

STH Coalition Webinar

A WORLD BANK'S STRATEGY FOR IMPROVING HUMAN CAPITAL DEWORMING AFRICA INITIATIVE (DAI)

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World Bank TWIN GOALS

End Extreme Poverty by 2030

&

Promote Shared Prosperity

Among the Poorest 40%

OUTLINE

- 1** WBG Human Capital Project
- 2** WBG Strategy to Control NTDs: *Deworming Africa Initiative*
- 3** Country Operations
- 4** Recent Implementation Stories - *Angola*

The Human Capital Project (HCP) is a key World Bank Group strategy to end extreme poverty

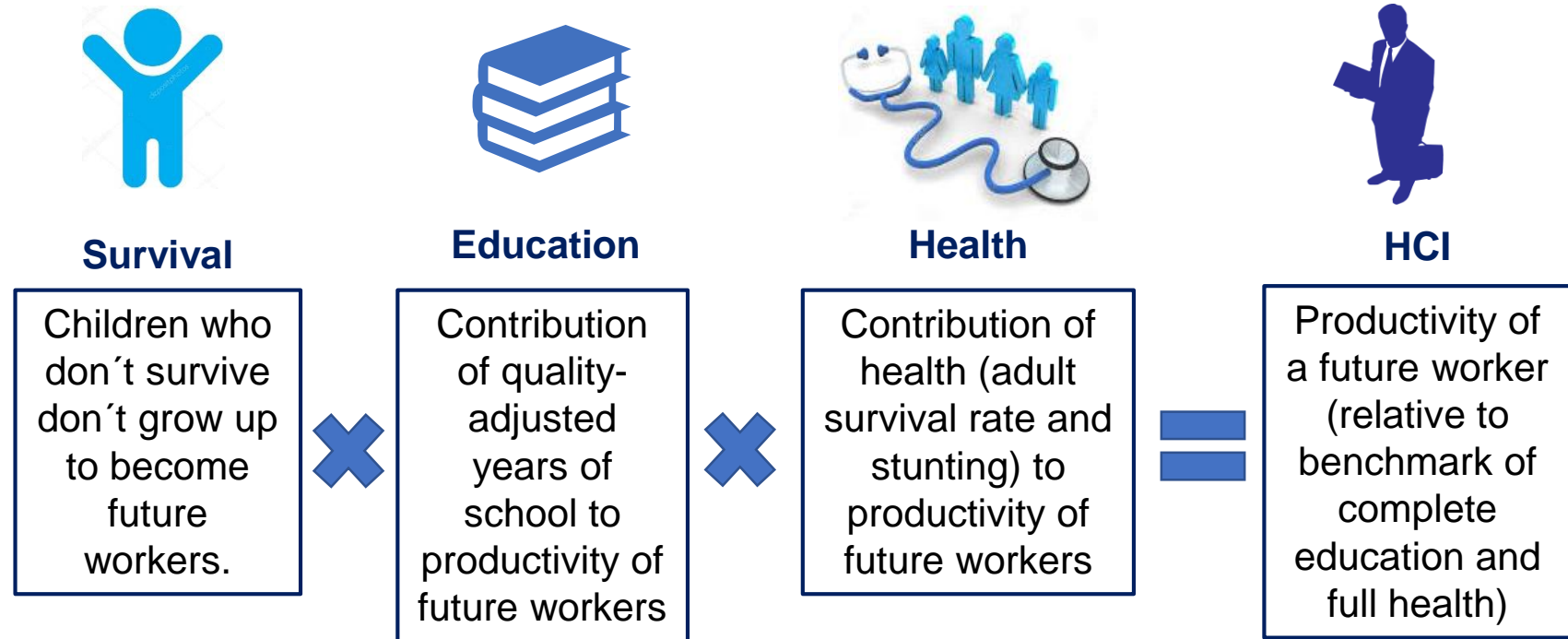
The Human Capital Project (HCP) is a global effort to accelerate more and better investments **in people** for greater equity and economic growth.



THE WORLD BANK HAS LAUNCHED THE HUMAN CAPITAL PROJECT TO ACCELERATE MORE AND BETTER INVESTMENTS IN PEOPLE

- 1. Human Capital Index (HCI):** Make the case for investment in the human capital of the next generation.
- 2. Measurement and Research:** Improve measurement and research and provide analysis to support investments in human capital development.
- 3. Country Engagement:** Support countries to prepare national strategies that accelerate progress on human capital.

How much human capital can a child born today expect to acquire by age 18, given the risks to poor health and education that prevail in the country where he/she lives?



World Bank Group – Human Capital Index

Indicator	East Asia & Pacific	Europe & Central Asia	Latin America & Caribbean	Middle East & North Africa	North America	South Asia	Sub-Saharan Africa
	Male + Female	Male + Female	Male + Female	Male + Female	Male + Female	Male + Female	Male + Female
HCI COMPONENT 1: SURVIVAL							
Probability of Survival at Age 5	0.978	0.993	0.980	0.984	0.994	0.957	0.934
HCI COMPONENT 2: SCHOOL							
Expected Years of School	11.9	13.0	11.9	11.5	13.5	10.5	8.1
Harmonized Test Scores	451	495	404	408	530	364	374
HCI COMPONENT 3: HEALTH							
Survival Rate from Age 15-60	0.873	0.900	0.861	0.906	0.921	0.841	0.732
Fraction of Children Under 5 Not Stunted	0.776	0.881	0.859	0.847	0.979	0.645	0.684
HUMAN CAPITAL INDEX (HCI)	0.61	0.70	0.55	0.57	0.78	0.46	0.40

HUMAN CAPITAL INVESTMENTS, ESPECIALLY EARLY INVESTMENTS, POSITIVELY IMPACT GROWTH AND DEVELOPMENT

INVESTING EARLY MATTERS!

- **Malnutrition:** irreversibly impairs development, learning, and earnings.
- **Cognitive/ linguistics:** delays accumulate early and last a lifetime.
- **Socio-emotional skills:** predict success and productivity
- **Human Capital** is a critical precondition for economic growth

Massive gains from human capital investments



Child mortality rates down



Maternal mortality rates down



More children in school



More people covered by safety nets



Rising life expectancy

WHY ARE NTDS A SERIOUS CONCERN FOR HUMAN CAPITAL?

Early years:

- Increased risk of anemia by 25% and severe anemia by 73%
- Reduction of nutrient absorption increasing malnutrition
- Increased chronic infections and fatigue
- Delays children's growth and cognitive development

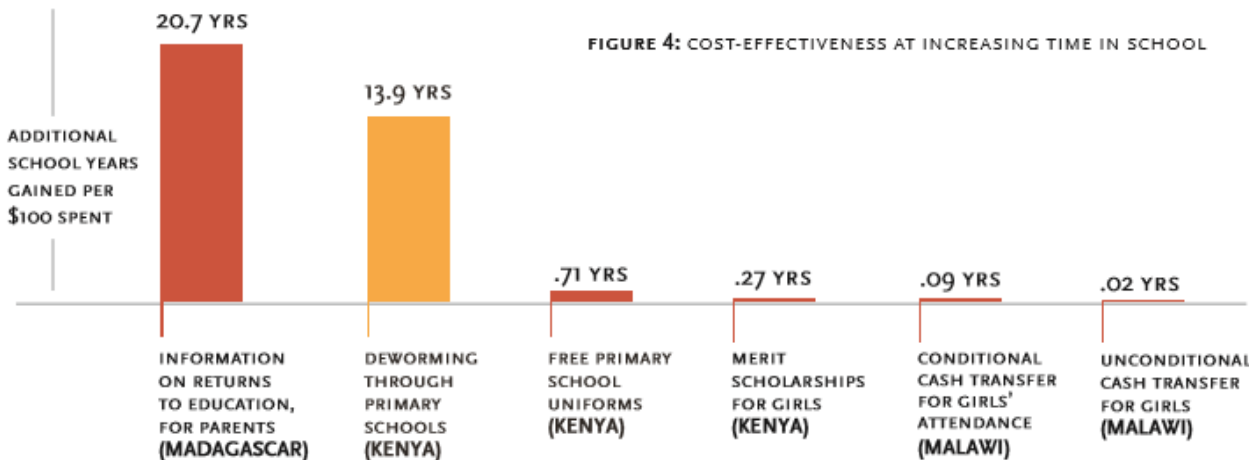
Deworming as a key intervention for school-age children (SAC):

- Higher math test scores following treatment (Uganda)
- Improved cognitive test scores
- Increased school attendance by 7.5% (Kenya)
- Increased rate of progression to secondary school in females by 25% (Kenya)
- Most cost-effective intervention at schools

Long-term economic productivity:

- Increased working hours per week for males by 17% (Kenya)

FIGURE 4: COST-EFFECTIVENESS AT INCREASING TIME IN SCHOOL





Short-run effects of deworming:

Miguel and Kremer (2004); Hamory Hicks et al. (2015)

- After one year, rates of serious worm infections fall by half, from 52% to 25%.
- Absenteeism falls by one quarter.
- Ozier (2017) finds cognitive gains among young children in the area.

Educational and Economic Effects 10 years later:

Baird et al., 2016

- 9.6 percentage points more likely to pass secondary school entrance exam (base rate=41%, $p<0.05$)
- Similar increase in attending secondary school ($p<0.05$)
- Shift from agriculture to non-agricultural self-employment ($p<0.05$)

ECONOMIC EFFECTS OF DEWORMING:15 YEARS LATER (BAIRD ET AL., 2018)

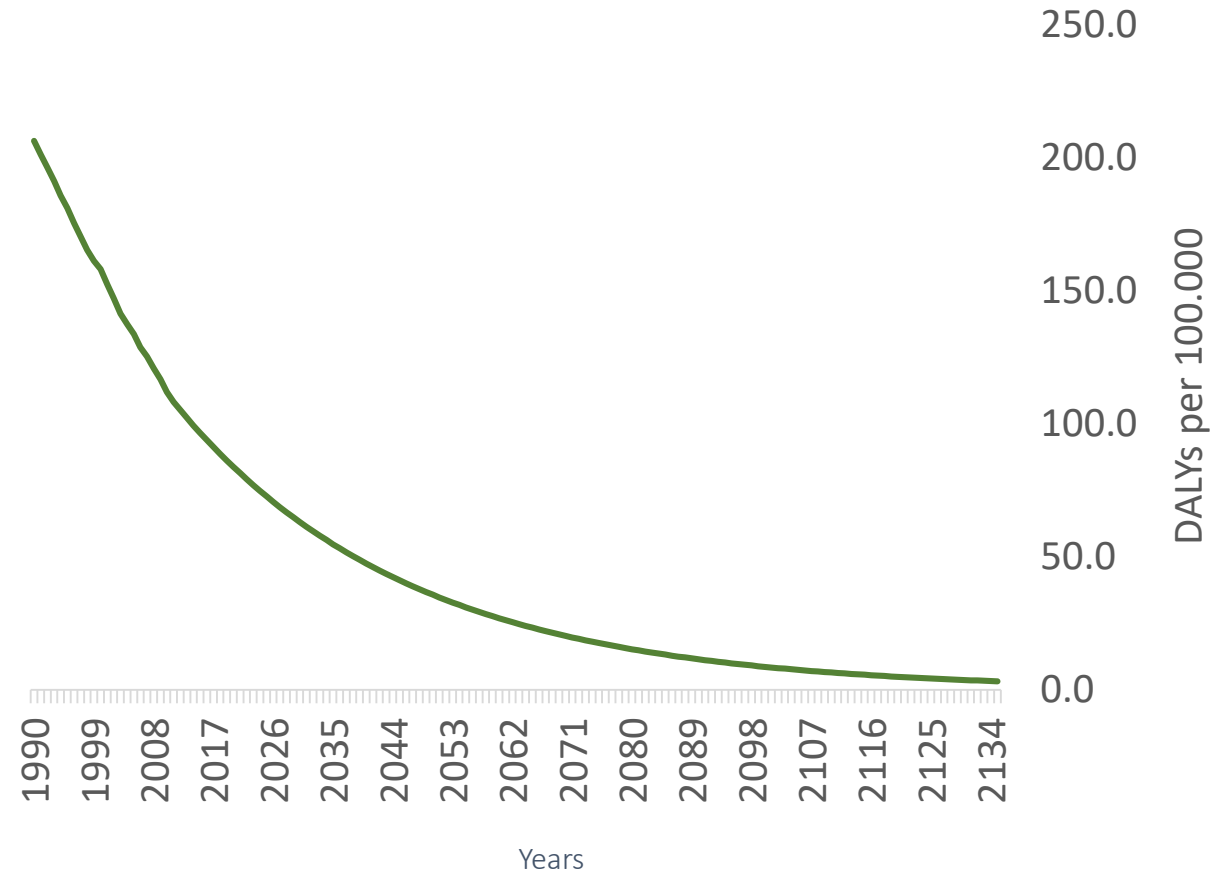
- Total earnings increased by 15% ($p < 0.05$)
- Total consumption expenditures increase by 30% ($p < 0.01$)
- Likelihood of migrating to an urban locality increased by 7pp, mainly among women ($p < 0.05$)

- Cost-benefit analysis
 - Future earnings (net of increased schooling costs) > **150 times** cost
 - Implies tax revenue > cost of program

- USA: Hookworm rates of 40% among school-aged children
 - Travelling dispensaries administered treatment and educated people about prevention in 1910's
 - Bleakley (2007) difference-in-differences analysis finds:
 - increase in school enrollment of 3-5% and increase in attendance of 6-8% (for a county with a 1910 infection rate of 50%)
 - 43% increase in adult wages among those infected and treated as children

HOWEVER, FOLLOWING BUSINESS AS USUAL, THE REGION WILL NOT ACHIEVE ITS TARGET BY 2020

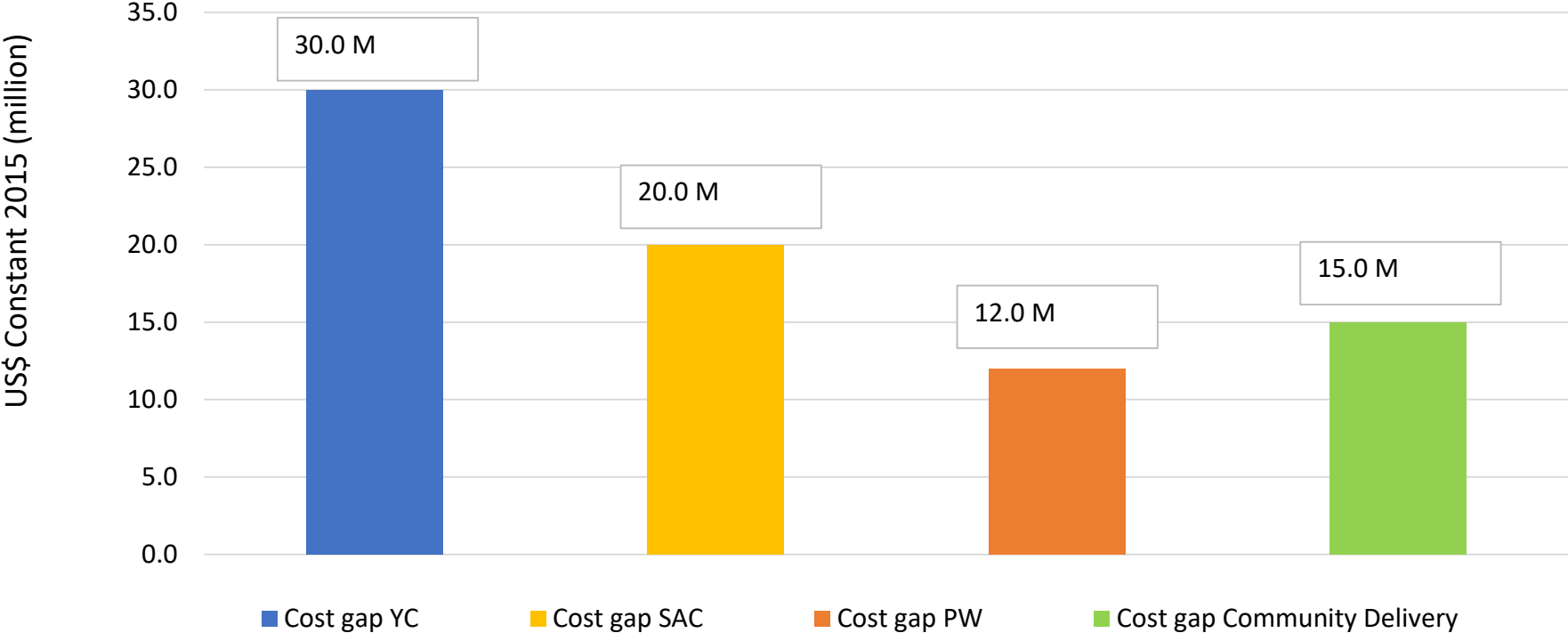
- 17 out of 48 countries in the Africa region have reached 75% coverage for STH among SAC
- Only Sierra Leone has achieved the 75% coverage target for schistosomiasis among SAC
- Limited data available on deworming in pre-sac, and no data available on deworming in pregnancy
- A regional financial effort is needed to build momentum to achieve the targets in the region by 2020 for all groups.



Using the current average annual reduction rate of 2.8%, STH will be eradicated by 2140.

FOLLOWING BUSINESS AS USUAL, FINANCIAL GAPS CONTINUE BEING A SERIOUS PROBLEM

Cost by group, 2016



Total gap cost for three population groups: US\$ 77.0 M



A PROPOSAL TO ADDRESS THE BIGGEST CHALLENGES

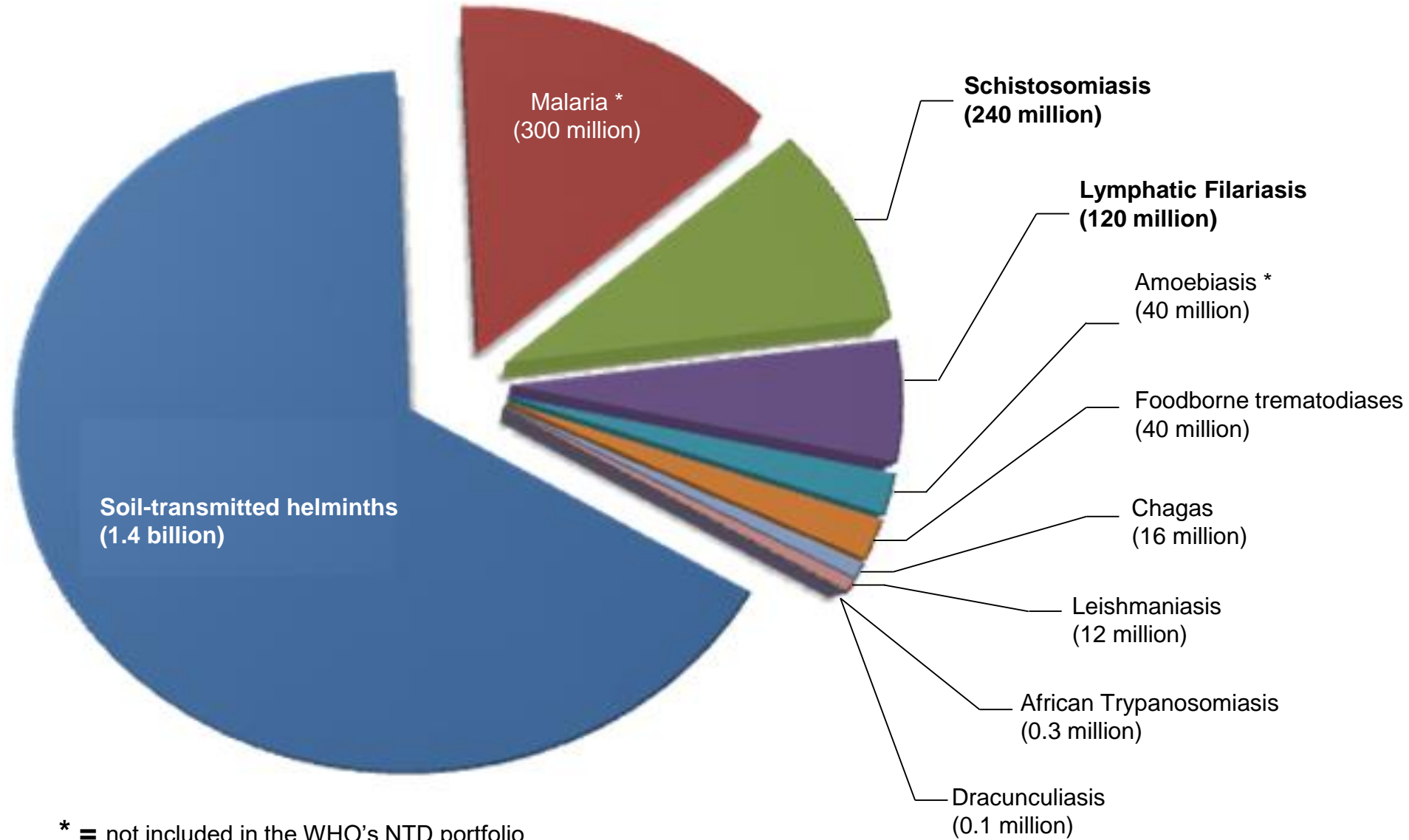
- PRIORITY SETTING
- GOVERNANCE
- FINANCIAL GAPS
- SUSTAINABILITY
- PARTNERSHIP

DAI: OUTLINE



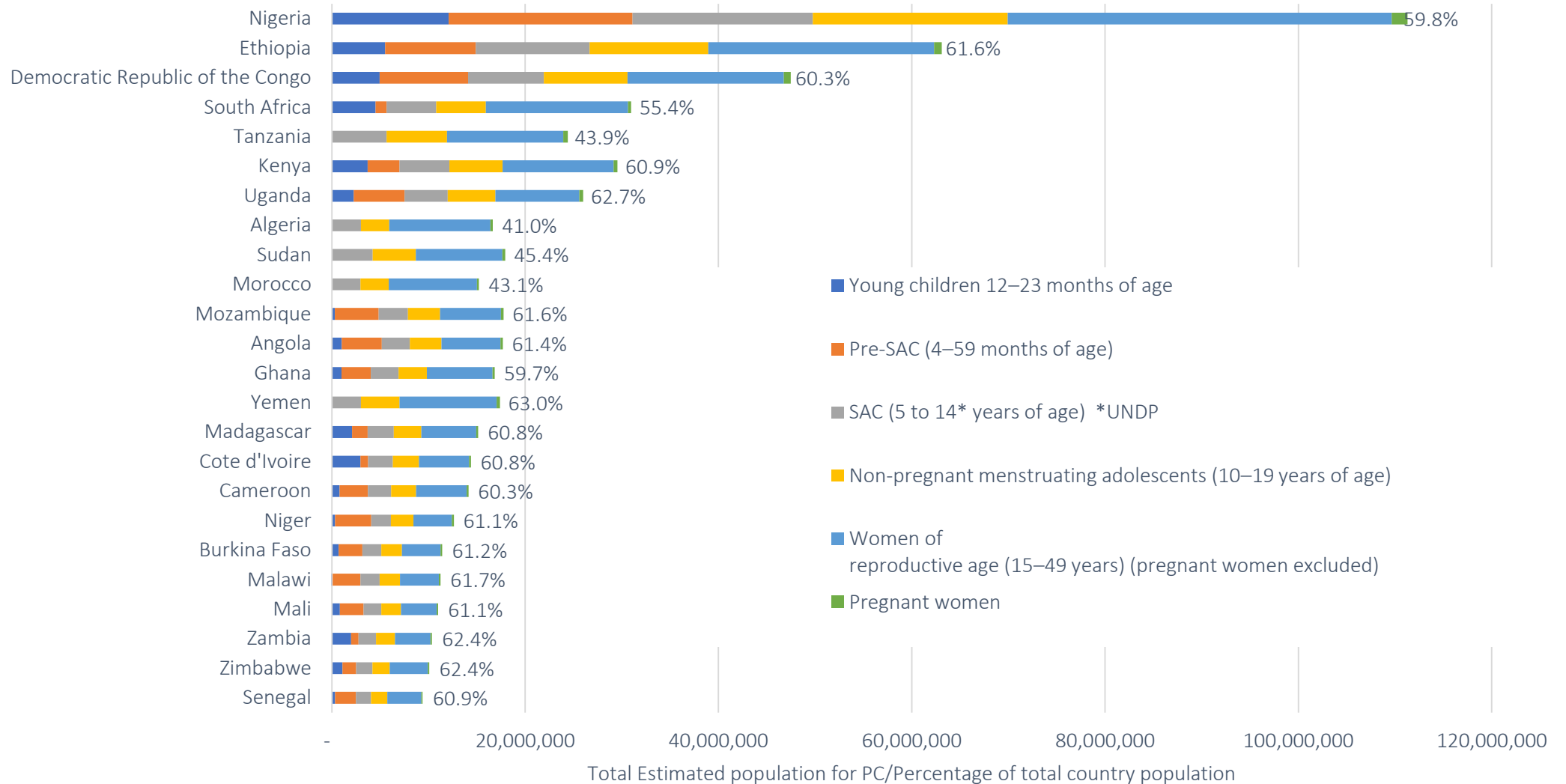
STH AND SCHISTOSOMIASIS AS TRACERS

Number of NTDs infections worldwide

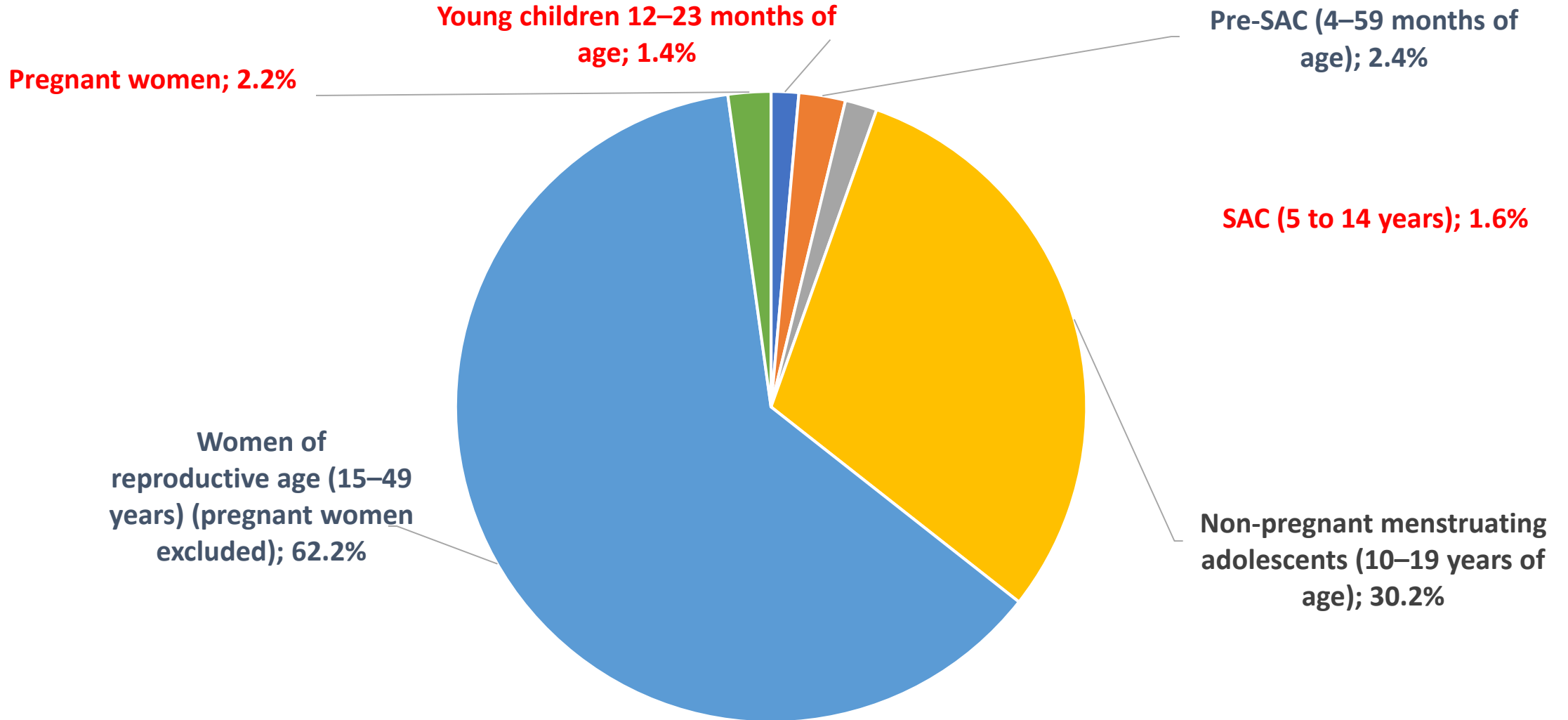


* = not included in the WHO's NTD portfolio

WORLD HEALTH ORGANIZATION IDENTIFIES SIX POPULATION GROUPS AT-RISK FOR STH INFECTIONS



THE WBG PRIORITIZES THREE AT-RISK POPULATIONS TO ACHIEVE THE GREATEST IMPACT ON HUMAN CAPITAL INVESTMENTS



NTD INDEX TO IDENTIFY COUNTRIES WHERE TO PRIORITIZE INVESTMENTS

$$Risk\ Index = \sum [(indicator_1 * weight) + (indicator_2 * weight) + \dots]$$

The NTDs index, comprised of 13 indicators, prioritizes countries most affected by the five PC-NTDs in SSA those countries are simultaneously in the worst condition to adequately respond to NTDs and/or do not have the mechanisms to mobilize resources in a way that could allow the country to control key NTDs in a sustainable manner.

MAGNITUDE

- 3 dimensions of magnitude:
- Absolute number of DALYs of NTDs
 - DALYs rate for NTDs
 - Number of NTDs in the country

PERFORMANCE

- 5 dimensions performance:
- National coverage of PC for STH of SAC
 - Existence of an NTD master plan
 - Undergoing research on NTD interventions
 - Donor support for STH
 - Donor support for SCH

SUSTAINABILITY

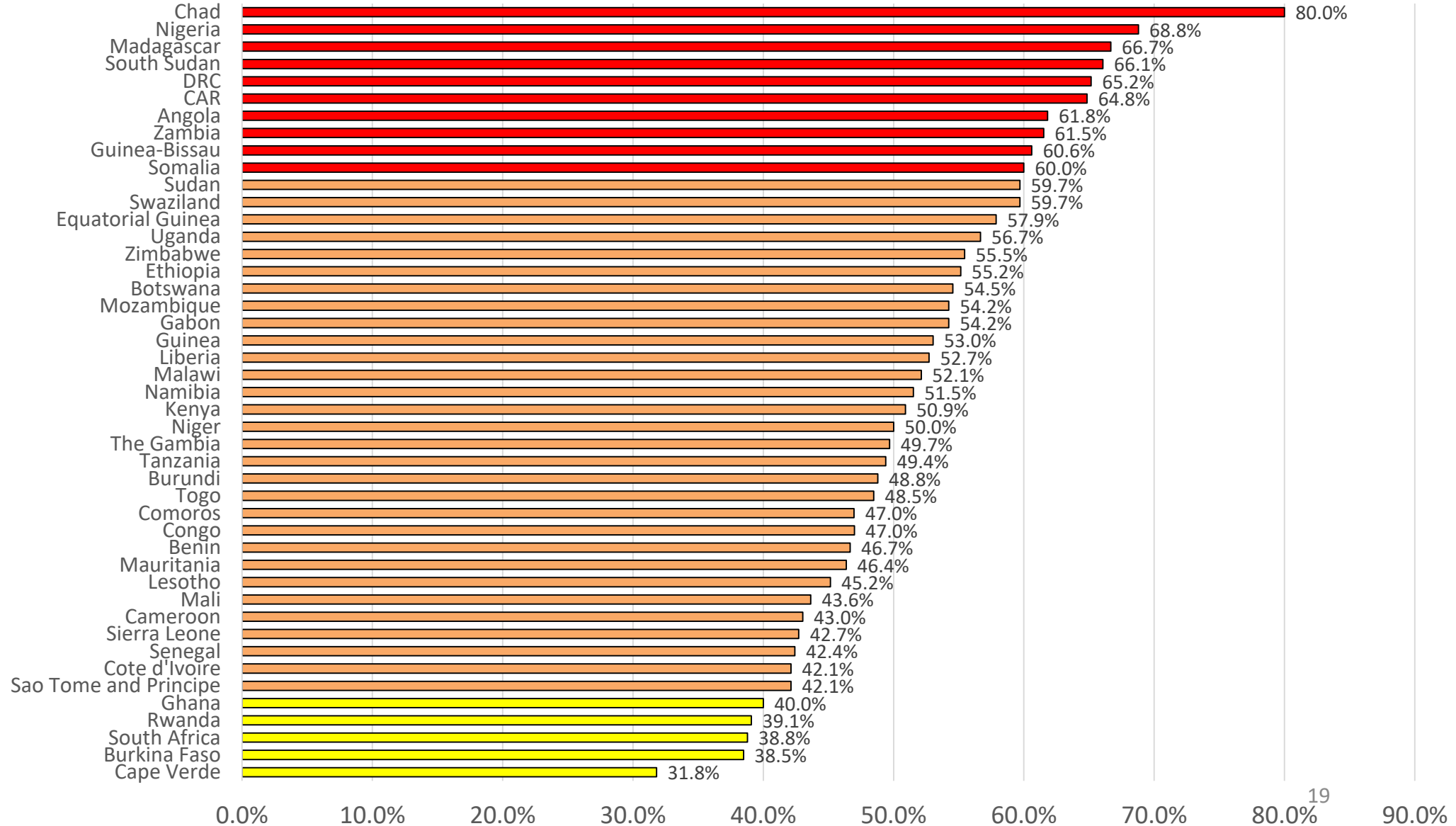
- 5 dimensions of sustainability:
- Education coverage
 - Coverage of safe drinking water
 - Health system quality
 - Country's health system performance
 - Rural population

NTD INDEX 2017: COUNTRIES CLASSIFIED BY PRIORITY

High Priority Countries (60%-80%)

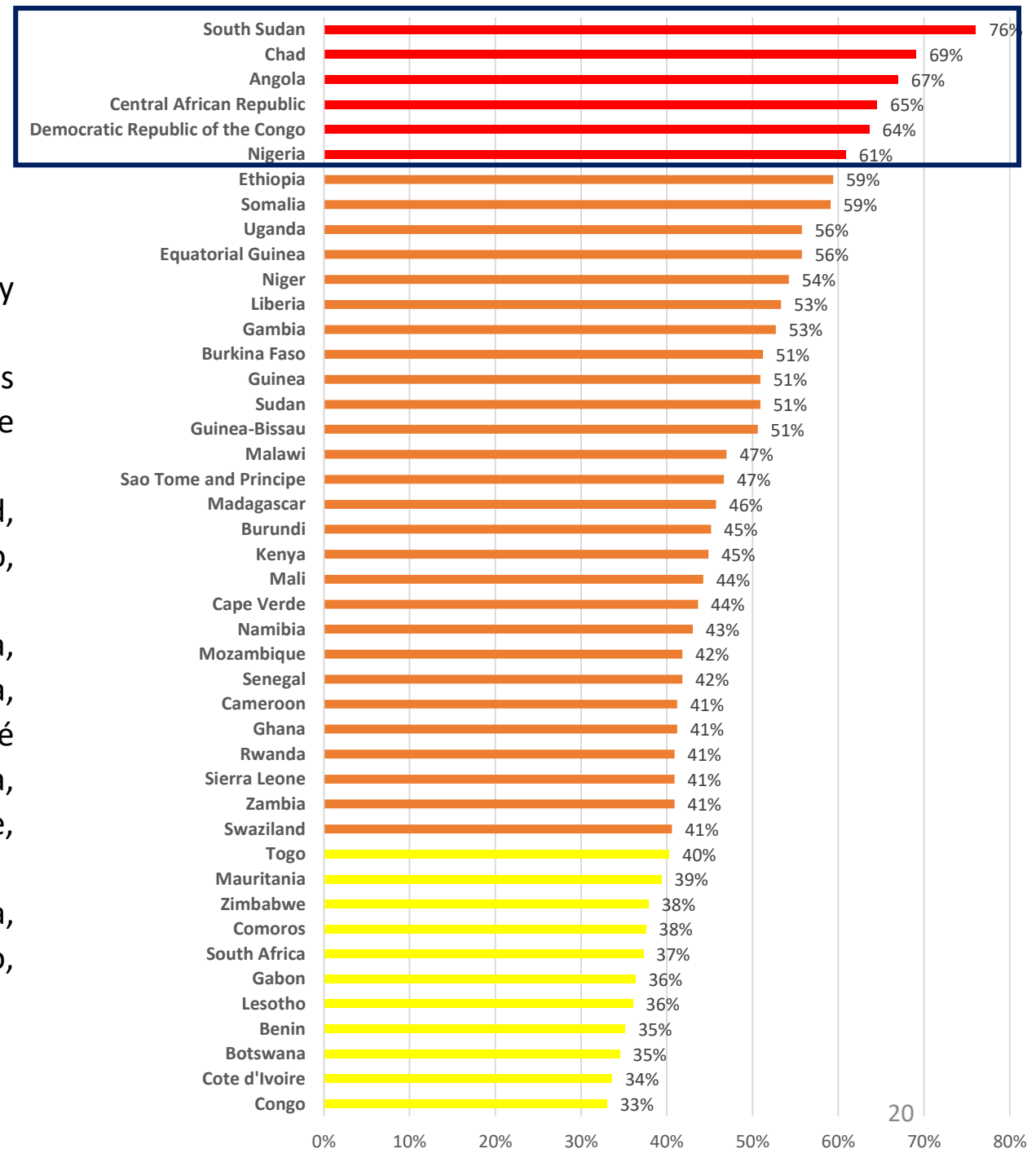
Moderate Priority Countries (40%-60%)

Low Priority Countries (20%-40%)



NTD INDEX 2019

- The regional average for the SSA was **47%**, (Moderate Priority level).
- The country with the highest score (lowest performance) was South Sudan (76%), and the country with the lowest score (highest performance) was Congo (33%).
- **High Priority Countries** ($\geq 60\%$): 6 countries (South Sudan, Chad, Angola, Central African Republic, Democratic Republic of Congo, Nigeria)
- **Moderate Priority Countries** (41% - 59%): 26 countries (Ethiopia, Somalia, Uganda, Equatorial Guinea, Niger, Liberia, The Gambia, Burkina Faso, Guinea, Sudan, Guinea-Bissau, Malawi, Sao Tomé and Príncipe, Madagascar, Burundi, Kenya, Mali, Namibia, Mozambique, Senegal, Cameroon, Ghana, Rwanda, Sierra Leone, Zambia, eSwatini [Swaziland])
- **Low Priority Countries** ($\leq 40\%$): 12 countries (Togo, Mauritania, Zimbabwe, Comoros, South Africa, Gabon, Lesotho, Benin, Botswana, Cote D'Ivoire, Congo).



DAI: outline



GOVERNANCE FOR SCHOOL-BASED DEWORMING

- Requires strong collaboration between education and health sectors to ensure all materials and knowledge reach from the national level to frontline workers
- Governments contribute significant in-kind resources to programs:
 - Teacher time, and health and education personnel responsible for program delivery.
 - These costs are estimated to be 40% of total program cost, when opportunity costs are included

GOVERNANCE ASSESSMENT - IMPROVE COUNTRIES' INSTITUTIONAL CAPACITIES FOR IMPLEMENTING NTD INTERVENTIONS

NTDS COSTING TOOL	GOVERNANCE ASSESSMENT TOOL
<p>Support SSA countries estimate the cost required to fill the coverage gap of deworming with PC (through MDA) and attain the 75% coverage target of deworming for STH among school-age children, emphasizing on STH and SCH, and on the three prioritized populations. Key for UHC benefit packages in projects.</p>	<p>This tool is currently being developed and aims to evaluate the institutional capacity of governments in terms of program implementation, management of the 5 PC-NTDs, coordination between stakeholders and services, and the allocative efficiency and partnership for long-term financing of deworming. This is the baseline to strategize in a more sustainable and comprehensive manner and mainstream NTD interventions into national action plans.</p>



THE RIGHT SETTING

1. **UNIVERSAL HEALTH COVERAGE**
2. **Universal School health and nutrition coverage**

No more vertical programs!

NEW SETTING FOR NTDS: MAJOR THEMES

Expanding access to equitable, quality service coverage and financial protection

Building and protecting **Human Capital**: investing in the early years and harnessing the demographic dividend

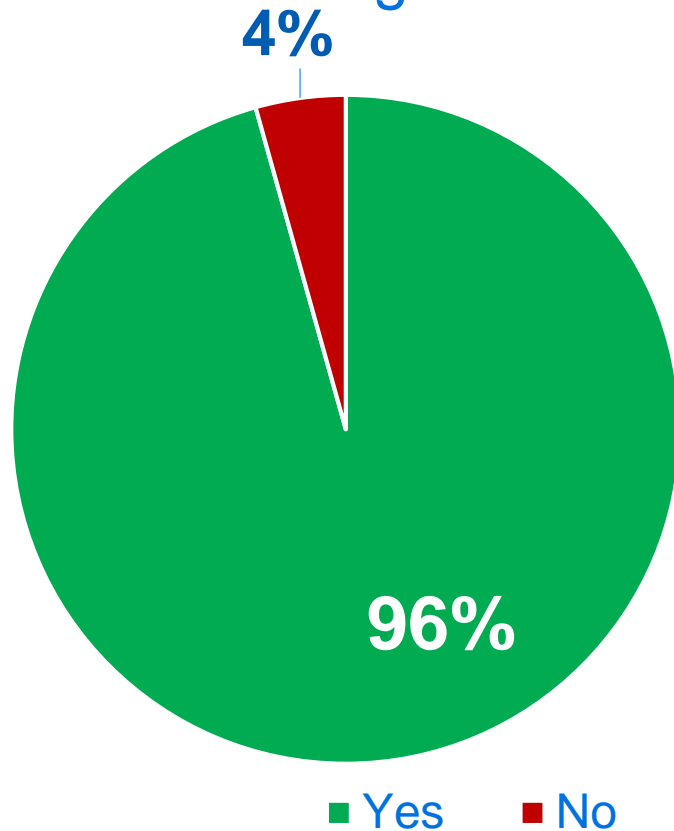
UNIVERSAL HEALTH COVERAGE

Strengthening **institutional capacity** at a local, national, regional level for stewardship

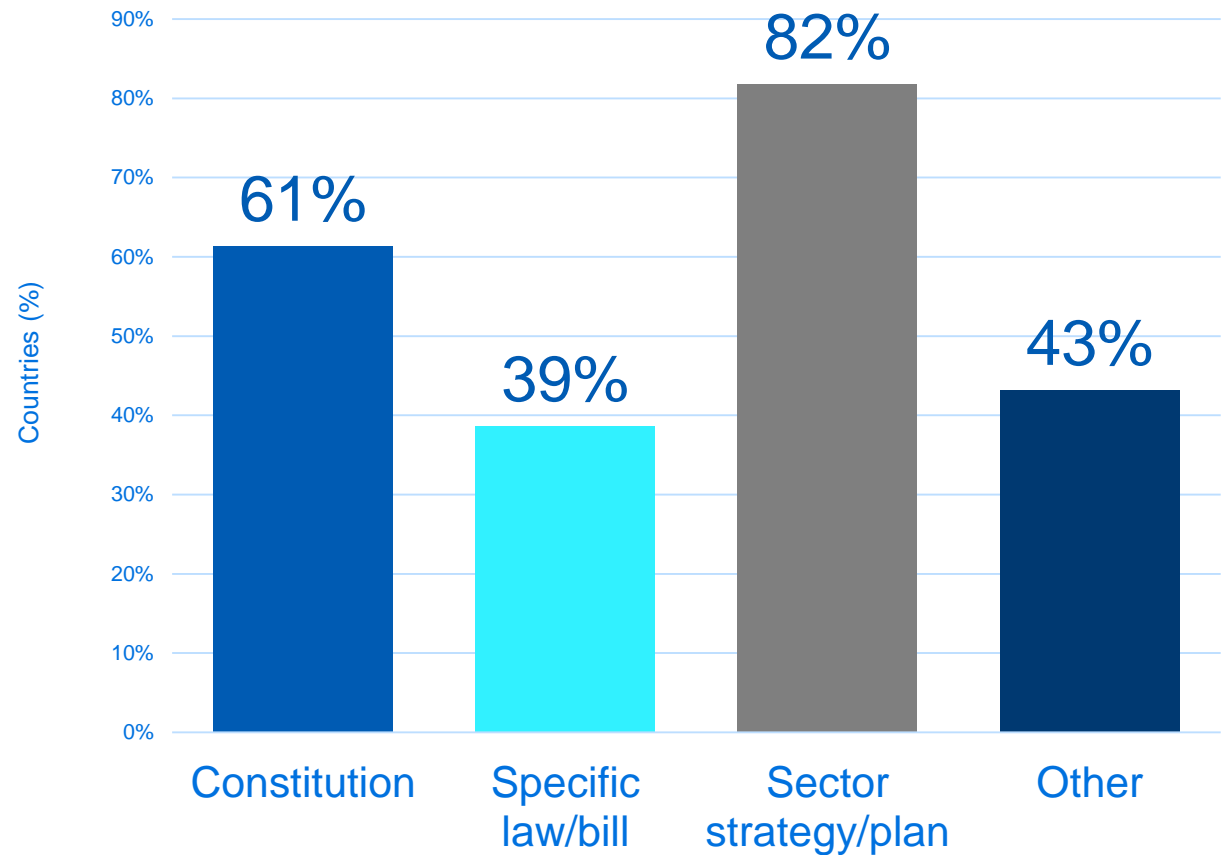
Focus on **public goods**: preparedness, control / elimination of diseases (NTDs, Malaria, TB, Polio)

ALMOST ALL SSA COUNTRIES ARE OFFICIALLY COMMITTED TO ACHIEVING UHC

Countries with a commitment to UHC / the right to health

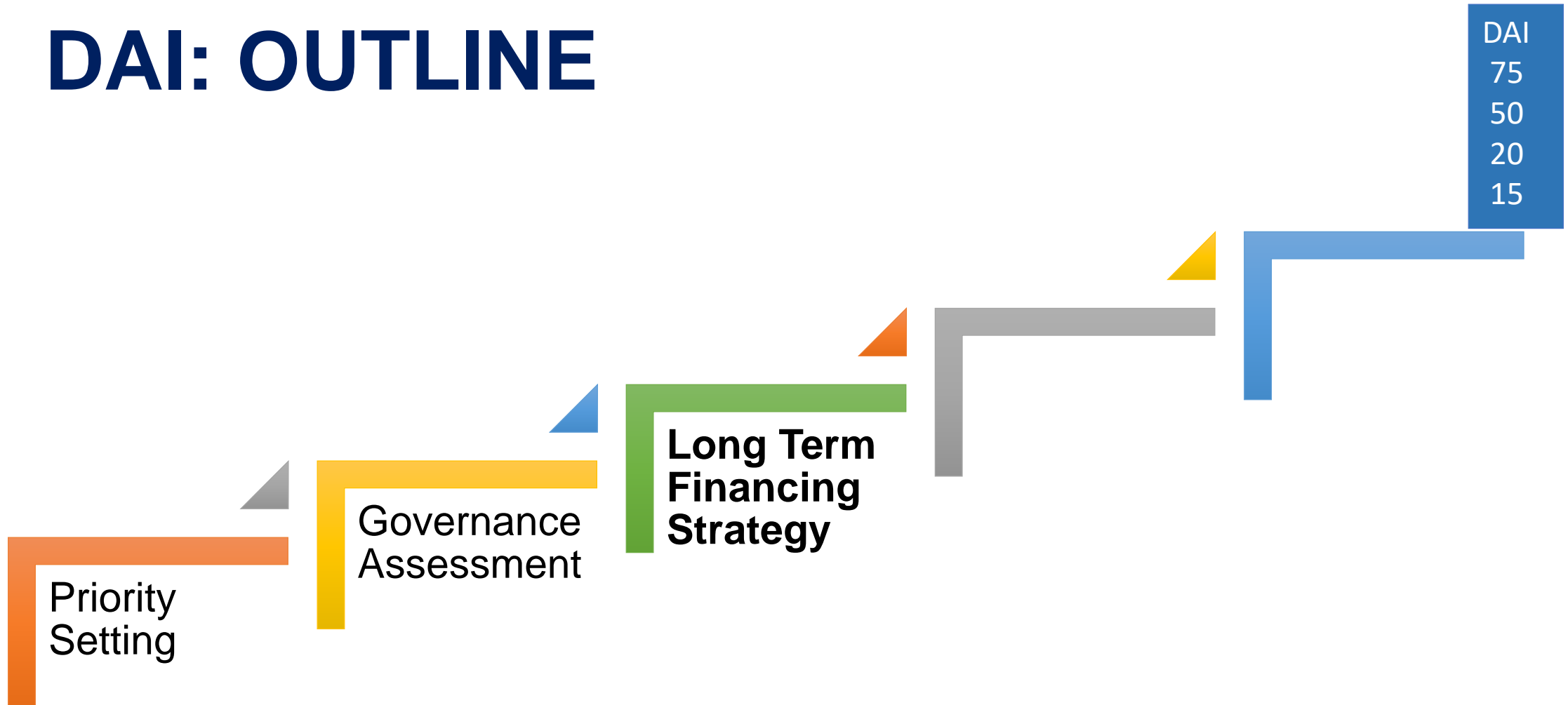


Where is the commitment to UHC expressed? (*)



(*) Note: may add up to more than 100%

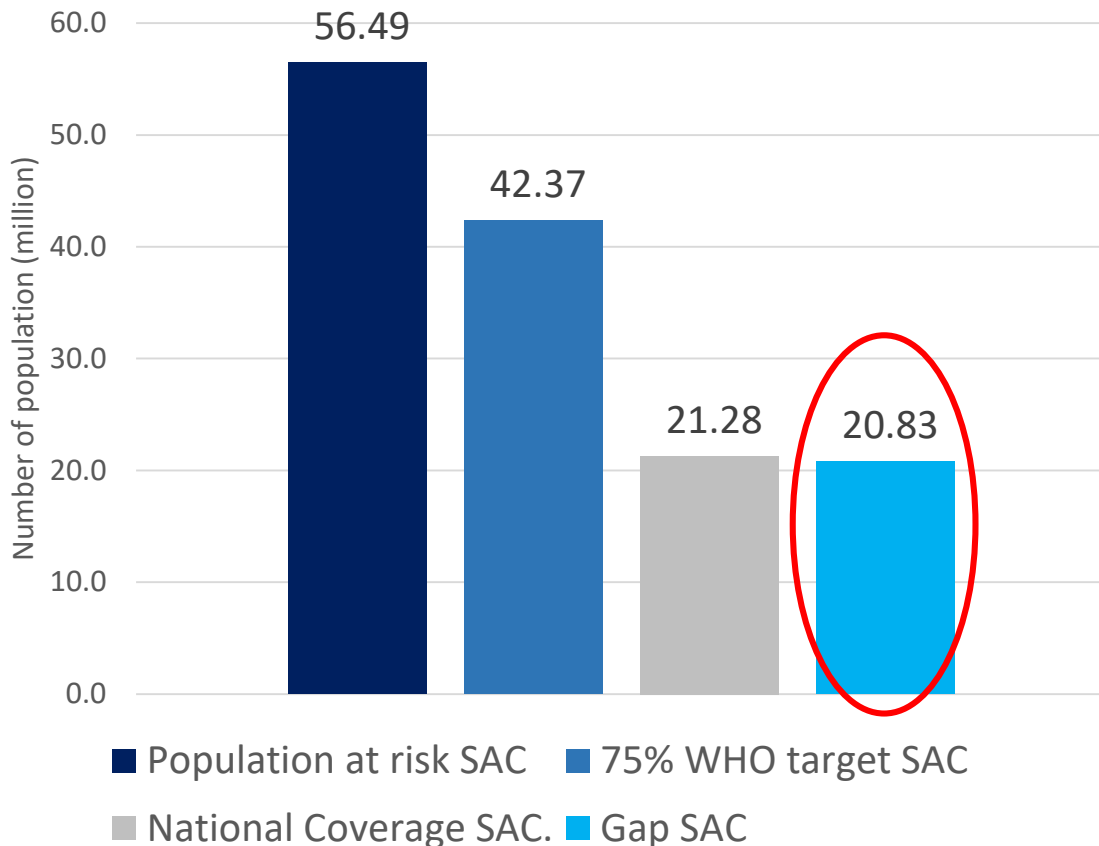
DAI: OUTLINE



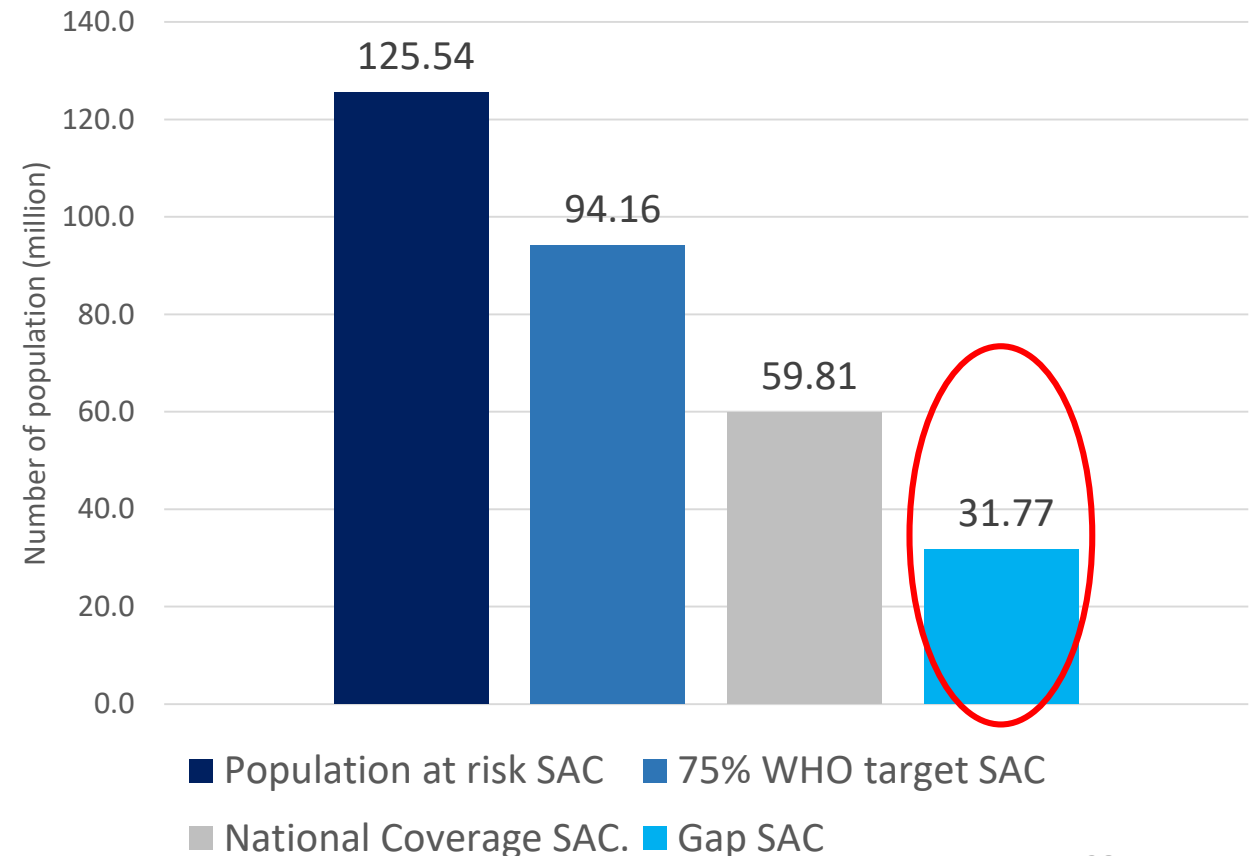
AFRICA'S 10 HIGH RISK COUNTRIES

Investments to achieve the regional target of universal deworming coverage among SAC

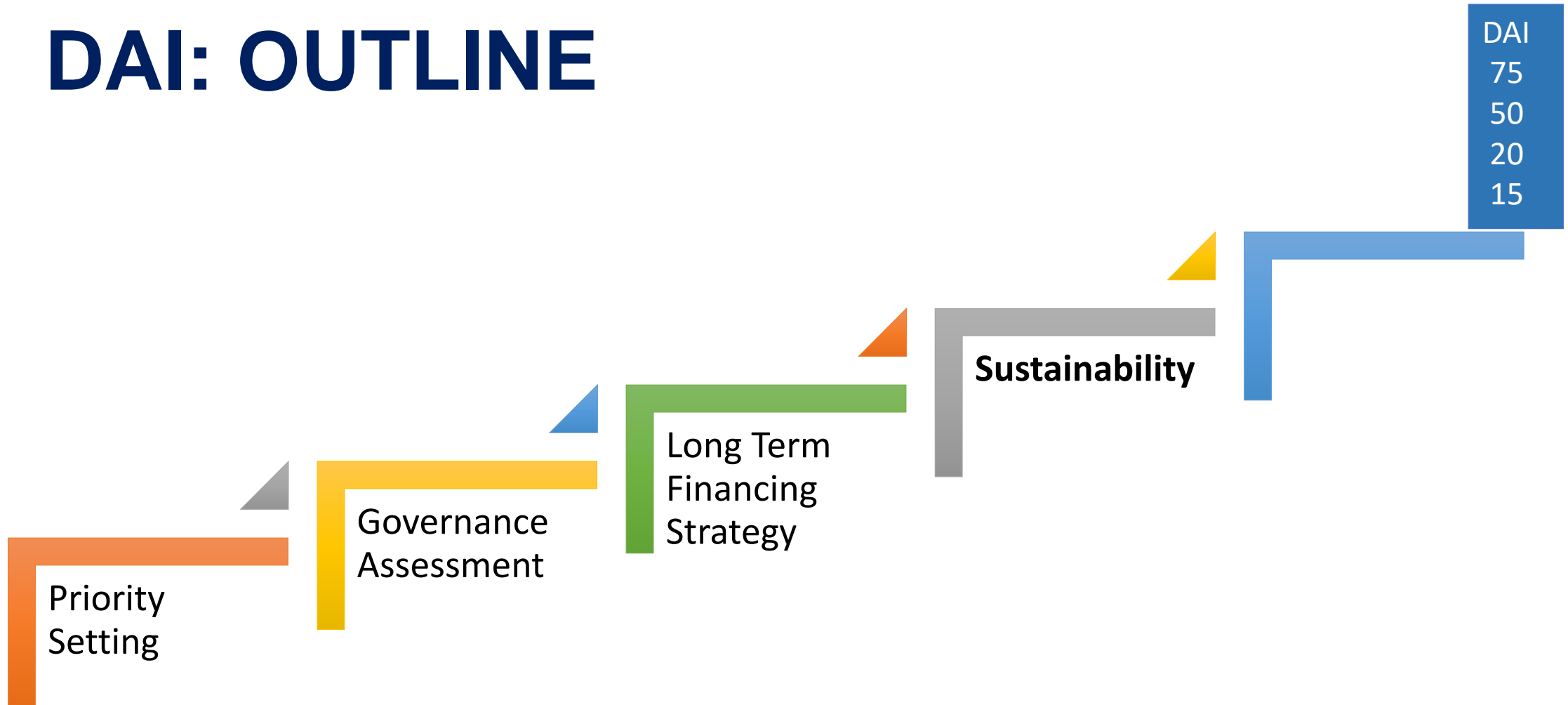
10 High Risk countries



Africa



DAI: OUTLINE



INVEST IN SUSTAINABILITY

- i. Support countries to increase current NTD financial investment with declining investment over time
- ii. Engage in cross-sectoral investments with WASH (Angola's case)
- iii. Country implementation road map for NTDs

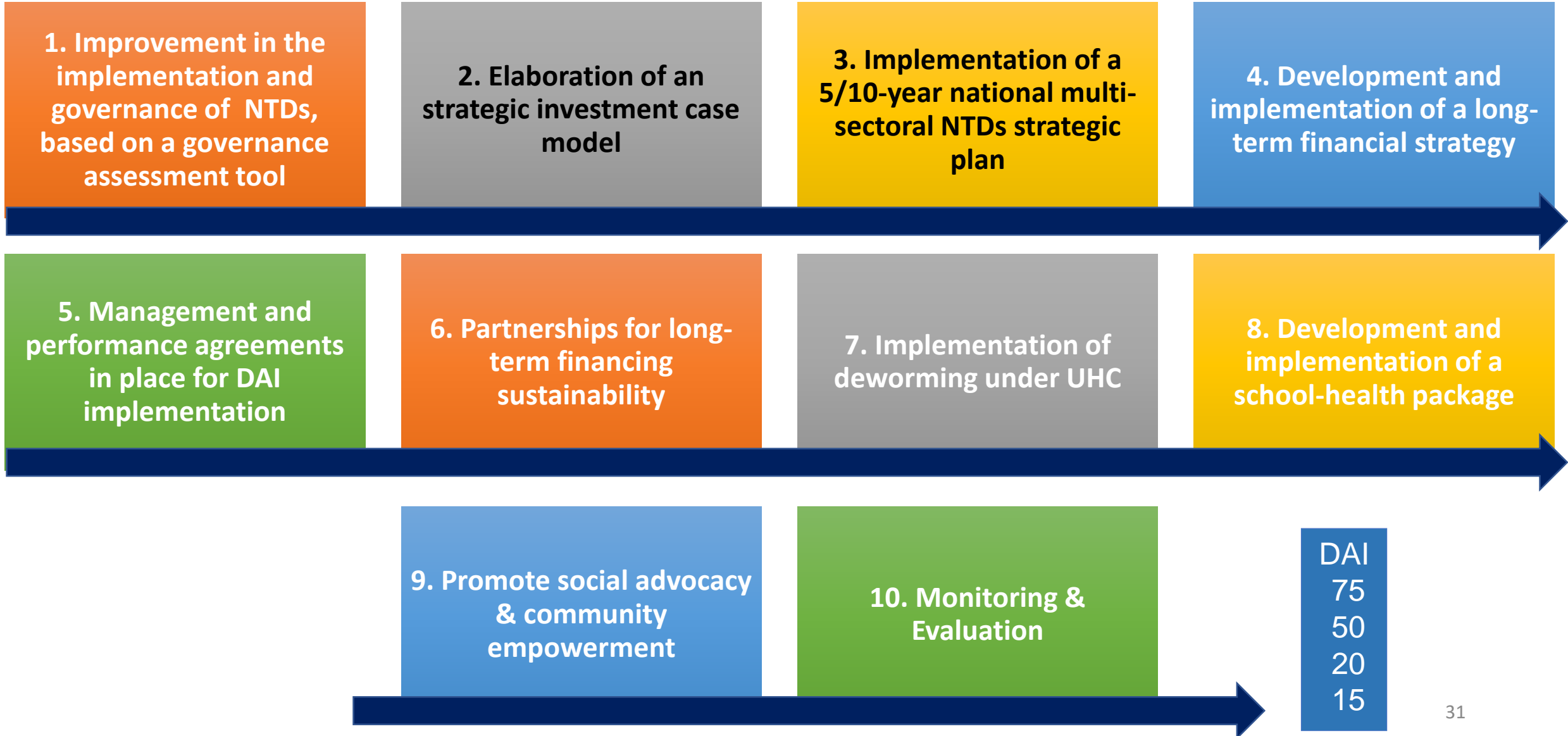


Strategy

- Support countries to increase national investment on NTDs
- Comprehensive investment approach, including: Health, Education and WASH

DEWORMING AFRICA INITIATIVE (DAI) – BUSINESS PLAN (COUNTRY GRADUATION)

The WB has defined the process of country graduation based on the following 10 areas of focus:



DAI: OUTLINE



LONG TERM PARTNERSHIP STRATEGY

Objectives	Overview
Strategic Objective 1	Develop a bold regional deworming initiative to control STH and schistosomiasis in Africa - SAC +++
Strategic Objective 2	Increase external and domestic funding for NTDs and deworming in endemic countries in key countries in SSA (long-term financial investment / graduation)
Strategic Objective 3	Increase number of World Bank projects across Global Practices that include a NTD, deworming, and WASH activities into a new or restructured project
Strategic Objective 4	Key partnerships for DAI in selected countries (Cameroon, Equatorial Guinea, Nigeria, Angola etc.)
Strategic Objective 5	Improve governance through health systems strengthening to guarantee a sustainable integration of the programs in national health plans.



THE RIGHT SETTING

1. Universal Health Coverage
2. **UNIVERSAL SCHOOL HEALTH AND NUTRITION COVERAGE**

No more vertical programs!

UNIVERSAL SCHOOL-HEALTH AND NUTRITION COVERAGE

- Based on evidence from the *DCP3 vol. 8* report and WB School health team, **26 key health interventions were identified as cost-effective.**
- The time is right to work together, across both sectors, in a collaborative effort to ensure healthy girls and boys, and to complete equitable, and quality primary and secondary education.



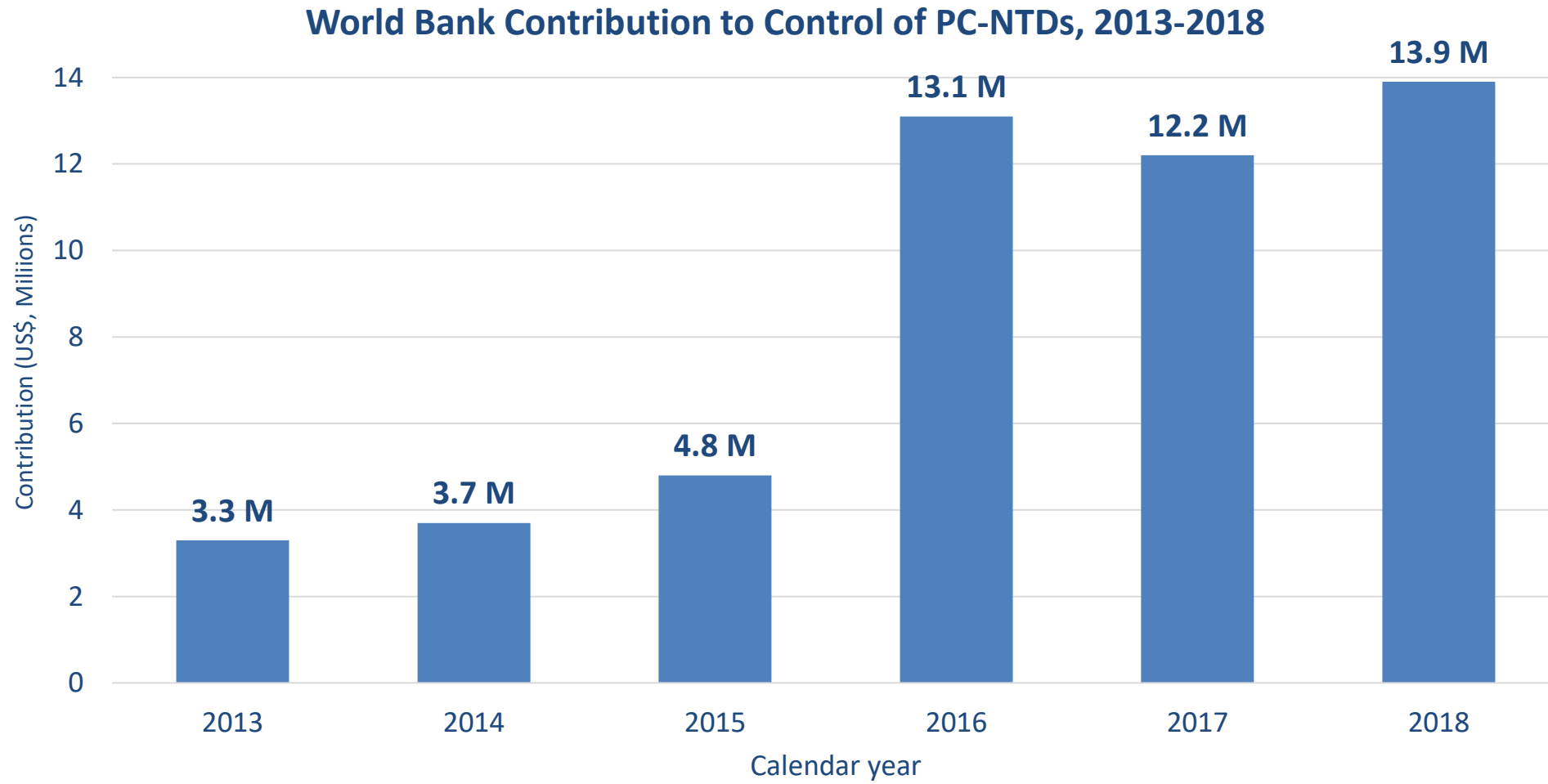
COUNTRY OPERATIONS

DEWORMING AFRICA INITIATIVE (DAI) – COUNTRY OPERATIONS



- **Closed** Guinea-Bissau (FY16-17)
- **Closed** Madagascar (FY16-17)
- **Closed** Republic of Congo (FY16-17)
- **Active** Burkina Faso, Mali, Niger (FY17-20)
- **Active** Angola (FY19-20)
- **Active** Cameroon (FY19-20)
- **Active** Nigeria (FY19-20)
- **Pipeline** Niger (FY19-20)
- **Pipeline** Equatorial Guinea (FY19-20)

THE WBG HAS INCREASED ITS ROLE IN FINANCING NTDS CONTROL SINCE 2014





RECENT IMPLEMENTATION STORIES - *ANGOLA*

THANK YOU!

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