

Better Health Systems for Malaria Surveillance and Control

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&

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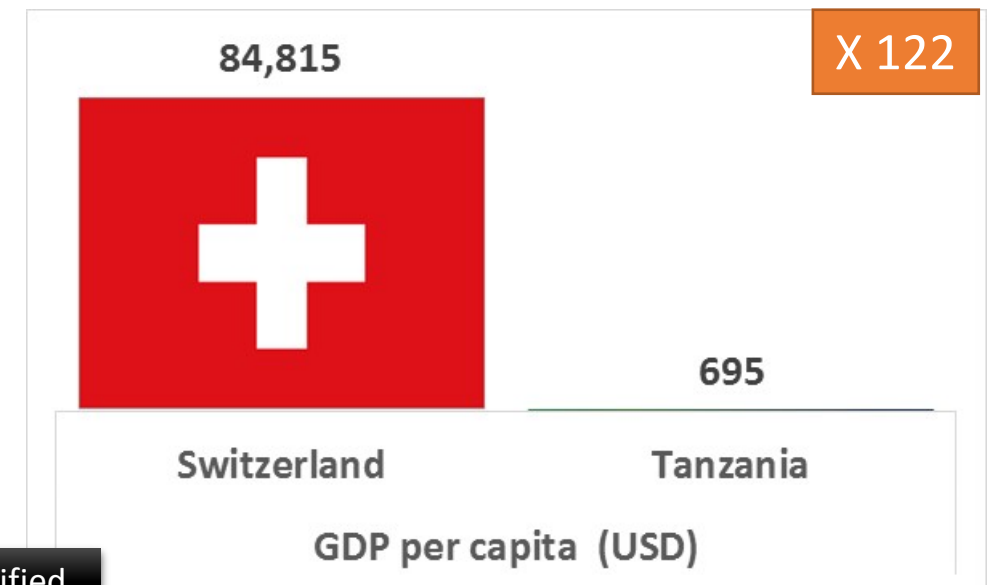
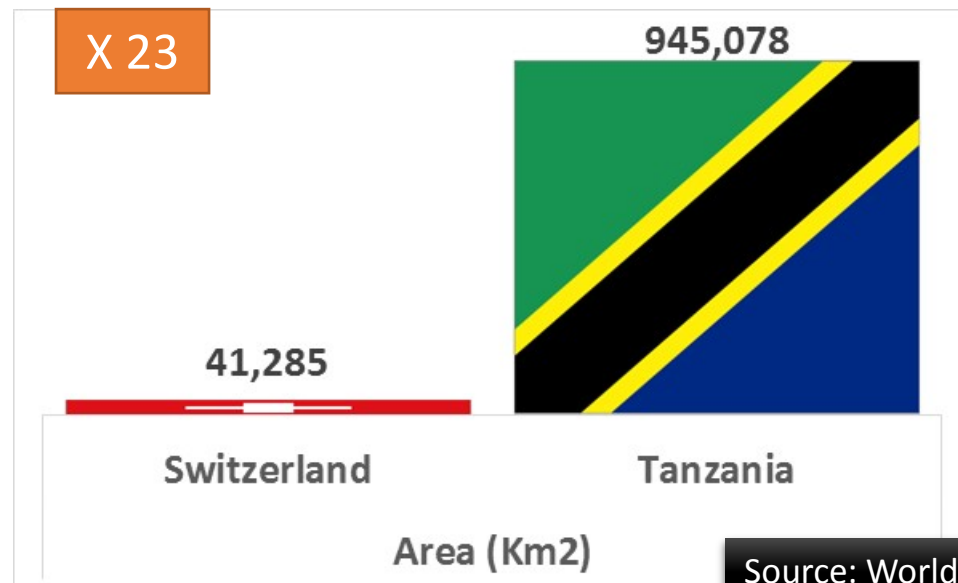
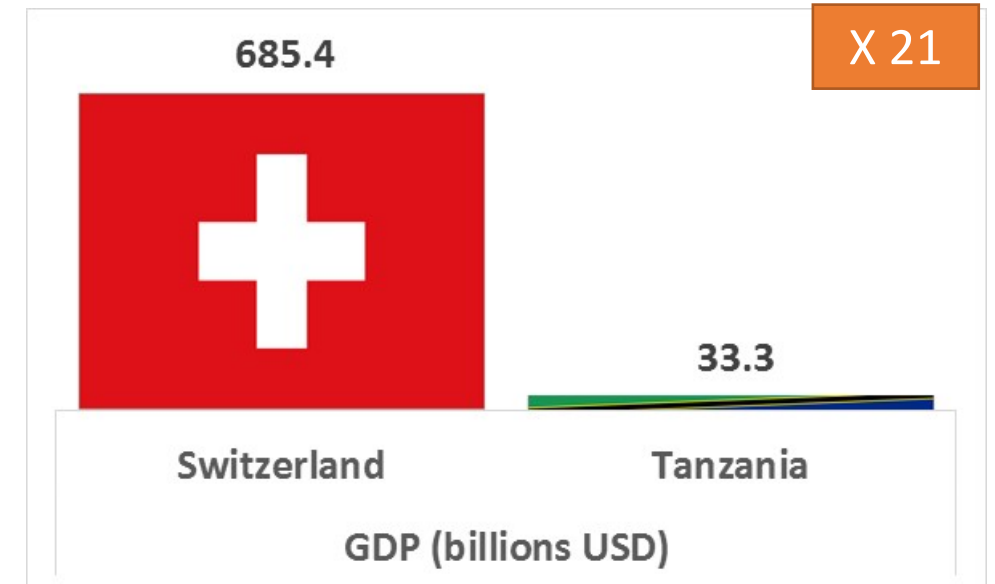
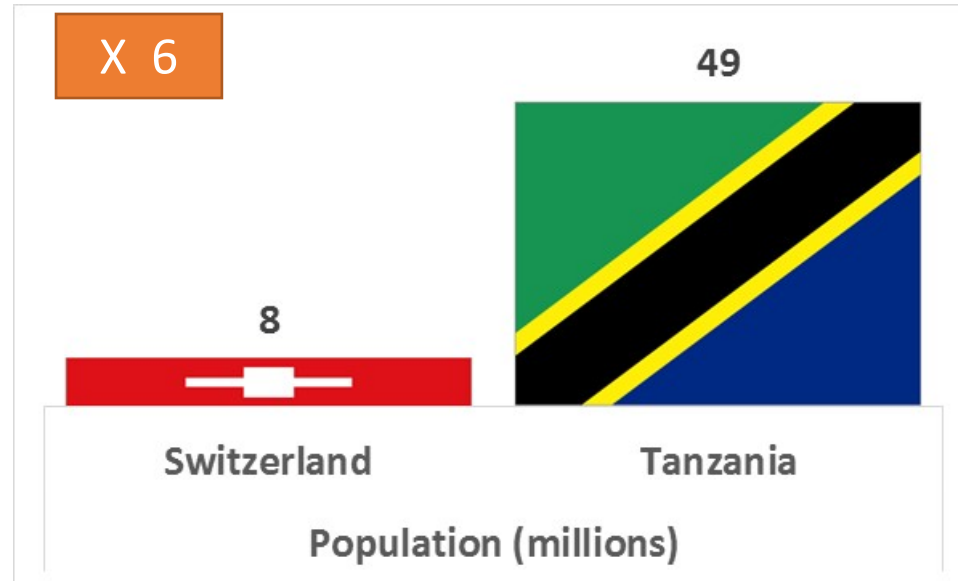
Outline

- Introduction, Switzerland & Tanzania
 - Key Demographic and socio economic indicators
 - Key health indicators
- Health System in Tanzania
- Malaria control in the context of the Tanzanian Health System
- Malaria surveillance in the context of the Tanzanian Health System
- Challenges
- Conclusions

Introduction, Switzerland & Tanzania

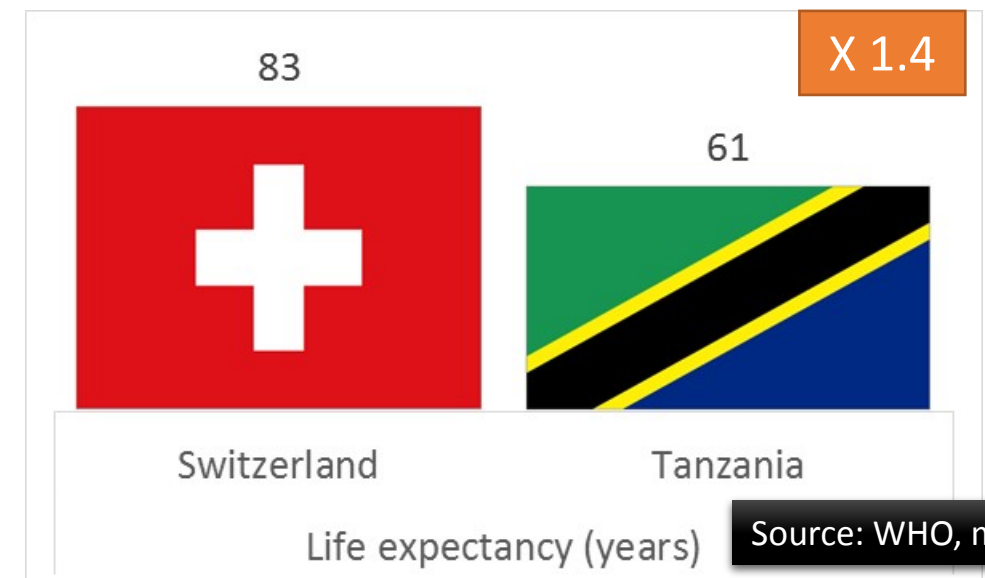
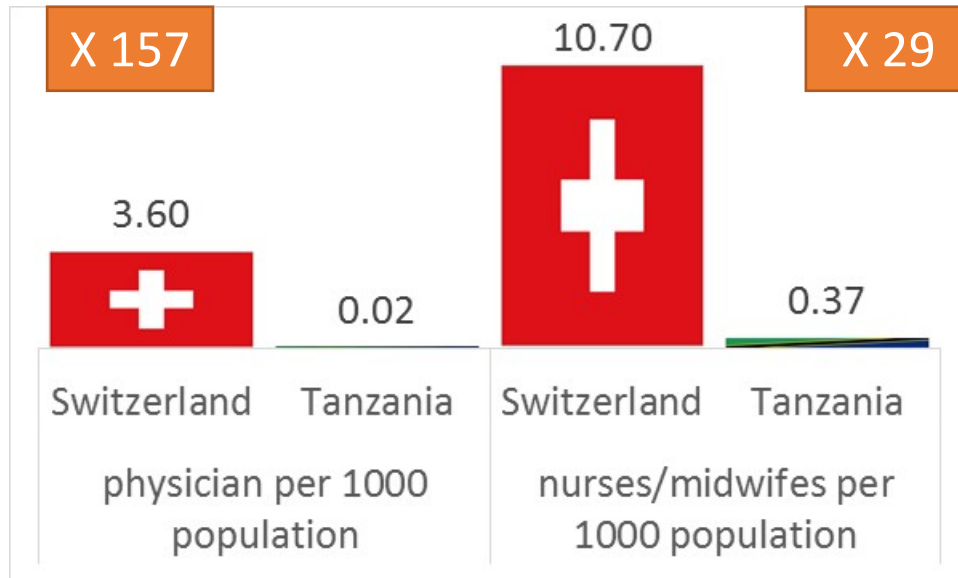
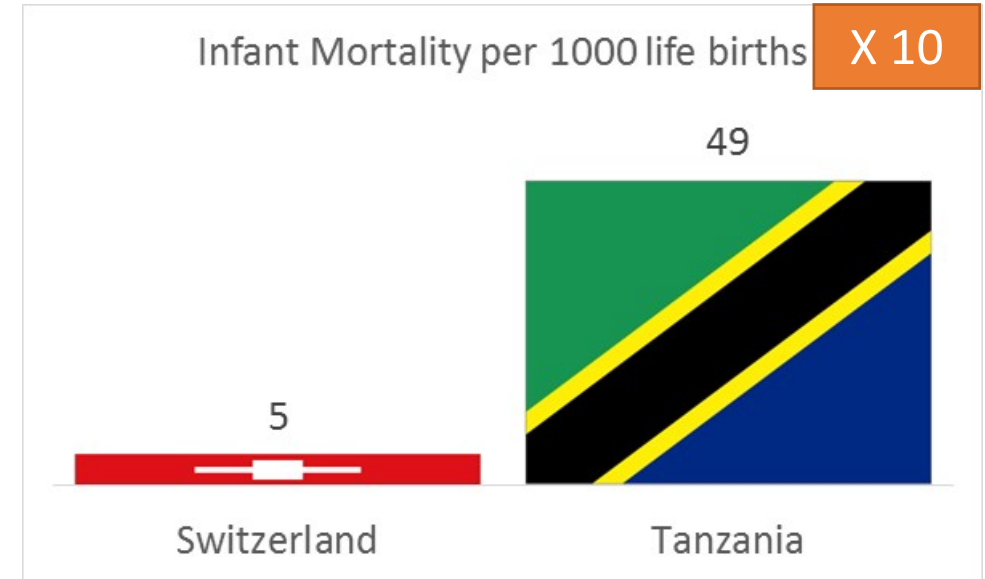
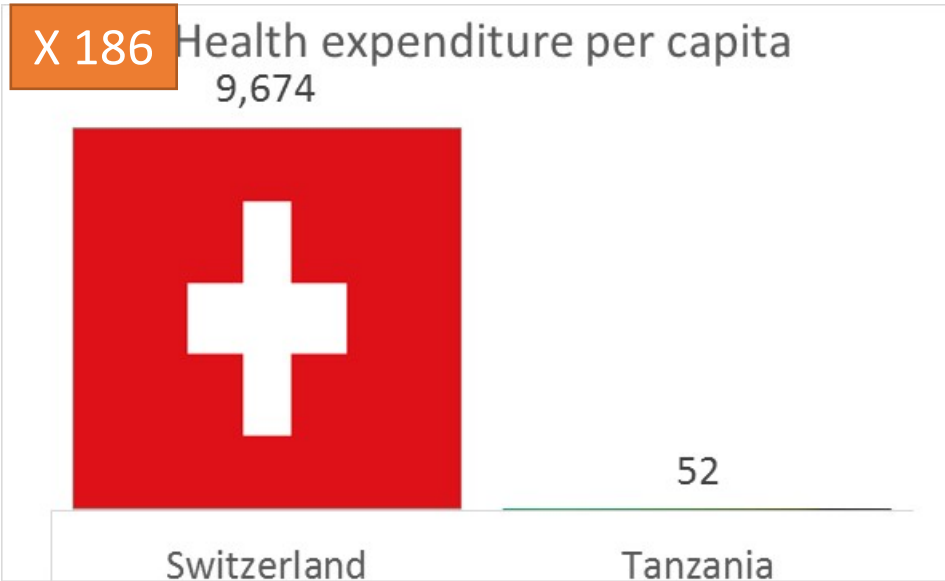


Key indicators: Switzerland vs Tanzania

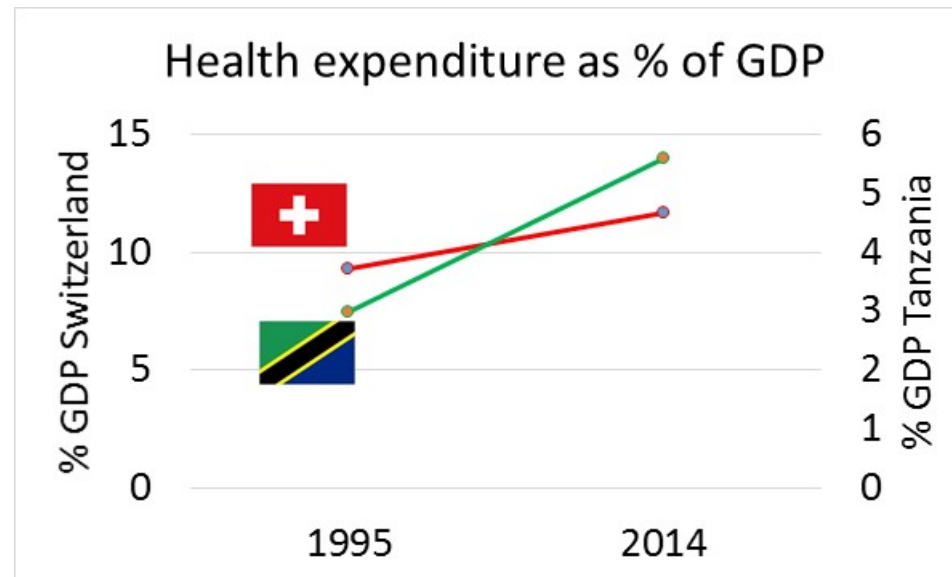
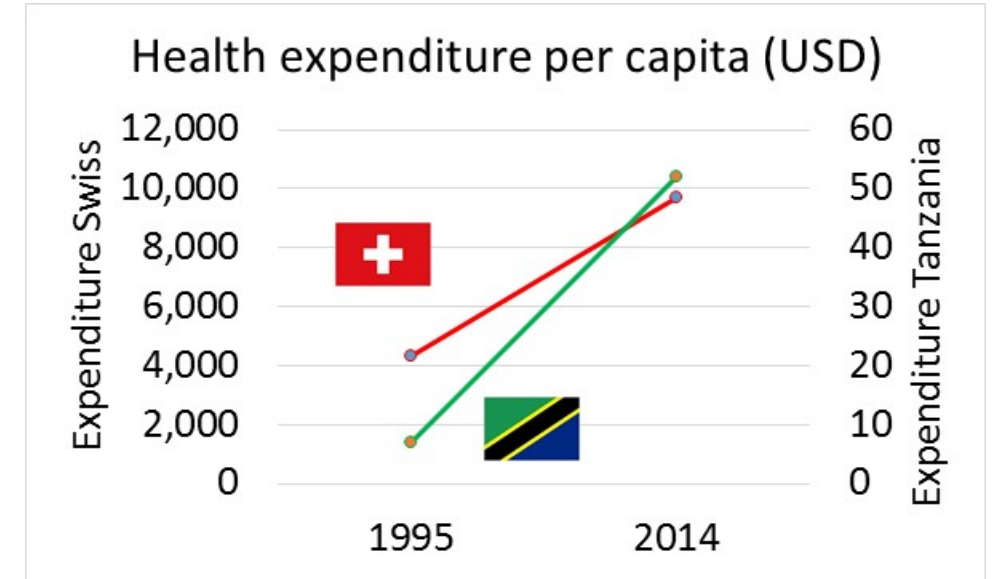
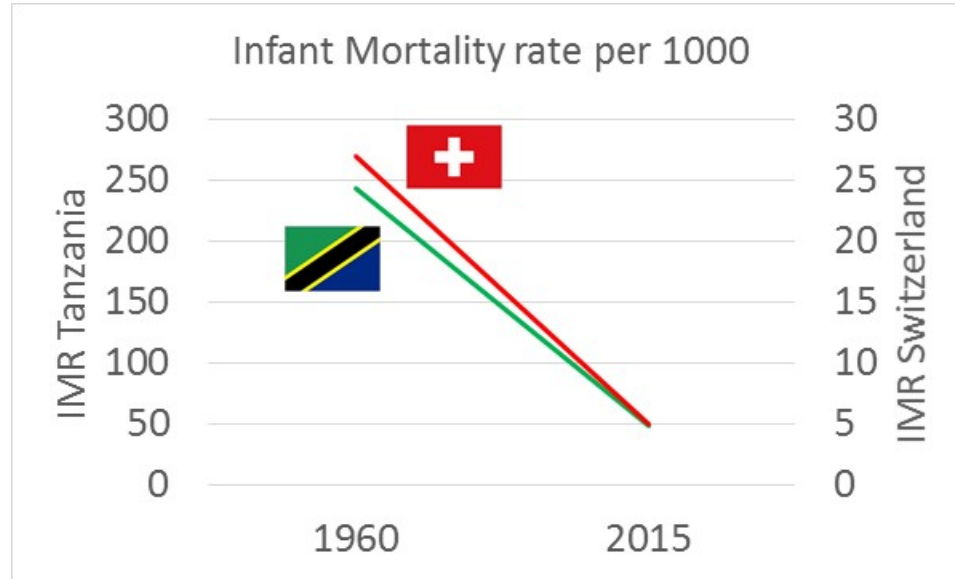


Source: World Bank, modified

Key health indicators: Switzerland vs Tanzania



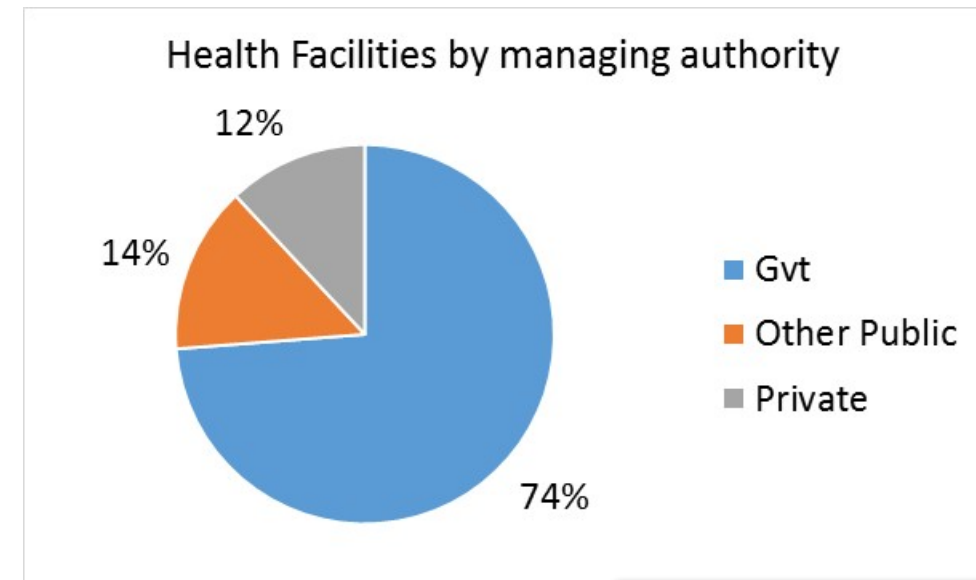
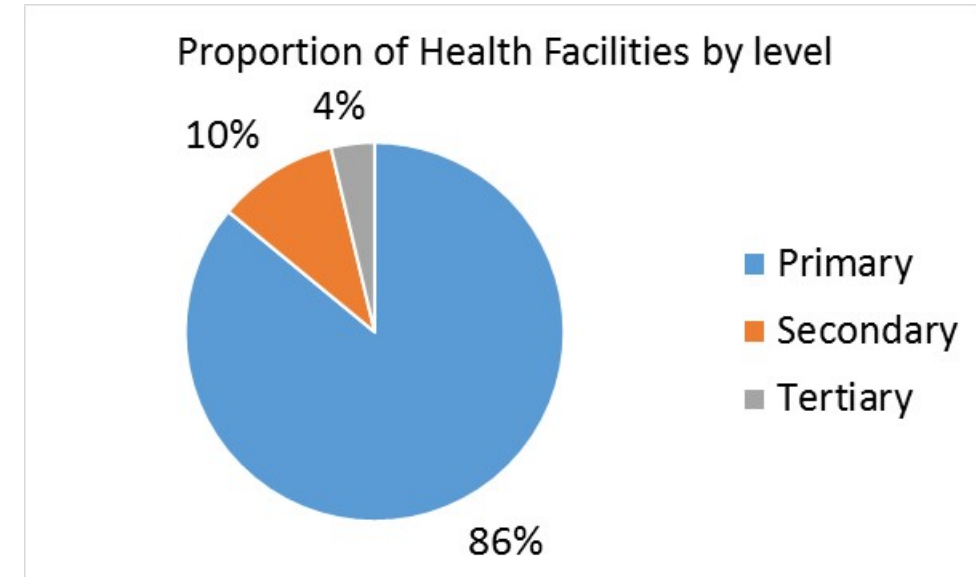
Key health indicators progress: CH vs TZ



Health System in Tanzania

- 3 levels
 - Primary: dispensary (5000-10000)
 - Secondary: health centre (25,000-50,000)
 - Tertiary (150,000-300,000)
- Public and Private
 - Public > represented in rural areas
 - Private > represented in urban areas

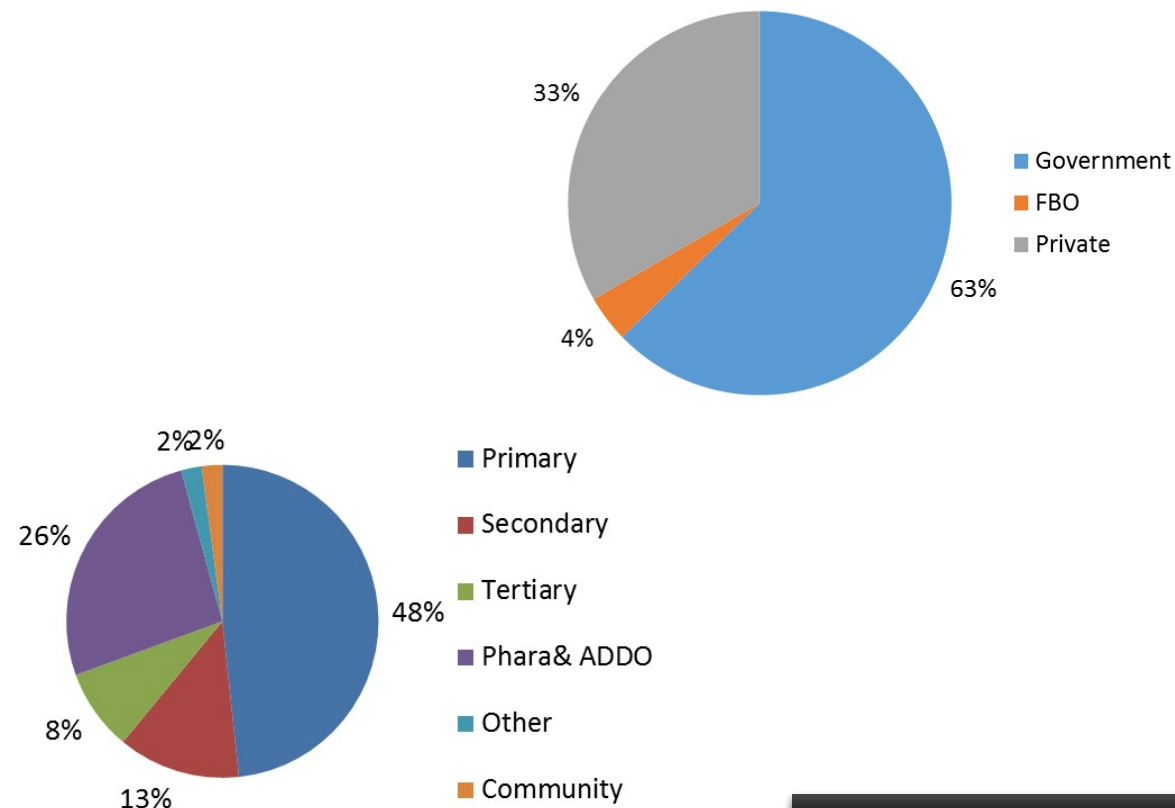
	Gvt	Other Public	Private	Total	Pop/Gvt HF	Pop/All HF
Primary	4502	742	716	5960	10,257	7,748
Secondary	484	153	79	716	95,410	64,495
Tertiary	129	94	34	257	357,972	179,683
Total	5115	989	829	6933	9,028	6,661



Health System and Malaria Control

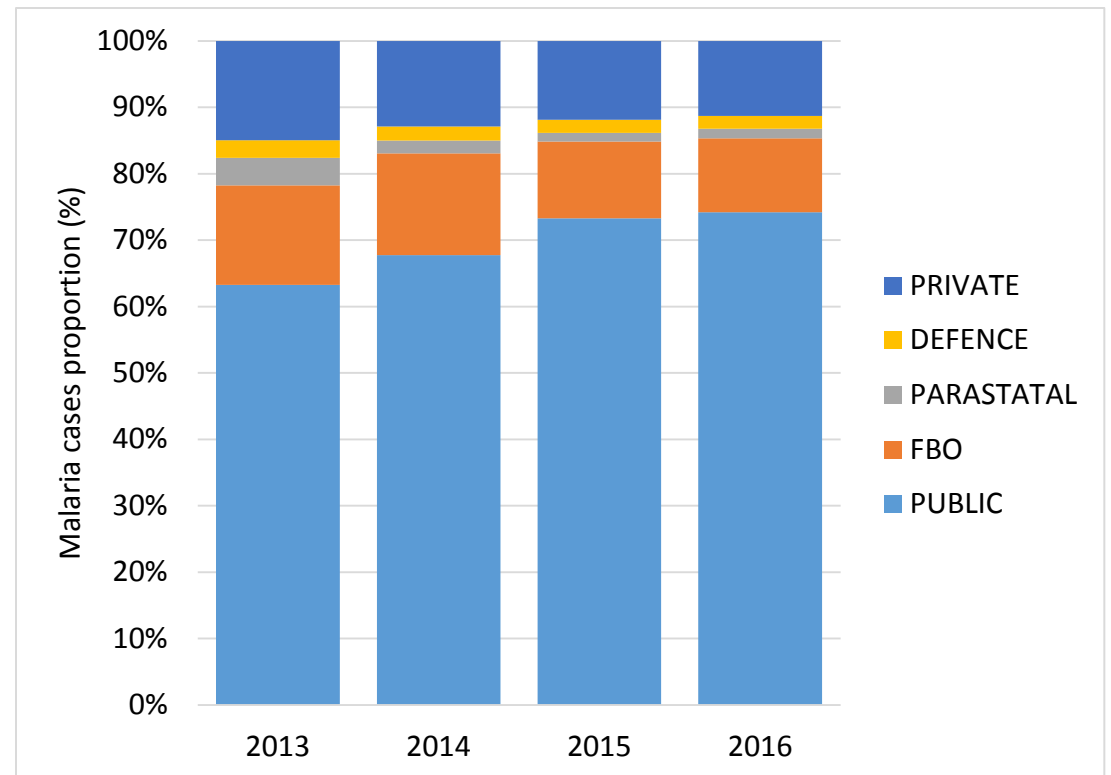
Malaria Services within Tanzania Health System

Proportion of children treated with antimalarials in HF by type and ownership



Source: MIS 2012

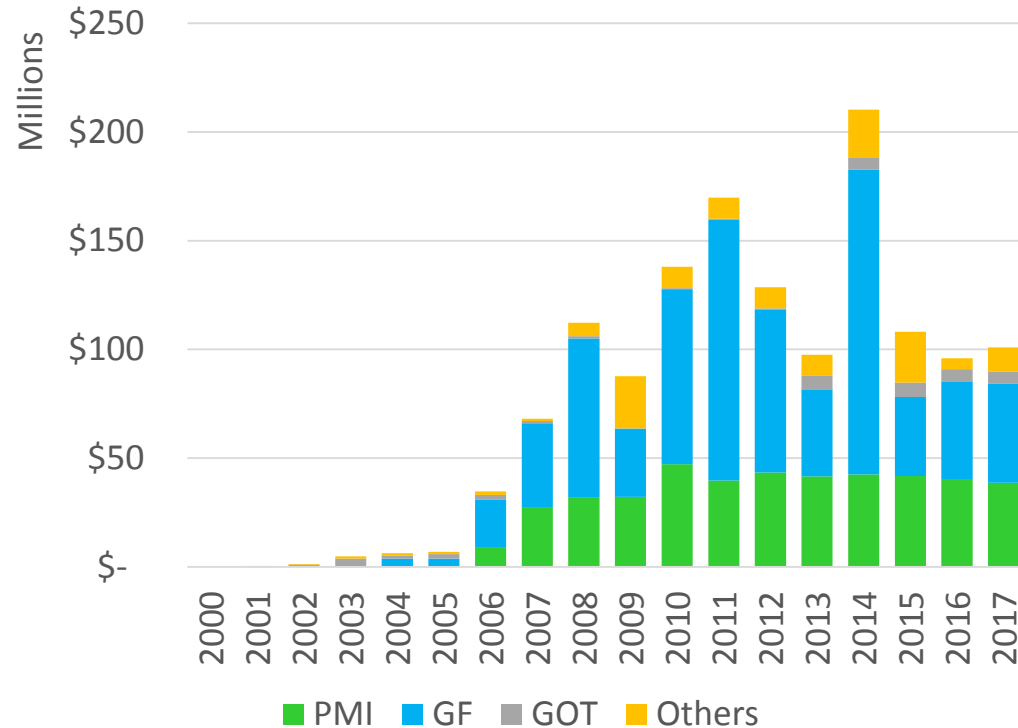
Proportion of malaria cases reported in Health Facilities by ownership (2013-2016)



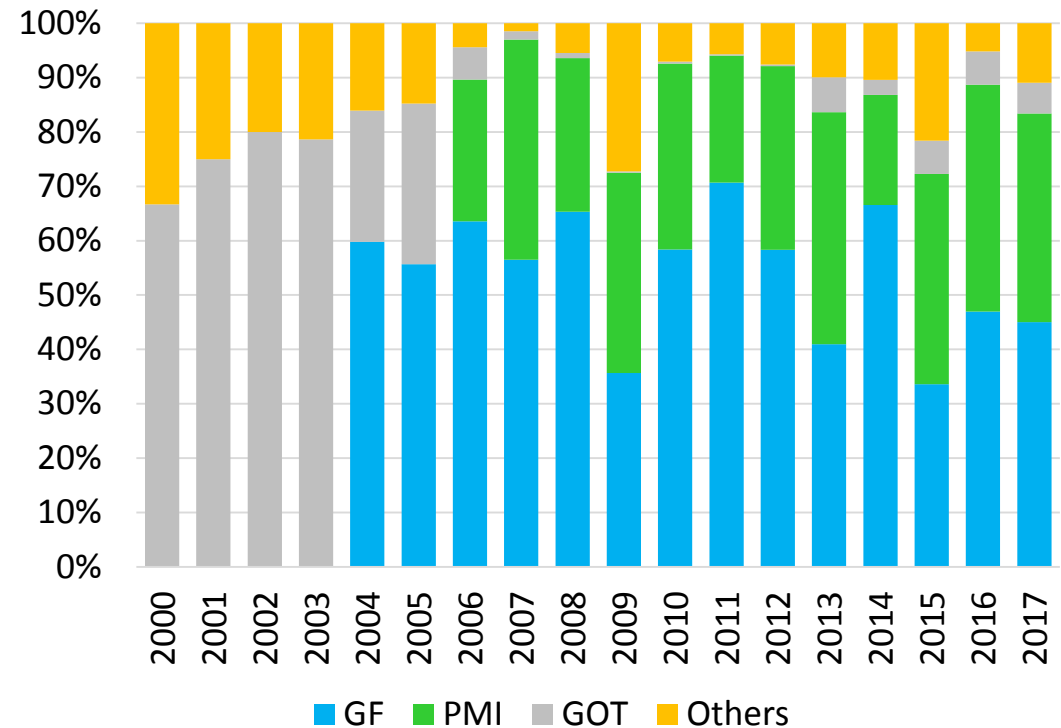
Source: DHIS2

Financing Malaria Services in Tanzania

Annual Malaria Control Expenses (actual and anticipated) 2000-2017

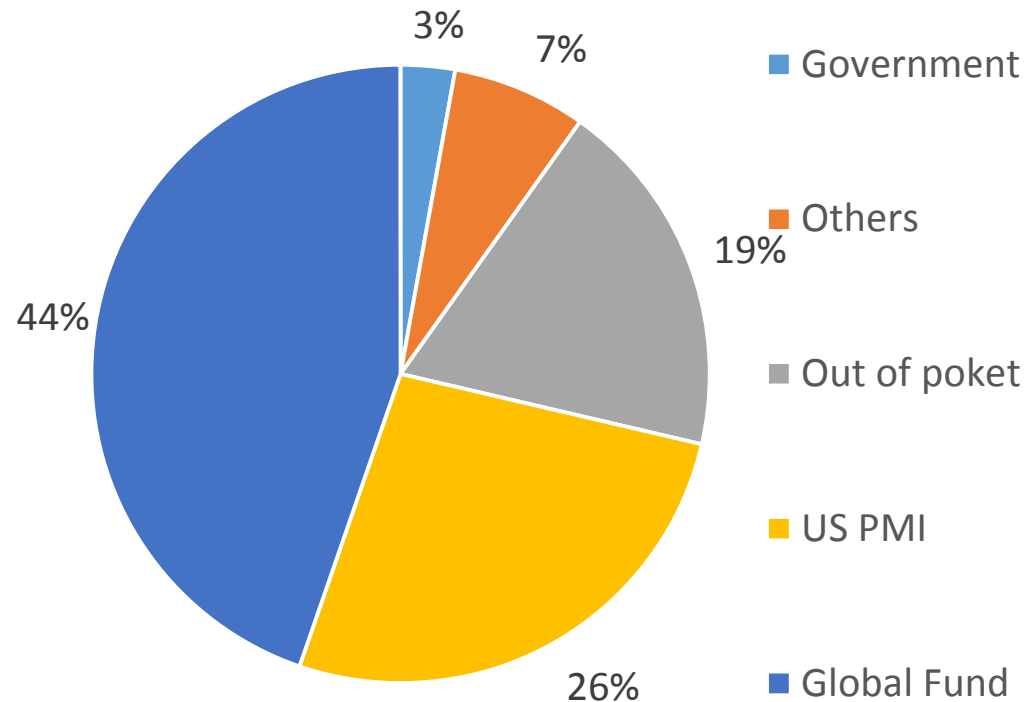


Proportion of Annual Malaria Control Expenses (actual and anticipated) 2000-2017



Financing Malaria Services in Tanzania

Financing Malaria Control 2000-2016



Remarks

- Paradoxical shift from GoT funding to developing partners funding coinciding with the
- Rapid increase in funding level over the last decade mainly due to non-domestic funding
- Over-dependence on developing partners (GF and PMI)
- Role of *out of pocket* financing

LLIN delivery

Current two tier strategic approaches for LLIN delivery

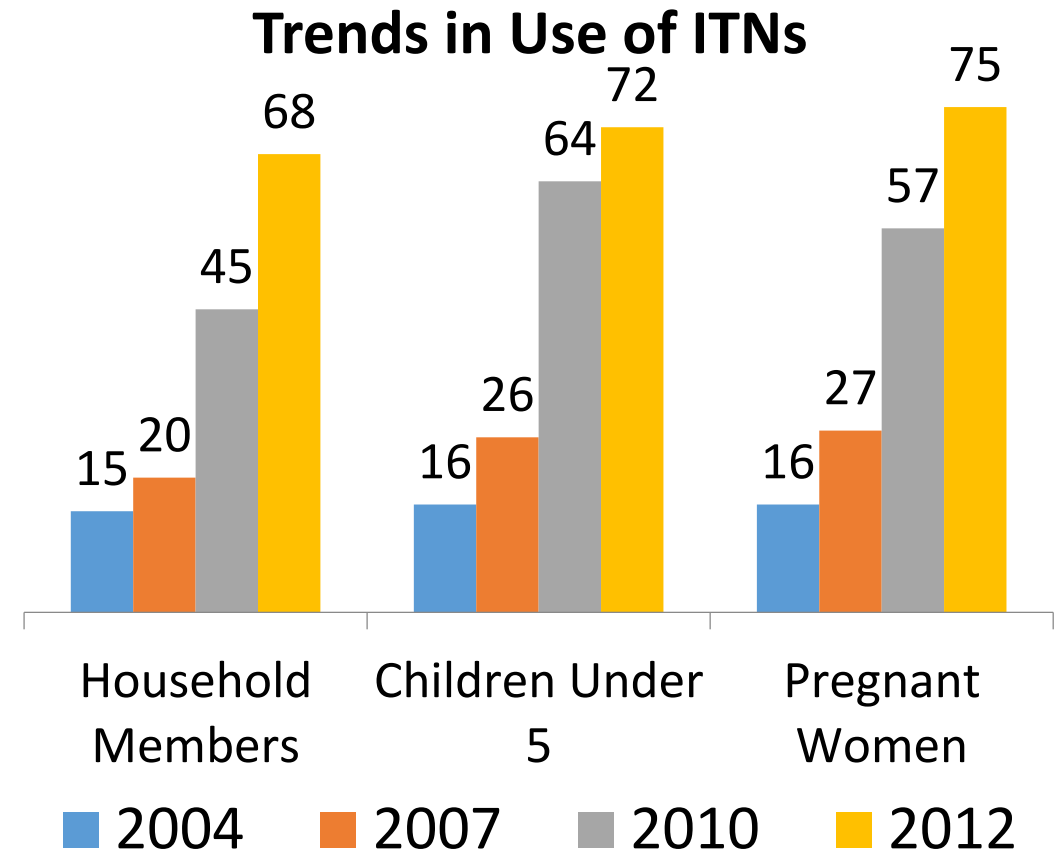
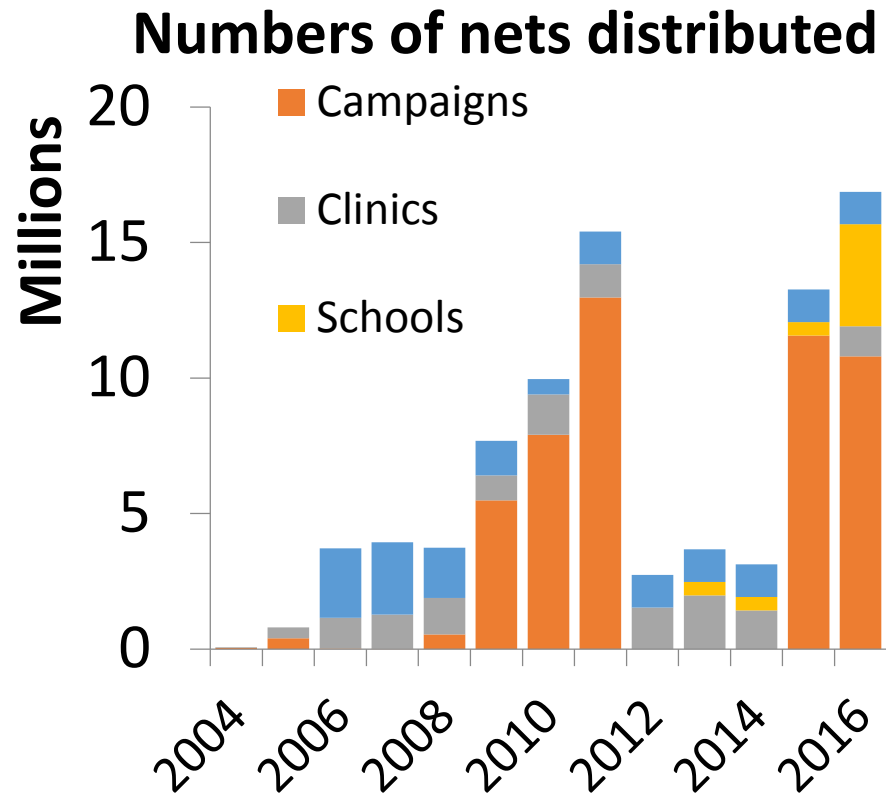
Catch up

- Mass distribution campaign
 - Under five catch up campaign (2009-2010)
 - Universal coverage (2010-2011)
 - Replacement (2015-2016)

Keep up

- Continuous distribution
 - Social Marketing 2002 - 2007
 - Vulnerable groups via subsidized TNVS (PPP) 2003-2014
 - Vulnerable groups via RCH clinic 2016
 - School distribution 2003 – present
 - Unsubsidized commercial sector

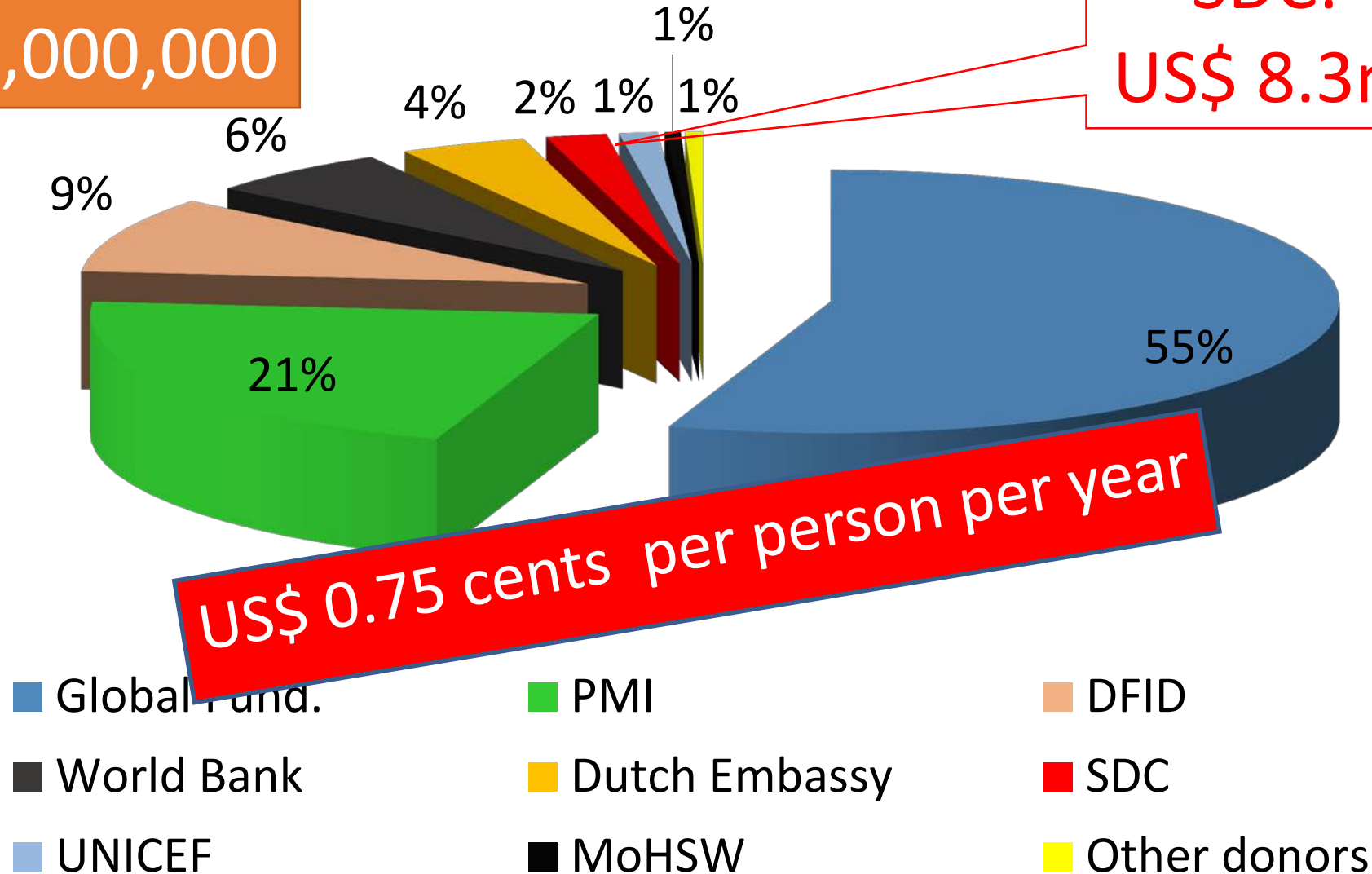
Improved Access and Use



55 millions nets distributed since 2004

NATNETS Expenditure by donor 2002 – 2014

US\$ 430,000,000

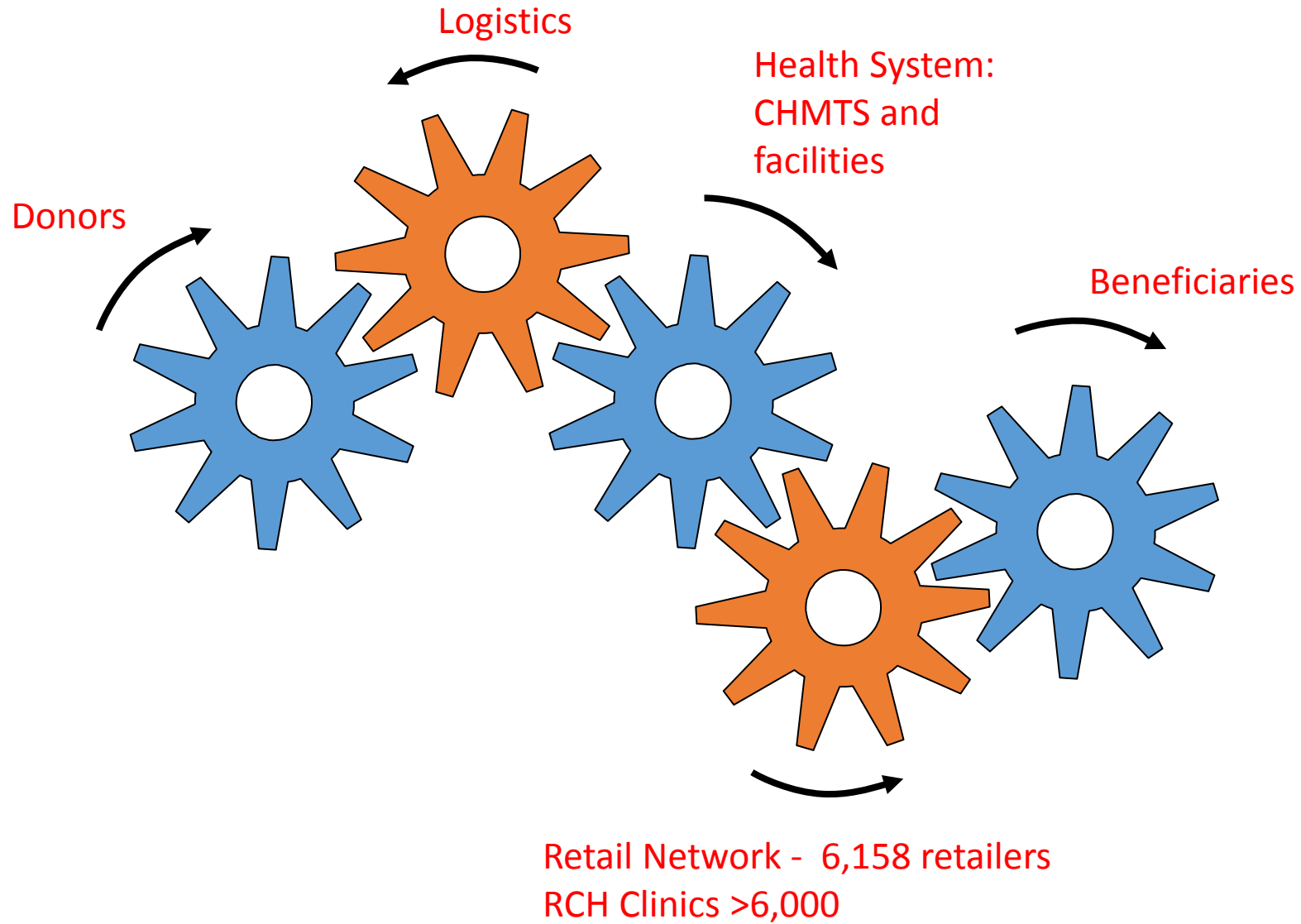


Factors associated to National Treated Nets Programme (NATNETS) success



- **Government of Tanzania** strategic vision based on broad partnership
- An **ITN coordination cell** within the National Malaria Control Programme supported by Swiss TPH Grant from the Swiss Agency for Development and Cooperation - **NETCELL project** (since 2002)
- **Development partners** willing to fund the LLIN related initiatives
- A vibrant **private sector** with non-state actors including:
 - Manufacturers
 - NGO (Social marketing, logistic, management of PPP)
 - Retailers (Voucher scheme)

Natnets Partnership



Diagnosis and treatment

Delivery of malaria diagnosis, treatment and preventive therapies services

Public Sector

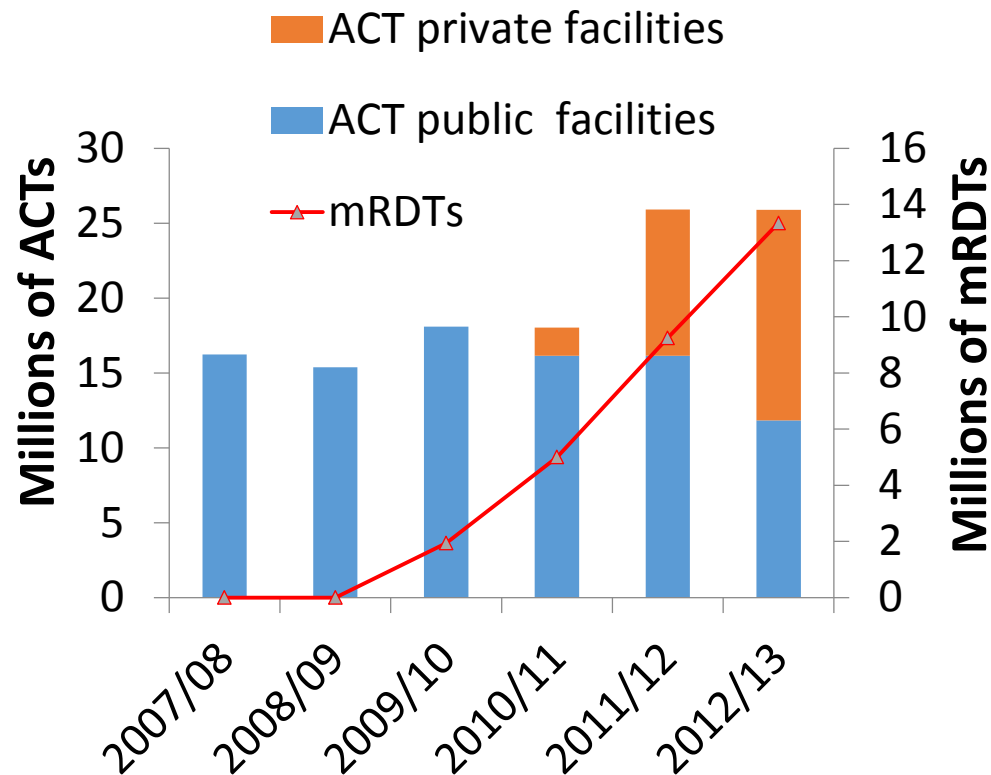
- **Policy, Guidelines and Capacity bld:** MoH, NMCP
- **Regulatory:** TFDA
- **Logistics:** MSD, LMU
- **HS Management:** LGA → HR mng, OTSS and SME
- **Service Delivery:** Health Facilities

Private Sector

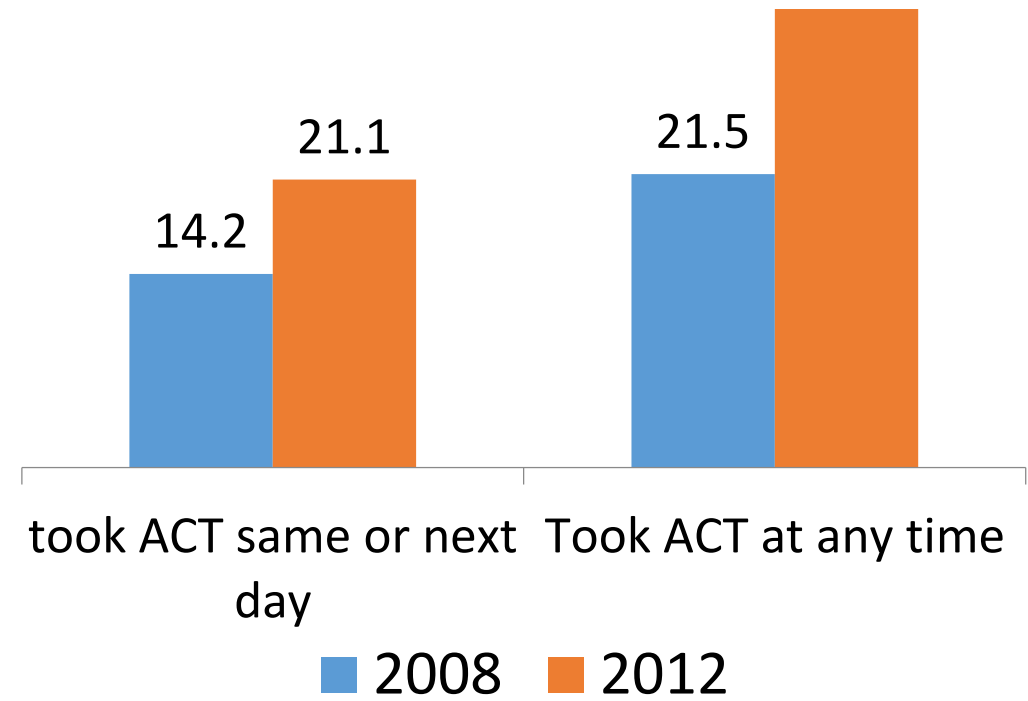
- **Policy, Guidelines and Capacity bld:** MoH, NMCP
- **Regulatory:** TFDA, Ph Council, Private H/Lab Board
- **Logistics:** FLB, Wholesalers
- **HS Management:** LGA → OTSS and SME
- **Service delivery:** Health Facilities, ADDO

ACT Access and Use

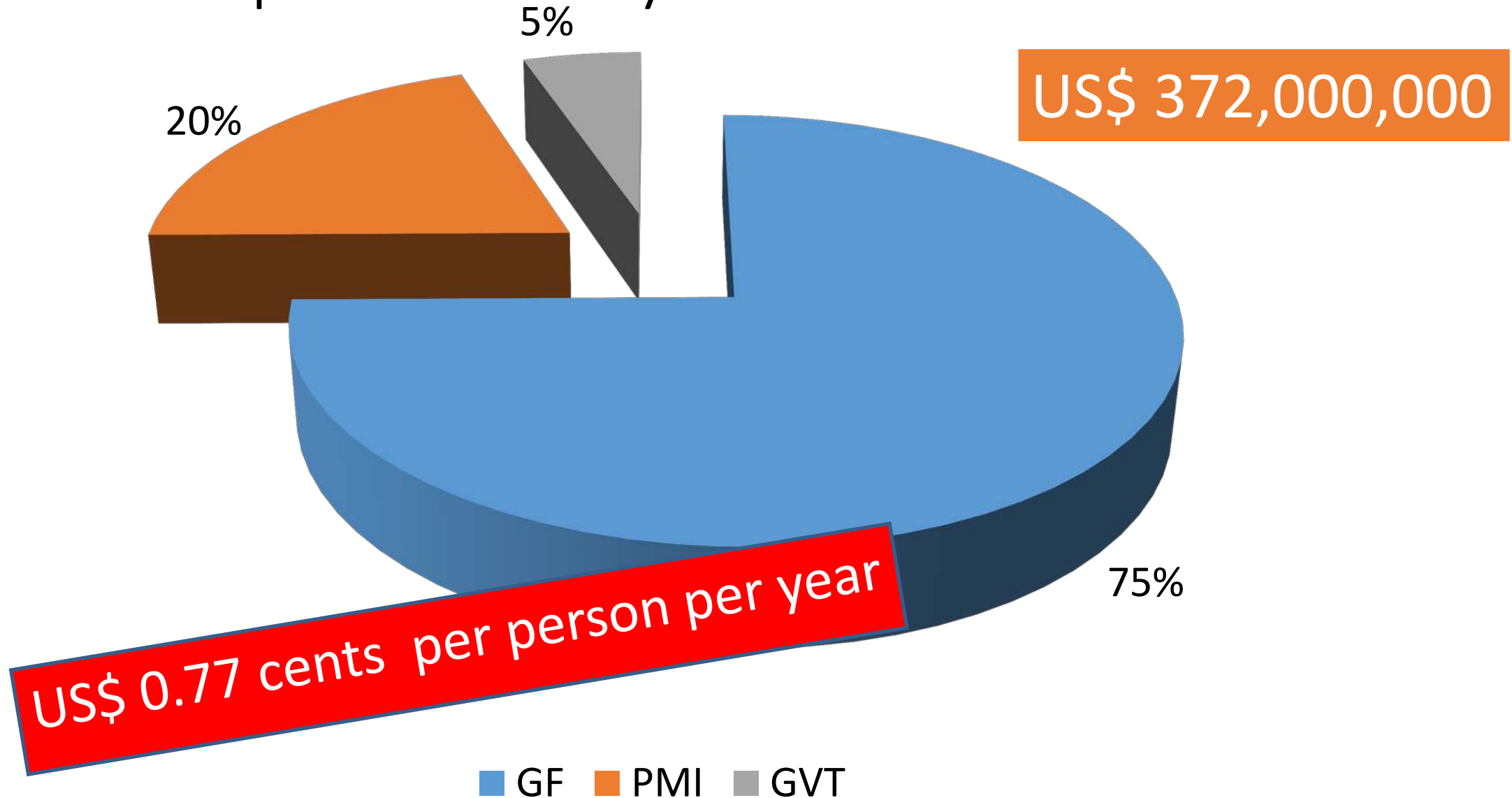
ACT and mRDT Procured



ACT use among children under 5 with fever



MCM Expenditure by donor 2005 – 2015



Health System and Malaria Surveillance

Malaria Surveillance Framework in Tanzania

Disease Surveillance

Passive Monthly: HMIS

Passive Weekly: IDSR and MEEDS

Active: MSAT, FSAT, MCN and HSAT

Programmatic Surveillance

malaria commodities: weekly reporting

Routine malaria prevention services

Insecticide resistance and therapeutical efficacy

Transmission Surveillance

Parasitological: SMPS, SPS

Entomological: MVS

Climatic Monitoring (MEEWS)

• Aims of Malaria Surveillance in Tanzania

- Getting **information** about malaria and its control
- Generating **knowledge** on factors associated to malaria transmission and control interventions
- Create **evidence** for informed policy decisions on malaria control interventions
- Planning **responses** to improve malaria control interventions

Malaria Disease Surveillance

Source: HMIS/DHIS2

Level: HFs, District, Region

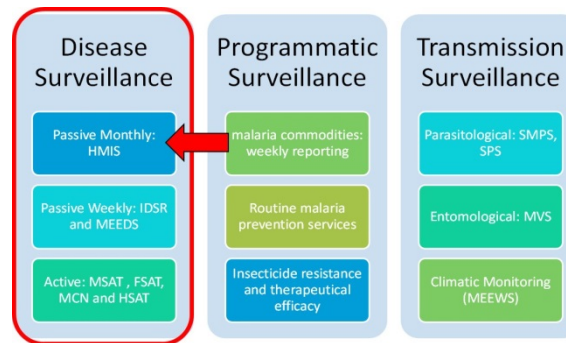
Performance: >90% reporting

Frequency: weekly, monthly

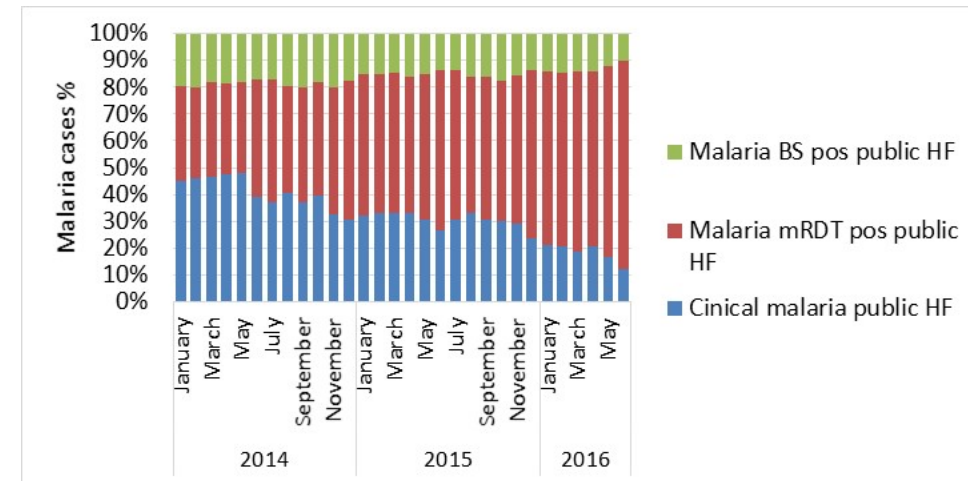
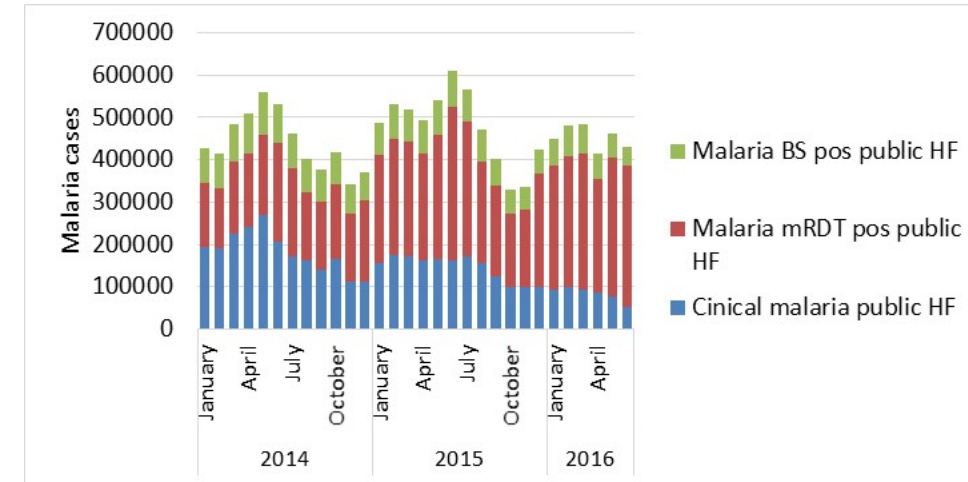
Monitor:

- Disease trends
- HF performances (3Ts)
- Adherence to guidelines
- Private/Public sector share
- Abnormal disease occurrence
- Asymptomatic cases (ACD)

Monthly distribution of
number of malaria diagnosis
in OPD by type 2014 – June
2016, all HFs



Monthly proportion of malaria
diagnosis in OPD by type 2014
– June 2016, all HFs



Malaria Programmatic Surveillance

Source: HMIS/DHIS2, LMIS/e-LMIS, TES, IRS

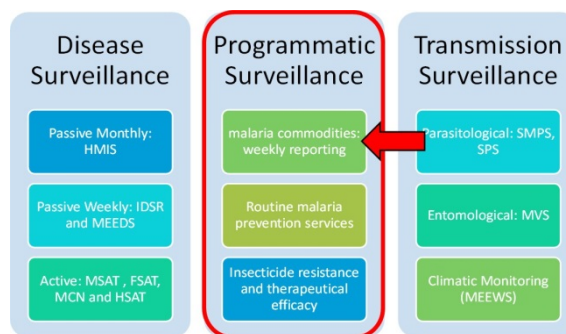
Level: HFs, Sentinel sites, District, Region

Performance: >90% (DHIS2) & >75% (e-LMIS) reporting

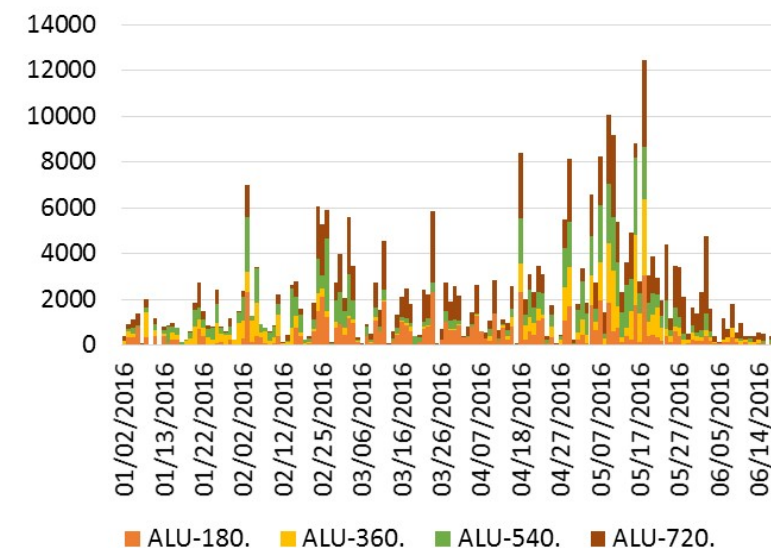
Frequency: monthly, periodic

Monitor:

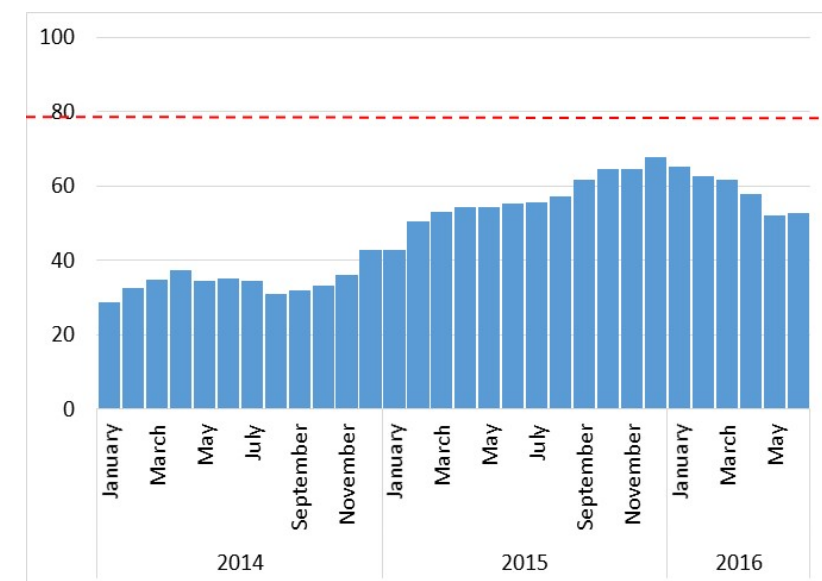
- Commodities logistics (ordering, issuing, stock)
- Commodities Accountability (services vs consumption)
- Quantification
- HF preventive services performances
- Therapeutical Efficacy
- Insecticide resistance
- Medicine quality and safety



Number of Alu dispensers (30 strips) by date of issuing January – June 2016



Monthly distribution of IPT2 coverage in ANC 2014-June 2016



Malaria Transmission Surveillance

Source: HMIS/DHIS2 (routine), MIS & SMPS (surveys)

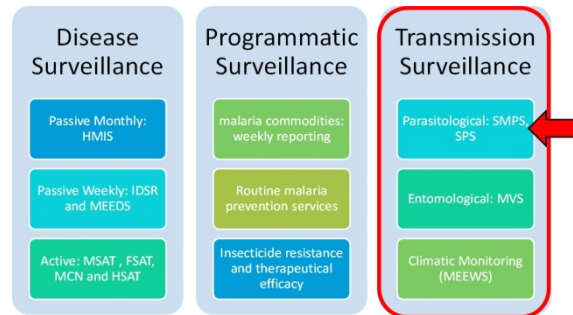
Level: Sub-district, District, Region

Performance: >90% (DHIS2)

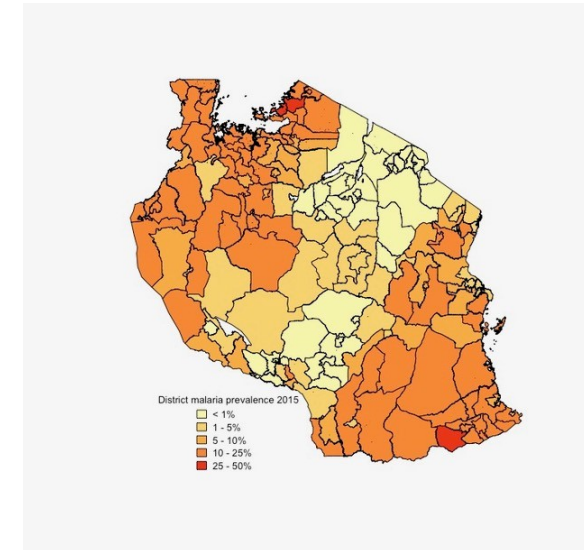
Frequency: monthly, periodic

Monitor:

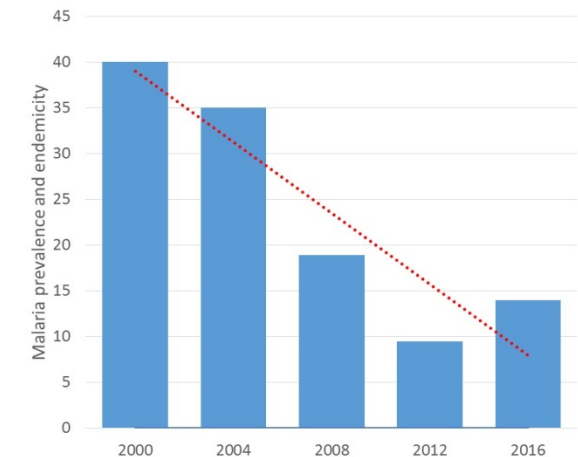
- Intensity of transmission in Sentinel population
- Interventions Impact, Changes over time
- Geographical heterogeneity
- Seasonality



Malaria positivity rate in ANC 2015 by district



Malaria parasite rate 2000-2016

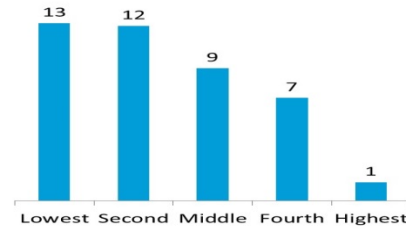


Challenges & Way forward

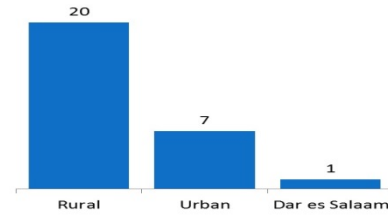
Challenges

Situation

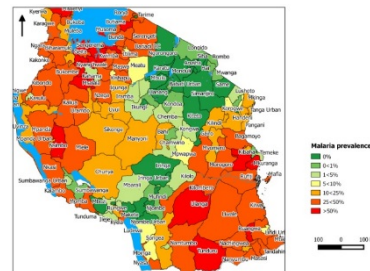
Reducing Wealth differences



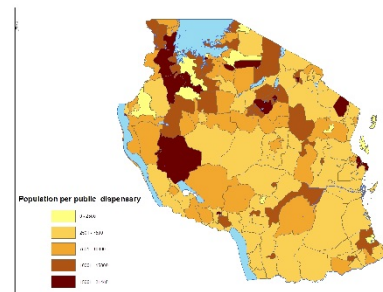
Addressing population settings



Reduce Transmission Heterogeneity



Improve Health Services



Health care delivery response

Assure **equity** in health services delivery for curative services and preventive measures

Provide quality and adequate services through different **efficient** delivery mechanism

Provide **effective** and **adequate quality** service packages able to respond to different transmission levels

Assure **accessible** and **affordable quality** service to all through PPP and addressing workforce crises

Health System Strengthening Way Forward

- **Human Resources for Health** → Acute shortage of qualified and skilled staff to be addressed by LGA through better allocation of available staff, retention and new recruitment
- **Financial resources** → alternative funding mechanisms through community health funds, improved insurance system, better allocation from LGA
- **Information system management** → data quality assurance to be established at all levels
- **Logistic management** → eliminate stockouts through better requisition and supply system
- **Quality of care** → improve adherence to guidelines

Malaria control strategic way forward

- **Fragile achievements** → need of continuous technical and financial support to maintain high coverages
- **High diversity/heterogeneity** not only in term of transmission but also among socio economic and human settings → need of targeted intervention to diminish differences among rural/poor and urban/affluent population
- **Need of stratified targets and strategies** → packages of interventions for specific areas (high vs. low transmission), operational areas (urban vs. rural), equity (less vs. high wealth classes), for guarantee economy (cost effectiveness of standard universal targets - one size fit all - vs. stratified/targeted intervention according to needs)

The background of the image is the flag of Tanzania, which consists of a green upper triangle and a blue lower triangle, separated by a diagonal black band with thin yellow borders.

9 December 1961
9 December 2016

55 years of Independence