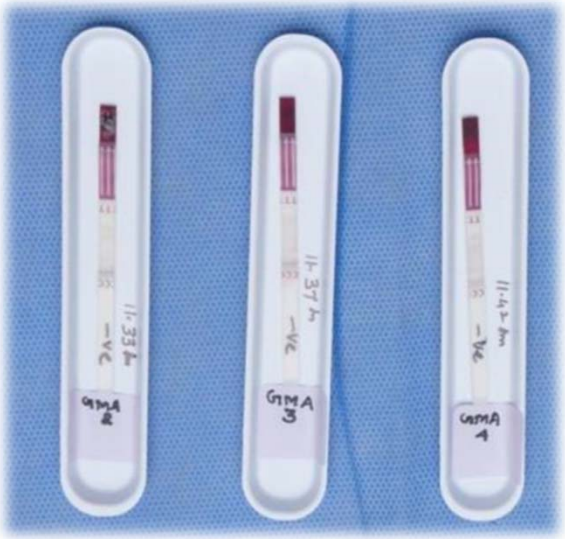
Global Programme to Eliminate Lymphatic Filariasis

Country Elimination expectations- 2030 NTD roadmap goals



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GPELF Strategic Plan 2010-2020

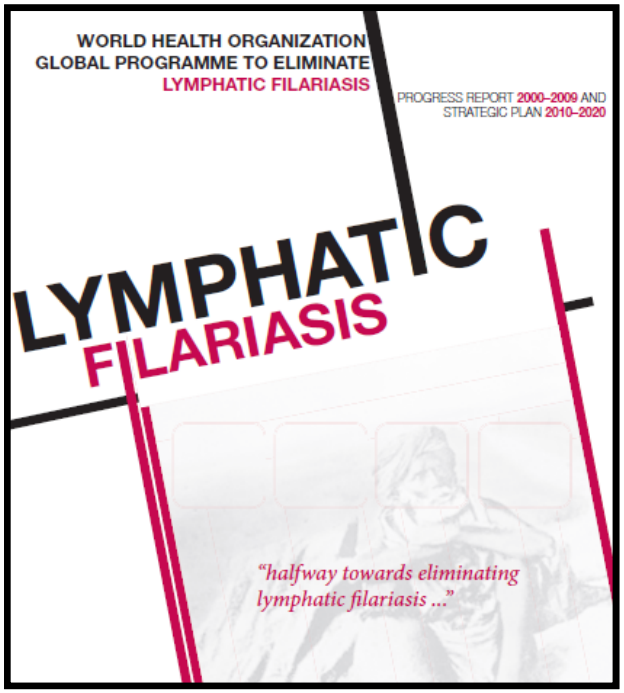
By 2020:

- 70% of countries *verified as free* of LF

  +30% under post-MDA surveillance

  100% stopped MDA

- Full geographical coverage and access to basic care for lymphoedema and hydrocele offered in all countries



http://www.who.int/iris/handle/10665/44473

NEW Generic Framework for Control, Elimination and Eradication of Neglected Tropical Diseases (NTD-STAG)

WHO/HTM/NTD/2016.6

Target	Defined	Required process
Control	Reduction to locally acceptable level; continued interventions required to maintain reduction	-
Elimination as a public health problem	Achievement of measurable global targets for **both infection and disease**, when reached, **continued actions are required** to maintain the targets and/or **to advance the interruption of transmission**	**Validation**
Elimination of transmission	Reduction to zero the incidence of infection in defined areas, minimal risk of reintroduction, continued actions to prevent re-establishment of transmission may be required	Verification
Eradication	Permanent reduction to zero of a specific pathogen with no more risk of reintroduction	Certification (formal)

Validation of Lymphatic Filariasis Elimination as a Public Health Problem

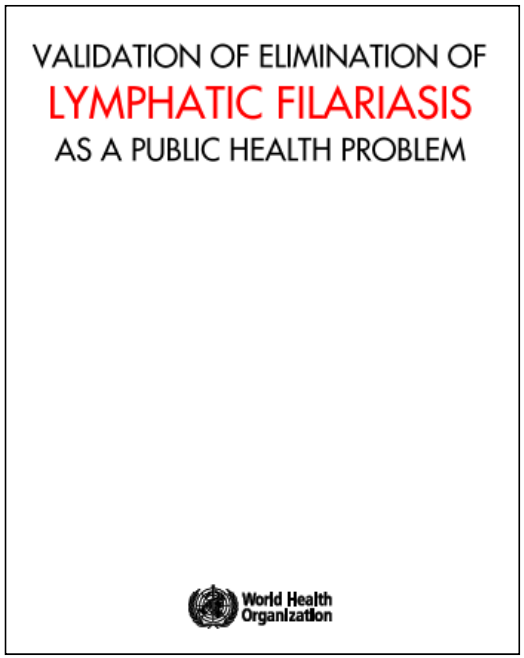
CRITERIA

1. **Stop spread of infection through MDA**:

   A country meets the validation criteria if 100% of endemic areas pass a final TAS conducted no sooner than 4 years after MDA stops.

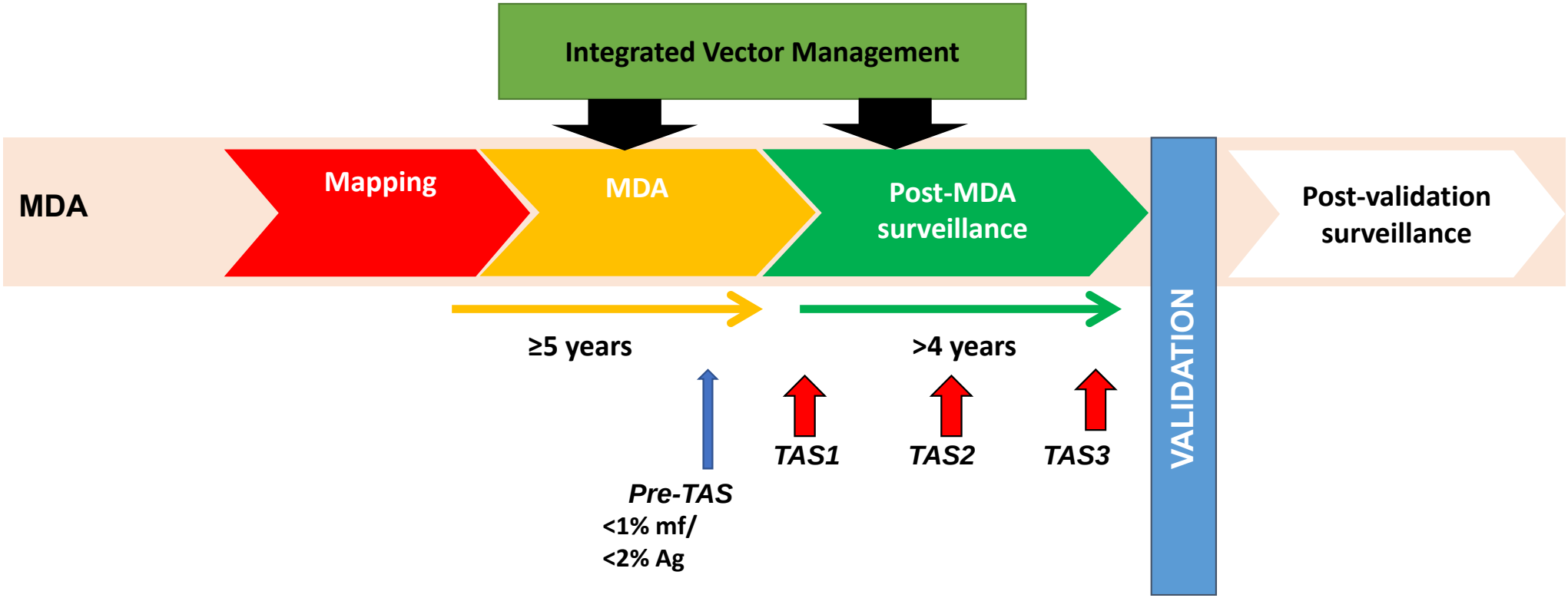
2. **Alleviate suffering with MMDP**

   Availability of the recommended minimum package of care in all areas of known patients (100% geographical coverage)

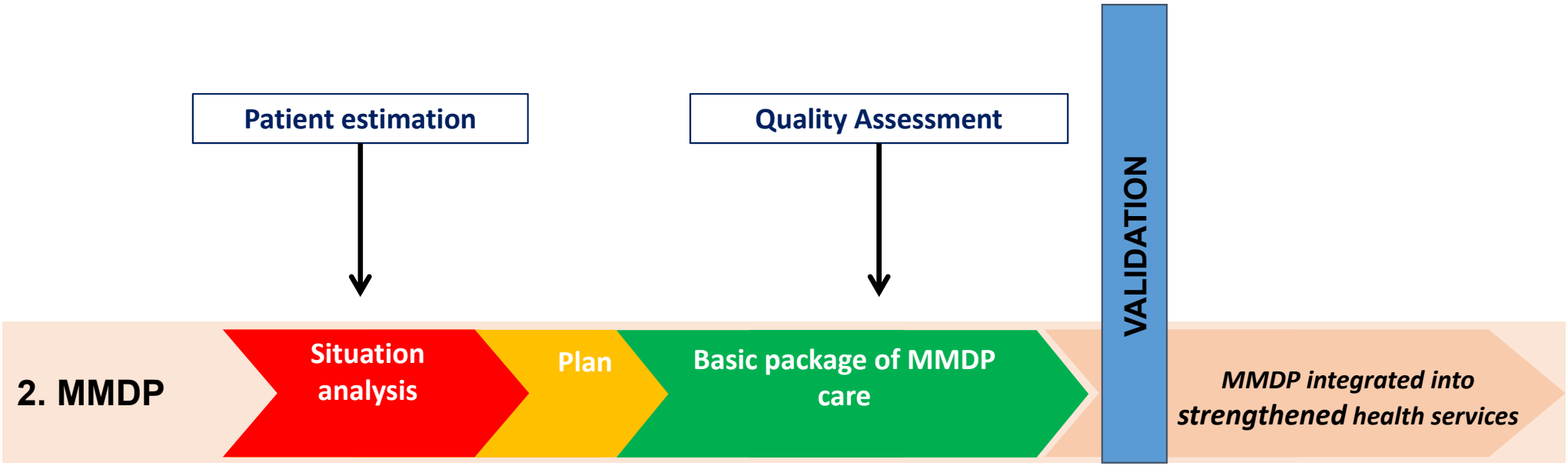


http://www.who.int/lymphatic_filariasis/resources/9789241511957/en/

GPELF Strategic Framework



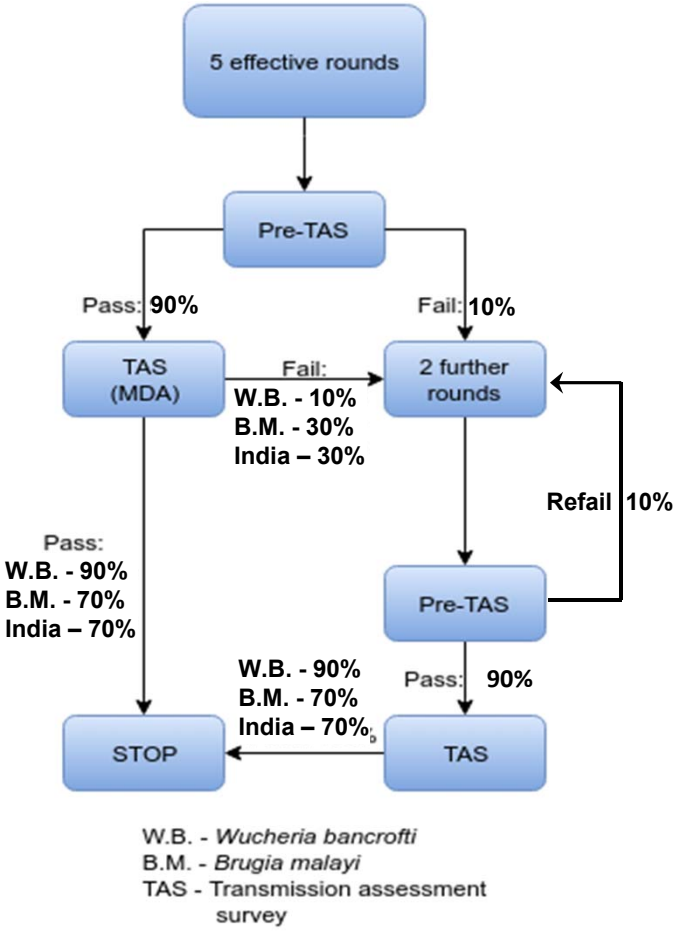
GPELF Strategic Framework



WHO Modelling Approach

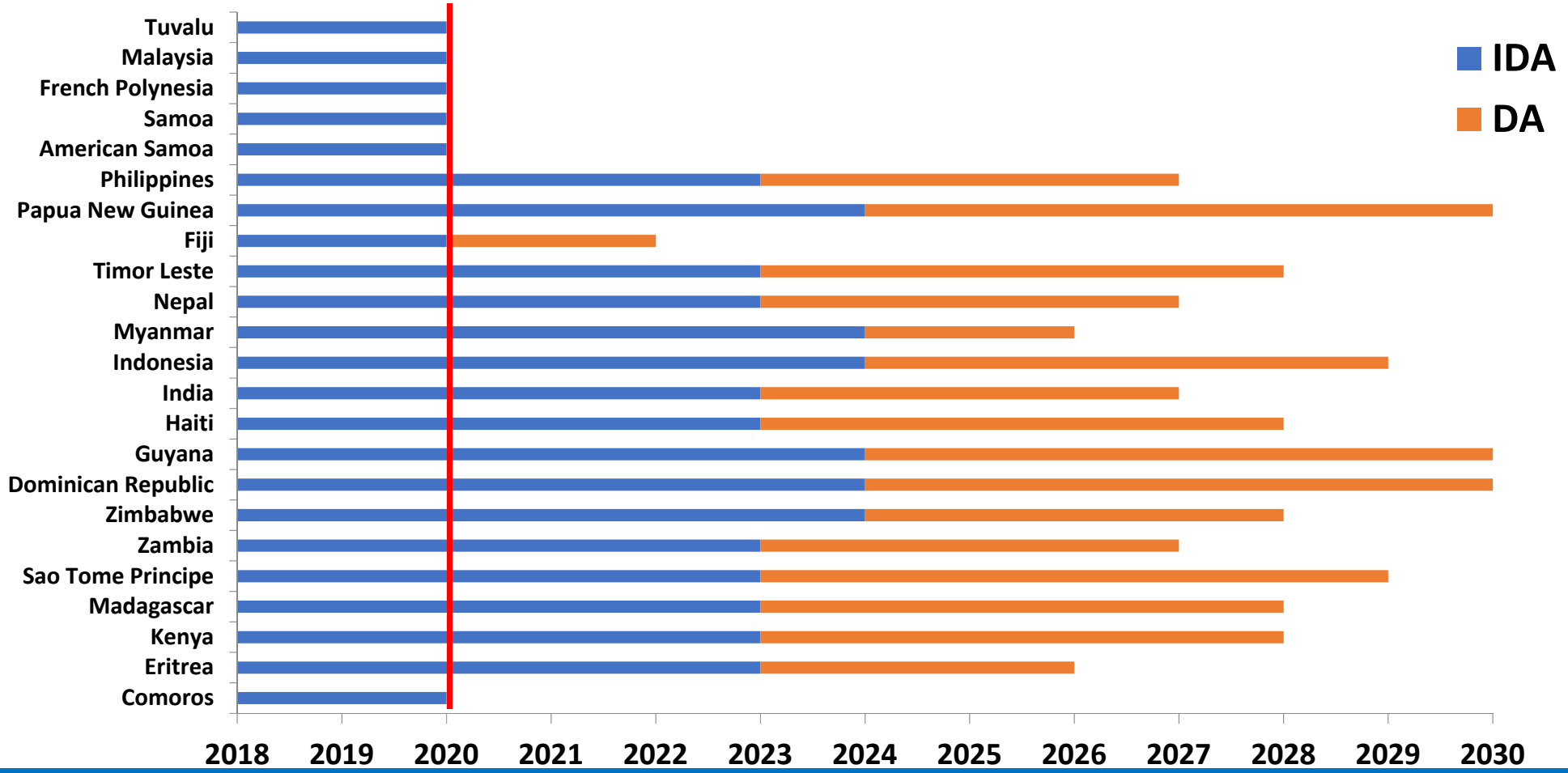
- Mathematical (Markov) model developed for the progression of a single implementation unit (IU) through MDA and passing **TAS1**
- GPELF data (2016) reported to WHO used to establish MDA progress for each IU
- JRSM 2018 used to estimate planned scale-up
- GPELF epidemiological database used to estimate pass rates for the pre-TAS and TAS

Modelling scale down of MDA



- IUs achieve 5 effective rounds (>65% coverage) and undergo pre-TAS
  - 78% of IUs achieve effective coverage each round
  - **90%** of IUs pass pre-TAS
- Pre-TAS and TAS pass-rate dependent on setting and regimen
  - Varies by species and country given existing GPELF data
  - IUs with IDA assumed 95% pass rate
- IUs failing pre-TAS or TAS conduct 2 more MDA rounds
  - **Failing IUs assume same pre-TAS and TAS pass rates above**
  - Unlucky IUs cannot fail more than 2 times
  - IDA IUs cannot fail more than once
- Other assumptions:
  - 100% geographical coverage **2019**
  - MDA is assumed to be given in a TAS year
  - IDA used where warranted

Projected year all IUs pass TAS and stop MDA *DEC+ALB*



*Preliminary results assumes 78% IUs with effective coverage; IDA where warranted;

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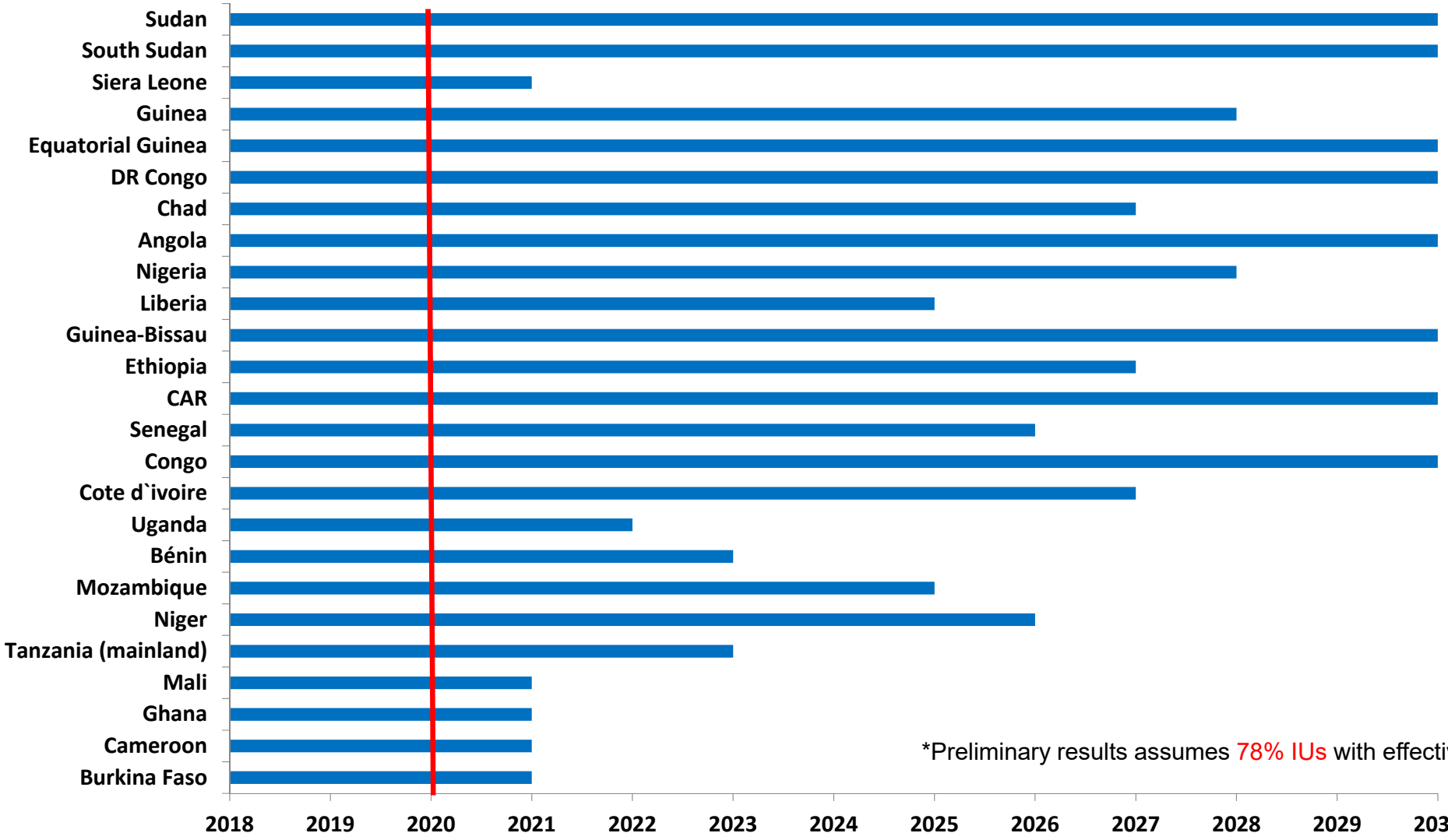
Projected year all IUs pass TAS and stop MDA *IVER+ALB*



2030 NTD Roadmap

Target: elimination as a public health problem

Lymphatic filariasis (elephantiasis)

HIGHLY PRELIMINARY

WHO 2030 target

Indicator	2020 (provisional estimate)	2023 (target)	2025 (target)	2030 (target)
# countries validated for elimination as a PHP – defined as: ***-infection sustained below TAS thresholds for at least 4 years after stopping MDA*** ***-availability of minimum package of care in all areas of known patients***	**19 (26%)**	**23 (32%)**	**34 (47%)**	**58 (81%)**
# countries implementing post-MDA or post-validation surveillance	26 (36%)	37 (51%)	40 (56%)	72 (100%)
Population requiring MDA	TBC	330mn	180mn	0

Assessment of actions required to meet 2030 targets

Summary of critical actions to achieve targets

- Start MDA in all endemic districts and strengthen MDA delivery in all settings; Implement alternative improved interventions where appropriate (e.g., IDA in qualifying settings; strategies for hotspots)
- Improve capacity for morbidity management and disability prevention; prioritize within primary healthcare and as part of UHC
- Improve diagnostics, strengthen criteria for stopping MDA; establish post-MDA and post-validation surveillance standards; update guidelines with new tools and strategies as appropriate
- Increase country commitment and investment at all levels

No bottleneck towards target — Critical action required to reach target

Category	Current Assessment	Current status	Actions required
Technical progress			
Scientific understanding		▪ Good understanding of transmission and parasite lifecycle ▪ Uncertainty of the impact of zoonotic *B. malayi* on efforts to interrupt transmission	▪ Continued research around correlation of biological markers of infection and exposure with transmission interruption ▪ Understanding & defining high transmission areas/ hotspots
Diagnostics		▪ Diagnostic tests are available for recommended monitoring & evaluation (M&E) ▪ *Loa loa* infection can create a false positive result of the recommended LF antigen test.	▪ Develop diagnostic test which is not cross-reactive with *L. loa* ▪ Improve reliability of current diagnostic tests; improved diagnostics for post-MDA surveillance ▪ Ensure reporting of issues with diagnostic tests for quality monitoring
Effective intervention		▪ Multiple rounds of annual MDA are effective at reducing infection prevalence below target thresholds with high coverage ▪ The new, triple-therapy regimen of ivermectin, diethylcarbamazine (DEC) and albendazole is more effective at clearing microfilariae (mf) for longer periods of time than two-drug regimens allowing for fewer rounds of MDA ▪ Surgery cures hydrocele ▪ Management of lymphedema reduces acute attacks	▪ Interventions are effective; delivery is the challenge *(see next section)* – Ensure directly observed therapy and sustain high coverage; – Implement IDA and other alternative MDA regimens where warranted – Develop strategies to mitigate 'hot-spots' of persistent infection and reach missed populations; Develop new approaches for urban settings – Ensure accessible and inclusive care for patients to reduce stigma and improve mental wellbeing are part of UHC essential packages
Strategy and service delivery			
Operational and normative guidance		▪ Guidelines are available for MDA, M&E, and morbidity management and disability prevention (MMDP) ▪ Specific guidance for post-validation surveillance is needed ▪ Criteria for elimination of transmission are not defined	▪ Update Aide Memoire for morbidity management with new targets; link to UHC ▪ Specify the minimum standards for post-validation surveillance and how to set up and maintain activities ▪ Define criteria to achieve verification of interruption of LF transmission
Planning , governance, and programme implementation		▪ WHO launched the Global Programme to Eliminate Lymphatic Filariasis (GPELF) in 2000 which represents the aggregate effort of all individual stakeholders towards LF elimination. ▪ While interventions and guidance exist there is lack of prioritization and quality implementation in some countries ▪ When programmes fail to achieve effective coverage, additional rounds of MDA become necessary	▪ Enhance support to countries to develop/update national NTD strategic plans with alternative MDA strategies and focus on UHC ▪ Encourage cross-country learning to facilitate adoption of best practices ▪ Strengthen political commitment, social mobilization, microplanning, supervision, and adverse event management to ensure quality of MDA ▪ Include patients in planning, policy development and mobilization ▪ Emphasize the importance of post-validation surveillance and patient care
Monitoring & Evaluation		▪ Lack of resources for M&E implementation ▪ Identification of focal, residual infection can be challenging ▪ Limited areas where endemicity was not determined when programmes started ▪ Risk of perverse incentive for health workers and/or programme managers at different levels to report inflated coverage figures or lower prevalence	▪ Map areas with uncertain occurrence of infection to determine need for MDA ▪ Identify epidemiological settings where current thresholds for stopping MDA may not be sufficient, define new thresholds and develop survey method ▪ Develop alternative M&E strategy for new MDA regimens (i.e. IDA) ▪ Develop new guidance on the standard of surveillance and interventions to be sustained post-MDA and post-validation ▪ Integrate surveillance with NTDs, Malaria, or others where feasible
Supply and logistics		▪ MSD, GSK, and Eisai donate ivermectin, albendazole & diethylcarbamazine; Global supply has been adequate to date. IDA will increase global demand of ivermectin. MSD has expanded the Mectizan donation of up to 100M treatments annually for IDA through 2025. ▪ Challenge to reach remote rural communities, islands, and conflict areas	▪ Improve planning, request sufficient medicines and diagnostic tests well in advance of programme activities ▪ Make contingency plans for failed impact assessments or emergencies ▪ Make materials for lymphedema management, hydrocele surgery and medicines to treat acute attacks available through the health system
Healthcare infrastructure and workforce		▪ Limited capacity within Primary Health Care to deliver the minimum package of care for morbidity management and disability prevention ▪ Limited capacity to implement recommended epidemiological surveys	▪ Include LF morbidity management modules in health workforce training curriculums; Include training on identification of cases & referral ▪ Include LF interventions in essential UHC packages ▪ Ensure availability of functional facilities for MMDP
Enablers			
Advocacy and funding		▪ Global Alliance to Eliminate LF (GAELF) supports advocacy/resource mobilization with international and local donors ▪ Limited prioritisation and resourcing for LF MDA in some countries ▪ USD ~15 million in funding is dedicated to R&D for fighting LF	▪ Advocate the success and cost effectiveness of LF interventions to facilitate govt support; Increase domestic funding and prioritization at all levels of government ▪ Encourage sustained commitment post-validation to avoid recrudescence ▪ Resources for improved diagnostics
Collaboration and multisectoral action		▪ Limited collaboration and coordination with: – Environmental sector and vector control – Primary Health Care system – STH/ deworming and onchocerciasis elimination programmes – WASH ▪ GPELF partners are active in supporting innovation through basic and operational research	▪ Integrate vector management and surveillance (where feasible) through the Global Vector Control Response to supplement MDA ▪ Strengthen integrated management of skin NTDs ▪ Create link with Global Surgery Initiatives to ensure availability of surgery in IUs with known hydrocele burden, and with Social services, rehabilitation and mental health to build capacity for assessment and referral for psychosocial support ▪ Coordinate with STH and onchocerciasis programmes for evidence based planning when implementation units (IUs) implement TAS and stop MDA ▪ Expand local partnerships to sustain MMDP and surveillance post-validation
Capacity building		▪ Lack of technical and operational capacity in some countries for MDA programme implementation, pre-TAS and TAS implementation, and for MMDP	▪ Build capacity for quality pre-TAS and TAS implementation ▪ Increase awareness and reduce stigma associated with LF in the community ▪ Disseminate MMDP toolkit tools (situation analysis, patient estimation methods, facility inspection, MMDP modules); increase training for providers and patients ▪ Build capacity across social mobilization, risk communication, microplanning,

NTD Roadmap 2030 targets for GPELF

- 58 (81%) countries validated for elimination as a PHP – defined as

-infection sustained below TAS thresholds for at least 4 years after stopping MDA

-availability of minimum package of care in all areas of known patients

- 72 (100%) countries implementing post-MDA or post-validation surveillance

- MDA no longer required

Current Status MMDP Monitoring 2018

Not Reporting	Ever reported number of patients	Reported by IU: patients and availability of minimum package
Angola	Cameroon	Benin
Chad	Comoros	Burkina Faso
Congo	Central Africa Republic	Ethiopia
Cote d'Ivoire	Eritrea	Ghana
Democratic Republic of Congo	Guinea	Kenya
Equatorial Guinea	Madagascar	Liberia
Gabon	Mozambique	Niger
Guinea-Bissau	Nigeria	Malawi
South Sudan	Sao Tome and Principe	Mali
Zimbabwe	Sierra-Leone	Senegal
Sudan	Uganda	Togo
New Caledonia	Zambia	United Republic of Tanzania
	Brazil	Bangladesh
	Dominican Republic	India
	Haiti	Indonesia
	Malaysia	Maldives
	American Samoa	Myanmar
	Federated States Micronesia	Nepal
	Fiji	Guyana
	Kiribati	Egypt
	Papua New Guinea	Yemen
	Samoa	Brunei Darussalam
	Tuvalu	Cambodia
		Lao PDR
		Philippines
		Cook Islands
		French Polynesia
		Marshall Islands
		Niue
		Palau
		Tonga
		Vanuatu
		Vietnam
		Wallis and Futuna
		Sri Lanka
		Thailand
		Timor-Leste
12 (17%)	23 (32%)	37 (51%)

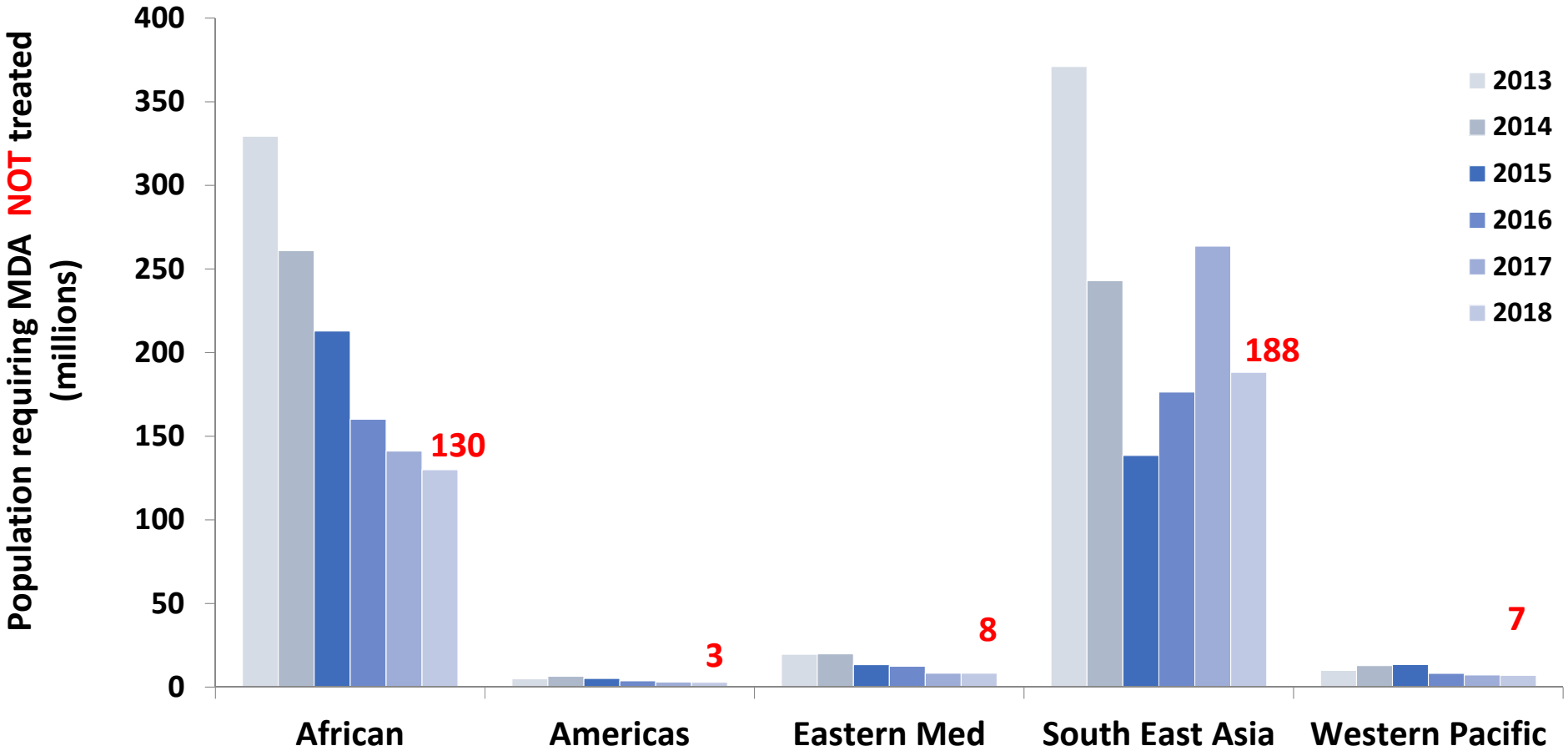
Priorities 2021-2030 MMDP

Action Required	Milestones & Indicators
Prioritize MMDP within primary health care as part of UHC	100% (72) countries included LF interventions in UHC essential package by 2025
Countries monitoring LF morbidity and available care by IU	100% (72) countries reporting to WHO at least partial data by 2023 and complete data by 2025
Countries have data on quality of the provision of care	100% (72) countries have met dossier requirements to report on quality and readiness by 2030

Other critical actions needed - *MMDP*

- Improve capacity for MMDP within primary healthcare
- Ensure accessible and inclusive care for patients to reduce stigma and improve mental wellbeing is part of UHC essential packages
- Ensure availability of functional facilities for MMDP in the primary healthcare system, including materials for lymphedema management, hydrocele surgery and medicines to treat acute attacks
- Link with Global Surgery Initiatives to ensure availability of surgery in IUs with known hydrocele burden, and with Social services, rehabilitation and mental health to build capacity for assessment and referral for psychosocial support

MDA Gap by Region



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GPELF Progress: MDA status of countries 2019

MDA not started	MDA started but not at scale	MDA scaled to all endemic districts	Post-MDA Surveillance	Post Validation Surveillance
Equatorial Guinea Gabon New Caledonia	Angola Central African Republic Congo Democratic Republic Congo Guinea-Bissau Nigeria South Sudan Sudan Madagascar Guyana Papua New Guinea	Benin, Burkina Faso Chad, Côte d'Ivoire, Ethiopia, Ghana, Guinea, Liberia, Mali, Mozambique, Niger, Senegal, Sierra-Leone Tanzania, Uganda, Comoros , Kenya, Eritrea Zambia, Zimbabwe Sao Tome & Principe Haiti India, Indonesia Myanmar Nepal Timor-Leste American Samoa French Polynesia, Tuvalu Fiji, FSM, Malaysia, Samoa, Philippines	Cameroon Malawi Brazil Dominican Republic Bangladesh Brunei Darussalam Lao PDR	 **Togo** Egypt, Yemen Maldives, Sri Lanka, Thailand Cambodia, Cook Islands Kiribati, Marshall Islands Niue, Tonga, Vanuatu Palau, Vietnam Wallis and Futuna
3 (0%)	11 (3%)	35 (41%)	7	16

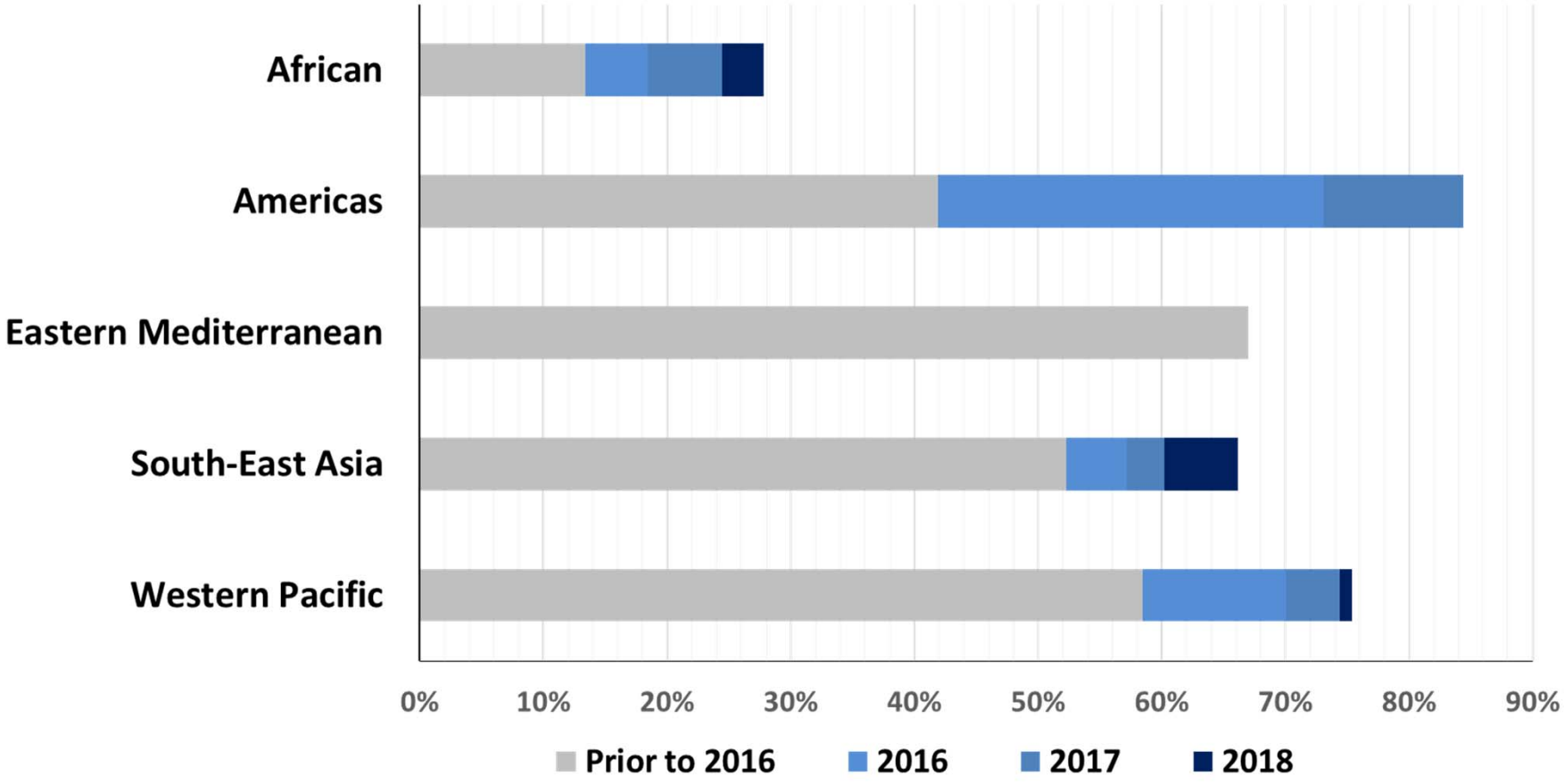
GPELF Priorities 2021-2030 - MDA

Action Required	Milestones & Indicators
Map uncertain areas	Need for MDA in all uncertain districts defined by 2021
Revitalize MDA to achieve high compliance: -build capacity in social mobilization, microplanning, and supervision	Every year, all IU's target 100% of eligible population in each round
Implement IDA where warranted	100% geographical coverage globally with WHO recommended MDA regimen by 2021

GPELF Priorities 2021-2030 - MDA

Action Required	Milestones & Indicators
Map uncertain areas	Need for MDA in all uncertain districts defined by 2021
Revitalize MDA to achieve high compliance: -build capacity in social mobilization, microplanning, and supervision	Every year, all IU's target 100% of eligible population in each round
Implement IDA where warranted	100% geographical coverage globally with WHO recommended MDA regimen by 2021
Build capacity - emphasis on quality pre-TAS and TAS implementation	**100% eligible IUs implement surveys at recommended timing**

Proportion of implementation units that have completed transmission assessment surveys (TAS) and no longer require MDA*



Other critical actions needed - *MDA*

- Develop strategies to mitigate ‘hot-spots’ of persistent infection and reach missed populations
- Develop new approaches for urban MDA
- Develop diagnostic test which is not cross-reactive with *L. loa*
- Improve reliability of current diagnostic tests;
- Ensure reporting of issues with diagnostic tests for quality monitoring

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Action Required	Milestones & Indicators
Map uncertain areas	Need for MDA in all uncertain districts defined by 2021
Implement IDA where warranted	100% geographical coverage globally with WHO recommended MDA regimen by 2021
Revitalize MDA to achieve high compliance: -build capacity in social mobilization, microplanning, and supervision	Every year, all IU's target 100% of eligible population in each round
Build capacity - emphasis on quality pre-TAS and TAS implementation	100% eligible IUs implement surveys at recommended timing
Facilitate government support, mobilize resources, expand partnerships	**Sustainable resources for programme activities and post-validation surveillance**

Critical actions needed - *surveillance*

- Improved diagnostics
- Encourage sustained commitment post-validation to avoid recrudescence
- Specify the minimum standards for post-validation surveillance (**PVS**) and how to set up and maintain activities
- Integrate vector management and surveillance (where feasible) through the Global Vector Control Response to supplement MDA
- Define criteria to achieve verification of interruption of LF transmission


THANK YOU
Merci
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