

# **BLOOMBERG DATA FOR HEALTH INITIATIVE**

## **DATA TO POLICY PROGRAM**

# OUTLINE

## 1. Andrew Ancharski

- a. Data impact and Data to Policy Program
- b. The structure of the Data to Policy Program
- c. Data to Policy by the Numbers
- d. Data to Policy in Africa

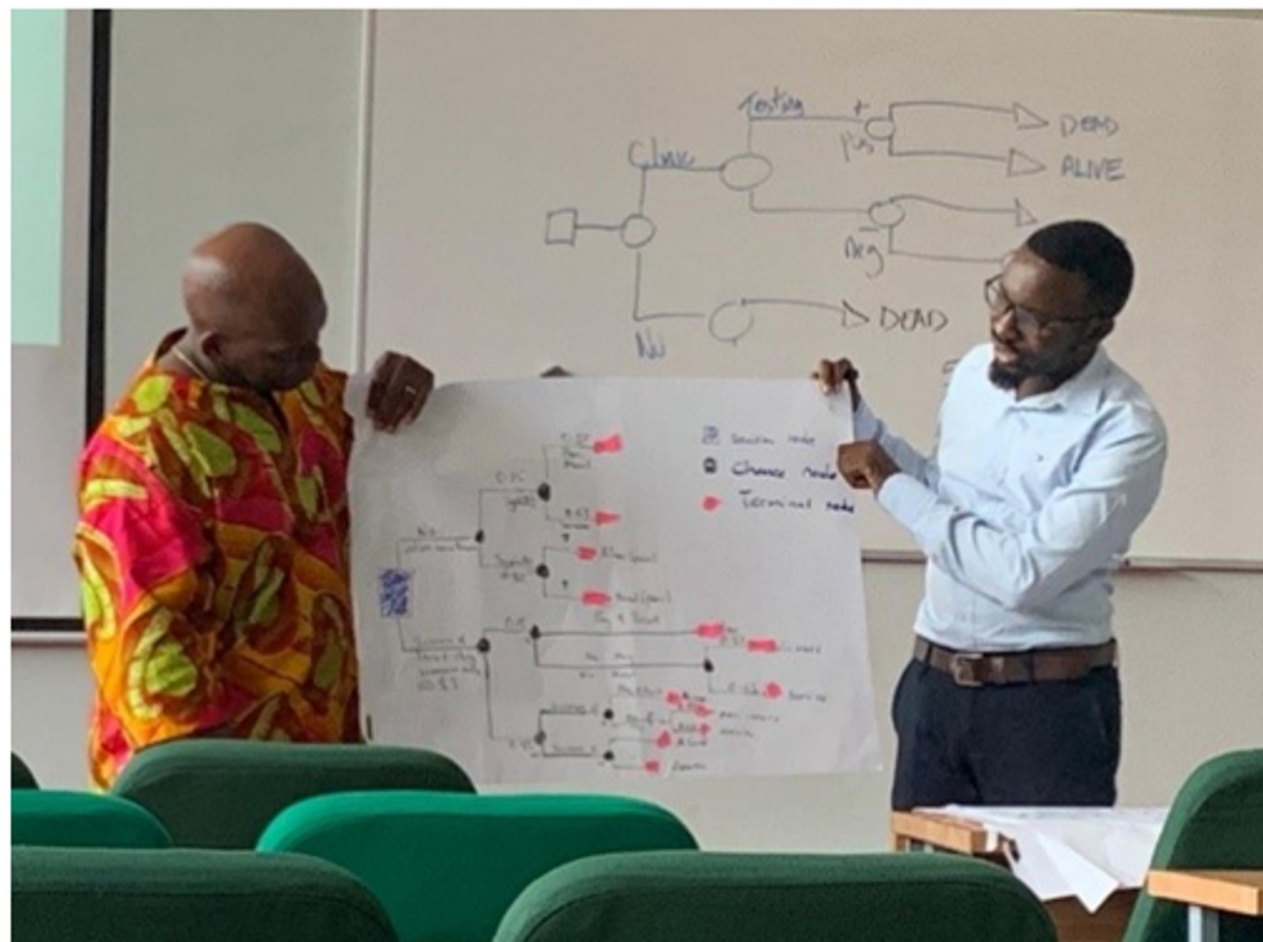
## 2. Ruvimbo Chingonzoh

- a. South Africa Data to Policy
- b. Policies produced from the first SA Cohort
- c. Experience as a participant of D2P and TOT

# Data for Health Initiative

The CDC Foundation's role in the D4H Initiative is to help low- and middle-income countries collect and use better public health data by:

1. Strengthening systems to **collect birth and death data (CRVS)**;
2. Building capacity to use public health data to **inform policy priorities** at the country-level (**Data Impact**); and
3. Testing and offering **novel survey methods** to more frequently monitor risk factors for non-communicable diseases (**NCD**).



# Data Impact (DI)

CDC Collaborating Centers: Center for Global Health (CGH)

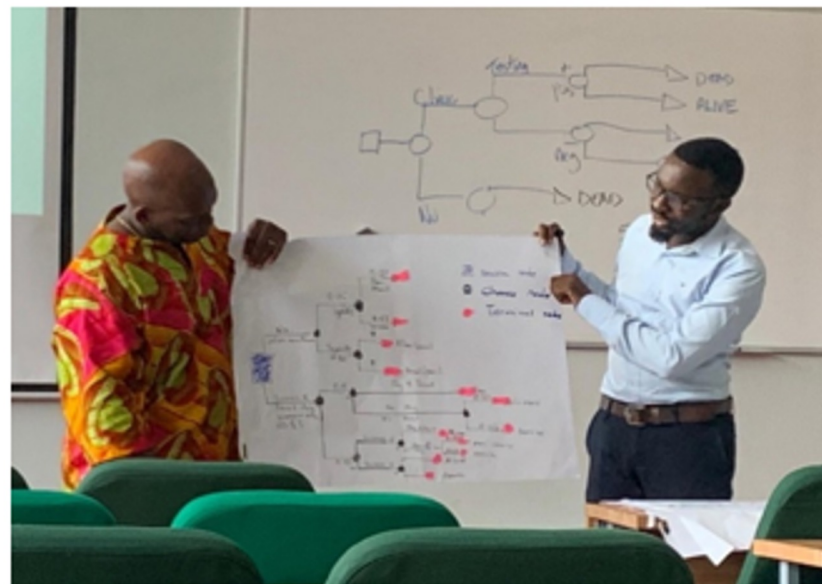
Initiative Partners: Vital Strategies

Active Countries: Bangladesh, Rwanda, South Africa, Tanzania, Thailand, Uganda, and Zambia

Summary: Provide technical assistance to utilize data to inform policy making and programming

## Activities:

1. Data to Policy
2. Public Health Bulletin
3. Scientific Communications



# WHAT IS THE DATA TO POLICY (D2P) PROGRAM?

- The Data to Policy (D2P) program, developed by Vital Strategies, the U.S. Centers for Disease Control and Prevention (CDC) and the CDC Foundation as part of the Bloomberg Philanthropies Data for Health Initiative.
- D2P aims to bridge the gap between policymakers and mid- to senior-level public health professionals in ministries of health.
- This is accomplished through intensive training and mentoring.

## WHAT IS THE D2P PROGRAM?

- The program help develop analytical skills, including root cause analysis, health impact assessment and economic evaluation, as well as techniques for communicating with stakeholders using data.
- D2P participants will develop data-driven policy briefs and recommendations that respond to current Ministry of Health priorities.
- The outcomes include both strengthened policy development skills as well as concrete and actionable policy proposals.

# THE DATA TO POLICY PROGRAM



# Data to Policy Training – Implemented with Vital Strategies

- **Goal**

- Trains MOH staff on the development of data-driven policy briefs designed to improve the health of the target population.

- **Content**

- Policy-relevant epidemiologic methods
- Root cause analysis
- Health impact assessment (modeling)
- Economic evaluation
- Stakeholder analysis
- Strategic communication

- **Output**

- Policy briefs
- Presentations to stakeholders

- **Structure**

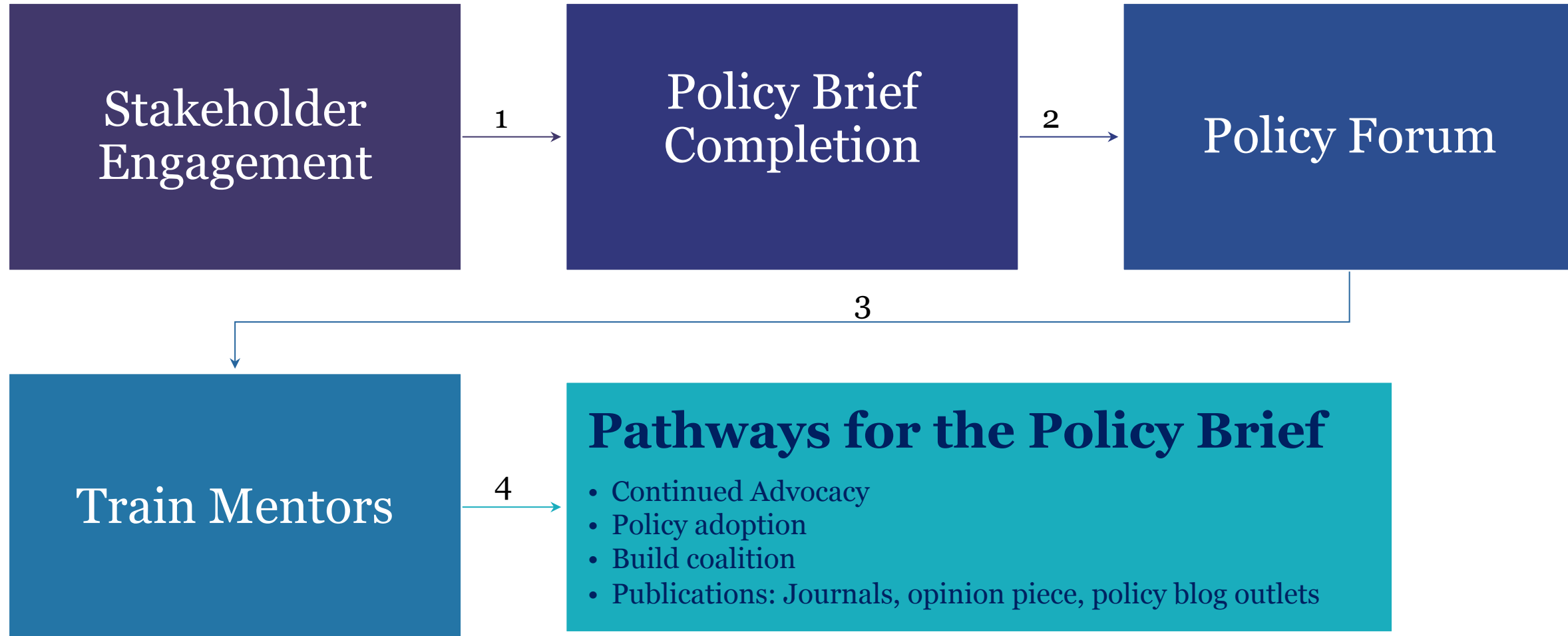
- Three weeks of training over 3–4 months
- Constant mentoring (in person and remotely)





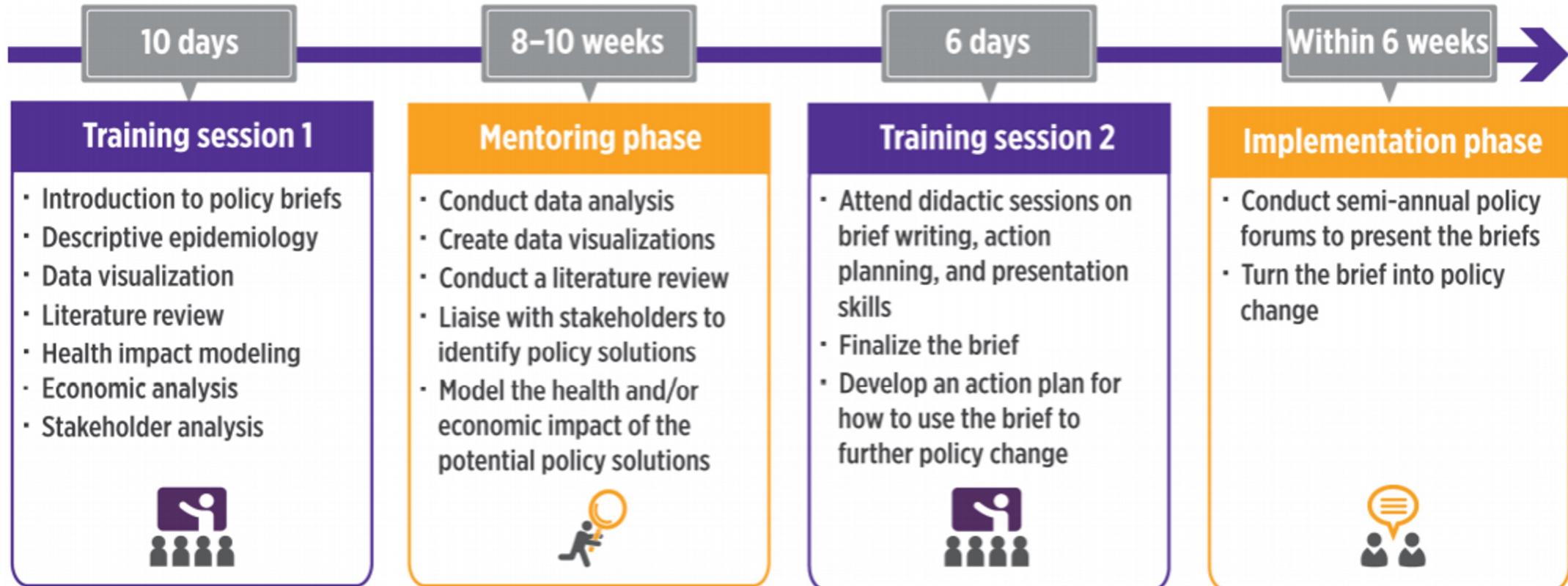
# D2P PHASE

# DATA TO POLICY -IMPLEMENTATION



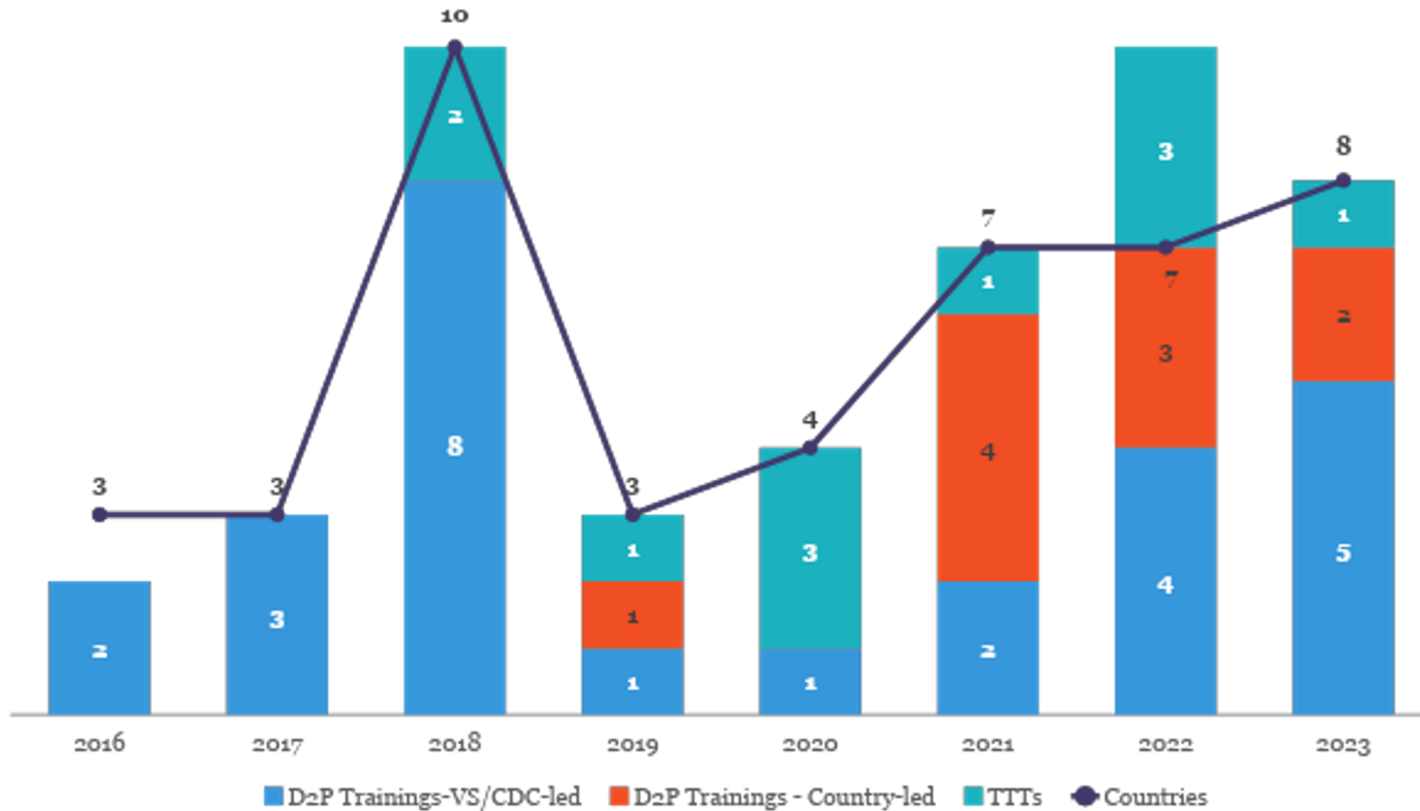
# D2P TIMELINE

## Data to Policy training timeline



# DATA TO POLICY BY THE NUMBERS

# D2P & TTT TRAININGS BY YEAR



## Cumulative:

**20** countries

**36** D2P trainings

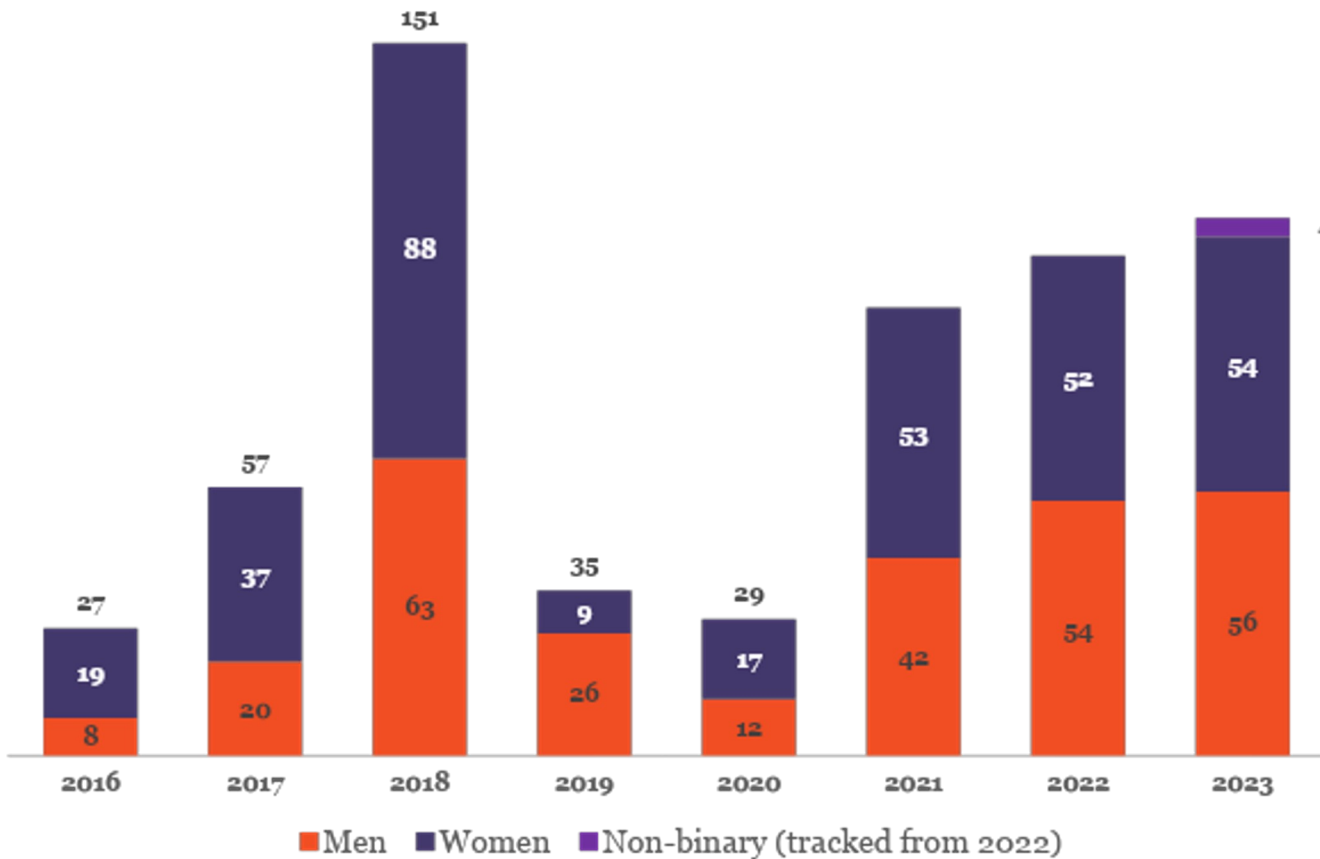
**11** TTTs

## Countries (# trainings):

- Bangladesh (2)
- Cameroon (1)
- China (4)
- Colombia (3)
- Ghana (1)
- India (1)
- Kenya (1)
- Mozambique (1)
- Myanmar (4)
- Peru (1)
- Philippines (4)
- PNG (1)
- Rwanda (1)
- Solomon Islands (1)
- South Africa (1)
- Sri Lanka (4)
- Tanzania (2)
- Thailand (1)
- Uganda (1)
- Zambia (4)

# D2P PARTICIPANTS BY YEAR AND SEX

D2P Participants(excludes TTT)



## Cumulative:

**614** D2P participants  
(54% women)

**93** local instructors  
trained through TTTs  
(54% women)

# DATA TO POLICY

Policies created and passed by country

Table 3 Policy briefs completed and policies enacted/progressing to enactment in current and previous DIP countries as a result of DIP workshops from commencement of DIP to March 2023\*

	2016	2017	2018	2019	2020	2021	2022	2023	Total
<b>Bangladesh</b>			6: 0					1: 0	<b>7</b>
<b>China (Shanghai, Shandong &amp; Anhui)</b>		9: 5	5: 1			3: 1	3: 0		<b>20: 7</b>
<b>Cameroon</b>								3: 0	<b>3</b>
<b>Colombia</b>			7: 3			1: 1	1: 0		<b>9: 4</b>
<b>Ghana</b>		1: 0							<b>1</b>
<b>India (Mumbai)</b>						1: 1			<b>1: 1</b>
<b>Kenya</b>								4: 0	<b>4</b>
<b>Mozambique</b>								1: 0	<b>1</b>
<b>Myanmar</b>	3: 3	8: 8	5: 4			7: 1			<b>23: 16</b>
<b>Papua New Guinea</b>							17: 3		<b>17: 3</b>
<b>Peru</b>			3: 2						<b>3: 2</b>
<b>Philippines</b>	5: 3		4: 4				6: 1	4: 2	<b>19: 10</b>
<b>Rwanda</b>						1			<b>1</b>
<b>Solomon Islands</b>			1: 1						<b>1: 1</b>
<b>South Africa</b>								6: 0	<b>6</b>
<b>Sri Lanka</b>			8: 6		6: 6		5: 5	4: 0	<b>23: 17</b>
<b>Tanzania</b>				5: 1				5: 0	<b>10: 1</b>
<b>Thailand</b>							2: 0		<b>2</b>
<b>Uganda</b>						5: 1			<b>5: 1</b>
<b>Zambia</b>	4: 2		4: 1	3: 0					<b>11: 3</b>
<b>Total</b>	<b>12: 8</b>	<b>18: 13</b>	<b>43: 22</b>	<b>8: 1</b>	<b>6: 6</b>	<b>18: 5</b>	<b>34: 9</b>	<b>28: 2</b>	<b>167: 66</b>

\* Enacted means the policy brief informed a change in policy or practice through passing or implementing a policy recommendation. Briefs enacted are a subset of briefs completed.

# DATA TO POLICY IN AFRICA

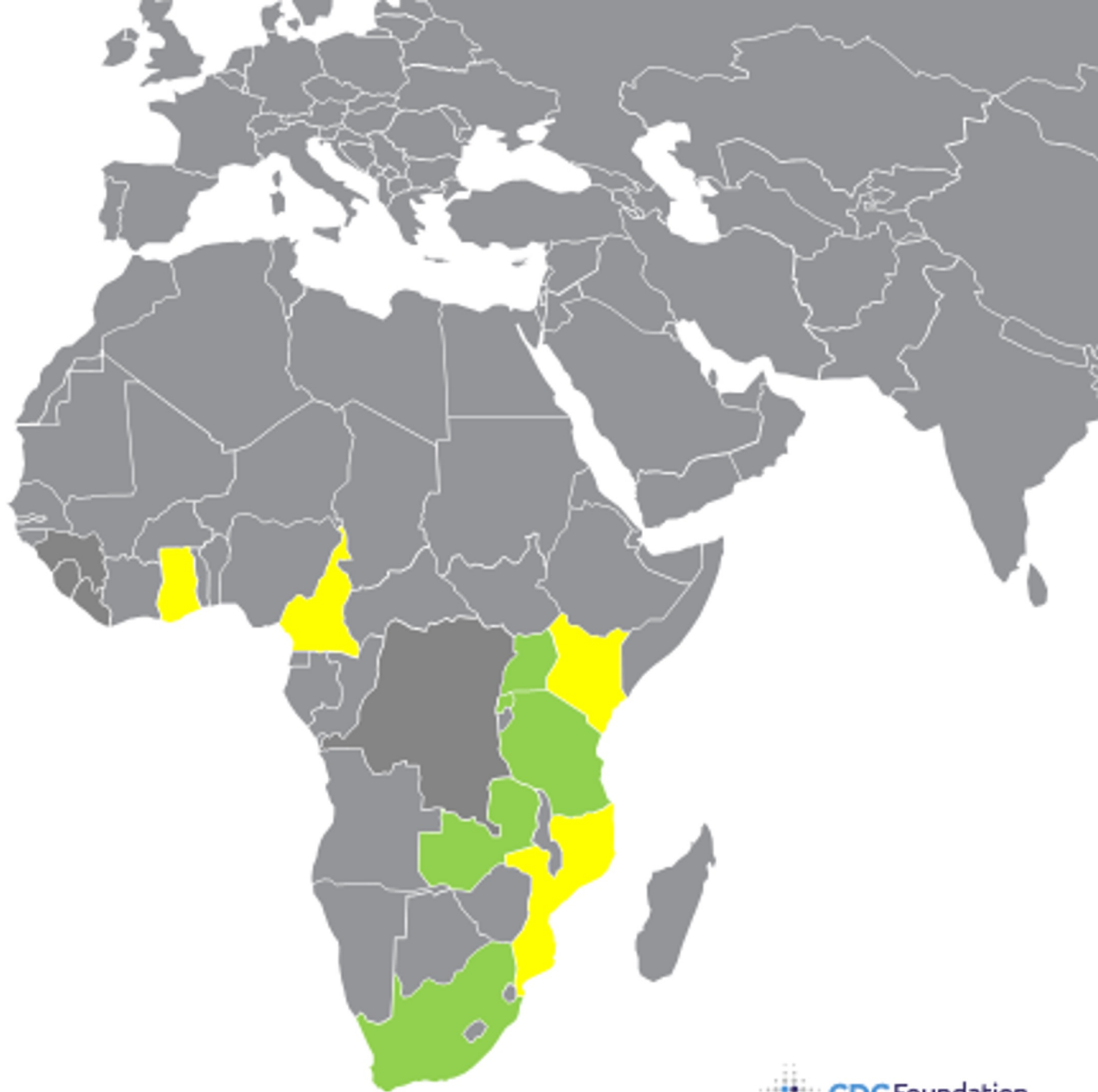


# African D2P Countries

9 Countries in Africa have been through the D2P program.

Current CDCF Countries: Rwanda, South Africa, Tanzania, Uganda, Zambia

Others: Cameroon, Ghana, Kenya, Mozambique



# Rwanda

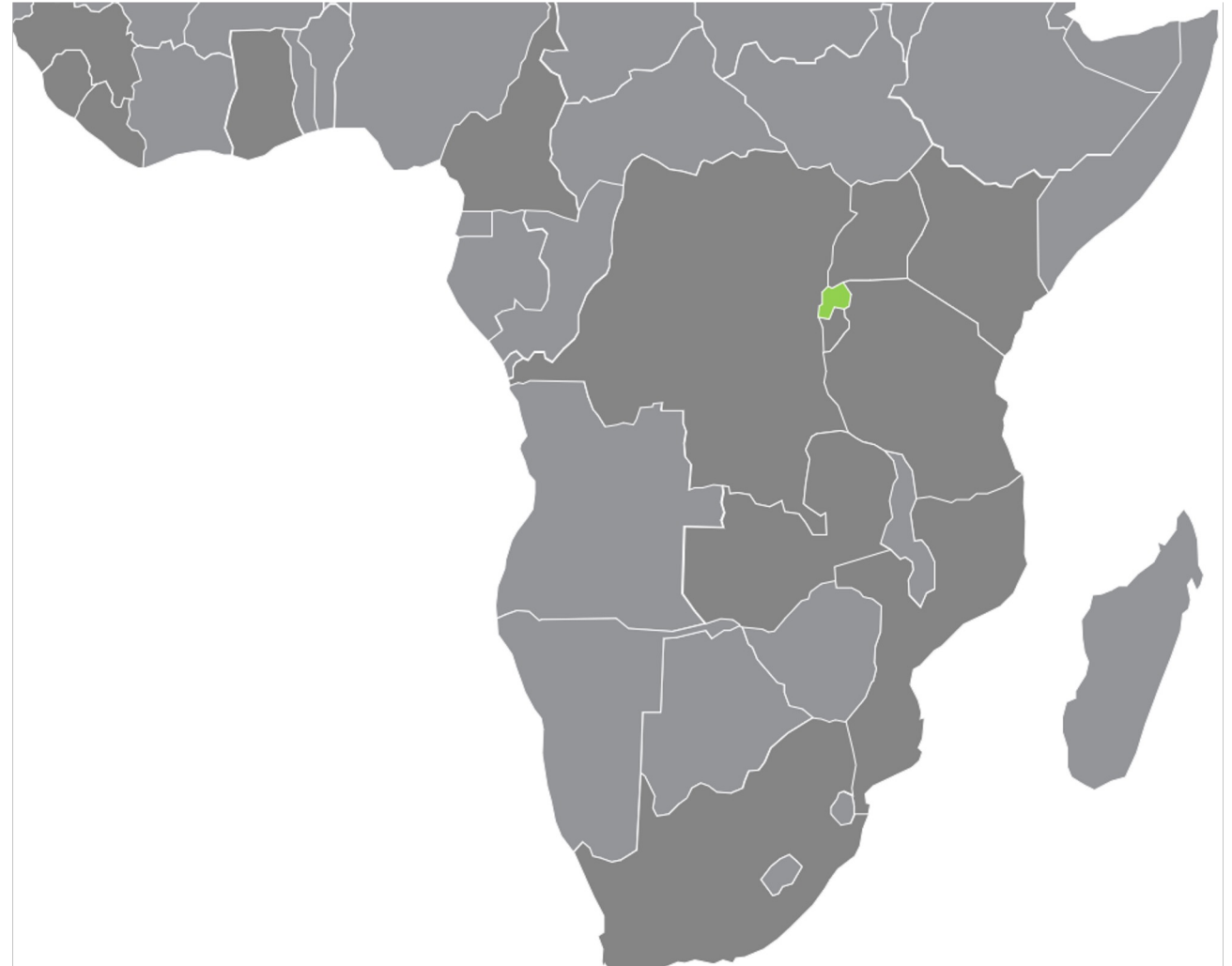
Number of Trainings: 2 (2021, 2023)

Number of Policies Produced: 6

Policy Topics: Stroke Deaths, Antimicrobial Resistance, Malaria, Measles Vaccination, Hypertension, and Cervical Cancer.

Next Training Expected: TOT in 2024

Selected Policy: Per a data to policy proposal in development, the development of an antimicrobial resistance surveillance system could prevent 250+ deaths at a cost 1400 USD per death averted. ( D2P Program Rwanda)



# Tanzania

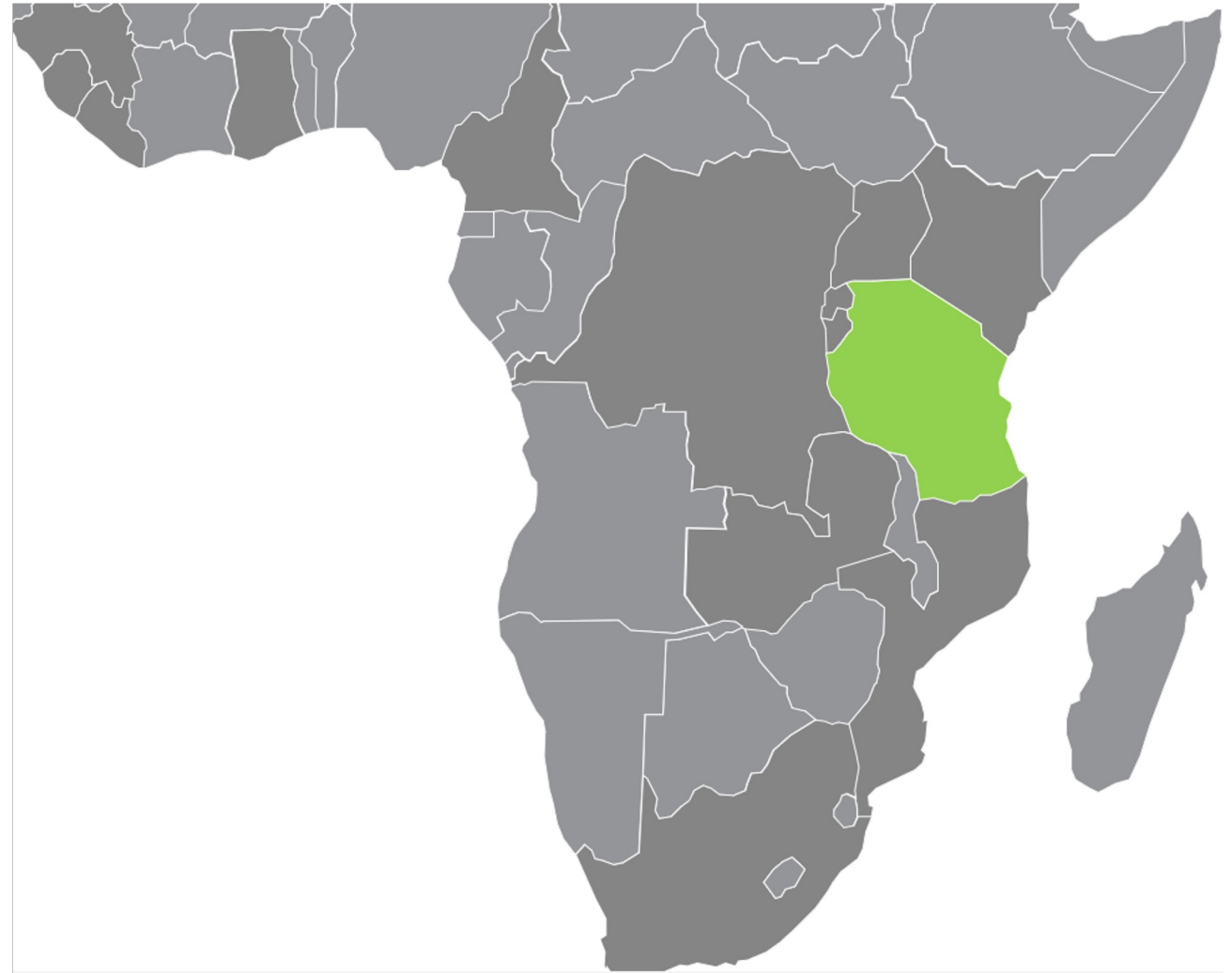
Number of Trainings: 2 (2019, 2023)

Number of Policies Produced: 10

Policy Topics: Rabies Vaccination for Humans, Rabies Vaccination for Dogs, Obesity, Neonatal Mortality, Maternal Mortality, TB Incidence, Oral Health, HIV Testing, HIV ART, and Malaria

Next Training Expected: TOT in December 2023

Selected Policy: Continuous non donor dependent distribution of ITNs has the potential to avert 127 deaths for under 5s with an ICER of 900 USD.  
(D2P Tanzania 2023)



# Uganda

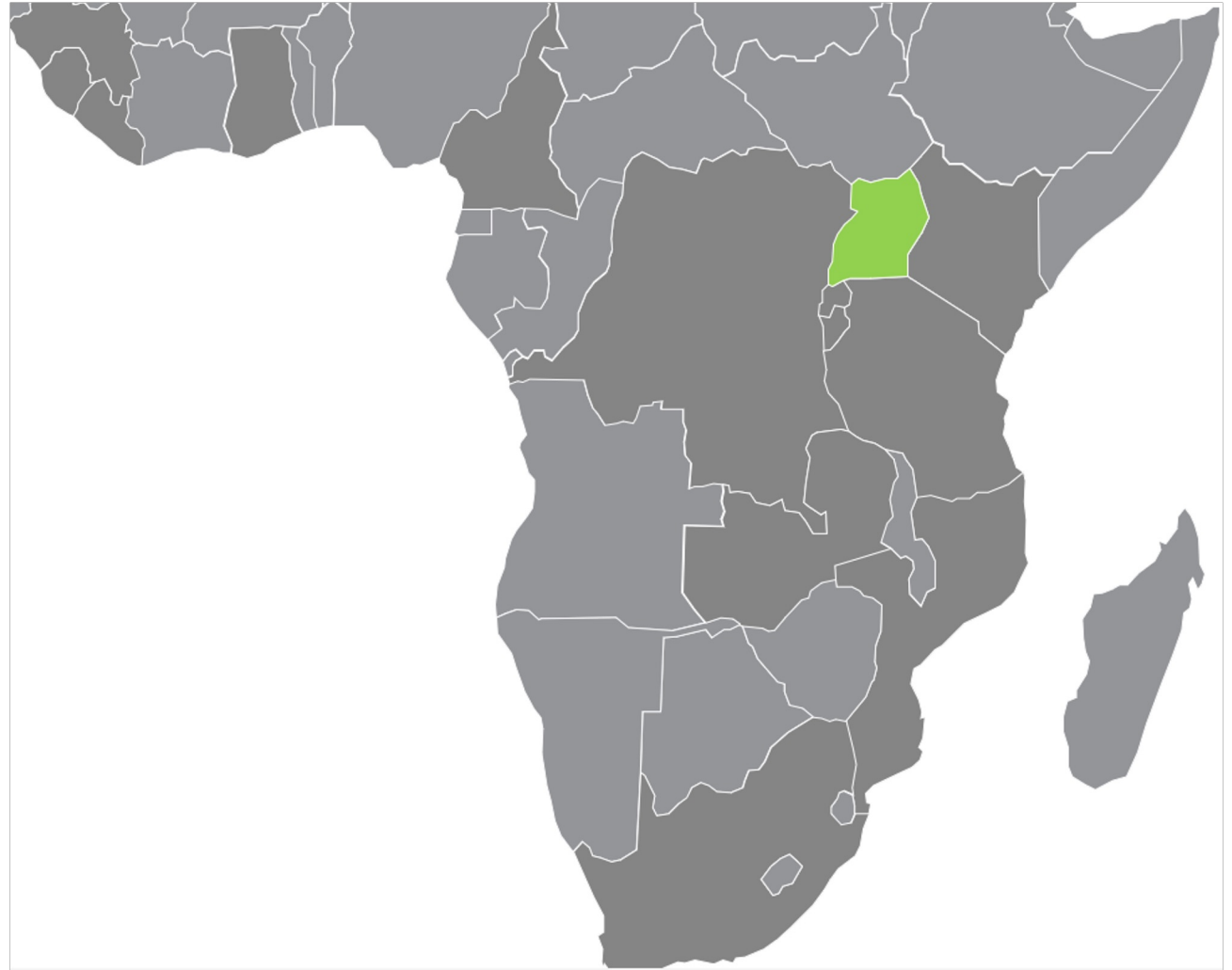
Number of Trainings: 1 (2021)

Number of Policies Produced: 5

Policy Topics: Rabies, Anthrax, Malaria Prevention, Malaria Medication, and Measles Vaccination

Next Training Expected: D2P 2nd Cohort Oct 2023

Selected Policy: Implementation of Mass Dog Vaccinations on World Rabies Day as a result of the Data to Policy Brief completed in Uganda 2021.



# Zambia

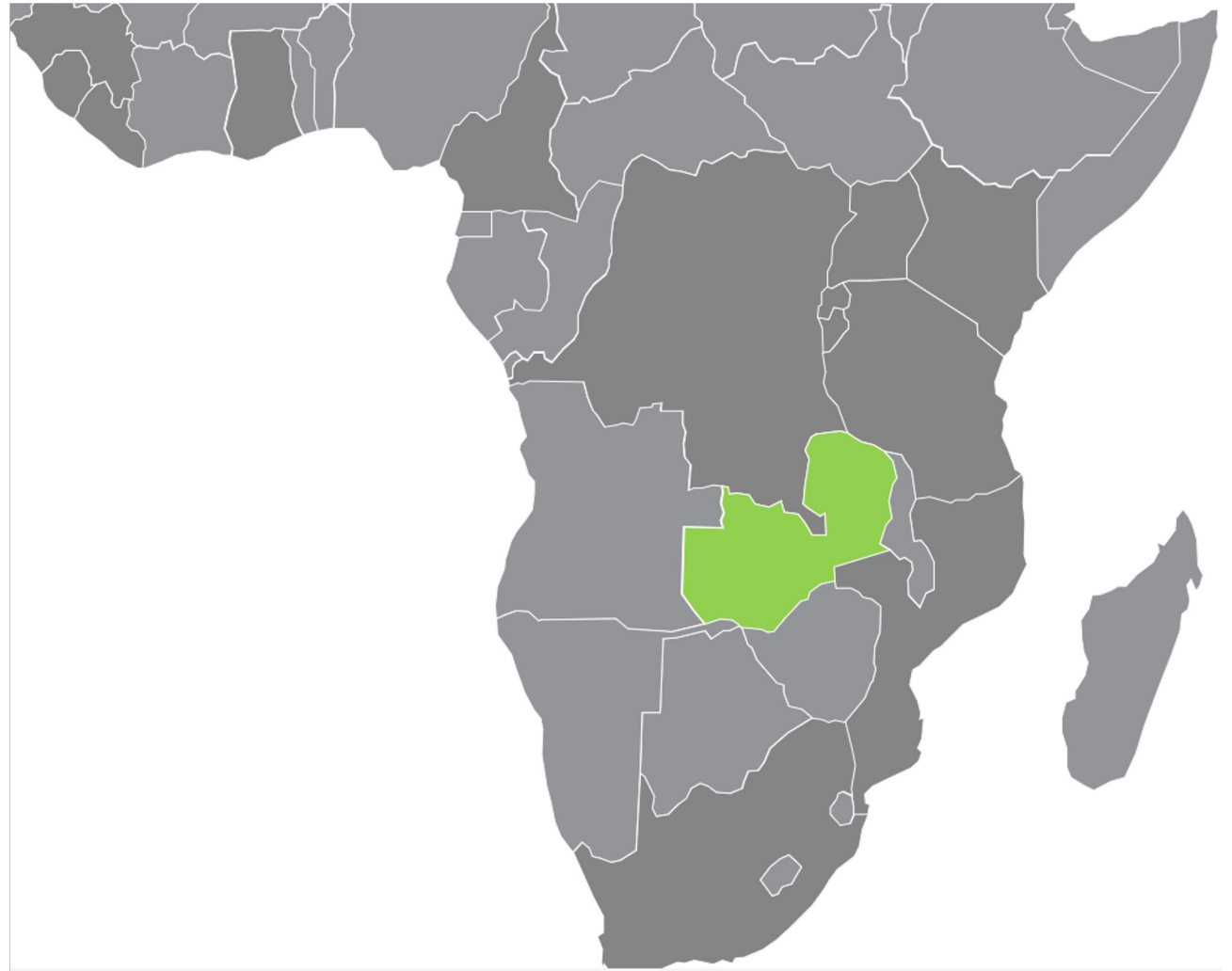
Number of Trainings: 5 (2016, 2018, 2019, 2021, 2022)

Number of Policies Produced: 16

Policy Topics: Smoking, HIV Testing, TB Screening, TB Treatment, Hepatitis B, Cervical Cancer, HIV Treatment, Neural Tube Defects, Antimicrobial Resistance, Hypertension, TB Prevention, Maternal Mortality, Healthcare Workforce.

Next Training Expected: D2P 6th Cohort Oct 2023

Selected Policy: Design and Introduction of Youth Friendly Clinics will increase adolescent HIV testing and adherence to HIV therapy at a reduced cost per case identified.



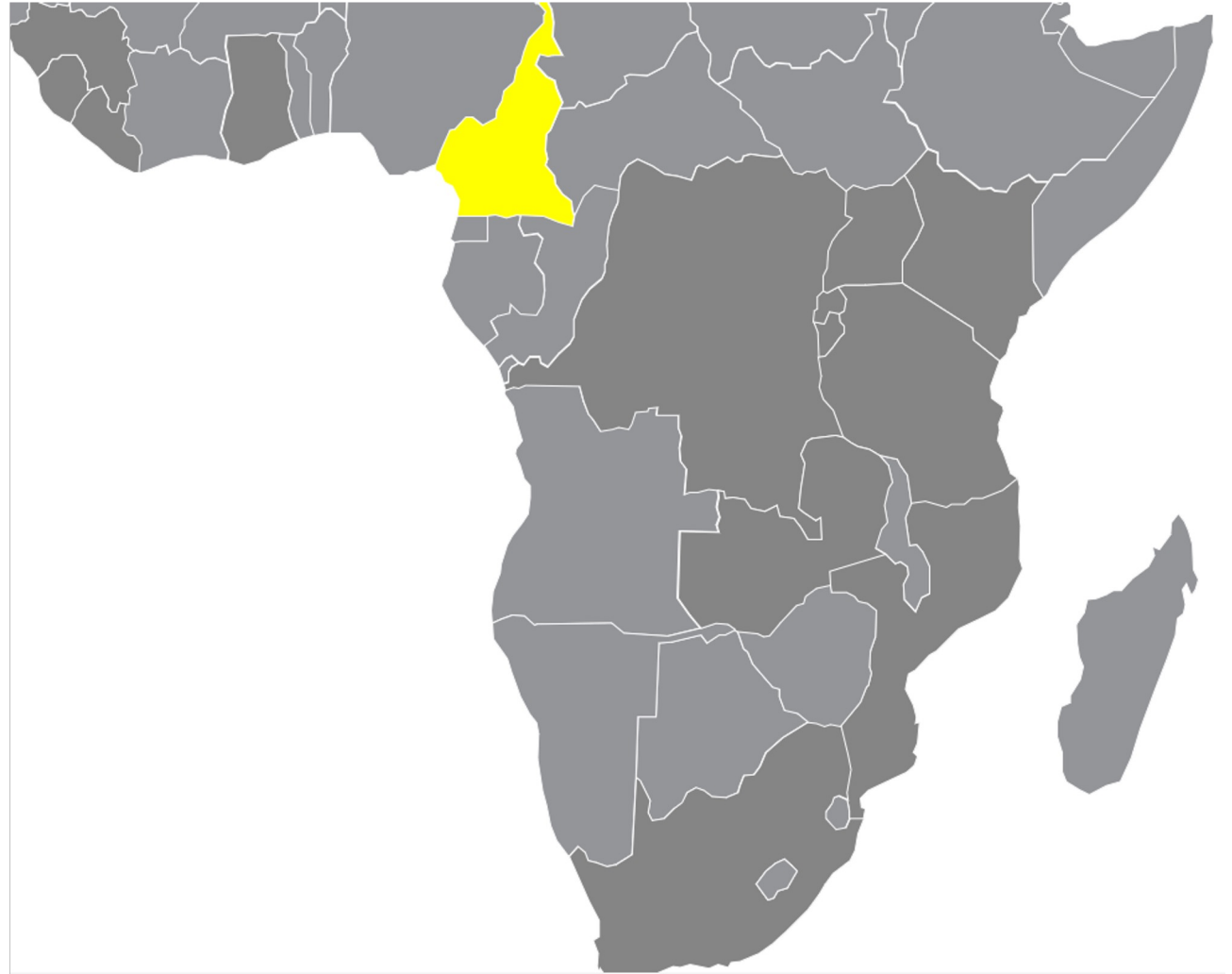
# Cameroon

Number of Trainings: 1 (2023)

Number of Policies Produced: 3

Policy Topics: Covid-19 Impact on Health Services, Maternal and Child Health Services, Road Traffic Deaths

Next Training Expected: Phase 5 English D2P

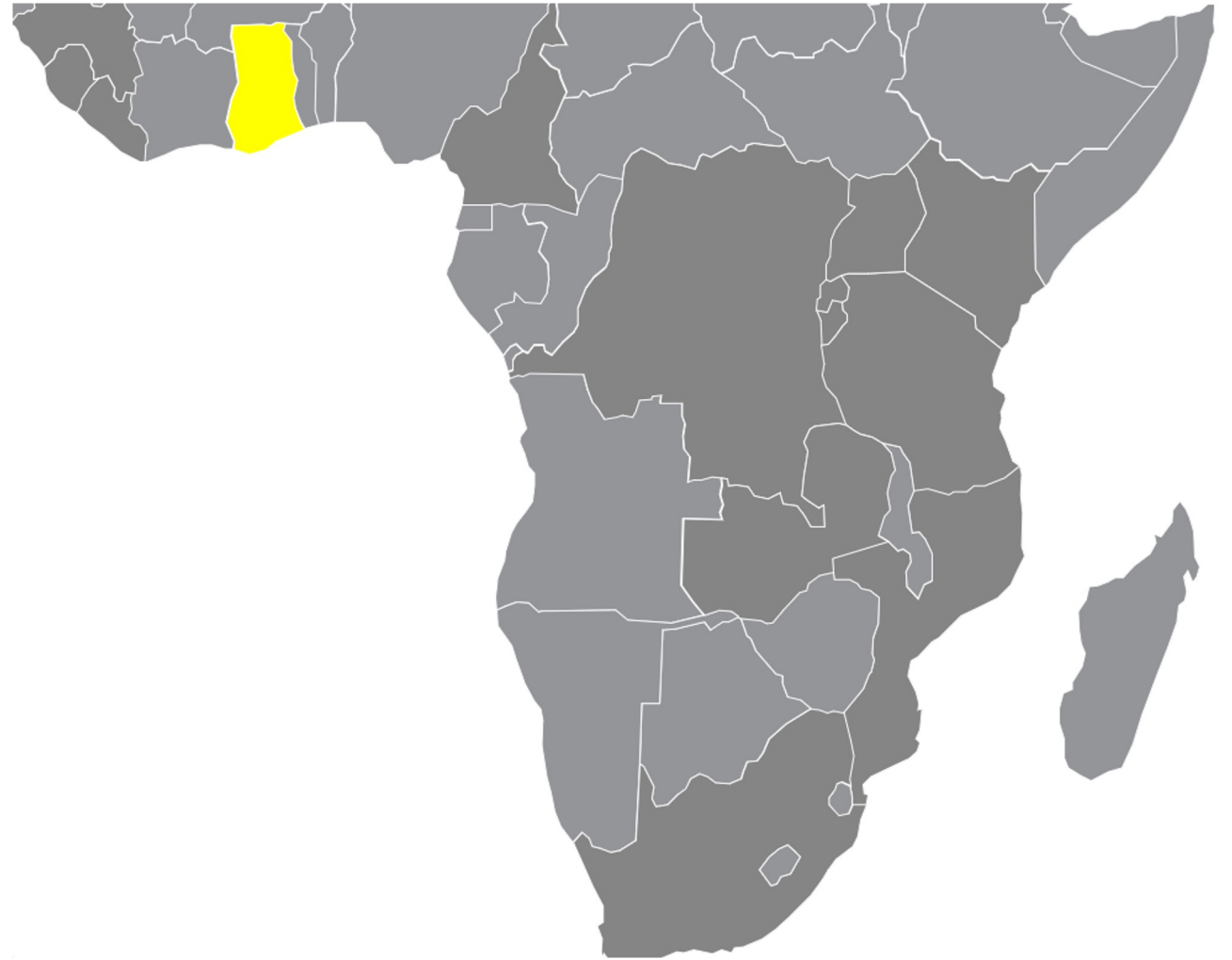


# Ghana

Number of Trainings: 1 (2017)

Number of Policies Produced: 1

Policy Topic: Bacterial Meningitis Outbreaks





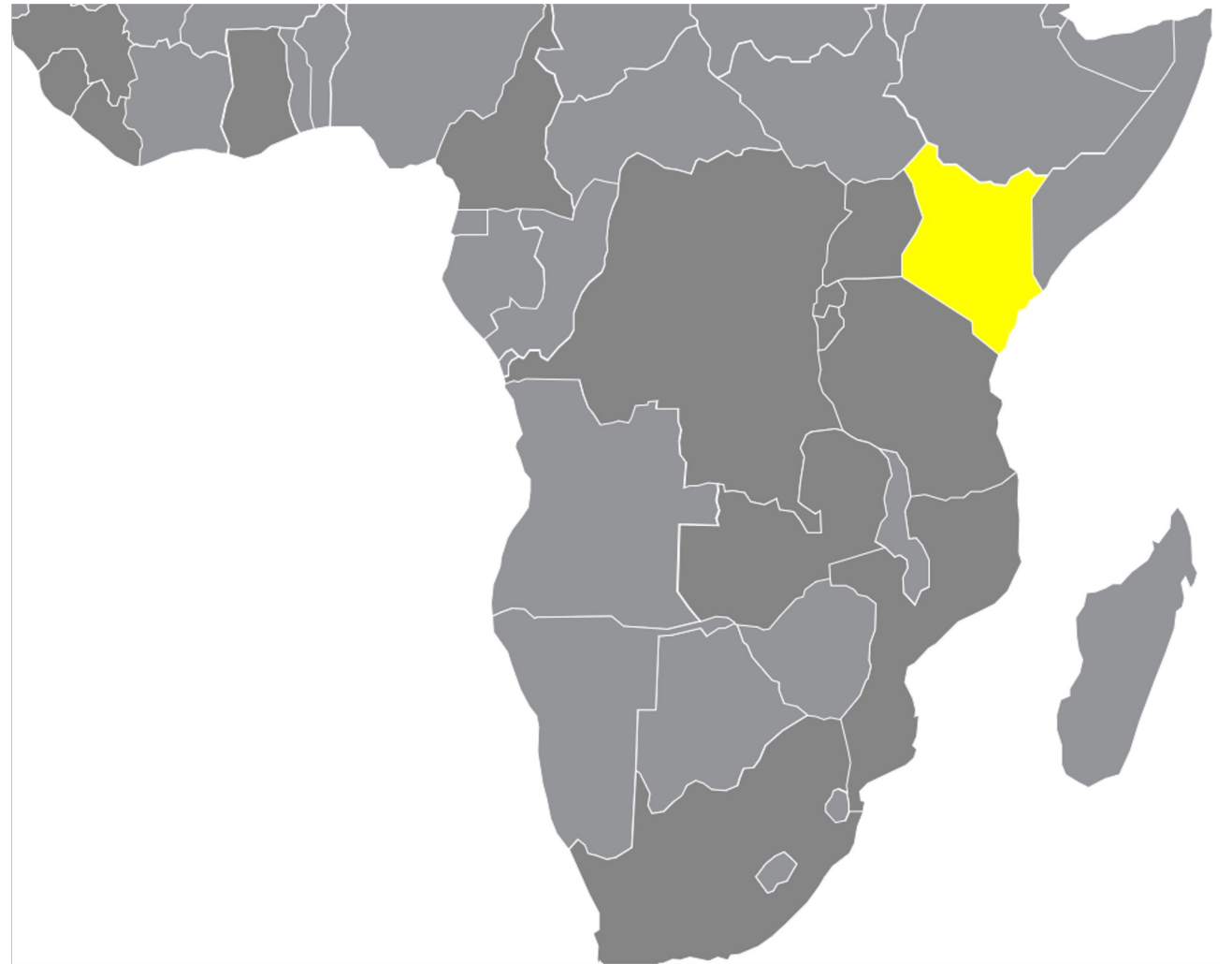
# Kenya

Number of Trainings: 1 (2023)

Number of Policies Produced: 4

Policy Topics: Mortality Reporting, Cervical Cancer, Adolescent HIV Treatment, and Suicide

Next Training Expected: Phase 5 TOT and D2P



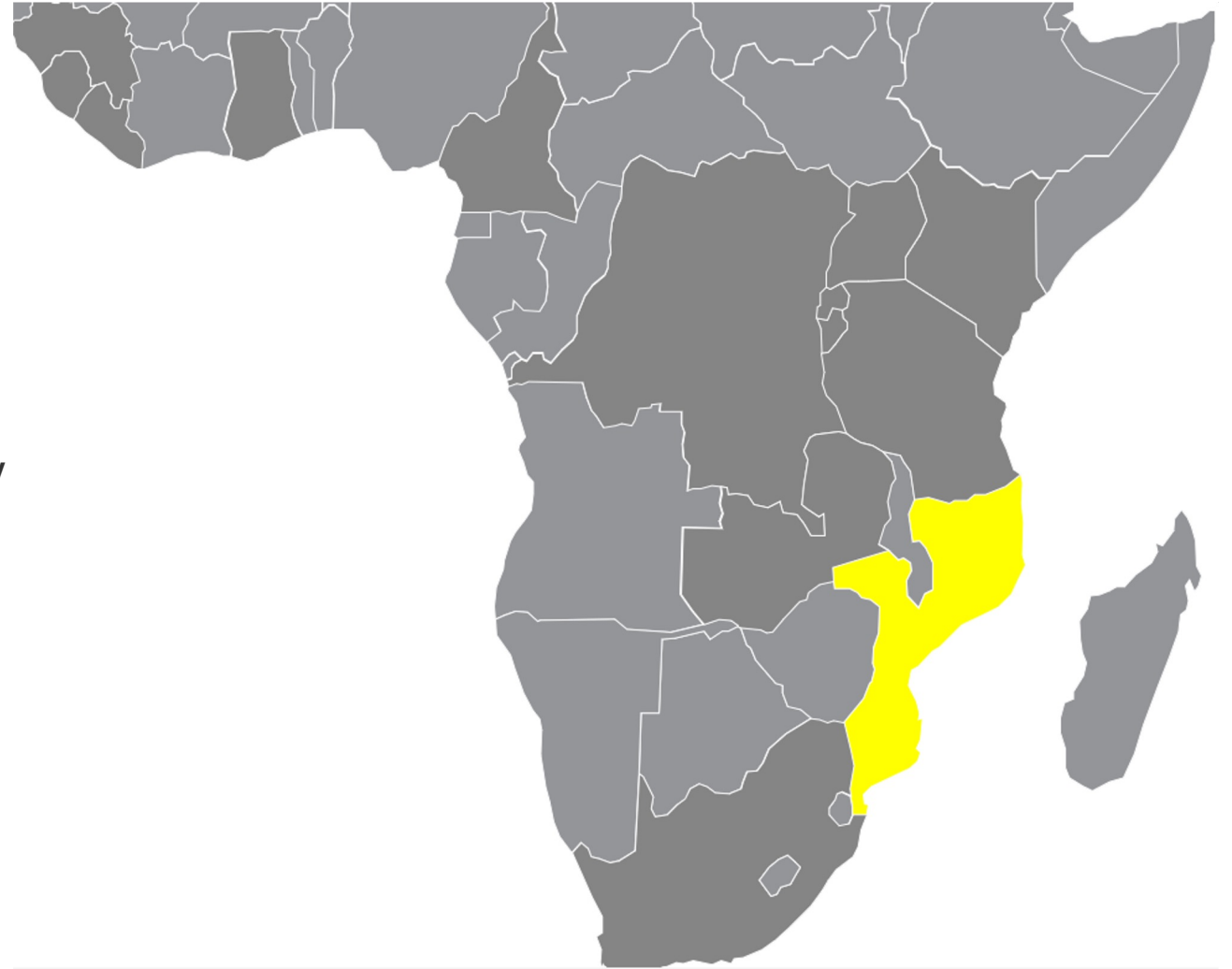
# Mozambique

Number of Trainings: 1 (2023)

Number of Policies Produced: 2

Policy Topics: Arboviruses and Maternal Mortality

Next Training Expected: Collaboration on Policy Brief Development in Phase 5



# OUTLINE

## 1. Andrew Ancharski

- a. Data impact and Data to Policy Program
- b. The structure of the Data to Policy Program
- c. Data to Policy by the Numbers
- d. Data to Policy in Africa

## 2. Ruvimbo Chingonzoh

- a. South Africa Data to Policy
- b. Policies produced from the first SA Cohort
- c. Experience as a participant of D2P and TOT

# POLICY MAKING AND IMPLEMENTATION, SOUTH AFRICA

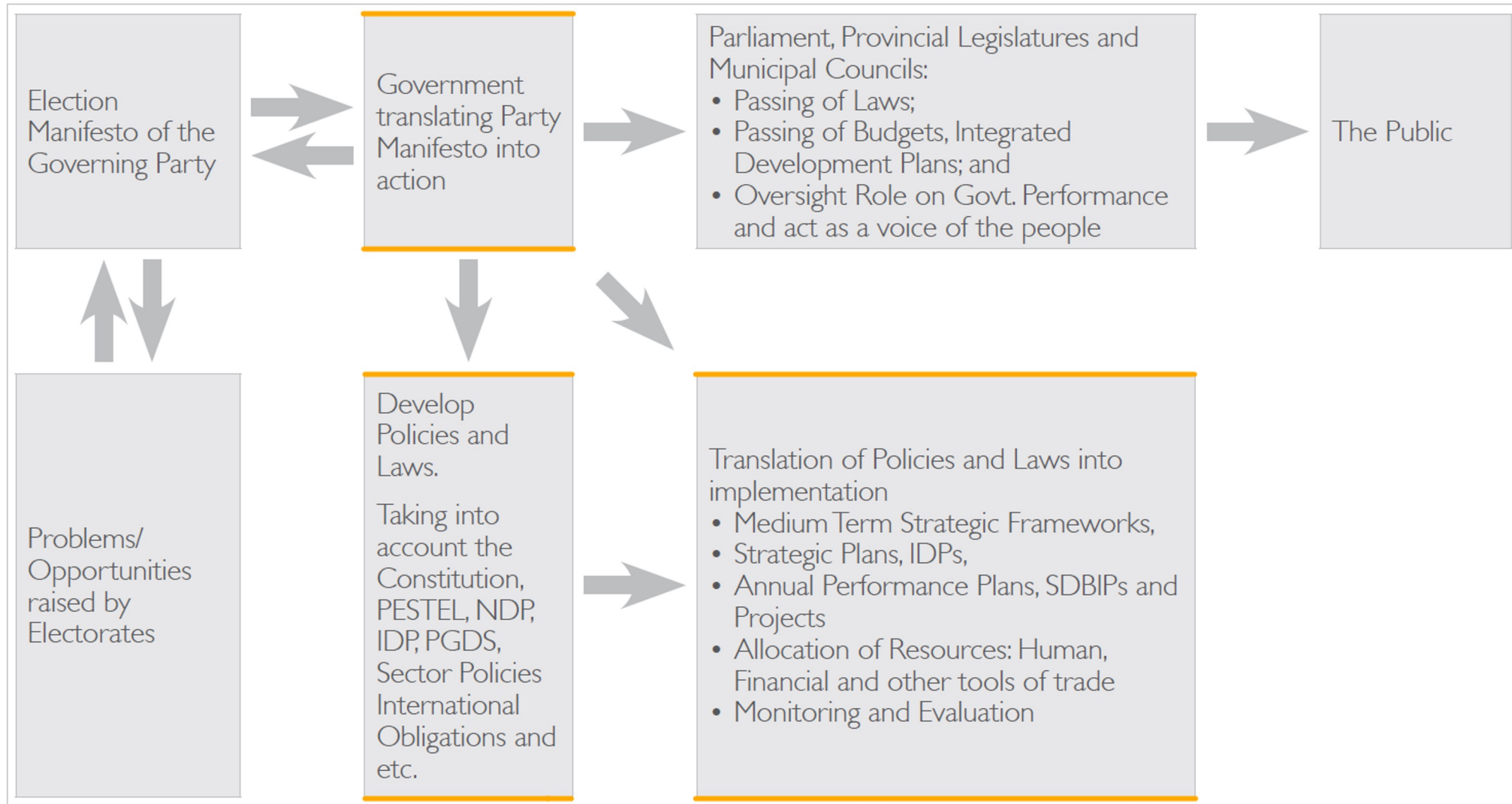


Figure 1: Generic policy making and implementation in South Africa; National Policy Development Framework, 2020;

[https://www.gov.za/sites/default/files/gcis\\_document/202101/national-policy-development-framework-2020.pdf](https://www.gov.za/sites/default/files/gcis_document/202101/national-policy-development-framework-2020.pdf)

# DATA TO POLICY IN SOUTH AFRICA

## First D2P Cohort

September 2022 - February 2023

- 6 groups: Schistosomiasis, HIV, Cervical Cancer, Rabies, Polio, and Rubella
- 20 persons trained

## First Training of Trainers

July 2023

-7 Participants (1 Economist)



# **POLICIES FROM THE FIRST SOUTH AFRICA COHORT**

# Policy 1. “Implementation of mass drug administration for praziquantel to treat and prevent schistosomiasis (bilharzia) in South Africa”

## Key Messages:

- South Africa is one of only two African countries yet to implement the World Health Organizations (WHO) recommended Mass Drug Administration (MDA) strategy.
- Implementation of MDA can reduce prevalence of bilharzia infection from 60% to <15% in South Africa.
- MDA is the most cost-effective intervention to reduce bilharzia cases in the country.

**Current Status:** A PZQ MDA implementation plan has been drafted and circulated to the South African NTD working group for inputs. This document will be presented at the next National Essential Medicines List Committee’s (NEMLC) quarterly meeting.



# Policy 2. “Animal Bite Surveillance with PEP for Rabies Control”

## Key Messages:

- Delayed or under-detection of animal bites and inadequate provision of rabies post-exposure prophylaxis are significant contributors to human rabies deaths in the province.
- The Integrated Animal Bite Surveillance with PEP Tracking strategy is the most cost-effective strategy for improving rabies post-exposure compliance and reducing human rabies deaths in the Eastern Cape.

**Status:** Preliminary engagements between the Provincial Department of Health and the National Institute for Communicable Diseases are taking place for policy enactment.

# Policy 3. “Improving Rubella Surveillance”

## Key Messages:

- Rubella can result in Congenital Rubella Syndrome and can result in negative impacts on health and well-being of women and infants
- Improving Rubella and CRS surveillance in South Africa can be used to monitor the effectiveness of rubella containing vaccination
- An enhanced surveillance program can detect the highest number of CRS cases

**Status: Policy recommendations being enacted.**

# Policy 4. Optimizing HIV testing in children in South Africa through the use of a screening tool

## Key Messages:

- South Africa has over 100,000 children living with HIV (CLHIV) that are not on treatment, who have a high risk of becoming ill or dying of HIV-related complications, the majority of whom are 5-14 years old (estimated 80%).
- Screening tools assist with identifying children at risk of being HIV-infected, allowing testing resources to be used where they are needed. The implementation of a validated screening tool found three times the number of CLHIV (5-14 years), for the same number tested.
- In addition to the screening tool, inclusion of intensive training for counsellors on counselling and testing children for HIV, would provide the greatest increase in the number of CLHIV identified and would most rapidly address the testing gap.

**Status: Policy recommendations enacted.**

# Policy 5. “Cervical cancer vaccination coverage in South Africa”

## Key Messages:

- Cervical Cancer (CC) is the second most common cancer amongst South African women.
- It is the leading cause of cancer-related mortality in South Africa (SA).
- CC is preventable through vaccination against HPV and a 98% coverage is expected when vaccines are easily accessible at healthcare facilities at no cost to the girls.

**Status: Enacted and concluded.**

# Policy 6. “Improving vaccine coverage to prevent polio outbreaks in South Africa”

**Key Messages:** If wild poliovirus type 1 (WPV1) is successfully introduced in South Africa (SA), it has the potential to cause large outbreaks. We need to improve vaccination coverage rates in many districts in South Africa.

**Status:** The policy is in the process of being sent for publication.

# D2P: A PARTICIPANT'S PERSPECTIVE

- **D2P provided an opportunity to participate directly in health policy formulation**
- **Intensive training with hands on learning that culminated in a policy forum presentation**
- **Process allows for “peer to peer” learning, with opportunities to:**
  - **Receive inputs from mentors, facilitators and participants**
  - **Review and track policy brief development within the D2P cohort**
  - **Engage with participants within the cohort**
- **D2P intensive program includes self learning, and facilitator-led sessions**
  - **Well structured Units & Modules, gradually build-up the policy brief**
  - **Incorporates mentorship - key success factor**
  - **Accountability, tracking progress: participant presentation at end of each unit**

# D2P: SUCCESS AND CHALLENGES, AND THE FUTURE

- **Escalate human rabies (deaths) as a local public health problem, conduct root cause analysis and evaluate options to address the problem**
- **Reinforced known concepts, but more importantly introduced new concepts and skills**
  - **Policy briefs as a policy proposal communication tool**
  - **Economic evaluation - cost benefit analysis using decision tree**
- **Milestone: adoption of the proposed recommendation**
- **Anticipated success**
  - **Implementation of the recommended intervention and,**
  - **Realization of intended impact - “zero by 2030”**
- **Subject matter interest out-weighed challenges faced**
  - **Time intensive - competing needs for participants**
  - **Team diversity and team management**



## D2P: IMPACT ON MY WORK AND THE FUTURE

- **Utilise policy brief as an approach to push key recommendations forward**
- **Expanded knowledge and application of problem analysis approaches**
- **Analysing a health problem and recommendations/ interventions**
  - **Pre-formulated strategy - able to take a step back, think through and evaluate different strategies/options**
- **Field epidemiologist, operational researcher and post graduate supervisor**
  - **Identify opportunities where policy briefs are an effective tool to communicate recommended interventions**
  - **Capacitate health workforce and researchers in developing policy briefs**
- **Incorporate economic evaluation when crafting recommendations strategies to address local health problems (as applicable)**

# SUSTAINING THE DATA POLICY PROGRAM, SOUTH AFRICA

- **NICD is recipient institution for D2P**
- **D2P trainers identified from the 1st D2P South Africa cohort (2022)**
- **Training of Trainers (1st cohort) conducted; July 2023**
- **2nd D2P South Africa cohort training planned (2024)**
- **Develop a pool of D2P Trainers to roll-out future trainings and support regional expansion of D2P**
- **Considerations - incorporate D2P as an elective for the Advanced FETP tier**



# HOW DOES THIS IMPACT THE WORK OF THE MINISTRY OF HEALTH

- **D2P trains health workforce to develop skills to use data to advance policy agenda**
- **D2P has capacitated the first South African cohort in developing policy briefs spanning a variety of health sector policies:**
  - **Mass Drug Administration Health Policy**
  - **Animal Bite Surveillance**
  - **Enhanced Congenital Rubella Surveillance**
- **National Department of Health (South Africa) mission is to improve health status by preventing illness and disease and promoting healthy lifestyles.**
- **It aims to consistently improve the healthcare delivery system by focusing on access, equity, efficiency, quality and sustainability.**
- **Developing a health workforce cadre that utilises local data to develop and propose interventions that address national, local health problems to inform national and provincial health policies, strategies and plans**

# THANK YOU