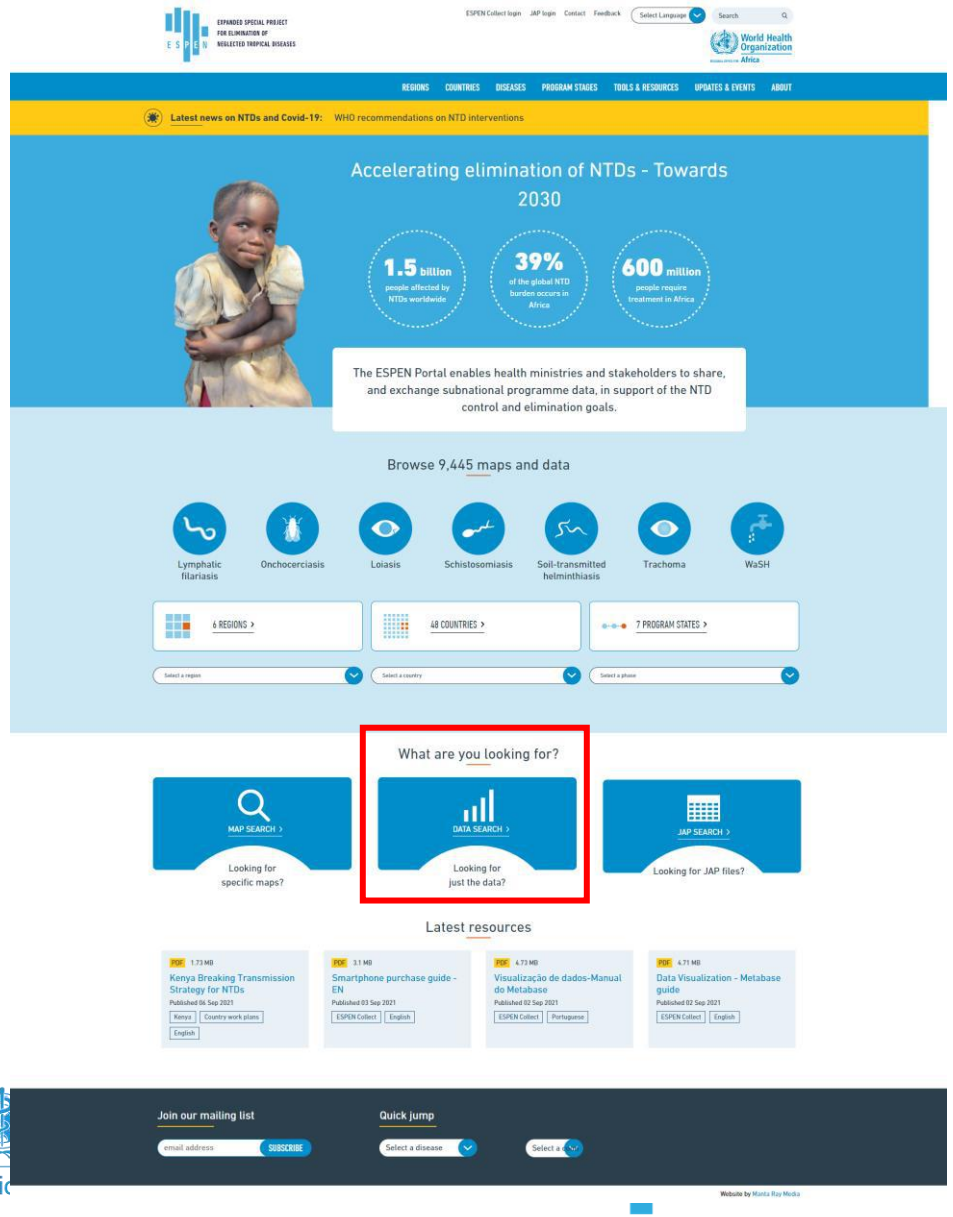
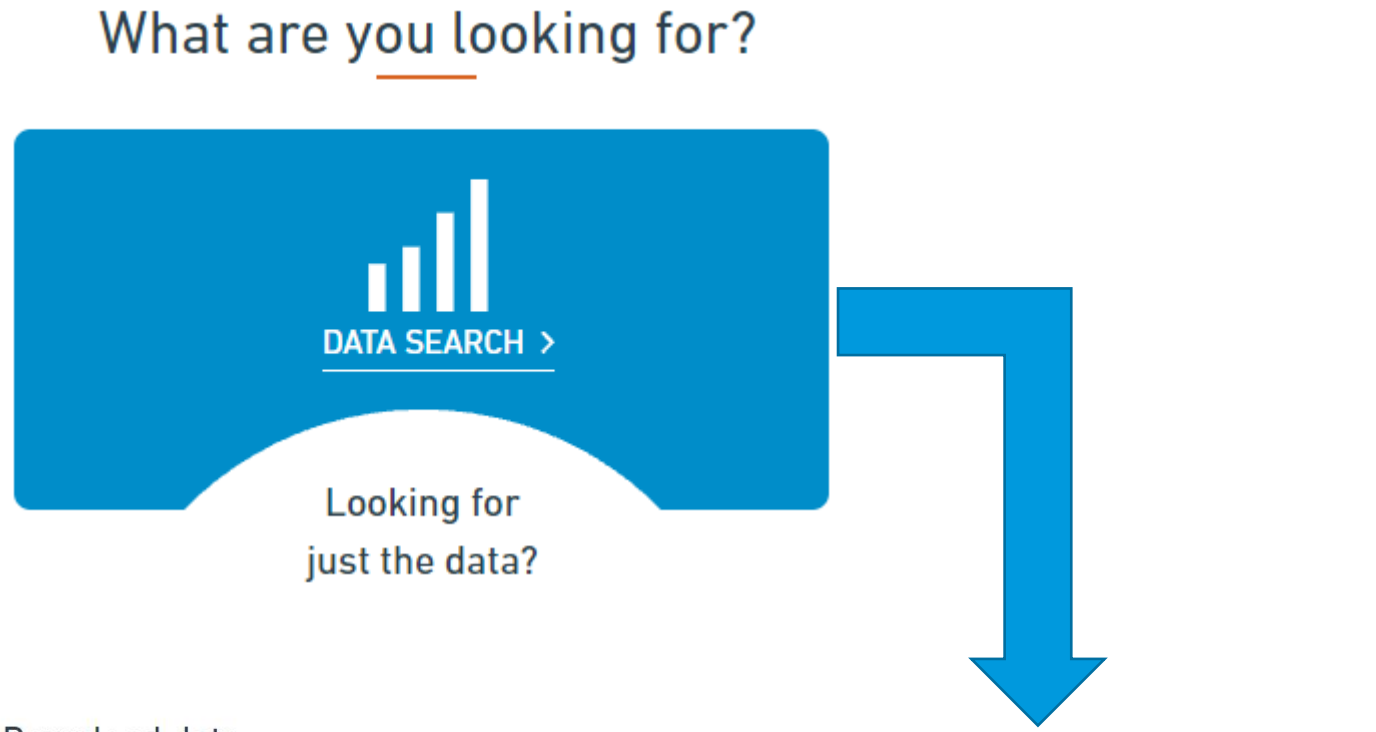
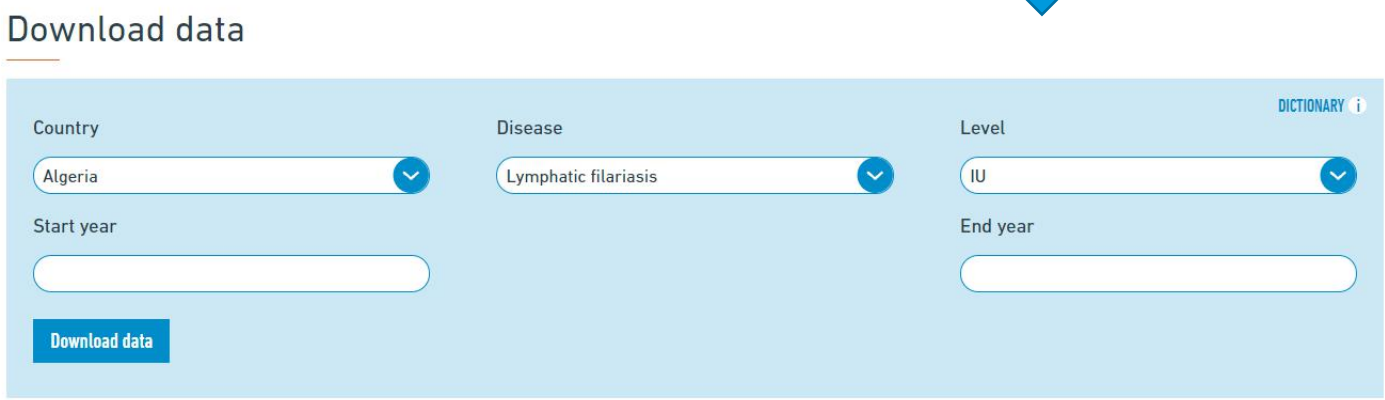


Data query tool

https://espen.afro.who.int/

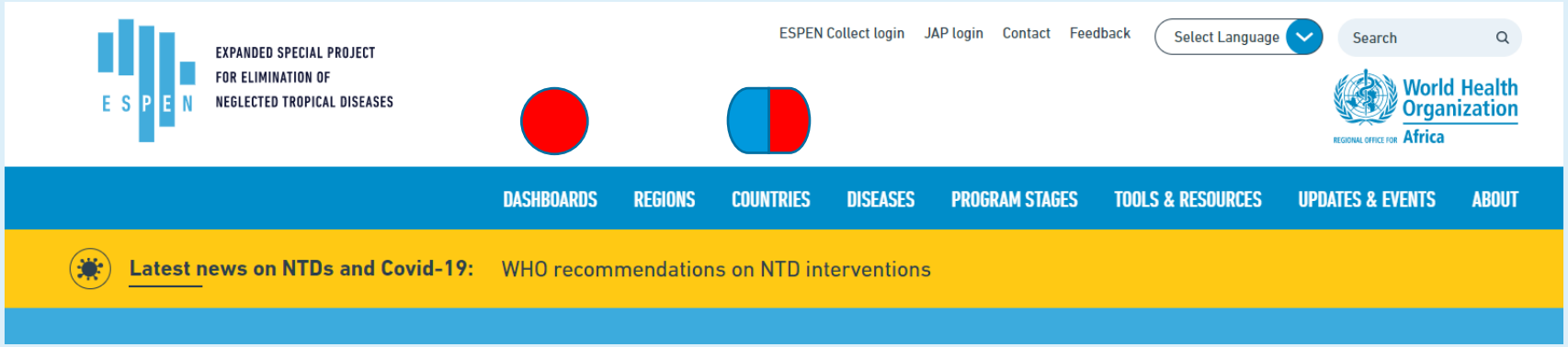






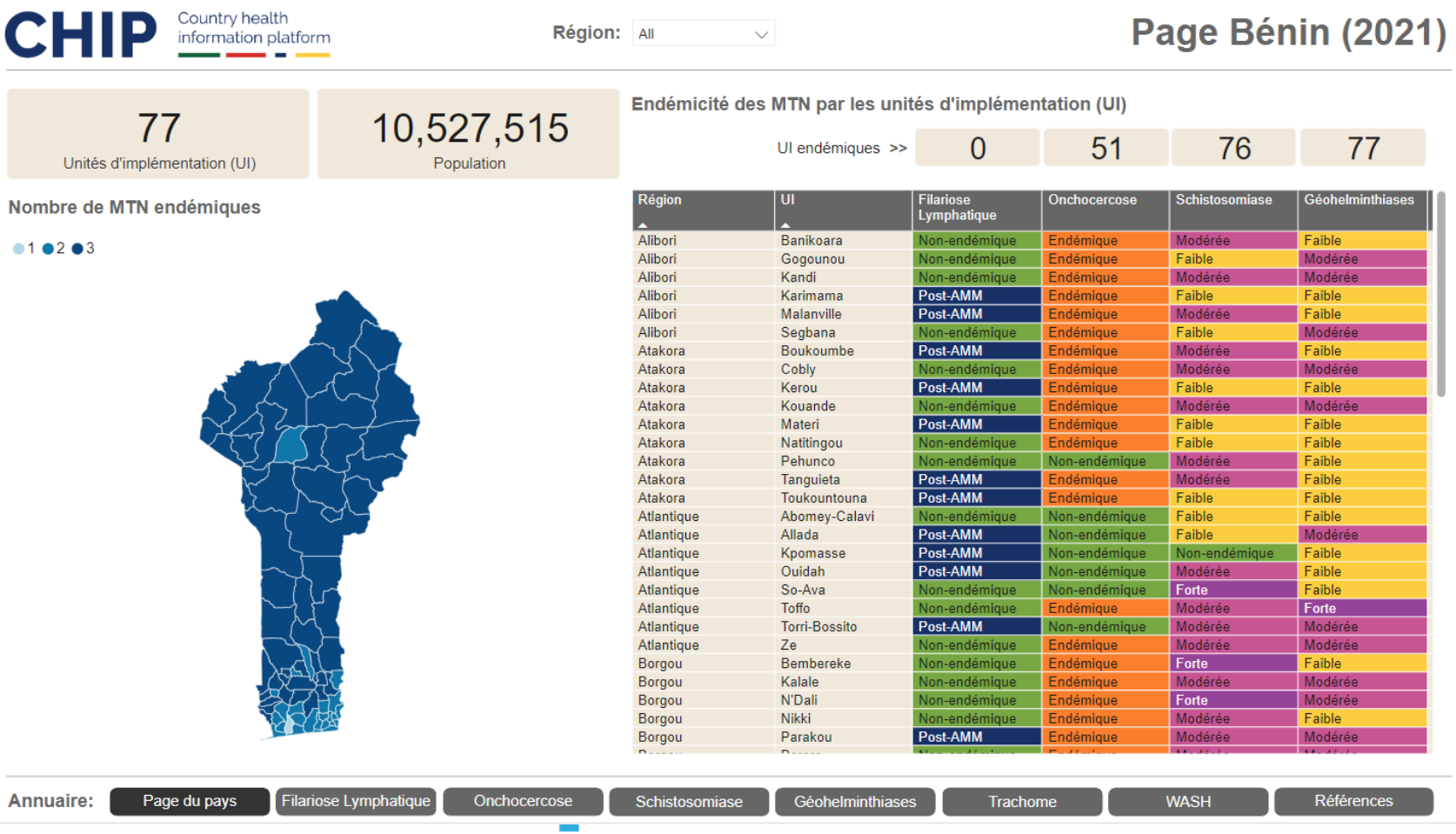
ESPEN NTD Portal:

Analytical Dashboards



Country Health Information Platform (CHIP)

The **Country Health Information Platform (CHIP)** is a business intelligence software tool, using Microsoft Power BI, which integrates with data on the ESPEN NTD Portal and presents this data to users through a fully **interactive, web-based dashboard**.



CHIP Country health information platform

https://espen.afro.who.int/tools-resources/chip

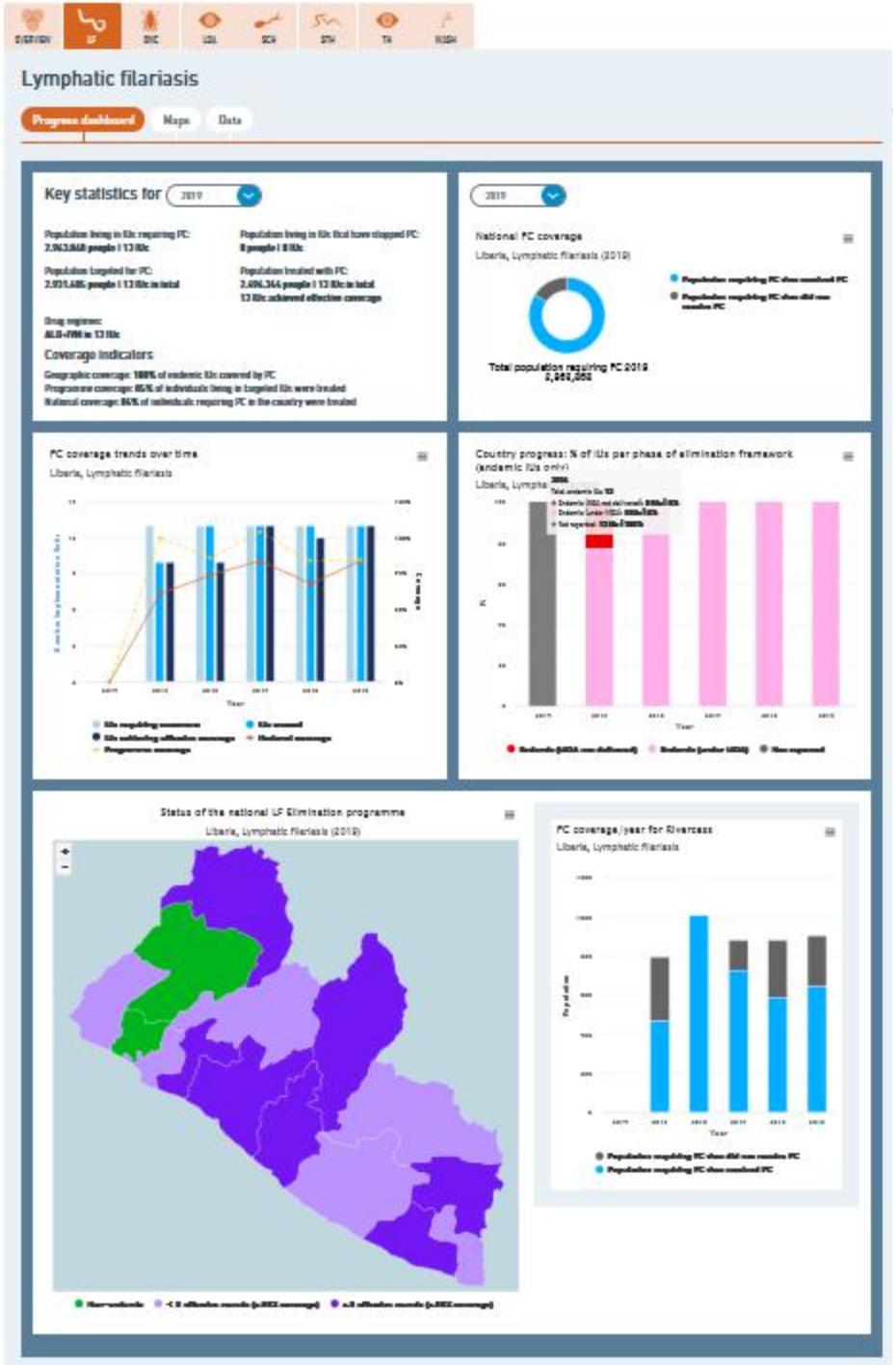
Progression dashboards

Analytical Dashboards for Monitoring Progress:

1. Disease-specific dashboards under COUNTRY tab: **progress on PC since 2014**
2. Key statistics by year including population and IU level summaries
3. Simple graphic to emphasis national coverage by year
4. Detailed graphics highlighting:

   trends in population and IU coverage over time

   Country progress along elimination framework by IU
5. Interactive map showing treatment coverage over time (PC rounds map) with linked IU-level PC treatment coverage graph
6. Chart and plots are downloadable.



World Health Organization African Region

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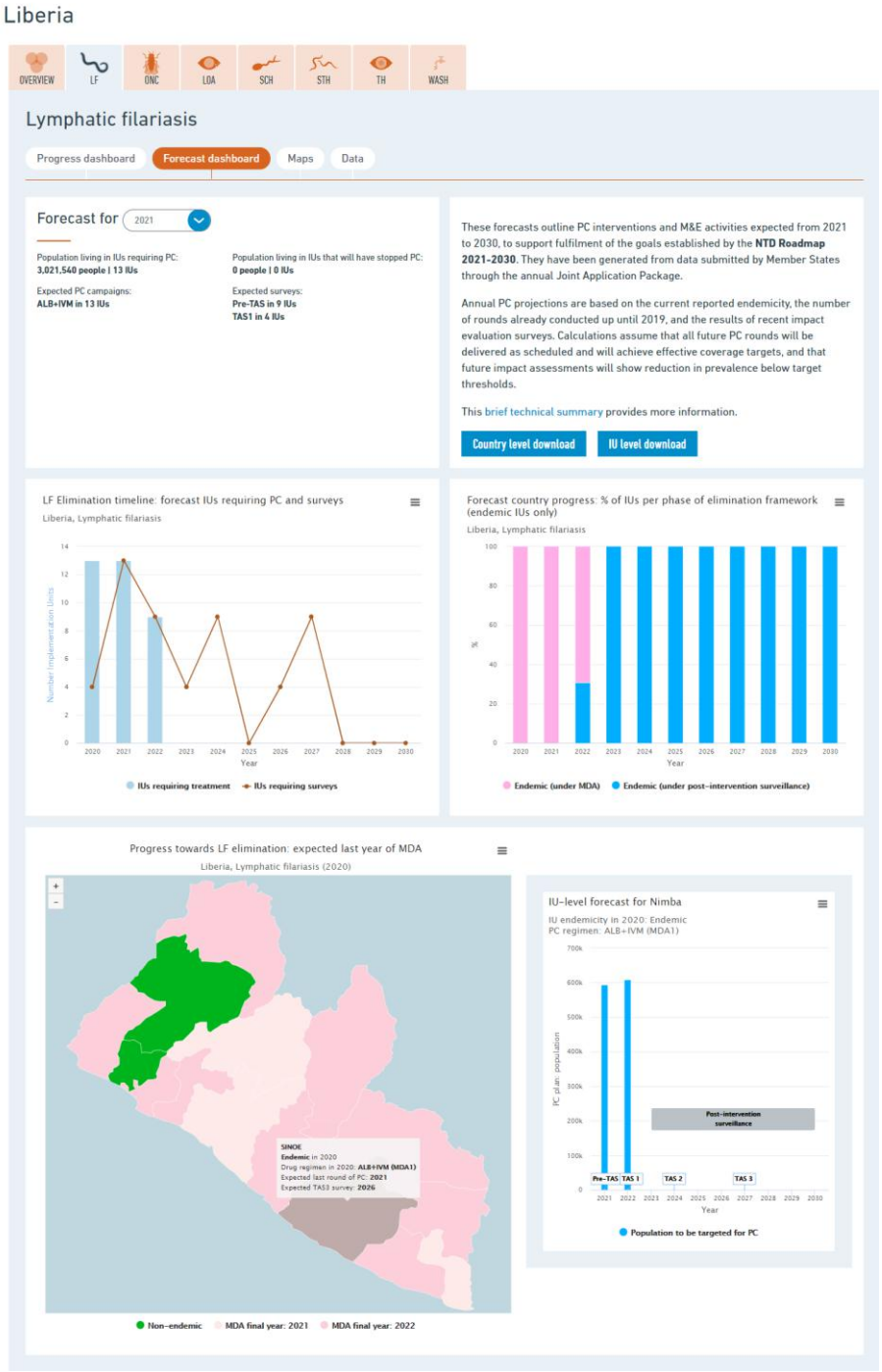
Projections dashboards

Analytical Dashboards with Projections:

1. Under COUNTRY tab and DASHBOARDS tab: dashboards for disease projections till 2030.
2. Yearly stats: MDA & survey needs until 2030.
3. Assumptions: Successful impact assessment means transmission interruption and achieved effective coverage on forecasted MDA.
4. Graphics: Disease-specific elimination timelines.
5. Map: MDA count for elimination + linked IU-level PC treatment & survey needs.
6. Charts & plots: Downloadable.
7. Projection data: Downloadable (country & IU summaries).



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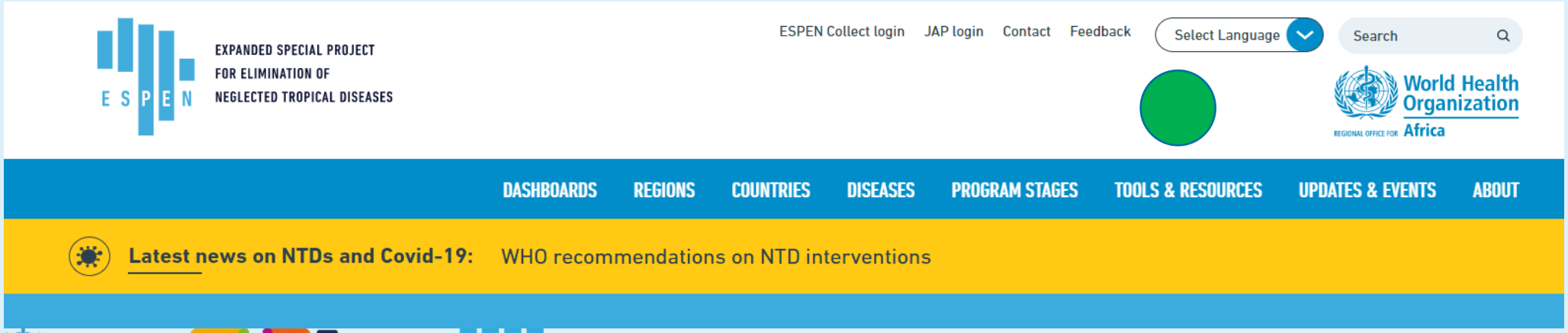
ESPEN NTD Portal:

ESPEN Collect & JAP Upload tool



ESPEN Collect

EXPANDED SPECIAL PROJECT FOR ELIMINATION OF NEGLECTED TROPICAL DISEASES

ESPEN Collect login | JAP Upload Tool login | Contact | Feedback | Select Language | Search

World Health Organization REGIONAL OFFICE FOR Africa

DASHBOARDS | REGIONS | COUNTRIES | DISEASES | PROGRAM STAGES | TOOLS & RESOURCES | UPDATES & EVENTS | ABOUT

Home > Tools & resources > ESPEN Collect

ESPEN Collect

In coordination with partners, Ministries of health planning disease specific assessments related to Neglected Tropical Diseases are encouraged to register to use ESPEN Collect for mobile data collection.

What is ESPEN Collect?

ESPEN Collect is a free mobile data collection tool for the national programs (Ministry of Health: MoH), Neglected Tropical Disease related NGOs, partners... in World Health Organization's African region.

ESPEN Collect is simple to use and train. Launched in August 2018, it is based on ODK (Open Data Kit) architecture.

Designed to collect data for the four Neglected Tropical Diseases responsive to Preventive Chemotherapy (PC-NTDs):

- Lymphatic Filariasis (LF)
- Onchocerciasis (Oncho)
- Schistosomiasis (SCH)
- Soil-transmitted Helminthiasis (STH)

ESPEN Collect currently supports disease-specific surveys that collect data to populate the JAP (Joint Application Package), as well as non-disease specific Coverage surveys.

How to download?

Submit a request

Register now / Login

ESPEN Collect registrations summary

World Health Organization African Region

ESPEN Collect

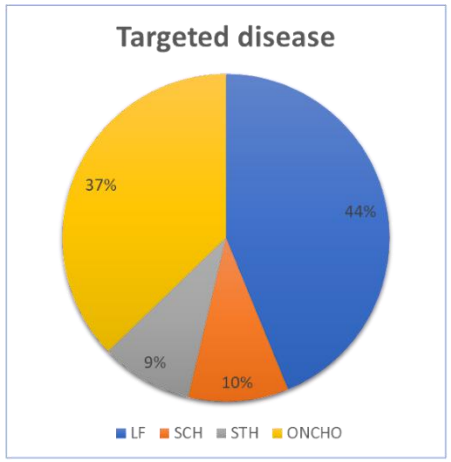
105 surveys

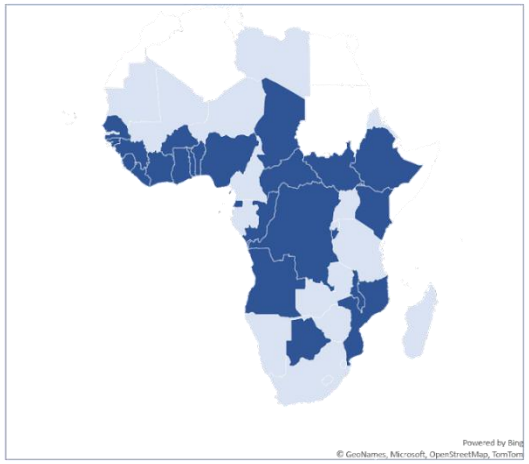
25 countries

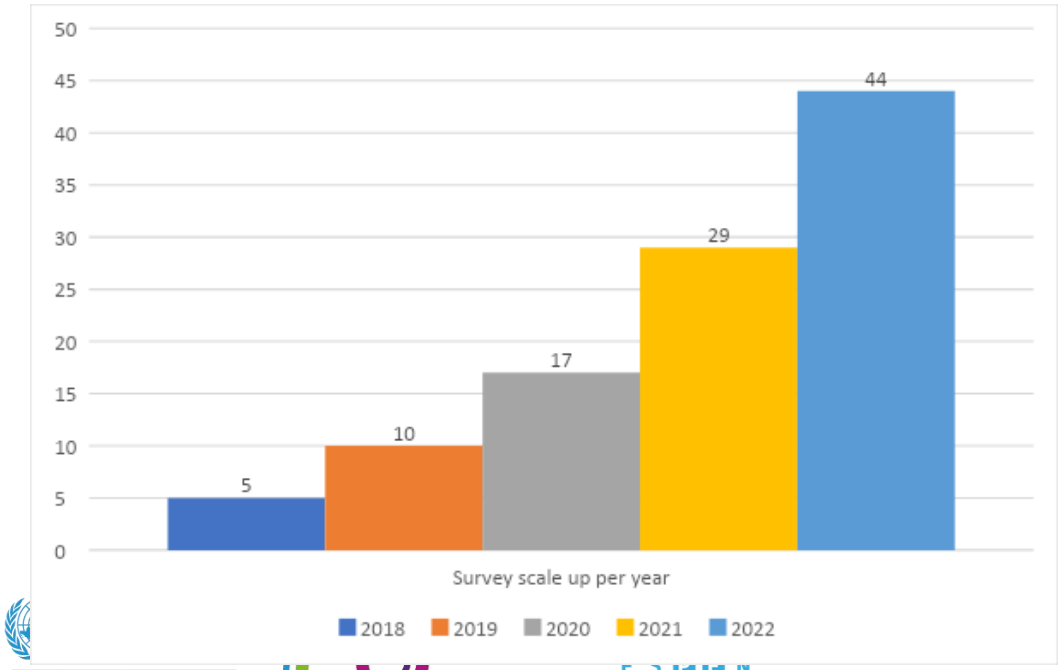
124 smartphones purchased and distributed

19,205 sites

1,138 people trained

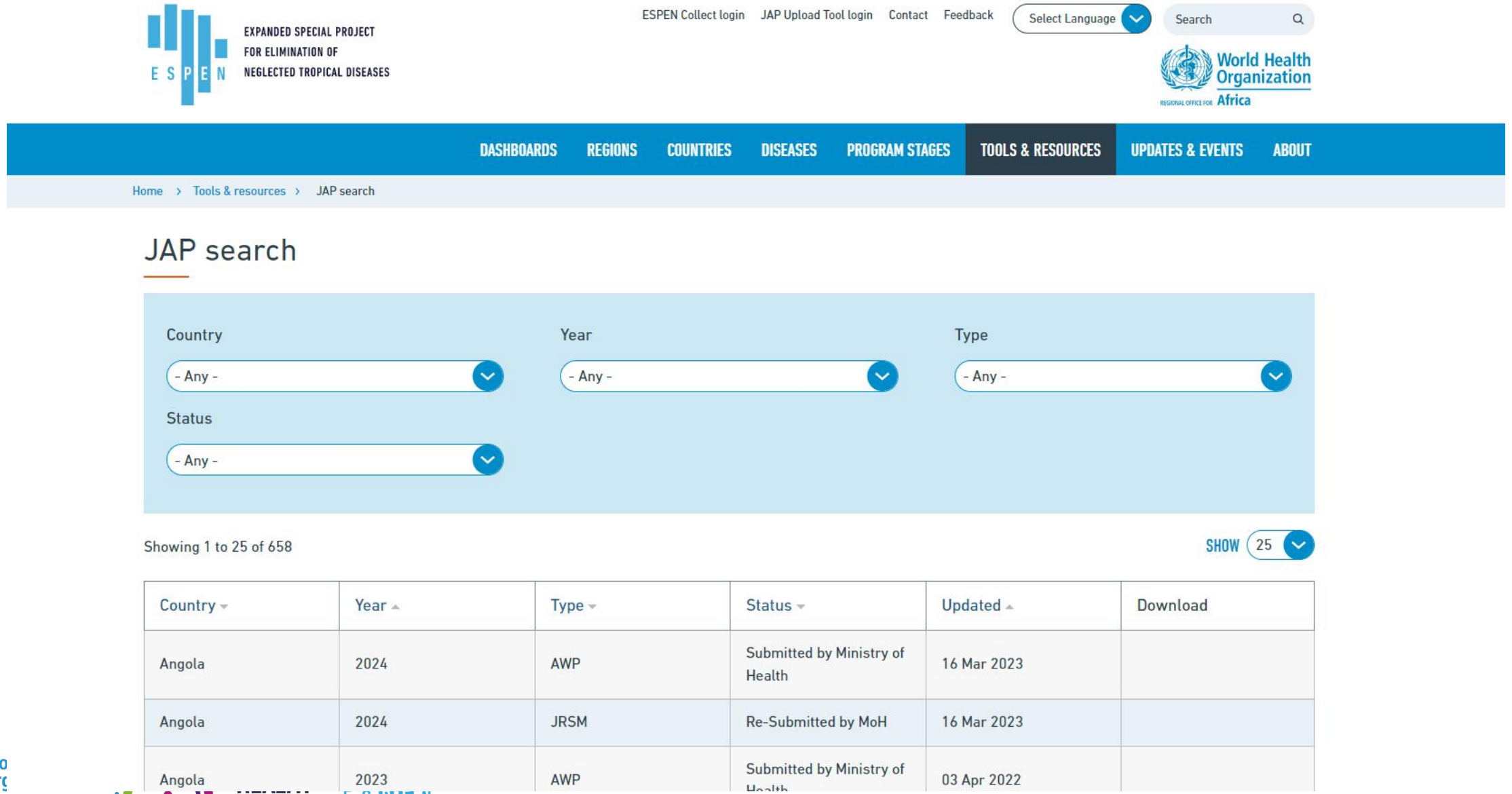






- ESPEN Collect received 105 support requests from 25 countries, highlighting the platform's growing recognition and demand.
- In 2022, 44 surveys from 19 countries received comprehensive support through ESPEN Collect.
- ESPEN Collect collaborated with five partner organizations, namely Sightsavers, FHI360, KEMRI, HKI, and Crown Agents.
- ESPEN Collect expanded to five new countries in 2022: Chad, DR Congo, Guinea Bissau, Kenya, and Malawi.
- ESPEN Collect facilitated data collection from 546 districts and 5,845 sites, including schools and villages.

JAP Upload Tool / JAP Search



African Region

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ESPEN NTD Portal:

Futures developments

Challenges & Ongoing Developments

CHALLENGES - LIMITATIONS

- Timeliness to release new data – conditioned to JAP submission
- Growing in complexity and functionalities
- Focused on endemicity and treatment interventions but lacking data on morbidity management or supply chain management
- Lack of dashboard analytics for trachoma
- Conceived as a data repository and given less attention to contents and communication aspects
- Existing projections based exclusively in existing empirical data and disease-specific assumptions
- Some resources such as map generator and dashboards not translated to other languages (French, Portuguese)
- Repository static maps

ONGOING & FUTURE DEVELOPMENTS

- Streamlined the data processing country-by-country, to make sure data is released as it comes to the ESPEN system
- Develop training materials for users to learn on navigation, data search, data extraction, and utilization of resources to guide programmatic decisions.
- Incorporate morbidity indicators and information concerning medicine request, needs and delivered.
- Develop analytical dashboards for trachoma indicators
- Architectural changes on the Portal (v3.0) to make easier the navigation, data exploration and find NTD related contents.
- Improve ESPEN projections by incorporated modelled data (transmission models) → commodities estimates
- Precise translation to multiple languages of ALL resources
- On-the-fly generation of maps upon demand

Tracking Funding Availability – Inquiry

- Two cohorts of inquiries:
  - ✓ November 2022 – January 2023 ➔ planned interventions in 2023
  - ✓ April 2023 – on (2024) ➔ planned interventions in 2024
- Based on planned MDA and Surveys submitted through JRSM 2023 & JRSM 2024
- Inquiry about funding availability for planned MDA & M&E **at IU level**
  - ✓ Funding secured
  - ✓ MoH funding allocated
  - ✓ Partners supporting/covering
- 26/44 (2023) & 27/44 (2024) countries reported funding availability
- 20 countries have submitted information for 2023 and 2024

Tracking Funding Availability – Inquiry

Total summaries for 26 and 27 countries reporting for 2023 and 2024, respectively

Disease	2023		2024	
	No. IU MDA	Funding gap MDA (%)	No. IU MDA	Funding gap MDA (%)
Lymphatic filariasis	737	12%	490	35%
Onchocerciasis	1101	11%	939	10%
STH	1737	35%	1240	21%
Schistosomiasis	1821	24%	1788	25%

Total summaries for 20 countries reporting for 2023 and 2024

Disease	2023		2024	
	No. IU MDA	Funding gap MDA (%)	No. IU MDA	Funding gap MDA (%)
Lymphatic filariasis	667	11%	309	18%
Onchocerciasis	807	13%	852	6%
STH	996	51%	926	11%
Schistosomiasis	1342	23%	1435	15%

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Tracking Funding Availability – Inquiry

	2023		2024	
	26 countries		25 countries*	
	Areas that have NOT secured funding yet	Areas that have secured funding	Areas that have NOT secured funding yet	Areas that have secured funding
Population Requiring PC	91,072,284	318,976,198	93,843,113	211,753,859
Population Requiring PC for LF/ONC	37,788,061	230,391,600	34,764,107	92,371,640
Population Requiring PC for STH/SCH	58,733,257	170,010,170	66,043,091	171,067,288
Cost Estimate PC	$ 45,536,142.00	$ 159,488,099.00	$ 46,921,556.50	$ 105,876,929.50
Cost Estimate PC for LF/ONC	$ 18,894,030.50	$ 115,195,800.00	$ 17,382,053.50	$ 46,185,820.00
Cost Estimate PC for STH/SCH	$ 29,366,628.50	$ 85,005,085.00	$ 33,021,545.50	$ 85,533,644.00

Assuming average cost of US$ 0.5 per person treated
** JRSM report for Eq Guinea & Nigeria not yet uploaded to the ESPEN database, and 1 country (Cameroon) have not yet submitted the funding information.*

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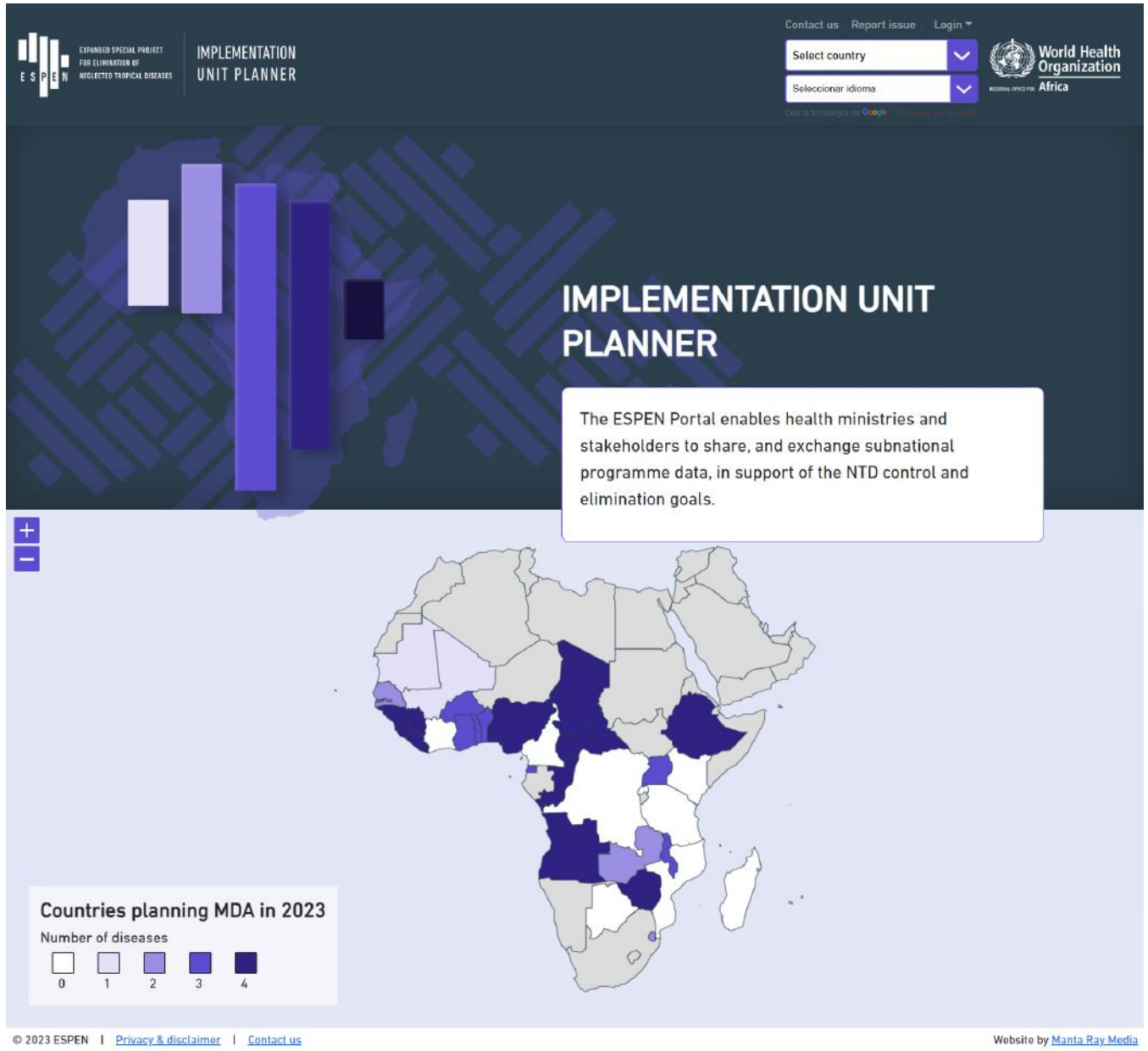
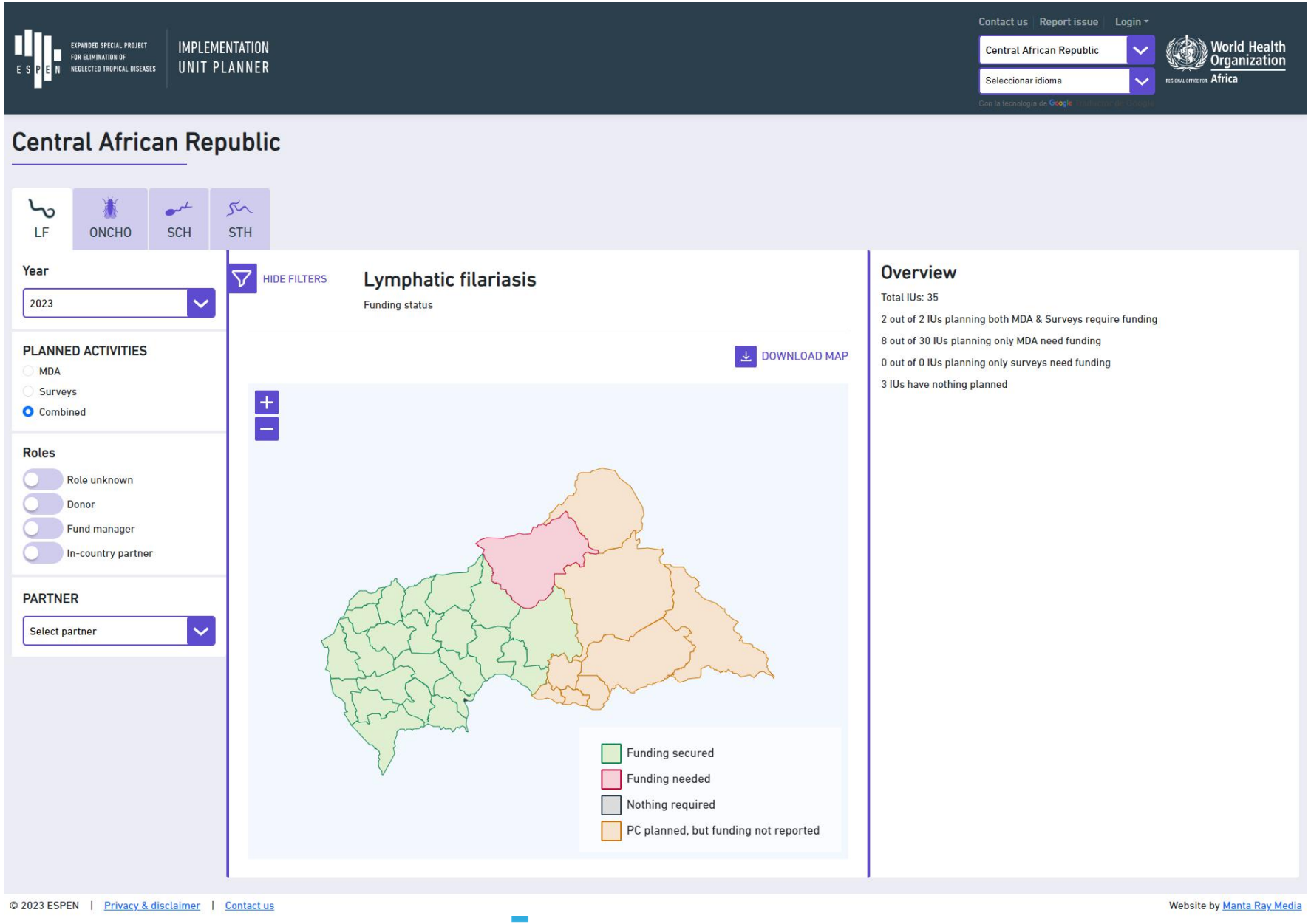
Tracking Funding Availability – ESPEN IU Planner v1.0



Principles/Objectives

- Identify funding gaps
- Confirm or reject country assumptions on funding support for planned actions
- Clarify stakeholder roles (donors/implementers)
- Edit endemicity data or add survey needs
- Registration and edit permissions provided by ESPEN
- Currently beta version under piloting
- Launch expected in January 2014

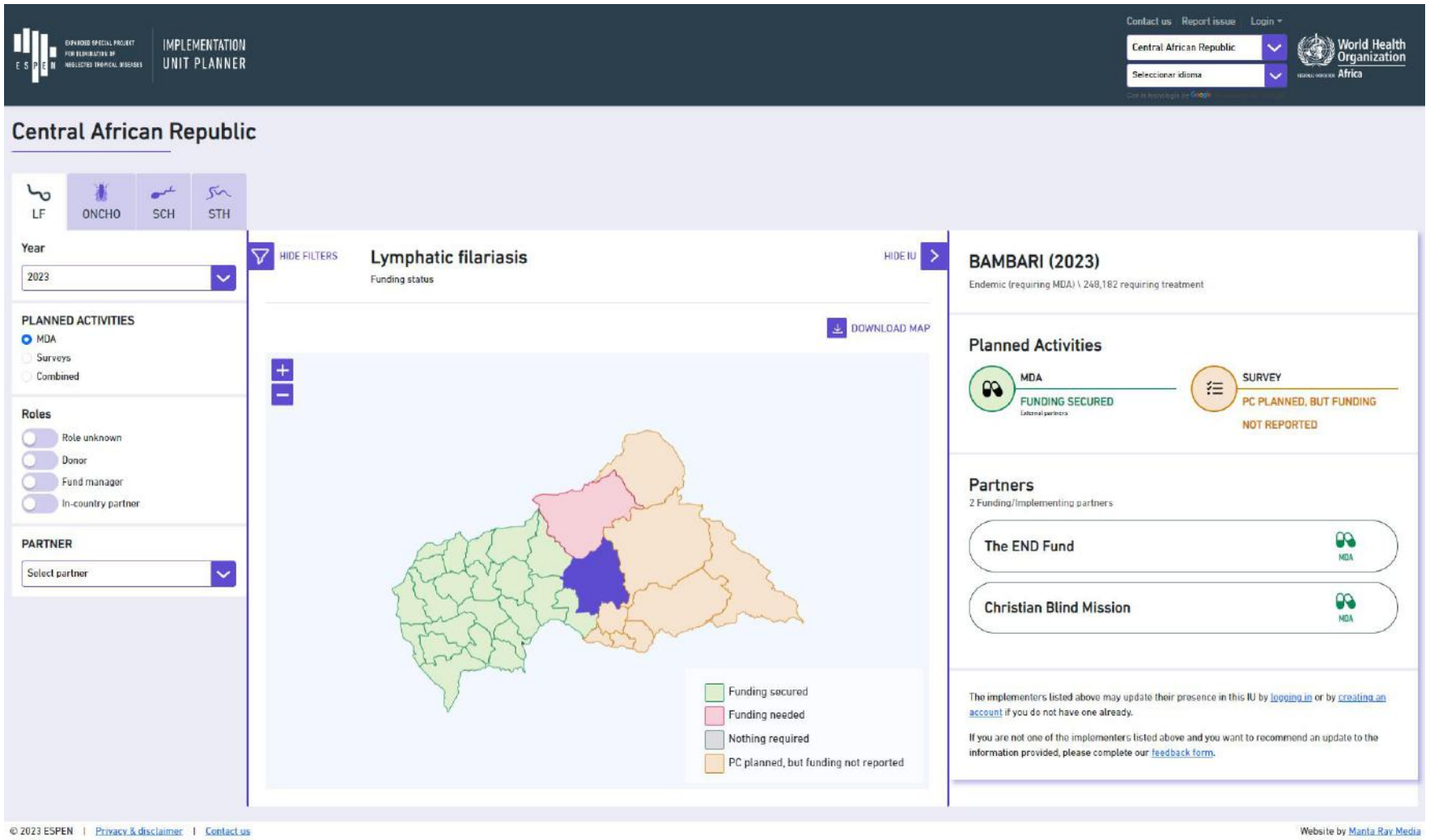
Tracking Funding Availability – ESPEN IU Planner



Functionalities

- Visualizing confirmed support
- Overview funding committed and planned MDA/Surveys
- Pop-ups window with summary information when clicking on an IU
- Overview landing page with summaries of funding availability, partners, etc. (*under development*)
- Selection by multiple options: activity, partner, role, etc.

Tracking Funding Availability – ESPEN IU Planner



Functionalities for partner (after log in)

- Revise information provided by country programmes
- Enter the role played: donor, fund manager, in-country partner
- Option to download CSV with the preliminary information by IU for easing data entry
- Possibility to confirm long-term support beyond the year specified

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ESPEN NTD Portal:

Additional Country Progress Analytics

Developed with the support of

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African Region

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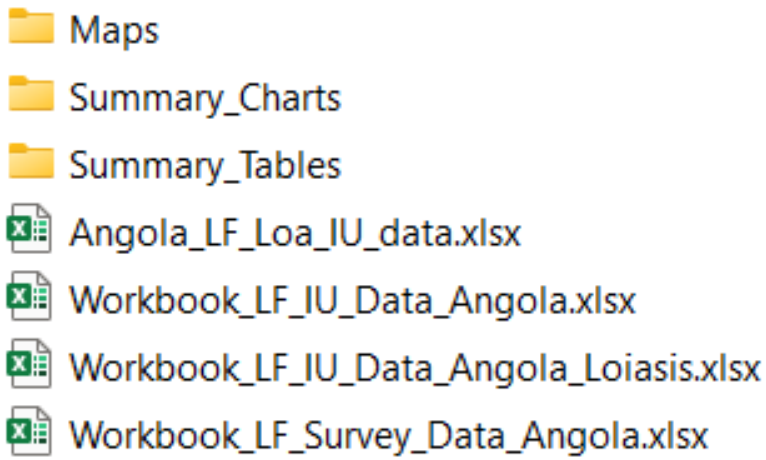
Additional Supporting Data Tools – Country data packs

Ex. Lymphatic filariasis - Angola



Maps

- IU level Endemicity maps since 2014
- IU level MDA coverage since 2014
- IU level Cumulative rounds by period: 2015, 2018, 2020, 2021 & 2022

Summary Charts (2017 – 2022)

- Plot distribution endemicity
- Plot treatment needs, delivered, epidemiological & geographical coverage

Summary Tables (2017 – 2022)

- Demographics
- No. IU by endemicity category
- Treatment detailed indicators

Workbooks (including data dictionaries)

- IU level summary indicators since 2014
- All surveys available under ESPEN db
- Aggregated prevalence estimates based on surveys

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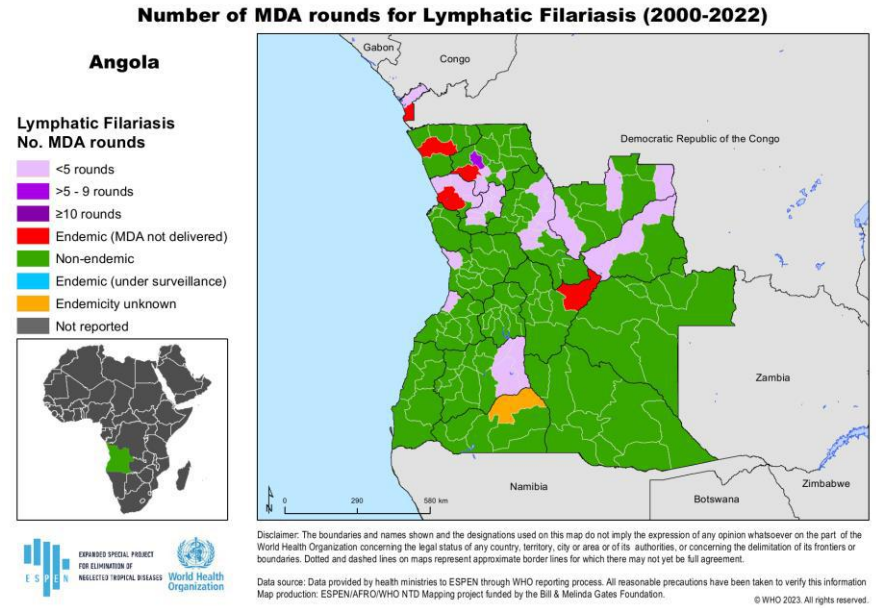
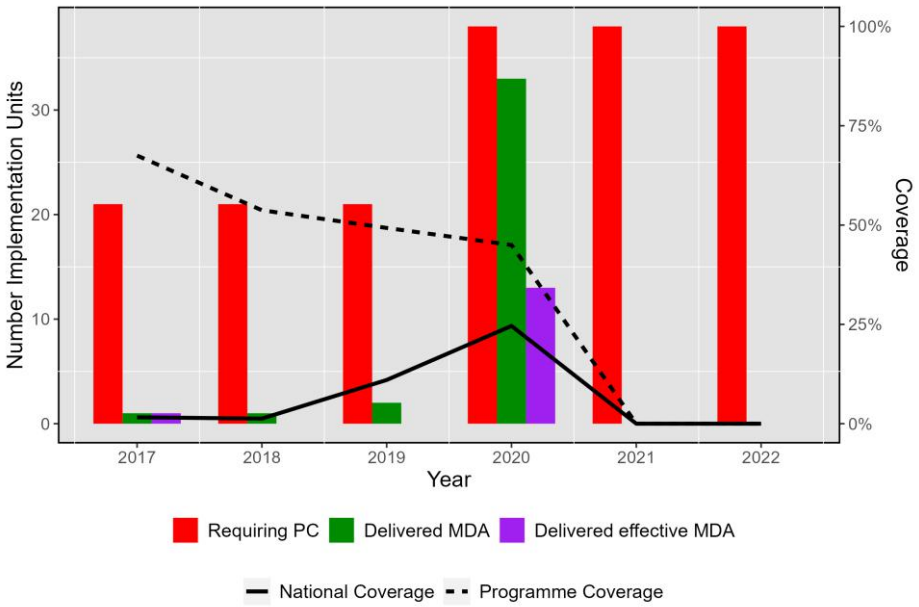
Additional Supporting Data Tools – Country data packs





Indicators / Year	Year					
	2017	2018	2019	2020	2021	2022
Population requiring MDA	2,266,800	2,331,399	2,394,342	3,819,439	3,979,637	4,105,407
Population no longer requiring MDA	0	0	0	0	0	0
Population targeted for MDA	53,774	55,306	534,899	2,088,781	0	0
Population treated	36,292	29,712	263,549	939,509	0	0
No. IU implementing MDA	1	1	2	33	0	0
No. IU achieving effective coverage	1	0	0	13	0	0
Geographical Coverage	4.8%	4.8%	9.5%	86.8%	0.0%	0.0%
Programme Coverage	67.5%	53.7%	49.3%	45.0%	0.0%	0.0%
National Coverage	1.6%	1.3%	11.0%	24.6%	0.0%	0.0%
No. IU delivering ALB+DEC	0	0	0	0	0	0
No. IU delivering ALB+IVM	1	1	2	33	0	0
No. IU delivering 2XALB	0	0	0	0	0	0
No. IU delivering IDA	0	0	0	0	0	0

MDA: mass drug administration

Geographical coverage: No. IU implementing MDA/No. IU requiring MDA

Programme Coverage: Population treated/Population targeted

National Coverage: Population treated/Population requiring treatment

NA: Data not available

Additional Supporting Data Tools – Dashboard (tailored)

1. Country Dashboard

Country-disease summary indicators to measure country progress and performance in given disease

Country Report:
Lymphatic Filariasis

Use the filters below to see your data of interest

ESPEN Priority Country (LF): (All) | Country: (All) | Year: (Multiple values)

		Disease Mapping			Coverage			Treatment Progress	
Country	Year	% IU baseline	Iu Mda	% Req Treat	Poptreat	% Req Reached	% Eff Coverage	% IU stopping mda	% No Longer Req
Angola	2014	92	0	8	0	0		0	0
	2015	92	0	8	0	0		0	0
	2016	93	1	7	16,701	1	0	0	0
	2017	93	1	8	36,292	2	100	0	0
	2018	93	1	8	29,712	1	0	0	0
	2019	93	2	8	263,549	11	0	0	0
	2020	99	33	12	939,509	25	39	0	0
	2021	99	0	12	0	0		0	0
	2022	99	0	12	0	0		0	0
Benin	2014	100	25	27	1,273,314	46	40	48	48
	2015	100	25	27	1,631,338	56	60	48	48
	2016	100	25	27	1,686,564	56	28	48	48
	2017	100	25	24	1,980,880	82	100	48	52
	2018	100	15	14	1,197,487	86	100	67	71
	2019	100	4	3	251,369	85	100	92	94
	2020	100	4	3	262,386	83	100	92	94
	2021	100	0	0	0			100	100
	2022	100	0	0	0			100	100
Burkina Faso	2014	100	41	65	8,202,072	70	100	35	35
	2015	100	30	45	5,393,933	65	100	52	55
	2016	100	31	45	5,485,410	64	100	56	55
	2017	100	24	27	4,229,398	80	100	66	70

2. RPRG feedback tool

Standardized feedback tool for experts to provide recommendations and feedback

Back to Table of Contents

	Action needed	Recommendation	Comments
Disease Mapping/Endemicity	[drop down: yes/no]	[tbd drop down or open?]	[Open]
Overall	Yes		
Mapping Surveys	No		
Refinement Mapping	Yes	Refinement mapping to be completed	No clear endemicit suspected Ius w/ LI
Coverage	Action needed	Recommendation	Comments
Overall	No		
MDA Quality	No		
MDA Supervision	No		
Target Population	No		
Treatment Progress	Action needed	Recommendation	Comments
Overall	Yes		
MDA Scheme	Yes	Add DEC to regimen	
Drug Efficacy	Yes	Investigate efficacy of drug regimen	More than 15 roun effective MDA but burden
M&E Progress	Action needed	Recommendation	Comments
Overall	No		Survey needs met
Impact Assessments	No		
Suspected Transmission Suppressed (Pre-STOP)	No		
Suspected Transmission Interrupted (STOP)	No		
Post-intervention Surveillance	No		
Implementation & Support	Action needed	Recommendation	Comments

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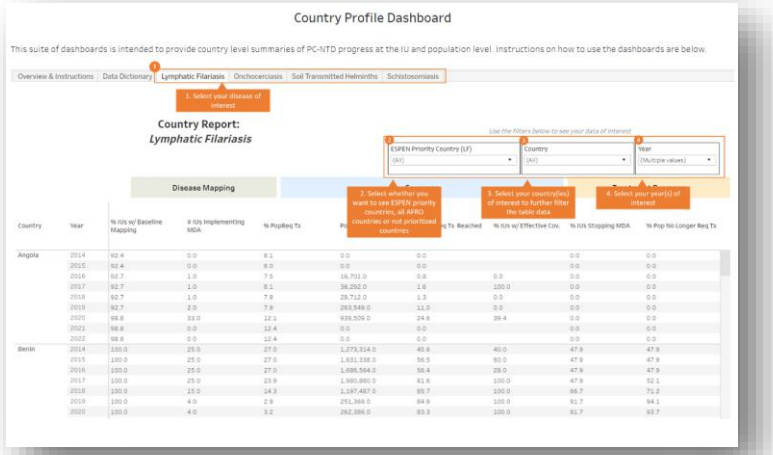
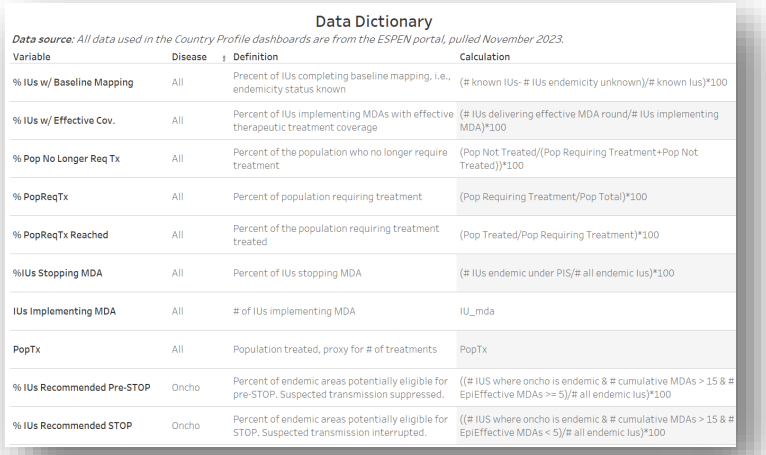
Additional Supporting Data Tools – Dashboard (tailored)

- **What is it:** dashboards is intended to provide country level summaries of PC-NTD progress at the IU and population level.
- **How to access:** [Link]
- **How to navigate:** There are six sheets within the dashboard, they include:

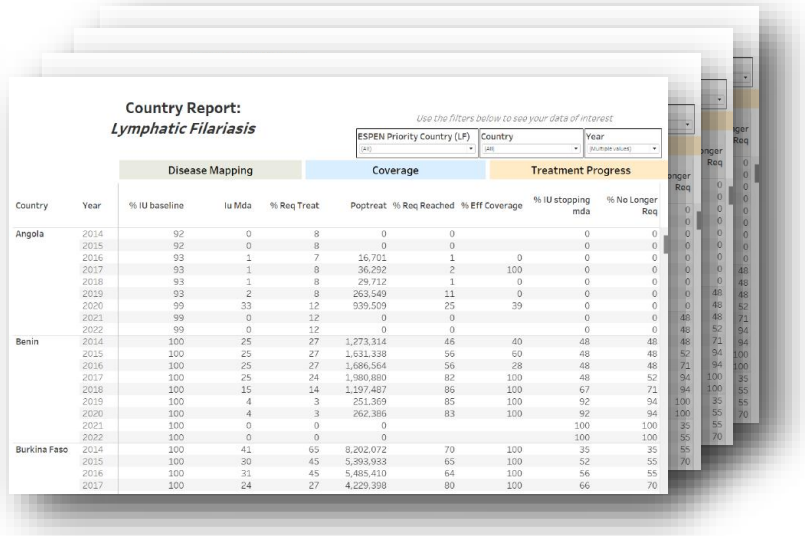
(1) Overview & Instructions



(2) Data dictionary



(3-6) Disease-specific country indicators (LF, Oncho, STH, SCH)



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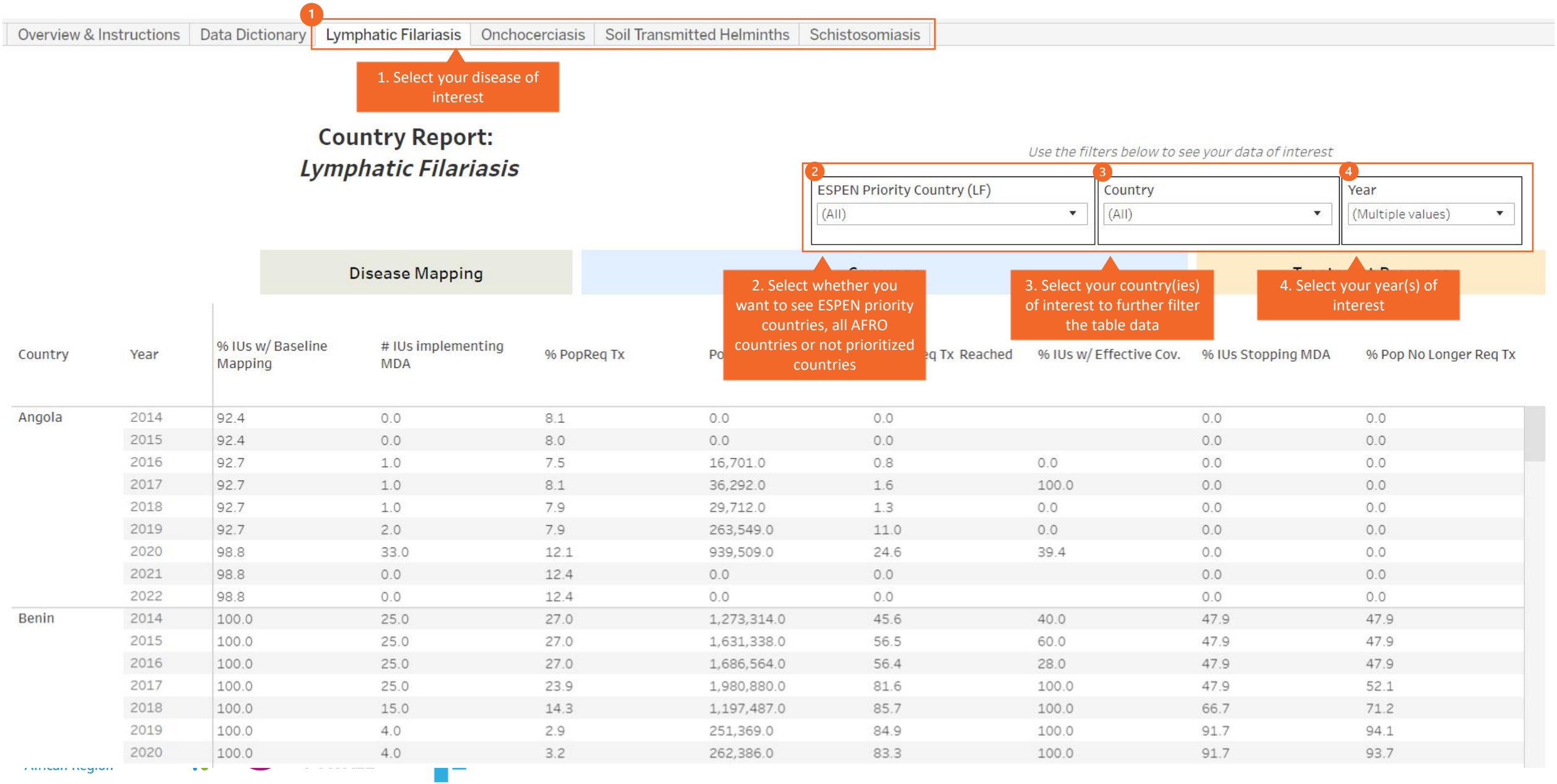
Additional Supporting Data Tools – Dashboards (tailored)

Data Dictionary

Data source: *All data used in the Country Profile dashboards are from the ESPEN portal, pulled November 2023.*

Variable	Disease	Definition	Calculation
% IUs w/ Baseline Mapping	All	Precent of IUs completing baseline mapping, i.e., endemicity status known	(# known IUs- # IUs endemicity unknown)/# known Ius)*100
% IUs w/ Effective Cov.	All	Percent of IUs implementing MDAs with effective therapeutic treatment coverage	(# IUs delivering effective MDA round/# IUs implementing MDA)*100
% Pop No Longer Req Tx	All	Percent of the population who no longer require treatment	(Pop Not Treated/(Pop Requiring Treatment+Pop Not Treated))*100
% PopReqTx	All	Percent of population requiring treatment	(Pop Requiring Treatment/Pop Total)*100
% PopReqTx Reached	All	Percent of the population requiring treatment treated	(Pop Treated/Pop Requiring Treatment)*100
%IUs Stopping MDA	All	Percent of IUs stopping MDA	(# IUs endemic under PIS/# all endemic Ius)*100
IUs Implementing MDA	All	# of IUs implementing MDA	IU_mda
PopTx	All	Population treated, proxy for # of treatments	PopTx
% IUs Recommended Pre-STOP	Oncho	Percent of endemic areas potentially eligible for pre-STOP. Suspected transmission suppressed.	((# IUS where oncho is endemic & # cumulative MDAs > 15 & # EpiEffective MDAs >= 5)/# all endemic Ius)*100
% IUs Recommended STOP	Oncho	Percent of endemic areas potentially eligible for STOP. Suspected transmission interrupted.	((# IUS where oncho is endemic & # cumulative MDAs > 15 & # EpiEffective MDAs < 5)/# all endemic Ius)*100

Additional Supporting Data Tools – Dashboard (tailored)



Country	Year	% IUs w/ Baseline Mapping	# IUs implementing MDA	% PopReq Tx	Po	eq Tx Reached	% IUs w/ Effective Cov.	% IUs Stopping MDA	% Pop No Longer Req Tx
Angola	2014	92.4	0.0	8.1	0.0	0.0		0.0	0.0
	2015	92.4	0.0	8.0	0.0	0.0		0.0	0.0
	2016	92.7	1.0	7.5	16,701.0	0.8	0.0	0.0	0.0
	2017	92.7	1.0	8.1	36,292.0	1.6	100.0	0.0	0.0
	2018	92.7	1.0	7.9	29,712.0	1.3	0.0	0.0	0.0
	2019	92.7	2.0	7.9	263,549.0	11.0	0.0	0.0	0.0
	2020	98.8	33.0	12.1	939,509.0	24.6	39.4	0.0	0.0
	2021	98.8	0.0	12.4	0.0	0.0		0.0	0.0
	2022	98.8	0.0	12.4	0.0	0.0		0.0	0.0
Benin	2014	100.0	25.0	27.0	1,273,314.0	45.6	40.0	47.9	47.9
	2015	100.0	25.0	27.0	1,631,338.0	56.5	60.0	47.9	47.9
	2016	100.0	25.0	27.0	1,686,564.0	56.4	28.0	47.9	47.9
	2017	100.0	25.0	23.9	1,980,880.0	81.6	100.0	47.9	52.1
	2018	100.0	15.0	14.3	1,197,487.0	85.7	100.0	66.7	71.2
	2019	100.0	4.0	2.9	251,369.0	84.9	100.0	91.7	94.1
	2020	100.0	4.0	3.2	262,386.0	83.3	100.0	91.7	93.7

Additional Supporting Data Tools – Dashboard (tailored)

Feedback Form

- **What is it:** Standardized feedback tool for experts to provide recommendations and feedback for priority countries in the Country Dashboard across the six buckets of data shown.
- **How to access:** [Link]
- **How to navigate:** There are tabs for each disease and priority country combination:

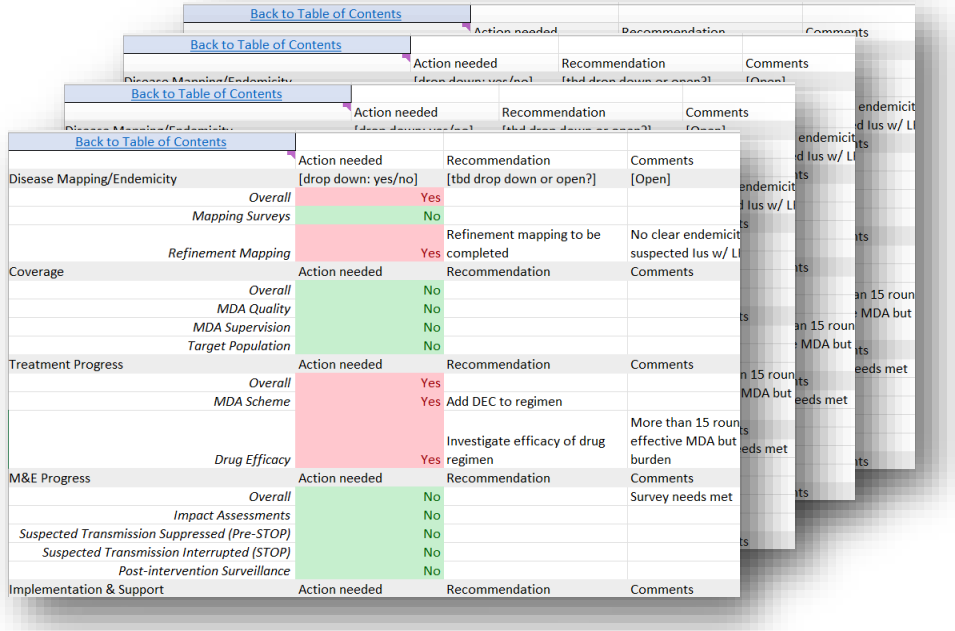
Table of Contents

Table of Contents

Click on the country with the associated disease to jump to the associated recommendation page

Disease	Country
LF	Angola
LF	Gabon
Oncho	Angola
Oncho	Gabon
Schisto	Benin
Schisto	Burundi
STH	Benin
STH	Cabo Verde

Feedback sheet by disease and priority country



PC-NTD RPRG

Operationalizing RPRG members' support

Operationalizing RPRG members' support

PURPOSE

1. To **support** the control and elimination of targeted Neglected Tropical Diseases (NTDs).
2. To **provide** strategic and **technical advice** to national NTD programmes.
3. To **guide efforts** toward achieving the NTD targets and goals of the 2030 roadmap.

Roles RPRG Members

1. **Regularly attend** and **actively engage in deliberations, review submissions**, and support the Secretariat in their duties as needed.
2. Fulfil responsibilities delegated by the co-chairs, including **participation in sub-committees** and joint country missions representing the PC-NTD RPRG.
3. Engage in the **review and updating** of the Group's Standard Operating Procedures (**SOPs**).

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Operationalizing RPRG members' support

1. As members of the RPRG, how do you think you can contribute to the purpose of this advisory structure: provide **support**, **technical advice** and **guide efforts** towards the control and elimination of PC-NTDs in the African region?

2. How do you **envision** the most efficient and effective methods for channelling RPRG's support to address the unique challenges of PC-NTDs? Could you propose specific strategies or models that would enhance our collaborative efforts and ensure the impactful implementation of our support in diverse regional contexts?

3. Reflecting on the **resources** and **tools** currently provided by ESPEN as the secretariat, do you feel these are **sufficient** and effective for you to fulfil your advisory responsibilities effectively? Are there specific types of data, resources, or instruments that you think could enhance your ability to provide informed, strategic guidance in our joint efforts to control and eliminate PC-NTDs?

Thank you

For more information, please contact:

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ALMA Scorecard for Accountability and Action

AFRICAN LEADERS MALARIA ALLIANCE | ALMA

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About ALMA

- Established in 2009
- 55 African Heads of State and Government working to eliminate malaria and NTDs in Africa
- Provides a forum to review progress and achieve targets set by the African Union and SDGs
- ALMA's Chair is H.E. President Umaro Sissoco Embaló of the Republic of Guinea-Bissau

ALMA Heads of State and Government during the AU Summit

H.E. Umaro Sissoco Embaló
President, Republic of Guinea-Bissau
Chair, ALMA

African Region

FOR ALL

ALMA Priority Agenda

Increase digitalisation and use of evidence-based tools (including national malaria, NTD and RMNCAH scorecard tools)

Mobilise national Youth Corps to recruit and engage youth leaders to champion the fight against malaria and NTDs and promote UHC

emc
NIGERIA END MALARIA COUNCIL

Establish national End Malaria & NTDs Councils and Funds to support mobilise advocacy, action, and resources from across all sectors

ECOWAS

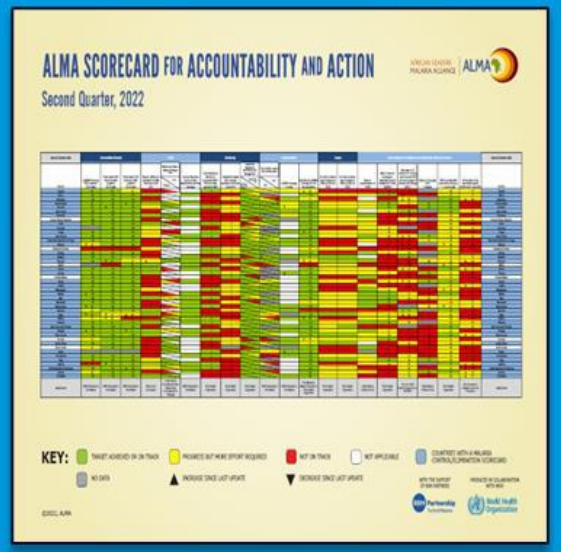
Enhance regional coordination on malaria through Regional Economic Communities (incl. for improved local manufacturing and regulatory environments)

African Region

FOR ALL

ALMA works to sustain malaria, RMNCAH, and NTDs high on the African regional development agenda

Malaria & NTDs are mainstreamed into the AU Summit, including the keynote presentation from the ALMA Chair. The annual report, including the ALMA Scorecard and a supplement on NTDs, is part of the official summit documentation



The ALMA Scorecard for Accountability and Action and country narrative reports are produced quarterly. Includes indicators on malaria, NTDs, and other priority areas of health for Heads of State & Government and Ministers of Health and Finance.

Malaria & NTDs AUC meeting held on the side lines of the WHA attended by Ministers of Health and Development Partners

Republic of Congo awarded the 2022 Joyce Kafanabo Award for Best NTD Scorecard at the AU Summit

Briefing of the Permanent Representative Committee of the AU on the implementation of the malaria related targets of the Catalytic Framework to End AIDS, TB and Eliminate Malaria in Africa by 2030 and the implementation of the Continental Framework to Control and Eliminate NTDs in Africa, the AU Roadmap on NTDs and the Kigali Commitments

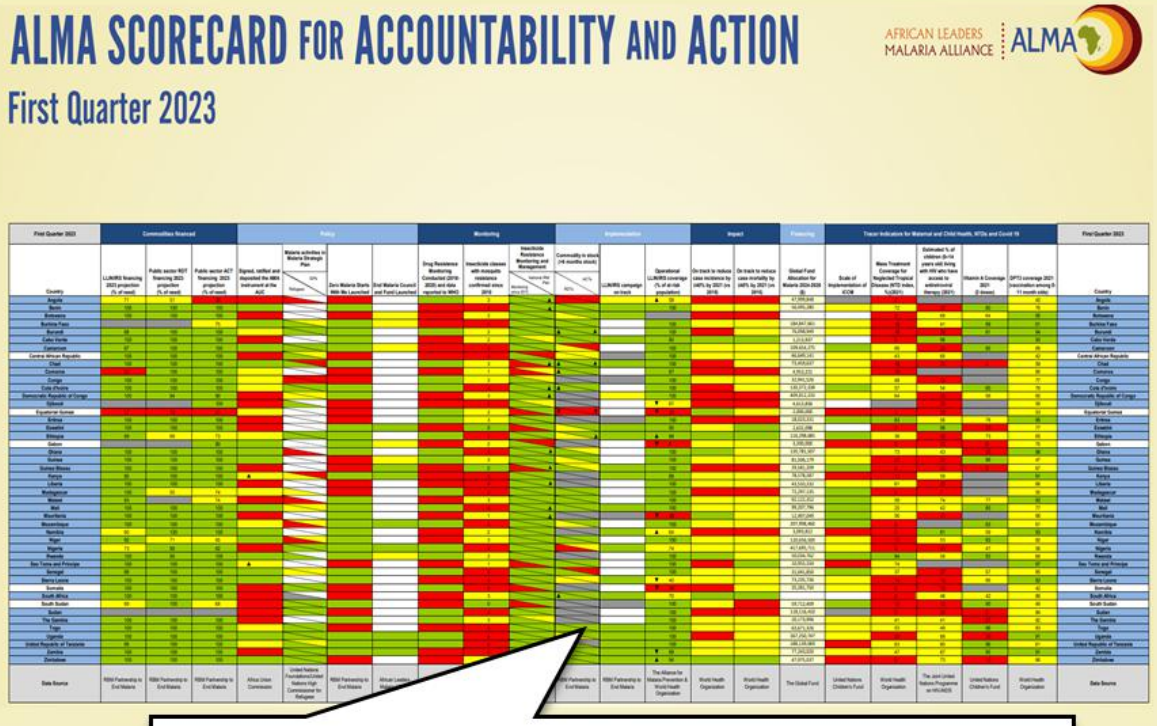
The ALMA Scorecard for Accountability & Action and recommended actions engage senior leaders to prioritise malaria and NTDs

The ALMA Scorecard and Country Reports are disseminated quarterly to Heads of State and Government, Ministers of Health, Finance and Foreign Affairs, Ambassadors to the AU and UN

The ALMA Scorecard has helped:

- Sustain malaria and NTDs on the regional development agenda
- Increase donor and domestic resources
- Accelerate procurement
- Enact policy changes

Country-specific recommended actions have a 97% response rate for NTDs



NTDs were added to the ALMA Scorecard at the 30th AU Summit to raise their visibility on the continent

An independent evaluation by R4D of scorecards and data visualization tools identified the ALMA Scorecard as a gold star example, noting that it has a clear and focused theory of change with defined objectives and audience, includes actionable indicators and has a clear engagement plan for its target audience.

The ALMA Scorecard for Accountability & Action includes the NTDs Coverage Index—with additional indicators under consideration

- The **NTD Coverage Index** (i.e., the percentage of the population protected by preventative treatment) is calculated annually by the WHO
- ALMA, WHO, UTC and other partners develop **recommended actions** for countries with low coverage (e.g., red) or where performance declines by 10% or more
- ALMA sends these recommended actions to **Heads of State and Government and Ministers**
- **97% response rate** for NTDs recommended actions

NTD Index

Data source: PC Data Portal, Department of Control of Neglected Tropical Diseases, accessed 5 December 2022

World Health Organization

	Population (in 1000) requiring treatment by disease, 2021					Coverage by disease, 2021					NTD Index	
	LF	ONCHO	SCH	STH	TRA	LF	ONCHO	SCH	STH	TRA	2020	2021
Angola Y	3,980	6,234	3,303	5,013	No data	0	0	61	28	ND	19	2
Benin Y	Surveillance	6,005	1,585	1,749	0	100	68	48	59	100	77	72
Botswana Y			372	43	No data			98	0	ND	3	3
Burkina Faso Y	2,103	286	2,236	Surveillance	0	0	20	98	100	100	89	18
Burundi Y		2,072	1,682	967	0		0	100	98	100	95	18
Cabo Verde Y				150					0		55	0
Cameroon Y	60	11,466	2,832	3,678	332	34	70	97	75	72	4	66
Central African Republic Y	6,390	3,579	669	1,528	3,602	77	61	16	43	47	0	43
Chad Y	5,395	6,089	2,452	576	526	78	78	77	36	0(NR)	12	18
Comoros Y	408			278		39			8		33	18
Congo Y	1,089	786	231	855		50	66	35	47		34	48
Côte d'Ivoire Y	14,350	19,559	2,930	2,481	6,237	25	75	85	59	62	59	57
Democratic Republic of the Congo Y	48,651	52,045	11,147	25,029	10,238	81	80	90	63	30	1	64
Equatorial Guinea Y	949	Surveillance	88	388		20		0	36		0	3
Eritrea Y	73		247		96	85		68		98	31	83
Eswatini Y			282	17				0	0		0	0
Ethiopia Y	6,729	26,250	8,190	29,029	71,787	26	66	38	18	65	11	38
Gabon Y	358	722	160	430		0	0	0	0		0	0
Gambia Y			258	53	Eliminated			15	47	100	1	41
Ghana Y	1,117	8,391	4,705	Surveillance	Eliminated	70	49	59	100	100	0	73
Guinea Y	8,407	7,960	2,193	2,401	241	69	74	100	65	0	73	20
Guinea-Bissau Y	1,942	580	111	387	27	12	0	75	18	1	12	4
Kenya Y	4,324		2,161	8,099	2,801	0		64	42	62	29	11
Lesotho Y				387					0		0	0
Liberia Y	3,022	3,237	893	812		72	71	55	50		0	61
Madagascar Y	21,390		4,439	7,381		0(VAL)		0(VAL)	0(VAL)		34	0
Malawi Y	Eliminated	2,491	3,834	7,838	0	100	86	37	22	100	76	59
Mali Y	Surveillance	6,326	4,083	Surveillance	0	100	0	95	100	100	95	25
Mauritania Y			454		0			31		100	85	56
Mozambique Y	19,580		6,530	12,742	4,966	3		13	7	16	13	8
Namibia Y			135	331	No data			0	0	ND	0	0
Niger Y	4,306		4,732	Surveillance	5,285	0		58	100	28	61	11
Nigeria Y	139,910	50,876	18,285	47,445	5,206	14	24	8	17	0	56	5
Rwanda Y			1,044	4,216				98	90		86	94
Sao Tome and Principe Y	Surveillance		25	82		100		70	58		8	74
Senegal Y	5,765	347	1,591	1,305	0	19	95	93	4	100	42	37
Sierra Leone Y	1,693	7,315	667	1,268		74	78	0	67		59	14
South Africa Y			3,808	15,682				0	0		0	0
South Sudan Y	8,758	8,750	1,596	694	3,457	53	62	1	35	21	2	19
Togo Y	Eliminated	3,916	2,192	2,590	0	100	82	8	62	100	86	53
Uganda Y	Surveillance	1,684	5,795	19,088	958	100	83	0	66	52	70	20
United Republic of Tanzania Y	7,921	6,752	8,752	23,465	2,132	77	85	94	49	34	3	63
Zambia Y	13,186		2,407	4,578	2,402	37		80	33	49	9	47
Zimbabwe Y	8,147		2,051	598	4,455	0		0	0	15	2	0
Djibouti Y				111					0		0	0
Egypt Y	Eliminated		1,464		1,975	100		0		0	10	1
Somalia Y			2,550	2,697	No data			0	0	ND	90	0
Sudan Y	11,139	176	4,630	1,248	3,783	0	0	0	0	3	3	0

Scorecards enhance the profile of NTDs at national level, increase resource commitments and enhance data quality and availability

Republic of Congo

- The scorecard is used for high-level advocacy, highlighting gaps in national NTD performance. This resulted in the addition of a US$170,000 line-item being added to the national budget for NTDs.

Republic of Rwanda

- Following up on recommended actions led to increased country ownership and institutionalization of NTDs
- NTDs are fully integrated into district and community level activities and MDA operational costs are fully funded by the government.

Republic of Niger

- The NTD scorecard was used to highlight gaps and request technical assistance from WHO for the mapping of onchocerciasis elimination.
- Scorecard analysis revealed reporting errors on leprosy cases and led to the organization of a training of DHIS data managers in the regions where the problem was identified.
- Health provides and CHWs were trained on leprosy early detection in a targeted region.
- Community mobilization (the 'awareness caravan') on NTD prevention and control was organized in targeted regions.
- Training of MPs on the use of NTD scorecards which led the MPs to invite the NTD Manager to present the situation of NTDs in Parliament and to add NTDs on the plan of action of MPs

Indicator screening criteria

- What is the goal (i.e., desired reaction from HoS) for each indicator? For each group of indicators?
- Are the data of acceptable frequency and reliability?
- Is the indicator actionable?
- Are data available for at least 10 countries?
- Is there a partner/institution tracking and publishing the data
- Are the data published somewhere and publicly available
- Is there a partner tracking progress on the indicators and actions being taken to address under perfoming indicators

ALMA Scorecard for Accountability and Action

CURRENT Indicators in the ALMA Scorecard

Financing

- LLIN/IRS financing 2023 projection (% of need)
- Public sector RDT financing 2023 projection (% of need)
- Public sector ACT financing 2023 projection (% of need)

Policy

- Signed, ratified and deposited the AMA instrument at the AUC
- Malaria activities targeting refugees and IDPs in the Malaria Strategic Plan
- Country Reporting Launch of Zero Malaria Starts with Me Campaign

Resistance Monitoring

- Drug Resistance Monitoring Conducted (2018-2020) and data reported to WHO
- Insecticide classes with mosquito resistance in representative sentinel sites confirmed since 2010
- Insecticide resistance monitored since 2015 and data reported to WHO
- National Insecticide Resistance Monitoring and Management Plan

ALMA Scorecard for Accountability and Action

CURRENT Indicators in the ALMA Scorecard

Implementation and Impact

- RDTs/ACTs in stock (>6 months stock)
- LLIN/IRS campaign on track
- Operational LLIN/IRS coverage (% of at-risk population)
- On track to reduce case incidence by ≥40% by 2021 (vs 2015)
- On track to reduce case mortality by ≥40% by 2021 (vs 2015)

Tracer Indicators for Maternal and Child Health, NTDs and Covid 19

- Scale of Implementation of iCCM
- **Mass Treatment Coverage for Neglected Tropical Disease (NTD index, %)(2021)**
- Estimated % of children (0–14 years old) living with HIV who have access to antiretroviral therapy (2021)
- Vitamin A Coverage 2021 (2 doses)
- DPT3 coverage 2021 (vaccination among 0-11 month olds)

Recommended action responses

Reports officially sent to HOS and Ministers of Health, Finance and Foreign Affairs and Ambassadors in Addis and New York

-

Recommended actions tracking tool

ALMA Secretariat and partners interaction with country focal points, local and global partners

Each quarter, countries get recommended actions as follows:

1. Countries where the indictors are red e.g. significantly below targets)
2. Countries where performance has decreased compared to the previous data

Progress on tracking recommended actions

1. ALMA receive good feedback on recommended actions on malaria (100%) and NTDs (>90%)
2. Substantial feedback on RMNCAH recommended actions (75%)

Actions linked to the scorecard tool have included increased domestic and donor resources for NTDs, helped to address commodity availability and stock expiry, and have helped to place NTDs higher on the domestic development agenda.

Example actions taken as a result of the ALMA Scorecard

Kenya

- Inclusion of NTDs on ALMA scorecard led to the inclusion of **trachoma** in the National NTD programme and the elaboration of the new NTD Master plan is ongoing
- The scorecard is reviewed with senior management to assess gaps and review progress on MDA and supply chains, leading to a 588% increase in funding for MDA (from US $170,000 in 2015 to US$1,000,000 in 2019)
- MDA for Schistosomiasis and Soil Transmitted Helminthiasis was recently completed and a Lymphatic Filariasis Transmission assessment was conducted

Rwanda

- Scorecard prompted improved coordination of in-country partners and the inclusion of NTDs indicators in the national HMIS system
- Underperformance on the Coverage Index led to an additional US$500,000 in domestic funding to improve MDA supply chain, distribution, and NTDs control & elimination activities

Burundi

- The scorecard and recommended actions triggered a root cause analysis of lower NTD coverage and the development of solutions to increase performance
- A survey of trachoma identified one district that was endemic and a follow-up MDA campaign increased coverage to 95%

NATIONAL NTD SCORECARDS

ALMA has supported countries in the implementation of national scorecards

National scorecard management tools are country-owned tools used to:

- Track national and sub-national real time health data against priority indicators aligned to national plans
- Identify bottlenecks or gaps
- Increase accountability
- Enhance decision-making to drive action

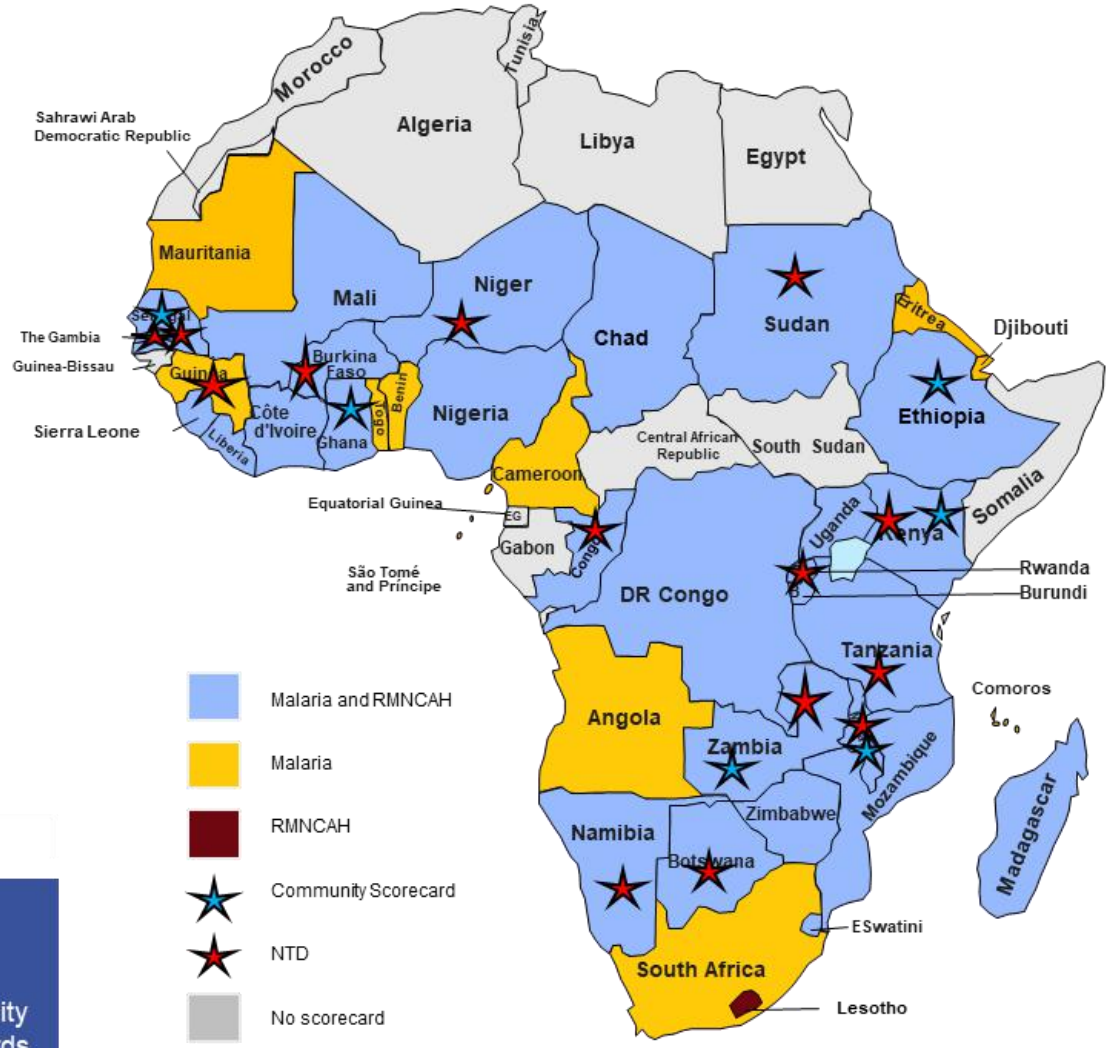
They are integrated into existing accountability and management processes

Drive action including addressing upsurges, stock-outs, task-shifting, filling resource gaps, etc.

Used at national, subnational and community levels (quality of care) and with political and technical stakeholders

Number of scorecards by focus area

41	30	18	4	6
Malaria Scorecards	RMNCAH Scorecards	NTD Scorecards	Nutrition Scorecards	Community Scorecards



Lessons leant on the use of continental and national NTD scorecards

- The inclusion of the NTD indicator in the continental ALMA scorecard for accountability and action has significantly increased the visibility of NTDs at country level.

- In countries, following up on the recommended actions arising from scorecard analysis has helped countries by increasing the attention of senior leadership to NTDs.

- Scorecard analysis at country level has supported the identification of reporting errors, bottlenecks and the design of country-led solutions.

- The use of the scorecard as an advocacy tool has helped to increase resource allocations from government and partners.

- Collaboration with partners at country, continental and global levels is key for success of the grant implementation.

Ongoing discussion to add NTD indicators in the ALMA scorecard

- **Consultations to have more NTD indicators to add into the ALMA scorecard:**
- The Regional NTD Meeting on NTDs organized by AUC in collaboration with ALMA joined AUC and Regional Economic Communities (East Africa Community and Economic Community of Central African States (ECCAS)
- Joint workshop (ALMA-Kikundi) during the 14th NNN Conference in Dar es Salaam
- Meetings with AUC, UTC and other partners to discuss which indicators to support monitoring the implementation of the NTD Continental framework
- **Suggested indicators:**
    - National Budget-line allocated to NTD Programme
    - % domestic resources allocated to NTDs
    - Removal of user fees for NTD services
    - % of NTD indicators captured into HMIS/DHIS2
- **ANY OTHER SUGGESTION?**

Thank you

For more information, please contact:

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Discussion & RPRG recommendations

Group Photograph

Lunch Break (60 min)

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Session 6: Information session on cross-cutting activities: Programme implementation planning

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Modelling to guide programmatic decision making

Dr. Mutono Nyamai

Center for Epidemiological Modelling and Analysis (CEMA), University of Nairobi (Kenya)

World Health Organization African Region

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Epidemiological models to support planning and implementation of Kenya's schistosomiasis elimination plan

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CEMA
Center for Epidemiological Modelling and Analysis

University of Nairobi

Imperial College London

CEMA
Center for Epidemiological Modelling and Analysis

UCSF
University of California San Francisco

LONDON CENTRE FOR NEGLECTED TROPICAL DISEASE RESEARCH

UNIVERSITY OF NAIROBI

Erasmus MC
Universitair Medisch Centrum Rotterdam

PAN-AFRICAN MOSQUITO CONTROL ASSOCIATION
PAMCA

BIG DATA INSTITUTE

UNIVERSITY OF OXFORD

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE

cmmid

centre *for* mathematical modelling *of* infectious diseases

CHICAS
combining health information, computation and statistics

Lancaster University

WARWICK
THE UNIVERSITY OF WARWICK

Introduction

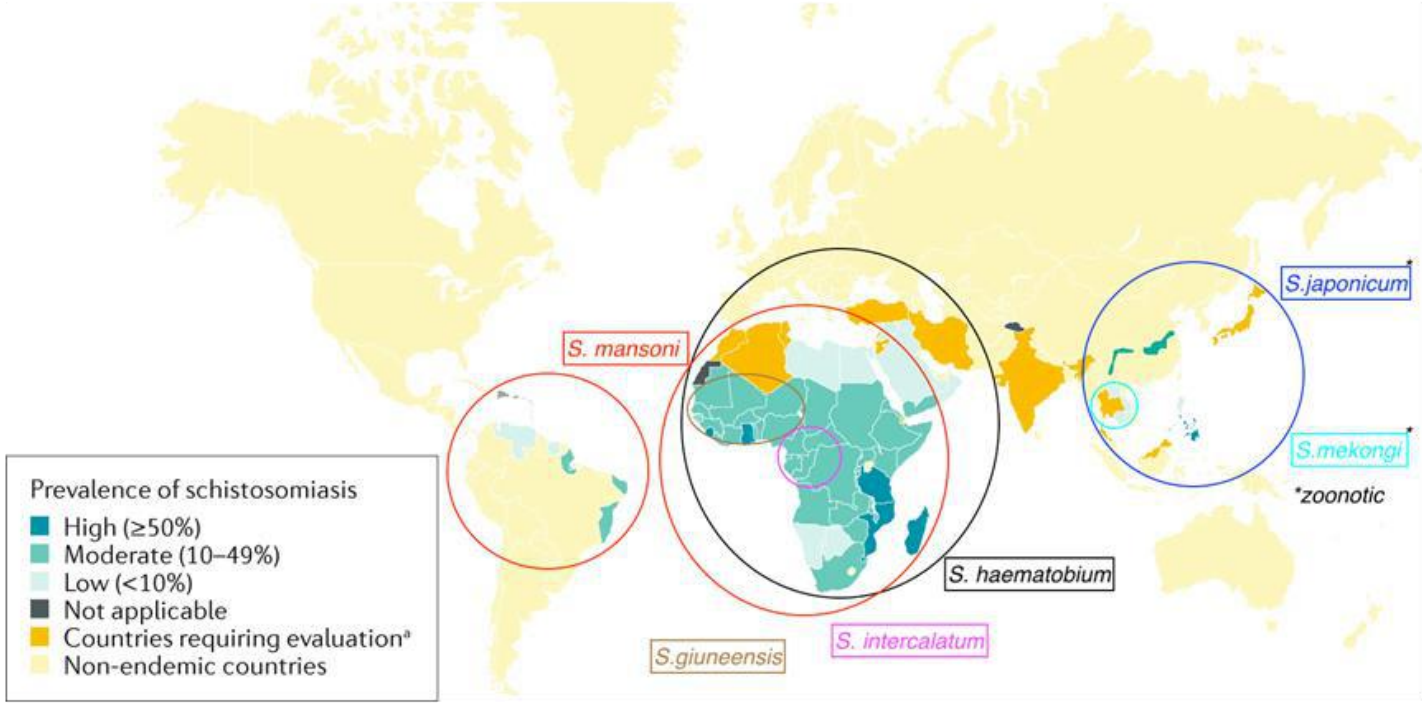
Schistosomiasis: a neglected tropical disease caused by parasitic worms called *Schistosomes*

Human transmission through dermal contact with infectious larvae stage of the worm

- Larvae develop in the human host, copulate and produce eggs which are released through faeces or urine

- Eggs hatch and are taken up by freshwater snails where they develop to infective larvae and the cycle continues

In 2016, the disease accounted for 1.9 million disability adjusted life years

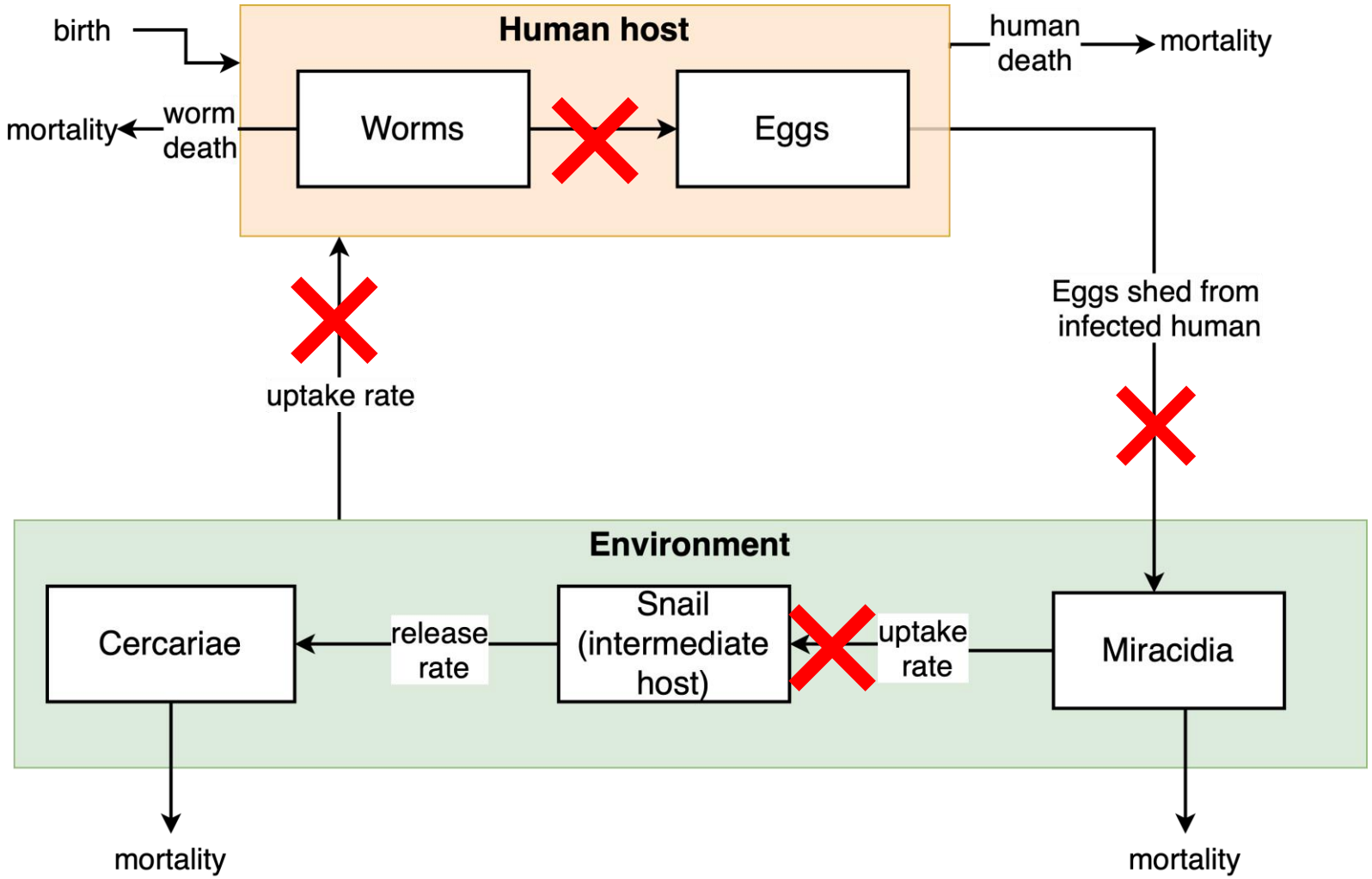


McManus et al., 2018 https://doi.org/10.1038/s41572-018-0013-8

GBD 2016 DALYs and HALE Collaborators, 2017
https://doi.org/10.1016/S0140-6736(17)32130-X

CEMA
Center for Epidemiological Modelling and Analysis

Schistosome life cycle



Mass drug administration with praziquantel

Improved water, sanitation and hygiene

Snail control

Behavior change

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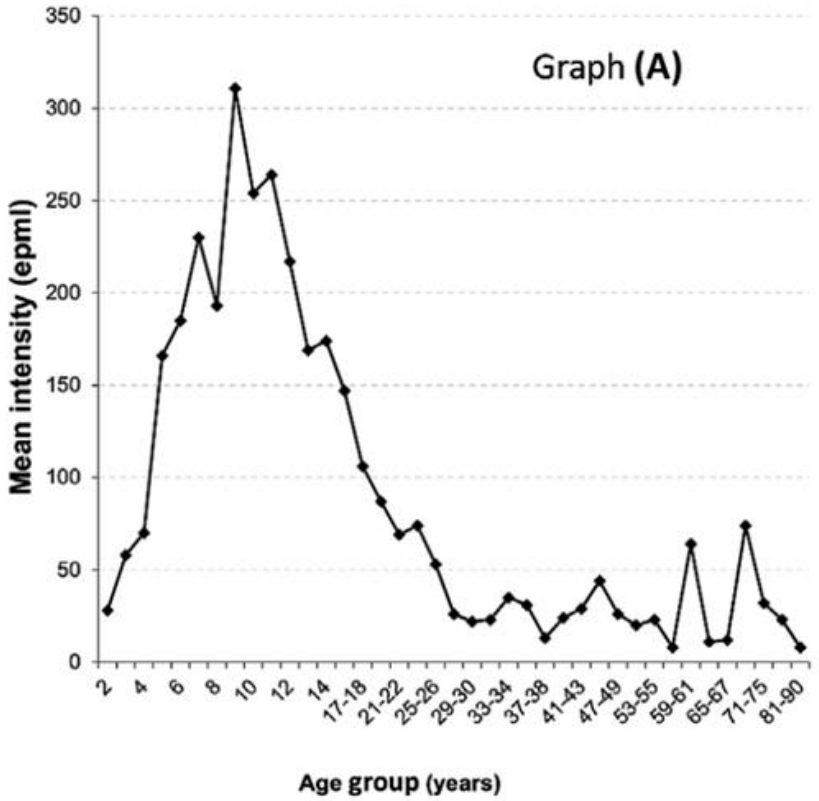
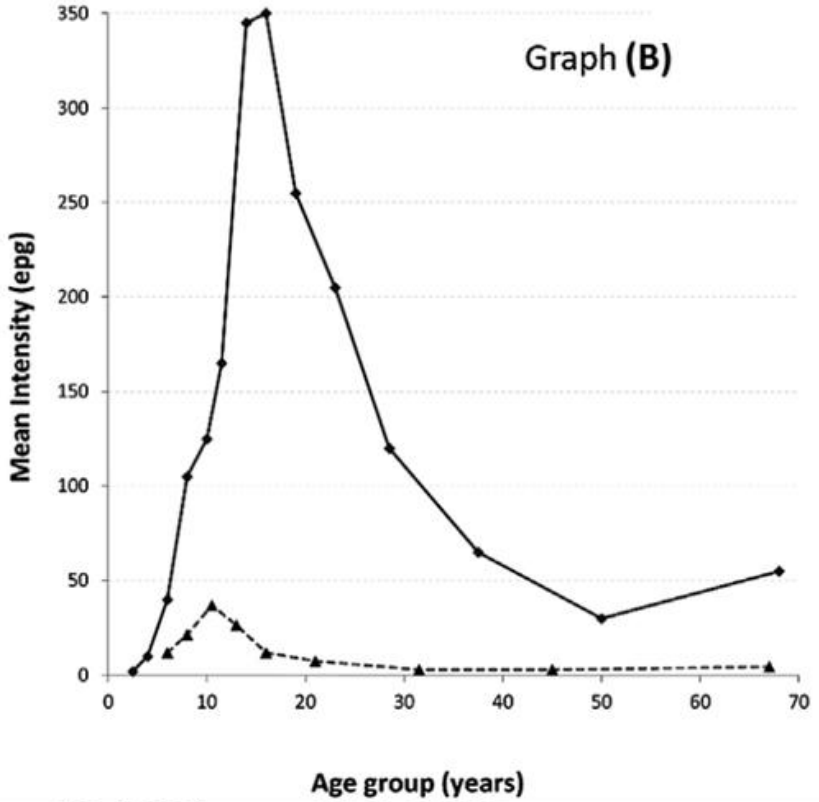
University of Nairobi

Intensity of infection

Schistosoma haematobium



Schistosoma mansoni



Anderson RM et al, 2016 http://dx.doi.org/10.1016/bs.apar.2016.06.003

Intensity profile before (solid line) and after (dashed line) a round of mass drug administration

School aged children (5-14 years) have a higher likelihood of infection

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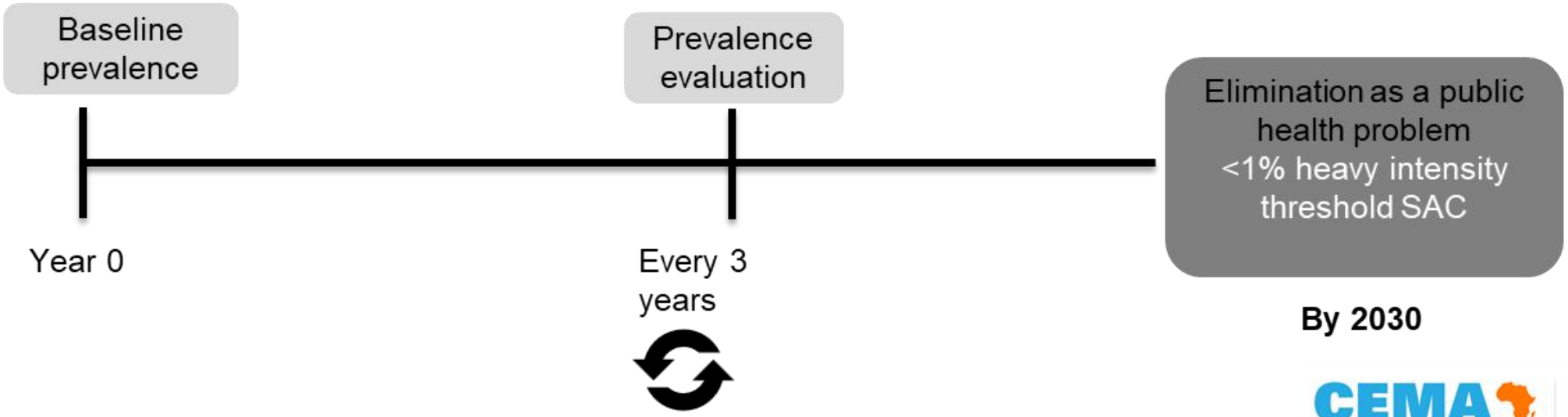
WHO treatment guidelines (2022)

Prevalence >50% = Bi-annual treatment

Prevalence >10%- 50% = Annual treatment

Prevalence (<10%) = Test and treat

- Treatment focusing on population >2 years
- Target 75%



WHO guidelines, 2022 https://www.who.int/publications/i/item/9789240041608

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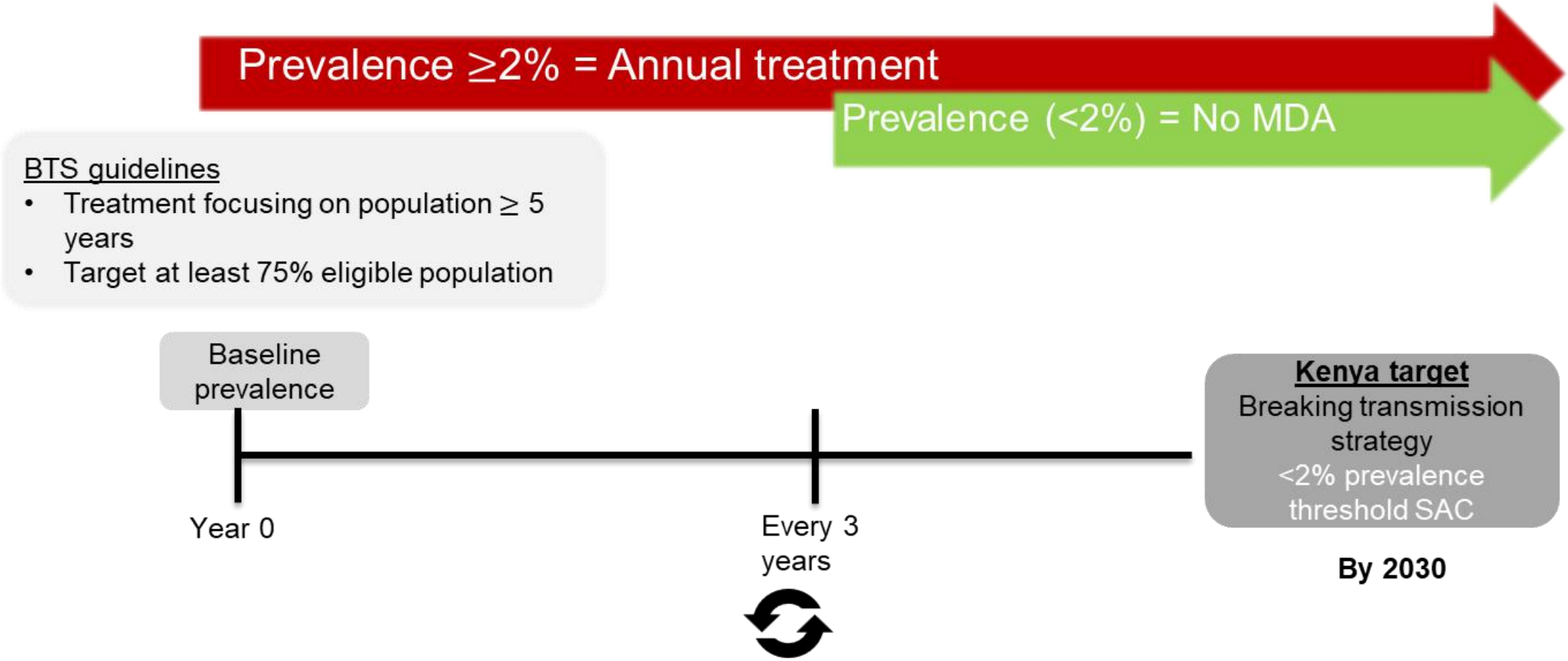
Kenya elimination targets: Breaking transmission strategy (BTS)



Kenya Ministry of Health, 2022 link

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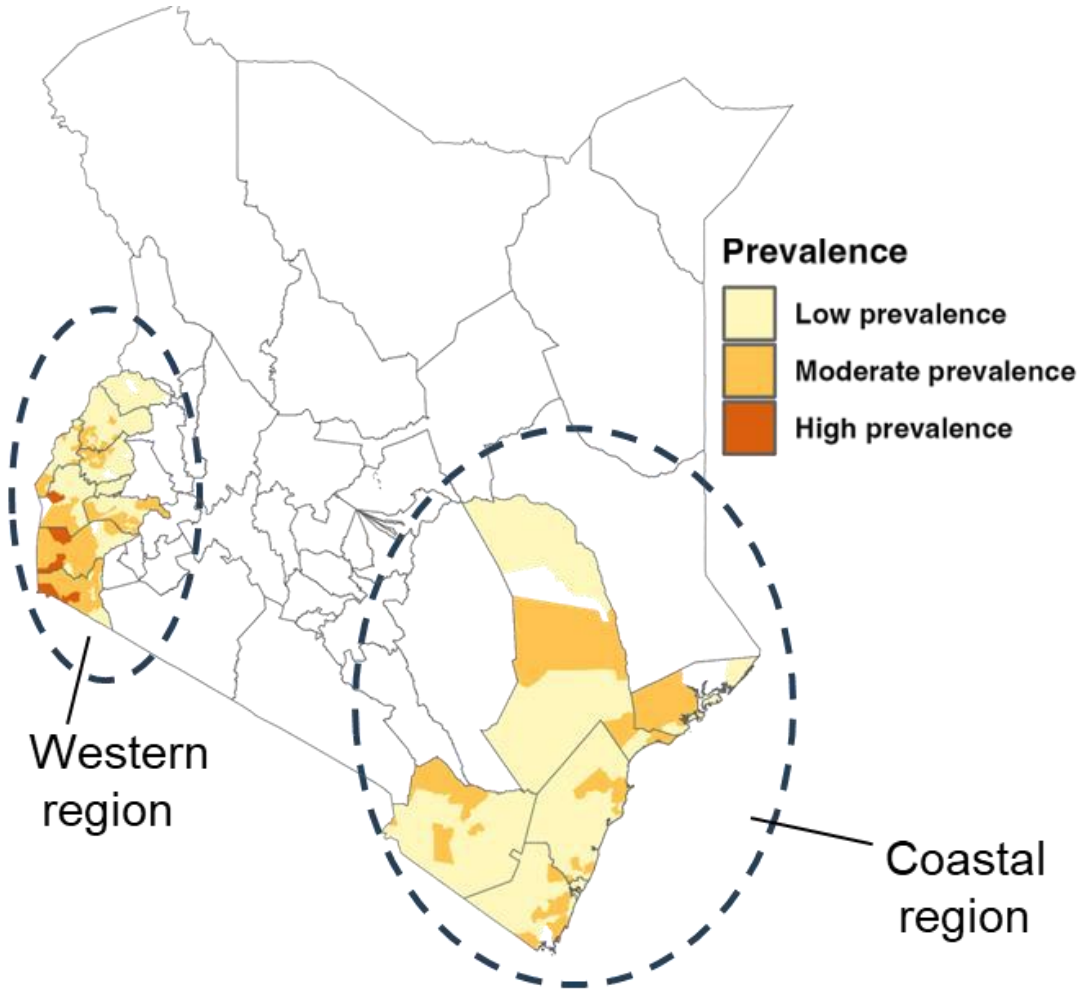
SCH prevalence in Kenya

- Two species found in Kenya:
  - *S. haematobium* (Coastal region)
  - *S. mansoni* (Western region)
- Currently, 15 of 47 counties in Kenya (32% of the population) are receiving treatment
- There are 478 implementation units which are:
  - Low prevalence: 74% (n=356)
  - Moderate prevalence: 24% (n115)
  - High prevalence: 2% (n=7)

** Survey to ascertain the endemicity status of the other counties (in white) is to be done in 2024*



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Modelling question from Kenya NTD program

- How many treatment rounds for schistosomiasis are required to achieve:
  - Kenya target of breaking transmission strategy: <2% prevalence in SAC
  - WHO target of elimination as a public health problem <1% heavy intensity in SAC
- What would be the effective treatment strategy to achieve breaking transmission strategy by 2030

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Model world

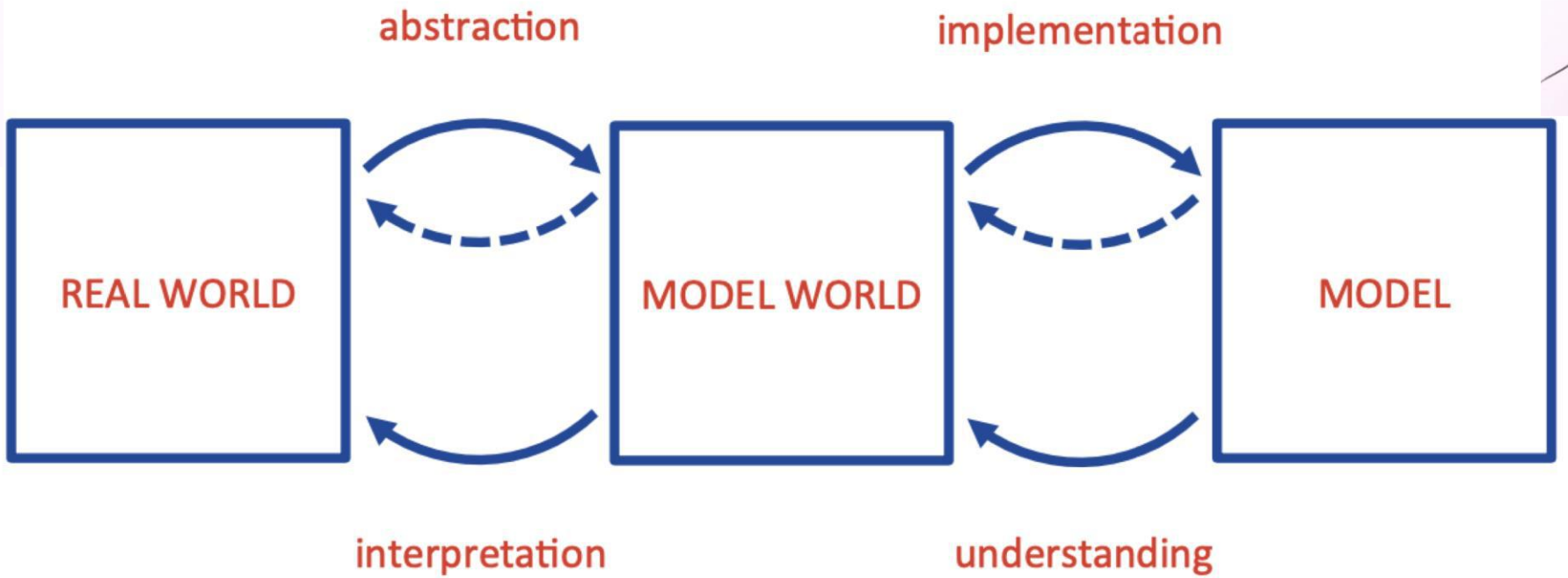
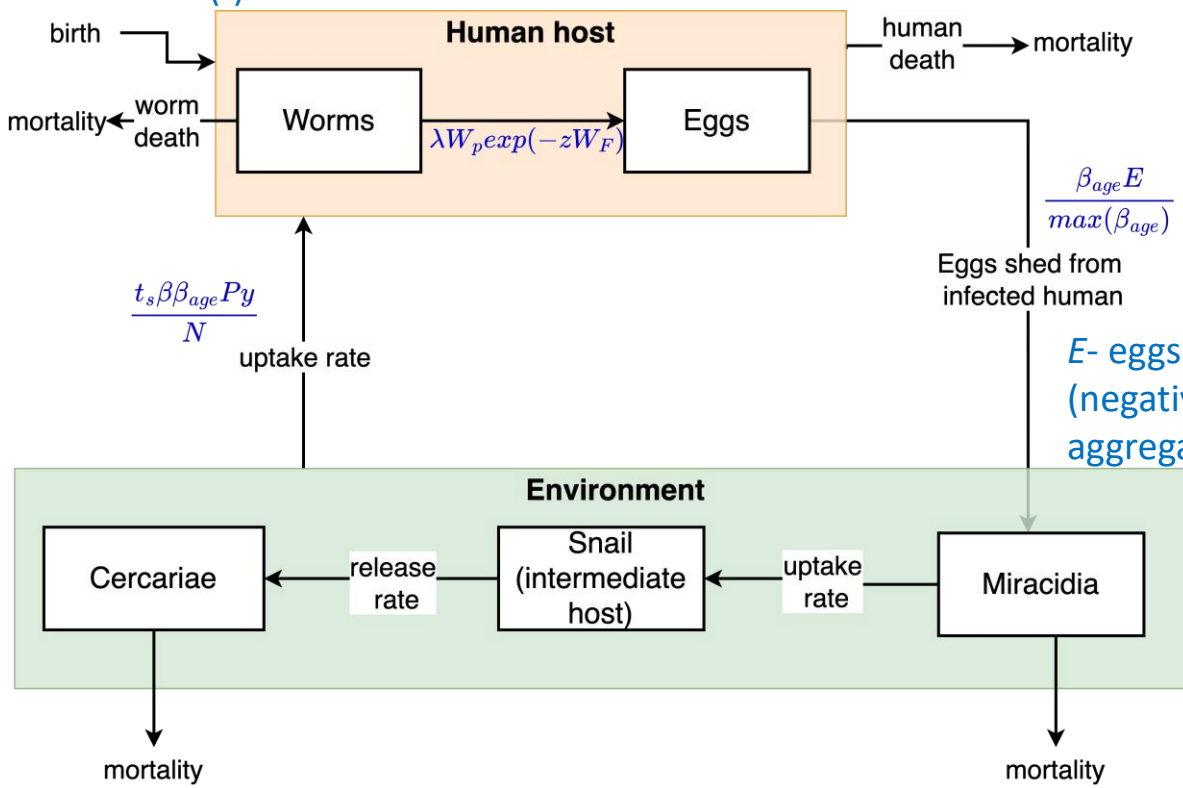


Figure courtesy of the International Clinics on Infectious Disease Dynamics and Data (ICI3D) Program
https://doi.org/10.6084/m9.figshare.5044606.v3

The model framework

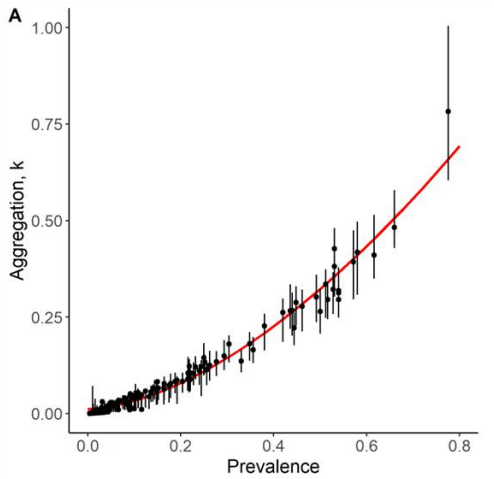
Intervention: treatment
(based on access and adherence)

W(p)-worm pairs
λ- Maximum fecundity of female worms
z- density dependent fecundity (control overcrowding)
W(f)- Number of female worms



P- level of predisposition
(determined by the parasite aggregation)
ß- depends on age and contact (risk)
y- number of infective cercariae in environment

E- eggs (density dependent)
(negative binomial based on aggregation and contact rate)



Kura, Klodeta, et al. (2022) "The observed relationship between the degree of parasite aggregation and the prevalence of infection within human host populations for soil-transmitted helminth and schistosome infections." TRSTMH.

Assumptions

- *Miracidia and cercariae stages are not included due to their short life span*
- *Adherence is random, based on the population coverage*
- *Treatment reduces worm burden (86.3%) – one time decrease*

Graham et al, 2021: https://doi.org/10.1016/j.idm.2021.01.010

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Model assumptions

- Some individuals are more predisposed to uptaking cercariae
- Exposure to infection depends on an individual's risk and their age, with the rate generally highest in SAC.
- An individual's predisposition, adherence and access to intervention are fixed for the remainder of their life in the population
- MDA treatment reduces the worm burden one-time
- No immunity is acquired for individuals over time
- Everyone who requires treatment has access to it
- Proportion of individuals who are never treated: 0%
- Treatment coverage: 75 – 90%

500 simulations run for 20 years

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Years taken to achieve the elimination targets

Prevalence	Treatment	Elimination strategy	Community treatment (5+)				Treatment of SAC (5-14)			
		Elimination strategy	75%	80%	85%	90%	75%	80%	85%	90%
Low (<10%)	Annual	BTS	5	4	4	4	5	5	4	4
		EPHP	3	2	2	2	3	2	2	2
Moderate (10-50%)	Annual	BTS	6-7	5-6	4-6	4-5	6-9	5-7	5-6	4-6
		EPHP	3-4	3-4	2-4	2-3	4-5	4	3	3
High (>50%)	Annual	BTS	8-19	7-16	6-13	5-11	16 - >20	15 - >20	14 - >20	13 - >20
		EPHP	5-13	4-10	4-8	3-7	14 - >20	13-19	13-18	13-18
High (>50%)	Biannual	BTS	4-6	4-6	4-5	3-5	13-16	12-15	12-14	11-14
		EPHP	3-5	3-5	3-4	3	9-12	9-11	8-10	8-10

Green are areas that can achieve the target by 2030
Orange are not able to achieve the target by 2030

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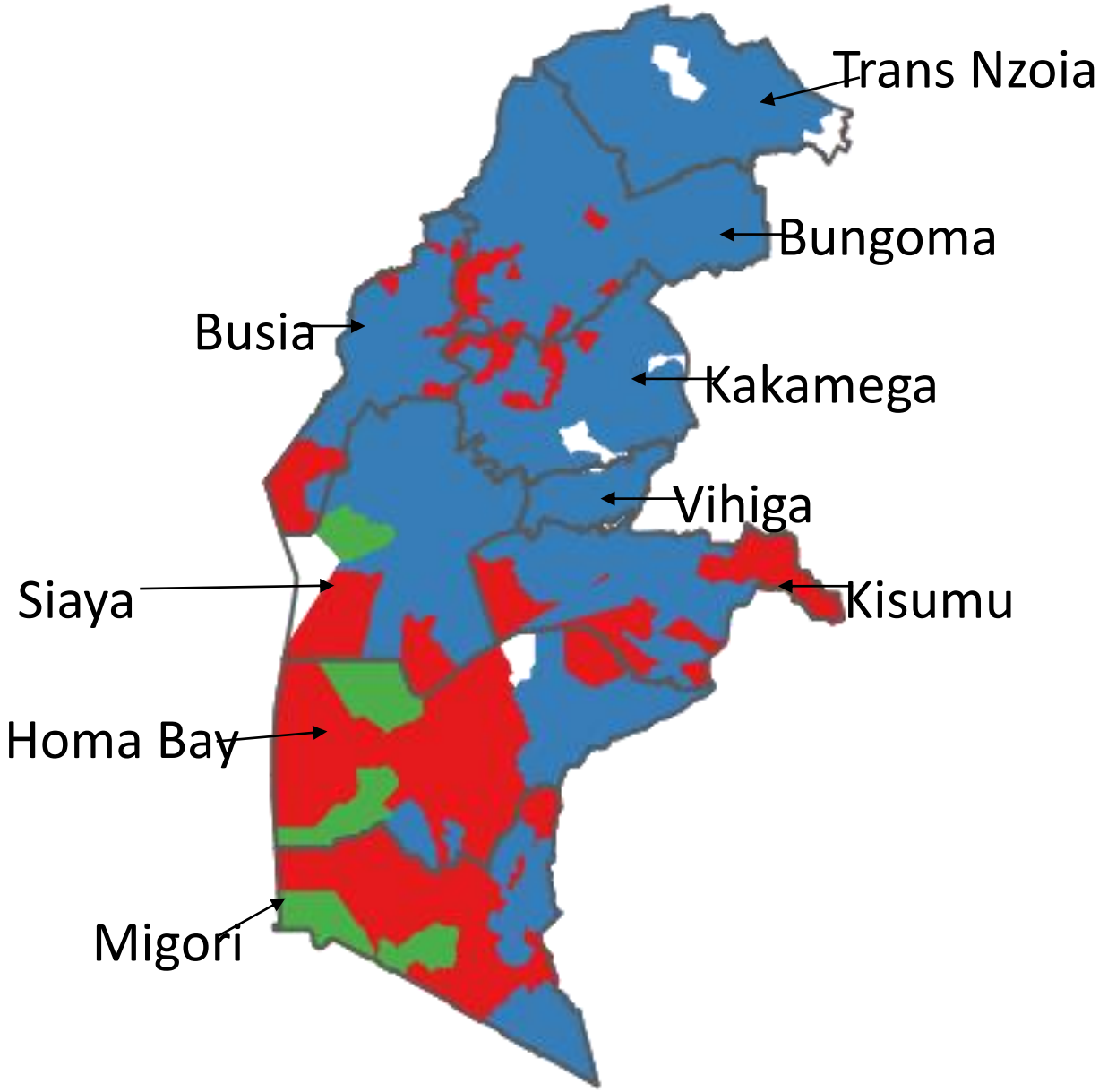
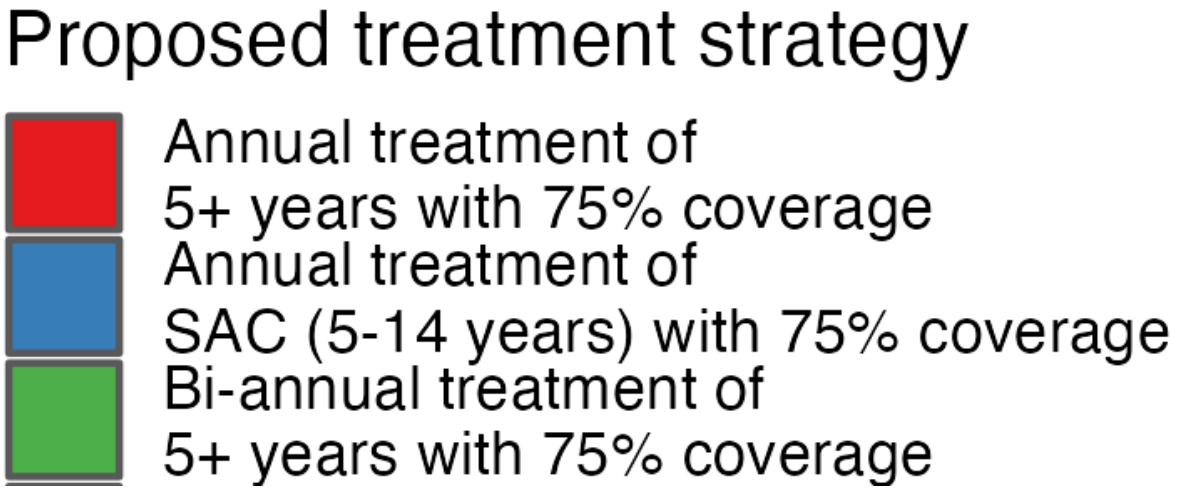
Proposed treatment strategy





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Treatment scenarios

	Treatment population	Treatment coverage	Treatment frequency	Proportion never treated
Scenario 1: *(Current treatment)*	5+ years	75%	Annual	15%
Scenario 2: *(Improved treatment efficiency)*	• Prevalence ≤25%: 5-14 yrs • Prevalence >25%: 5+ yrs	75%	• Prevalence≤50%: annual • Prevalence >50%: biannual	15%
Scenario 3: *(Optimal treatment)*	• Prevalence ≤25%: 5-14 yrs • Prevalence >25%: 5+ yrs	75%	• Prevalence≤50%: annual • Prevalence >50%: biannual	5%

Results

	Time to elimination (years)		
Prevalence:	***Annual treatment of population 5+ years, with 15% never treated***	***Treat adults in higher-moderate and high prevalence areas, with 15% never treated***	***Treat adults in higher-moderate and high prevalence areas, with 5% never treated***
• Low prevalence (<10%)	9	9	4
• Lower-moderate (10% - 25%)	13	15	10
• Higher-moderate (26% - 50%)	13	13	9
• High (>50%)	>20	>20	>20
• High (>50%) – Biannual	-	20	16
% of population for which SCH is eliminated within 10 yrs	70%	70%	96%

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	Time to elimination (years)		
	Annual treatment of population 5+ years	*Treat adults in higher-moderate and high prevalence areas, with 15% never treated*	
	15% Never Treated	*15% Never Treated*	*5% NT*
• Low (<10%)	9	9	4
• Lower-moderate (10% - 25%)	13	15	10
• Higher-moderate (26% - 50%)	13	13	9
• High (>50%)	>20	>20	>20
• High (>50%) – Biannual	-	20	16
% of population for which SCH is eliminated within 10 years	70%	70%	96%
Number of PZQ tablets required	32 million	20 million	7 million
Estimated total delivery cost	$30 million	$15 million	$12m (including $3m to increase coverage)

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Summary

- Elimination as a public health problem and the breaking transmission strategy would be attained by 2030 through:
  - **Low prevalence areas:** treating SAC (5-14 years), with ≥ 75% treatment coverage of eligible population
  - **Moderate prevalence areas:** treating SAC (5-14 years with ≥ 80% coverage of eligible population OR treating community (5+ years) with ≥ 75% coverage
  - **High prevalence areas:** treating community (5+years) twice a year with ≥ 75% coverage
- Proportion of population never treated has an impact on achieving the elimination targets

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- Dr. Klodeta Kura

Additional stakeholders

University of Oxford

- Prof. Deirdre Hollingsworth
- Dr. Andreia Vasconcelos

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- Dr. Luc Coffeng

Thank you

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NTD/PC Medicines Supply Chain Management

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World Health Organization
African Region

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Contents

1. What are the steps of the Medicine Supply Chain?
2. What are the main challenges?
3. Possible Undistributed (unaccounted) Issue
4. Pending 2024MDA PC Medicine Requests
5. Recommendations to Member State /WHO/ pharma donor

1. What are the Key Steps of the Supply Chain Process? (1/2)

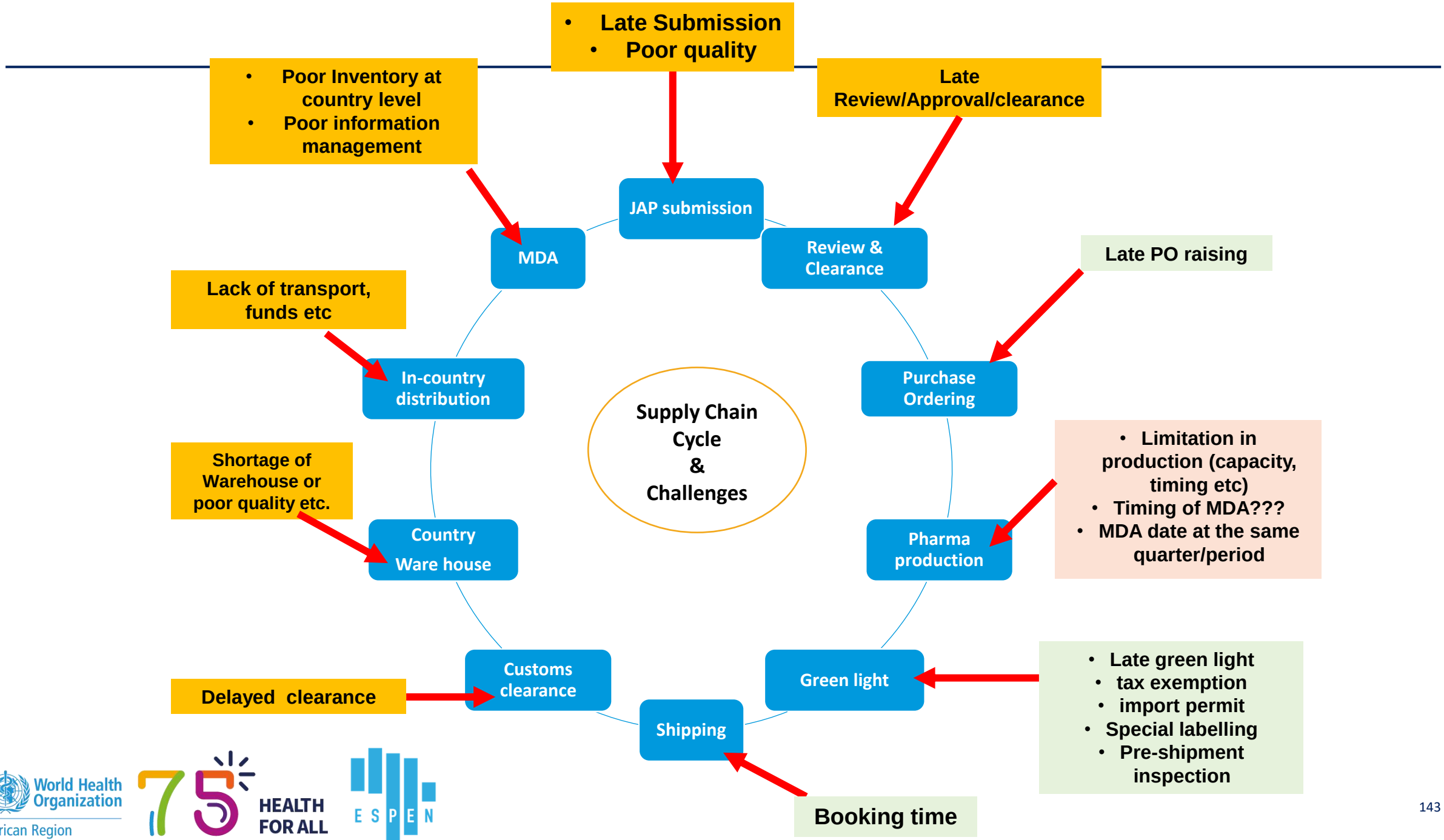
1. Medicine **Forecast**
2. Medicine **Application submission**
3. Medicine **Application Review/Revision/Approval**
4. Medicine **Supply** (external part)
    - PO raising: PO request & PO raising
    - PO received/acknowledged by the donors
    - Shipping greenlight (tax exemption doc, import permit etc)
    - Booking flight/vessel
    - Customs clearance:
    - Transportation to national warehouse

What are the Key Steps of the Supply Chain Process? (2/2)

5. In-country Medicine **Management**
   a) In-country **Supply** (Nat'l Warehouse to Tx points)
   b) Medicine **Distribution** (MDA/mass treatment)
   c) Medicine **Distribution Report**
      - treatment & impact
      - remaining balance

The movement of the medicine is the backbone of NTD PC Programme!

2. Challenges of the Process


• Late Submission
• Poor quality
• Poor Inventory at country level
• Poor information management
Late Review/Approval/clearance
JAP submission
MDA
Review & Clearance
Late PO raising
Lack of transport, funds etc
In-country distribution
Purchase Ordering
Supply Chain Cycle & Challenges
Shortage of Warehouse or poor quality etc.
Country Ware house
Pharma production
• Limitation in production (capacity, timing etc)
• Timing of MDA???
• MDA date at the same quarter/period
Customs clearance
Green light
• Late green light
• tax exemption
• import permit
• Special labelling
• Pre-shipment inspection
Delayed clearance
Shipping
Booking time

3. Possible Undistributed Medicine (unaccounted issue)

The recipient needs to fully account all the donated medicines that they have received.

Undistributed Example

COUNTRIES	Year	# ALB/STH tablets donated via WHO	# MBD tablets donated via WHO	# Tablets distributed to SAC as per official report	# Tablets expired/ Lost	Theoretical BALANCE of tablet donated via WHO by selected year	PO number	Expiry Date earliest
Kenya	2017	5,495,000		4,512,185		982,815	201519198	30-06-21
Kenya	2018	6,445,000				7,427,815	201818674	11-12-21
Kenya	2019	6,754,000	2,996,000	1,189,125		15,988,690	202257663	30-06-24
Kenya	2020		7,072,000	0		23,060,690	202582562	31-03-23
Kenya	2021		17,356,000	4,941,000		35,475,690	202624258; 202647688	31-07-23
Kenya	2022			4,883,000		30,592,690		
Kenya	2023			2,300,000		28,292,690		

4. AFRO's pending 2024MDA Requests

		Possible Undistributed issue	Pending Data Review	endemicity MDAround unmatched	No country reply Pending with Country	Lack or unconfirmed of funds	Other Reasons/Issues
1	Eswatini					x	
2	Botswana					x	
3	Ethiopia					x	
4	Ghana						x
5	Malawi					x	
6	Tanzania/M		x				
7	Zambia	x			x		
8	Mozambique					x	
9	Nigeria	x	x				
10	Rwanda		x				
11	Gambia	x				x	
12	Zimbabwe					x	
13	Eritrea	x				x	
14	Kenya	x					
15	Guinea Bissau					x	
16	Congo					x	
17	DRC		x				
18	Equatorial Guir	x			x		

5. Recommendations to Member States for the Medicine Request

- **For Medicine Request approval**
  - Timely submission:
    - 10 months before its first planned MDA date
  - Good quality
    - Total & targeted population up to date
    - Endemicity level up to date (baseline/impact data)
    - Proposed MDA round in line with endemicity
    - Minimal unaccounted quantity
  - Secure enough funds
- **For donated shipment**
  - Secure the warehouse space
  - Quick report of the MDA
  - Quick report of the inventory

6. Recommendations to WHO

- Closely working with Member States for the best possible Request/Report; for timely submission; and fund raising.
- Quick review/revision/clearance of the Request (RO-HQ)
- Quick PO processing (HQ)
- Timely facilitation of the GreenLight, incl tax exemption and warehouse availability to avoid demurrage charge (WHO/CO as consignee)
- Close follow-up with donors/its forwarding Co. and Member State ***to make sure a timely delivery*** (WHO all levels)

7. Recommendations to Pharma Donors incl DHL

- Quick PO process;
- Secure sufficient API, maintain continuous production (avoid out of stock)
- Shorten waiting time (incl booking time; shipment process, etc)
- Flexibility on mode of shipment (by sea vs by air)

Thank you

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Discussion & RPRG recommendations

Health Break (20 min)

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African Region

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Summary of recommendations & actions

Rapporteurs

Brief Meeting Evaluation (online)

[LINK provided via email]

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Vote of Thanks & Closing Remarks

RPRG Co-Chairs

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Meeting Ends

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