amp | The Alliance for Malaria Prevention

CLINTON HEALTH ACCESS INITIATIVE

Net Mapping Project and the Global Malaria Commodities Forecasting Project

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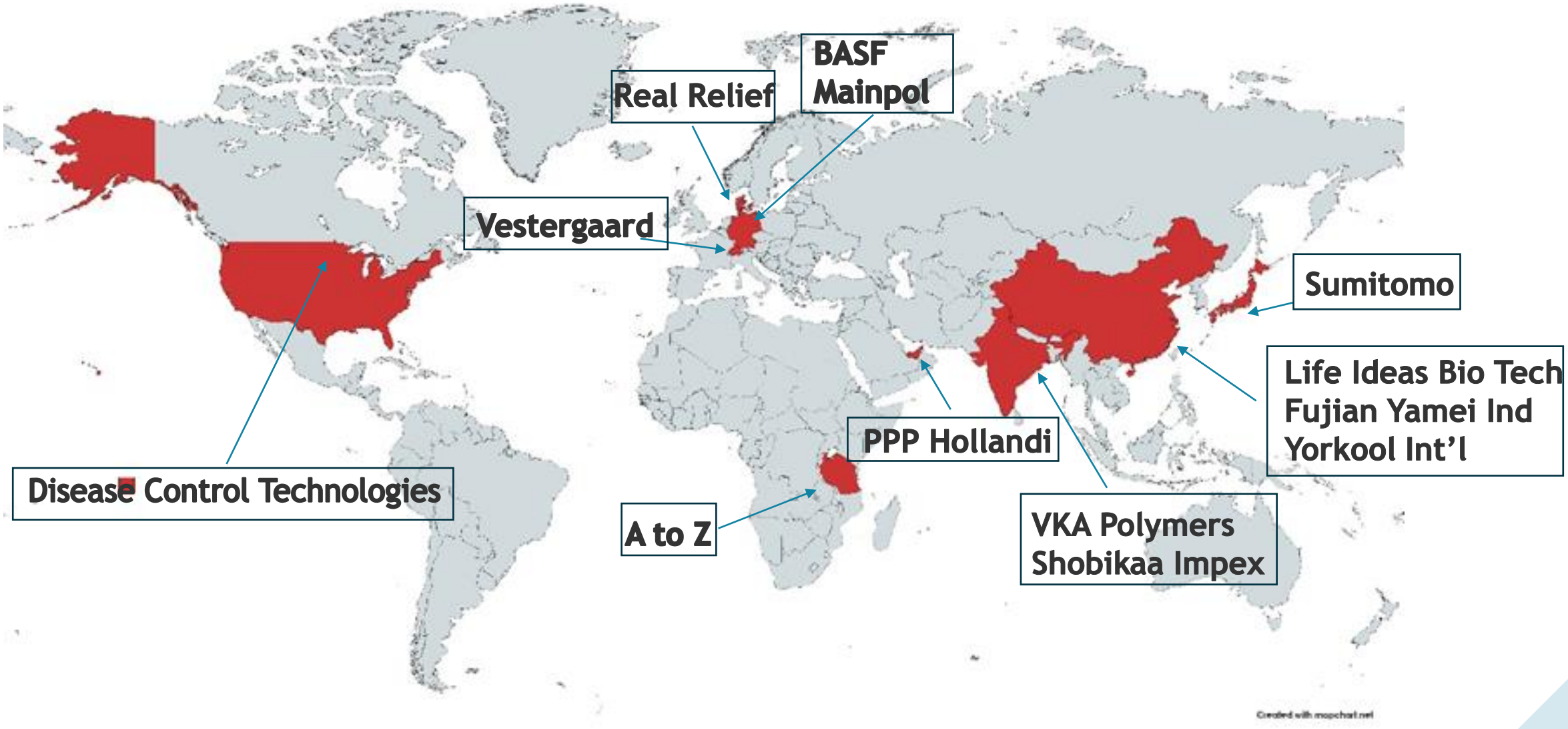
3.1B!

1. 2023 marked the 20th year of the Net Mapping Project
2. From 2004 – 2023: **3,084,878,107** ITNs were produced and shipped

NMP provides input on ITN shipments

1. Manufacturers supply ITN shipment data each quarter
2. NMP produces excel reports on ITN shipments
   - By country, by type, by donor and region
3. Website
   - Maps global distribution of ITNs
     Yearly and cumulative data, Net types (standard, PBO, Dual)
   - In-country maps showing planned distribution *(when available)*

Manufacturers HQs *(13 based in 9 countries)*



General trends

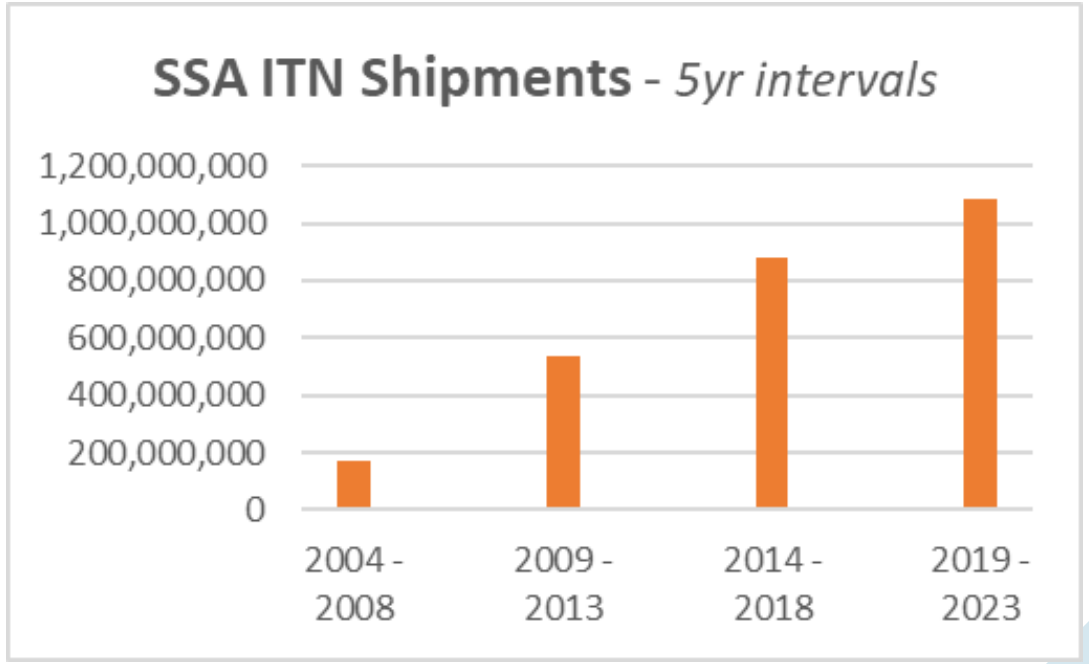
Global ITN shipments by region and year - ALL COUNTRI

in ITNs

Year	Sub-Saharan Africa	Rest of the World	Total	Cumulative
2004	5,617,184		5,617,184	5,617,184
2005	16,944,713		16,944,713	22,561,897
2006	46,842,964		46,842,964	69,404,861
2007	43,805,000		43,805,000	113,209,861
2008	60,151,197		60,151,197	173,361,058
2009	88,476,937	13,226,517	101,703,454	275,064,512
2010	145,209,800	20,473,178	165,682,978	440,747,490
2011	88,003,106	38,678,392	126,681,498	567,428,988
2012	70,272,798	18,181,481	88,454,279	655,883,267
2013	142,976,486	22,267,890	165,244,376	821,127,643
2014	189,205,502	22,151,629	211,357,131	1,032,484,774
2015	177,876,883	28,904,667	206,781,550	1,239,266,324
2016	137,724,562	25,811,705	163,536,267	1,402,802,591
2017	202,908,557	50,810,329	253,718,886	1,656,521,477
2018	172,405,858	26,184,837	198,590,695	1,855,112,172
2019	212,847,696	41,146,281	253,993,977	2,109,106,149
2020	209,210,311	44,090,650	253,300,961	2,362,407,110
2021	205,582,406	14,140,924	219,723,330	2,582,130,440
2022	259,459,521	23,264,300	282,723,821	2,864,854,261
2023	195,375,167	24,648,679	220,023,846	3,084,878,107
Total	**2,670,896,648**	**413,981,459**	**3,084,878,107**	

- **+200m ITNs annually since 2017**
  - **87% shipped to SSA**
  - **13% shipped to ROW**

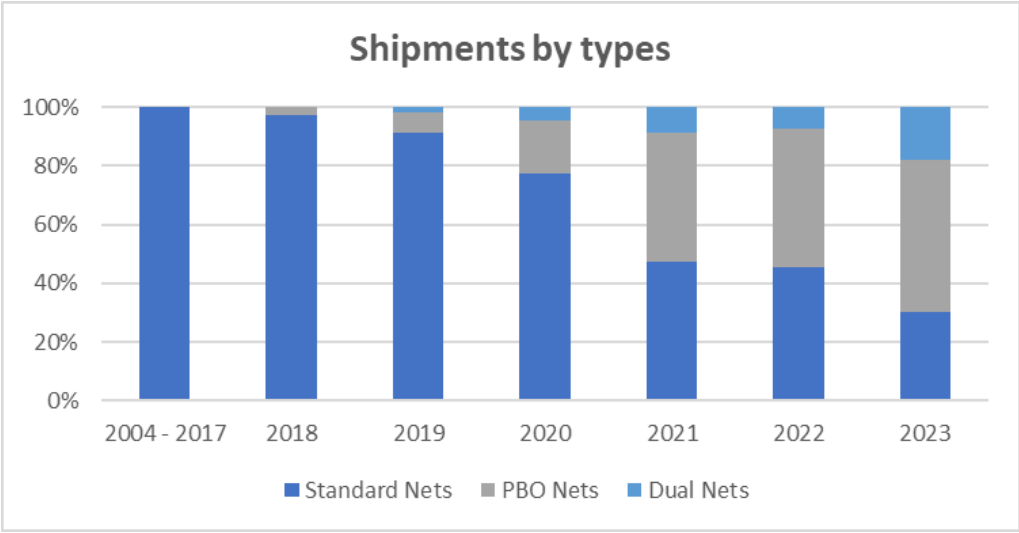
- **10 years to reach 1B**
  5 years to 2B
  4 years to 3B



Shipments by Type and Donor

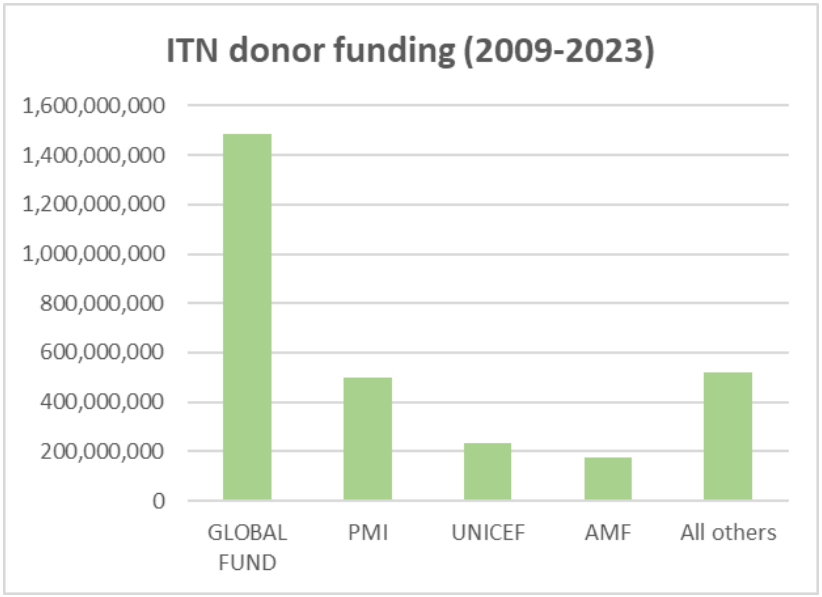
ITN shipments by type (All Countries)

in ITNs						
Year	**Standard Nets**		**PBO Nets**		**Dual Nets**	
2004 - 2017	1,656,521,477	100%				
2018	193,481,156	97%	5,109,539	3%		
2019	231,770,760	91%	18,078,117	7%	4,145,100	2%
2020	196,371,847	78%	44,916,713	18%	12,012,401	5%
2021	104,135,277	47%	96,768,722	44%	18,819,331	9%
2022	128,614,323	45%	132,725,464	47%	21,384,034	8%
2023	66,267,959	30%	113,740,228	52%	40,015,659	18%
Totals	**2,577,162,799**		**411,338,783**		**96,376,525**	



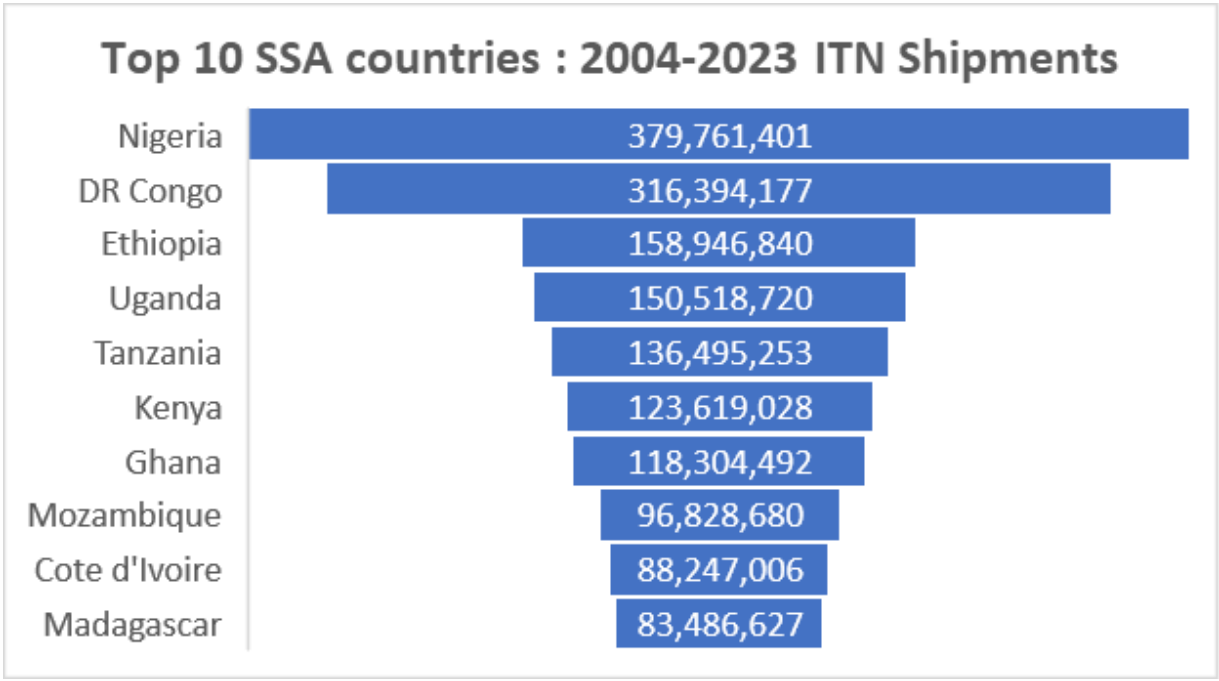
Major donors (2009 - 2023)

in ITNs		
GLOBAL FUND	1,484,339,803	51%
PMI	497,085,677	17%
UNICEF	232,412,346	8%
AMF	176,759,592	6%
All others	520,919,631	18%
Total	**2,911,517,049**	100%



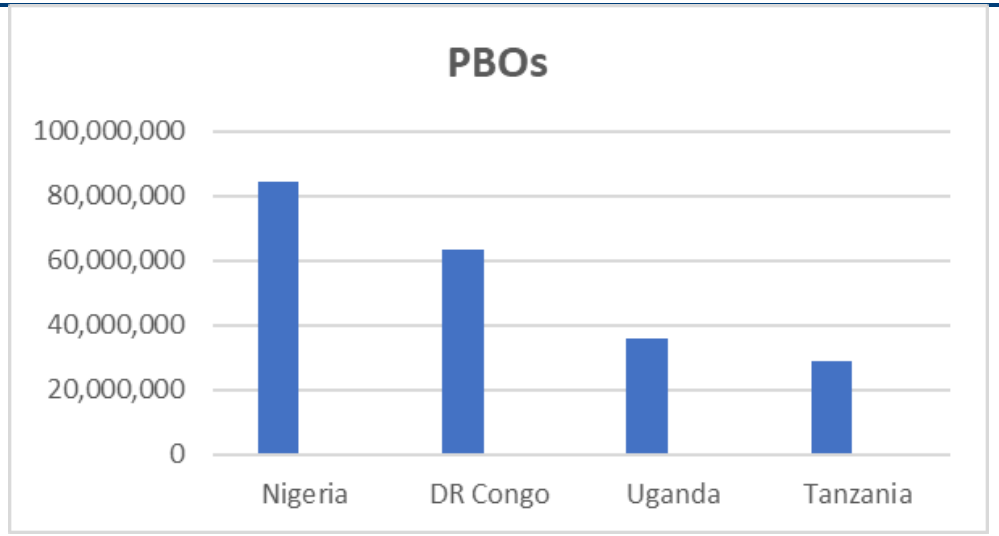
Top 10 ITN countries in SSA

ITN shipments Top 10 SSA (2004 - 2023)		
in ITNs		
Nigeria	379,761,401	14%
DR Congo	316,394,177	12%
Ethiopia	158,946,840	6%
Uganda	150,518,720	6%
Tanzania	136,495,253	5%
Kenya	123,619,028	5%
Ghana	118,304,492	4%
Mozambique	96,828,680	4%
Cote d'Ivoire	88,247,006	3%
Madagascar	83,486,627	3%
sub-Total	**1,652,602,224**	**62%**

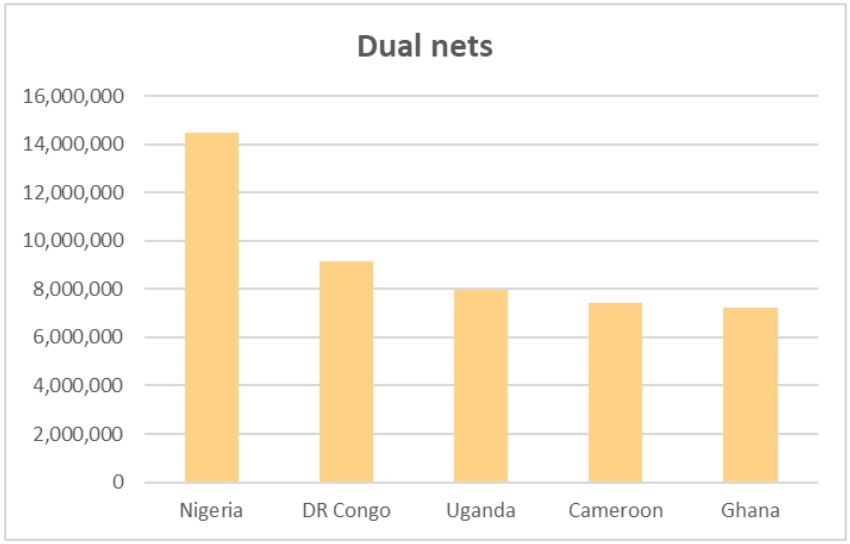


Next Gen

PBO nets top SSA (2018 - 2023)		
in ITNs		
Nigeria	84,167,128	21%
DR Congo	63,349,090	16%
Uganda	35,810,401	9%
Tanzania	28,764,271	7%
sub-Total	**212,090,890**	**52%**
All others	192,374,458	48%
Total	**404,465,348**	**100%**



Dual nets top SSA (2018 - 2023)		
in ITNs		
Nigeria	14,491,865	15%
DR Congo	9,156,083	10%
Uganda	7,944,089	8%
Cameroon	7,406,294	8%
Ghana	7,227,525	8%
sub-Total	**46,225,856**	**48%**
All others	49,938,669	52%
Total	**96,164,525**	**100%**



Thanks to those who make this project possible

- AMP for hosting the project
- UN Foundation for funding the project
- ITN manufacturers for continually supplying shipment data

https://allianceformalariaprevention.com/itn-dashboards/net-mapping-project/

In 2021 CHAI assembled a consortium of partners to develop a more organized approach to navigating an increasingly complex malaria commodities market

Objectives

- Improve **visibility and consensus**
- Highlight existing **commodity demand** and **potential gaps** in commodities coverage
- Identify factors influencing **global uptake of key commodities** and highlight the opportunity and/or need for additional investments or interventions

We produce three annual outputs

(i) Short-term procurement forecast

(ii) Long-term need and demand forecast

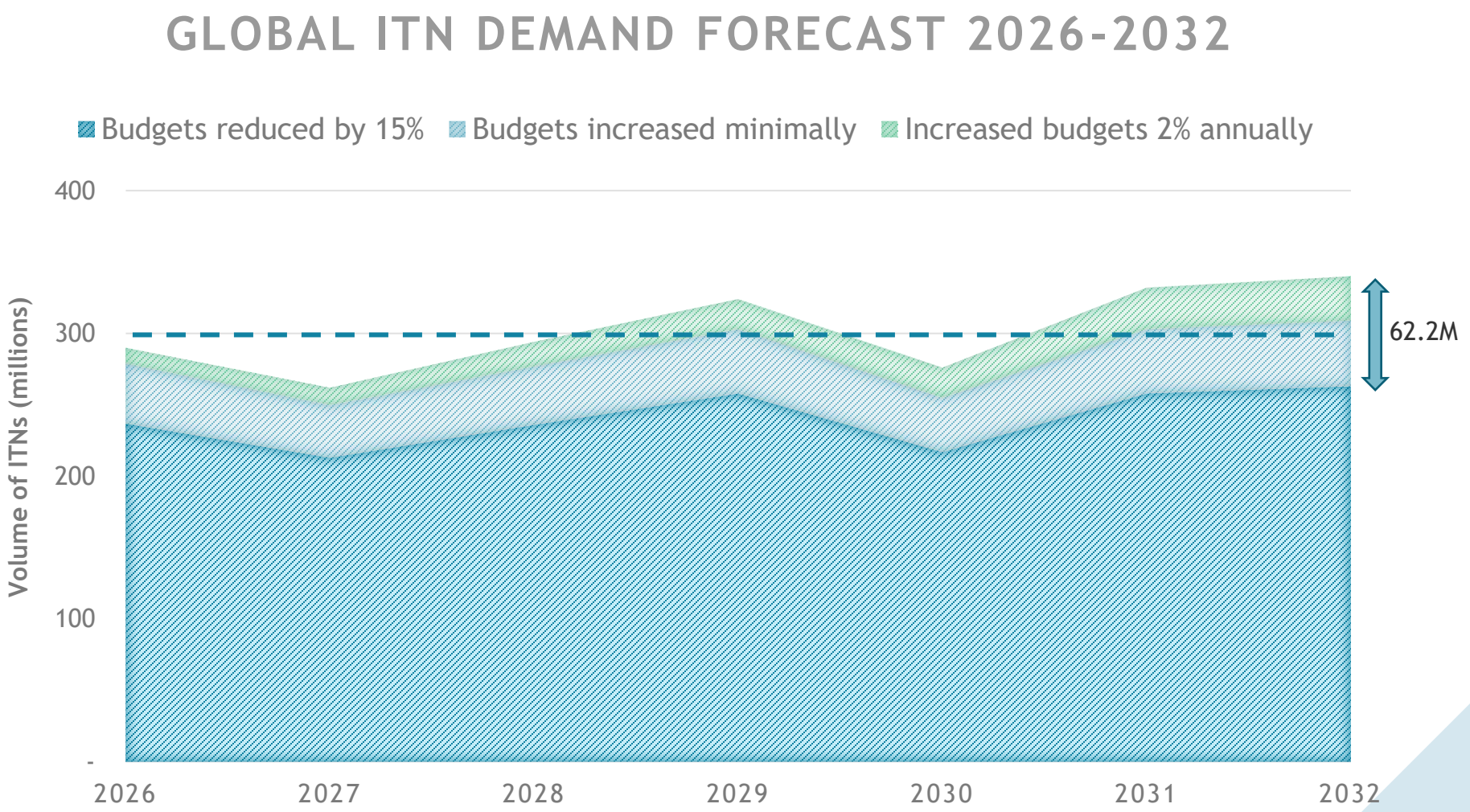
(iii) Deep-dive analysis on a specific commodity market

Our **methods** rely on historical trend and regular expert opinions from Forecasting Consortium and Project Steering Committee

https://dashboards.endmalaria.org/forecastingCommodities/long-term-forecast

It has taken 20 years to reach 3 billion nets - We expect to reach the next 3 billion in half that amount of time

- The **total number of nets we anticipate in the next ten years ranges from 2.4-2.9 billion**, according to long- and short-term forecasts
- While these are big numbers, this reflects only **a small annual increase over the next decade**, principally due to anticipated funding limitations
- There is a gap of 62 million nets between funding scenarios by 2032



*Long-term commodity forecast only includes 2026-2032

Short-term forecasts are influenced by ITN coverage (universal coverage vs sub-national tailoring) and budget limitations

Four scenarios developed:

SUB-NATIONAL TAILORING

Sees reduced ITN coverage and results in lower overall ITN volumes

MINIMAL BUDGET INCREASES:

Reduces uptake of newer types of ITNs being procured

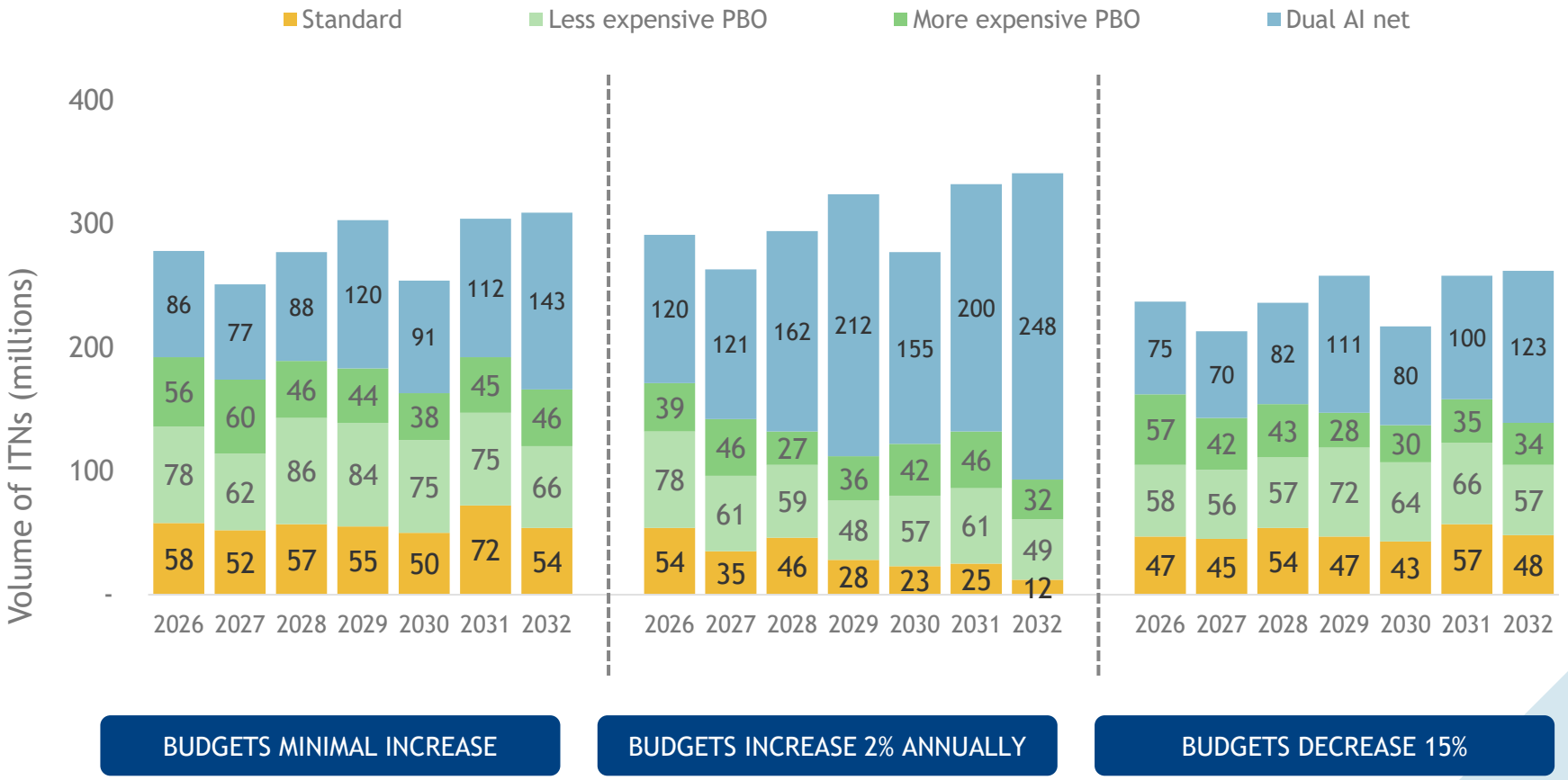
Shipment data from 2023 shows the most similarity with the scenario with **sub-national tailoring and a minimal budget increase**

Available budgets for ITN procurement determines the rate of switch to dual AI nets and influences the level of ITN coverage attainable

GLOBAL TRENDS SEE BUDGETS IMPACT BOTH VOLUMES AND ITN PRODUCT SPLIT

Product split is highly sensitive to available budget. In a scenario where we see budgets consistently increase faster than the change in population, dual AI nets take over 73% of the market by 2032. However, we see other types of nets maintain an edge where budgets stay flat

Under a **reduced budgeting scenario, we anticipate countries to heavily target net distribution**, reducing global volumes, resulting in **gaps in coverage.**



Caveats and considerations when forecasting outputs of a dynamic and continually changing market

- This forecast does not yet account for any new tools coming to market.

- The forecast was determined before the latest pricing agreement from Global Fund on CFP-PYR nets.

- Two PBO pricing categories were developed to capture varied price-points between PBO nets on the market

- Assumptions in the population at risk data for use in population coverage with ITNs

- The introduction of new dual AI nets at a higher price-point are included within the long-term forecast

- Uniform coverage strategy assumed, which increased gradually over time

Please direct any questions/comments to:
malaria.forecast@clintonhealthaccess.org

The **Forecasting Consortium** is coordinated by

CLINTON HEALTH ACCESS INITIATIVE

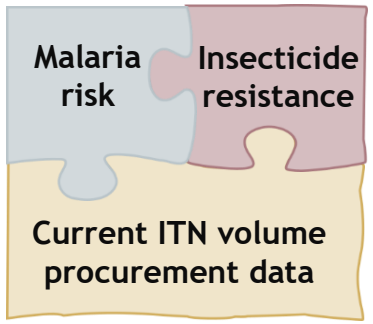
In partnership with

IVCC map Swiss TPH MMV Medicines for Malaria Venture RBM Partnership To End Malaria

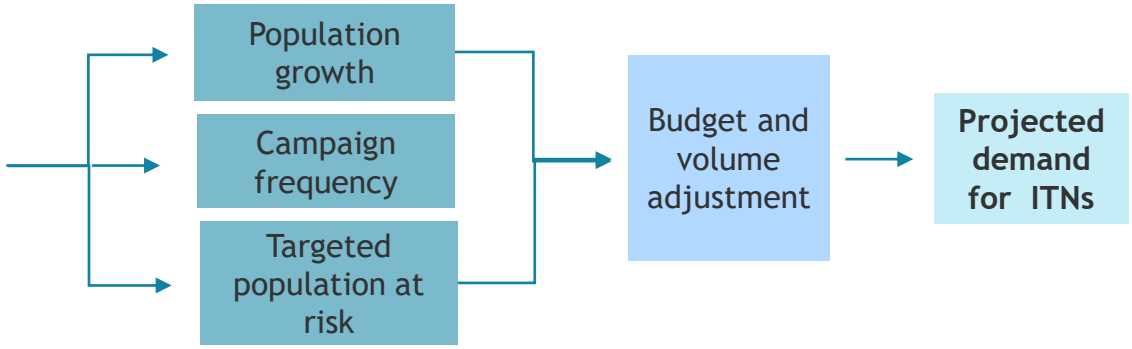
Workflow for generating long-term projections of demand for insecticide treated nets: general overview

The workflow uses the Malaria Atlas Project (MAP) statistical modelling approach, forecasting trends based on current procurement volumes, population growth, targeted intervention coverage, insecticide resistance, net product preference and allocated budgeting scenarios

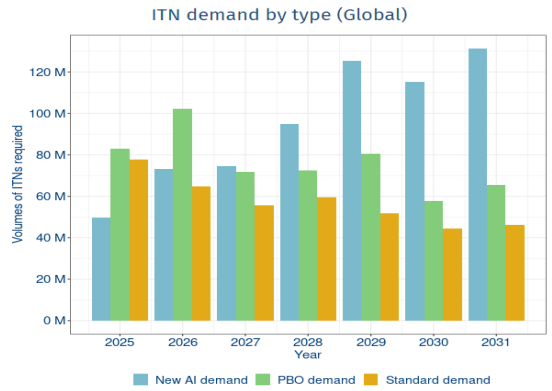
Parameters and data sources



Flow for calculating ITN demand



Product split



Step1: Data inputs taken from AMP Net Mapping Project, MAP's PAR and reported insecticide resistance (IR Mapper and the WHO Threats Map)

Step2: Current ITN volumes from historical supply projected by population growth, assumptions of campaigns frequency and coverage targeting. Target volumes and budgets are adjusted for budgeting allocation scenarios

Step3: Adjusted forecast ITN volumes were split by product category using country-level data on current use and projected trends for future uptake based on reported insecticide resistance