



TANZANIA - MAINLAND




MALARIA STATUS IN TANZANIA MAINLAND: AN OVERVIEW

NATIONAL MALARIA FORUM- 25TH APRIL 2014.

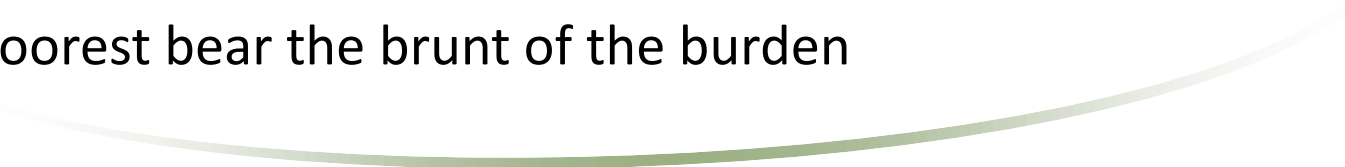


Presentation Outline:

- **Overview**
 - **Intervention scale up/achievements**
 - **Current malaria epidemiologic profile and the New Malaria strategy 2014-2020**
 - **Summary/conclusion**
- 



The Malaria Burden_ Introduction

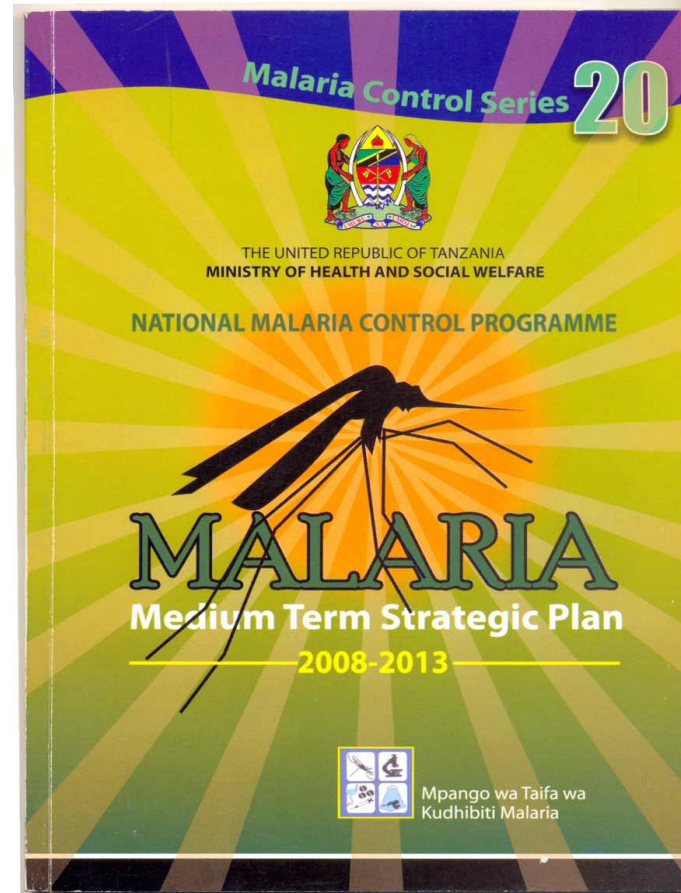
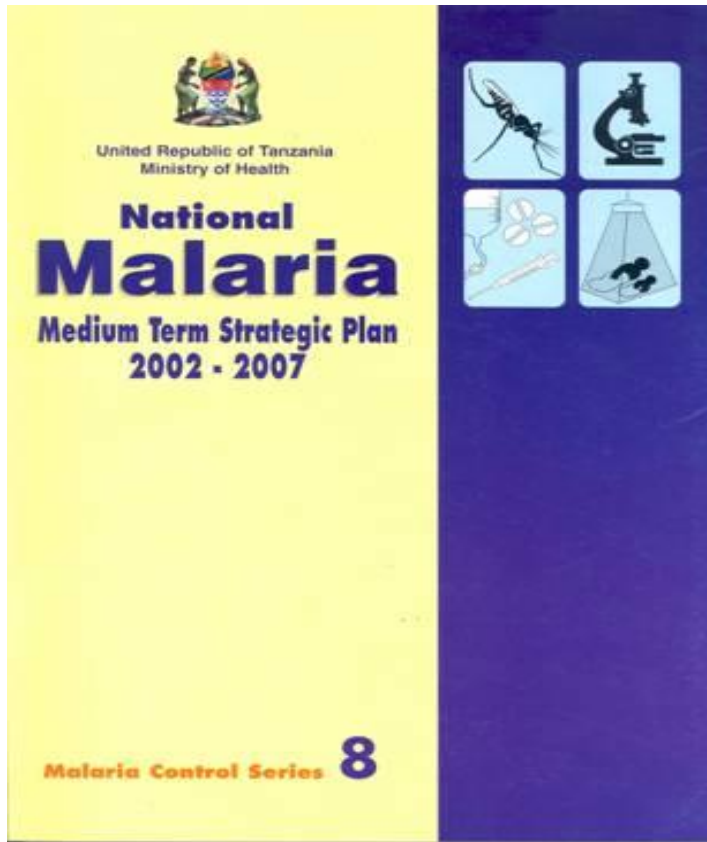
- Tanzania has the ***third (3rd) largest*** population at risk of malaria in Africa after Nigeria and DRC.
 - One of top 10 countries that account for 70% of the global malaria burden. Others include: Burkina Faso, Cameroon, Côte d'Ivoire, DR Congo, Ghana, Mozambique, Niger, Nigeria and Uganda (WMR)
 - Over 93% of population (40 M) live in areas where malaria transmission occurs.
 - Great variation in the risk of malaria transmission: Prevalence - 1% - 33% with an average of about 10%
 - Despite a declining evidence, still is the leading cause of Outpatient, Hospital admissions and deaths. About 20 to 60% of OPD attendances
 - Misclassification major problem, difficult to assess trends over years from HF data
 - The poorest bear the brunt of the burden
- 

Malaria burden,...



- Malaria is about people's lives and livelihoods:
Impact of malaria on the economy of a Tanzanian farmer
- Other development sectors , similarly affected

MMTSP 2002-2007, 2008 -2013



Interventions (summary):

- Integrated Malaria Vector Control
 - Insecticide Treated Nets (ITNs/LLINs)
 - Indoor Residual Spraying (IRS)
 - Environmental management including Bio-larviciding in Dar es Salaam city.
- Intermittent preventive therapy to pregnant women (IPTp)
- Early Diagnosis and Effective Treatment
- Behaviour Change and Communication (BCC)
- Monitoring, Evaluation and Surveillance.
- Regional and District/Councils support.

Interventions scale up:



National Coverage

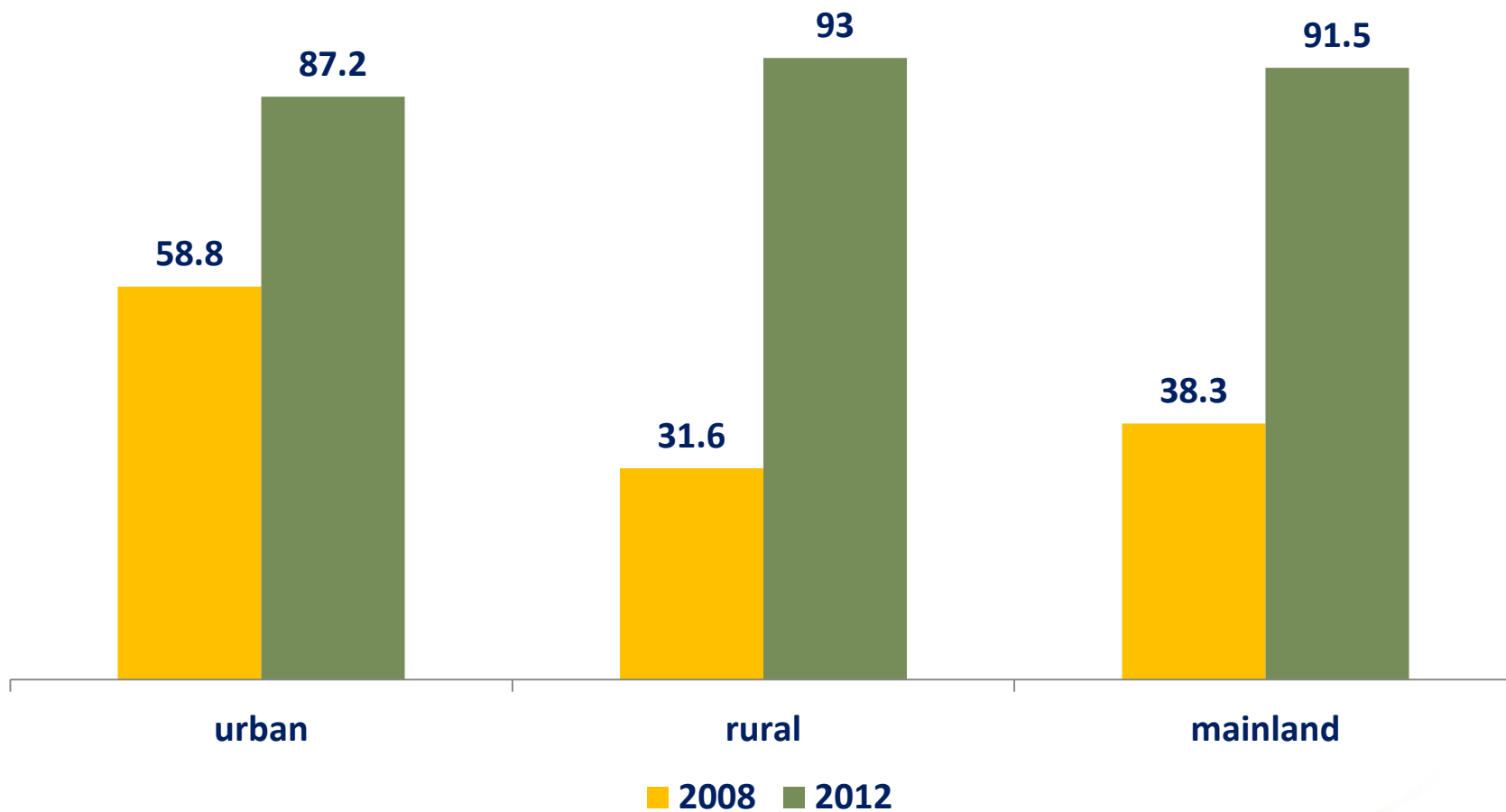
- Insecticide treated mosquito nets (ITNs)
- Intermittent preventive treatment in Pregnancy
- Artemisinin Based Combination Therapy (ACTs)
- Mass media and Community mobilization (BCC)
- Rapid Diagnostic Tests (mRDT)



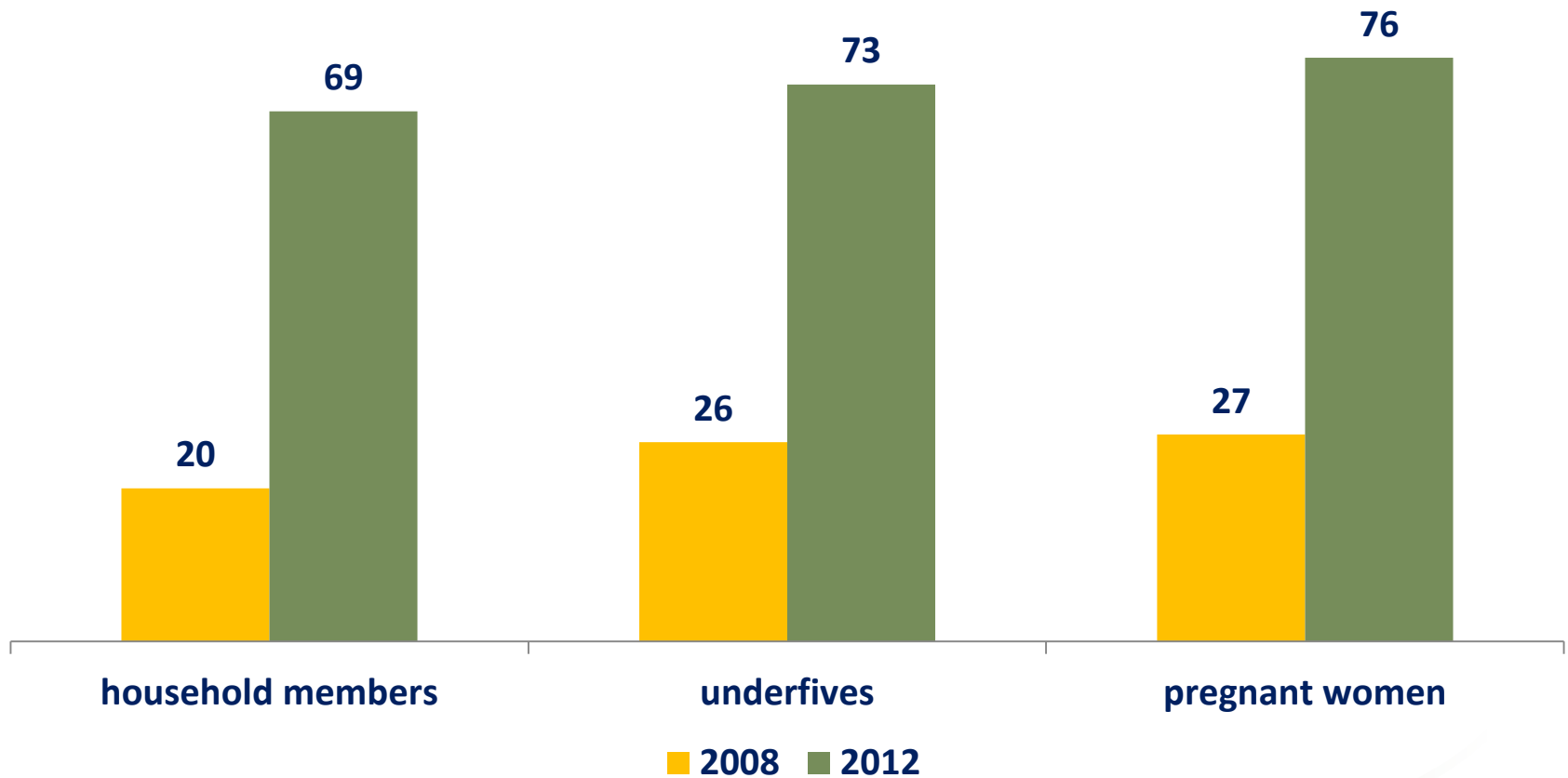
Regional Coverage

- Indoor Residual Spray - Lake Zone
- Larviciding (78 Wards)

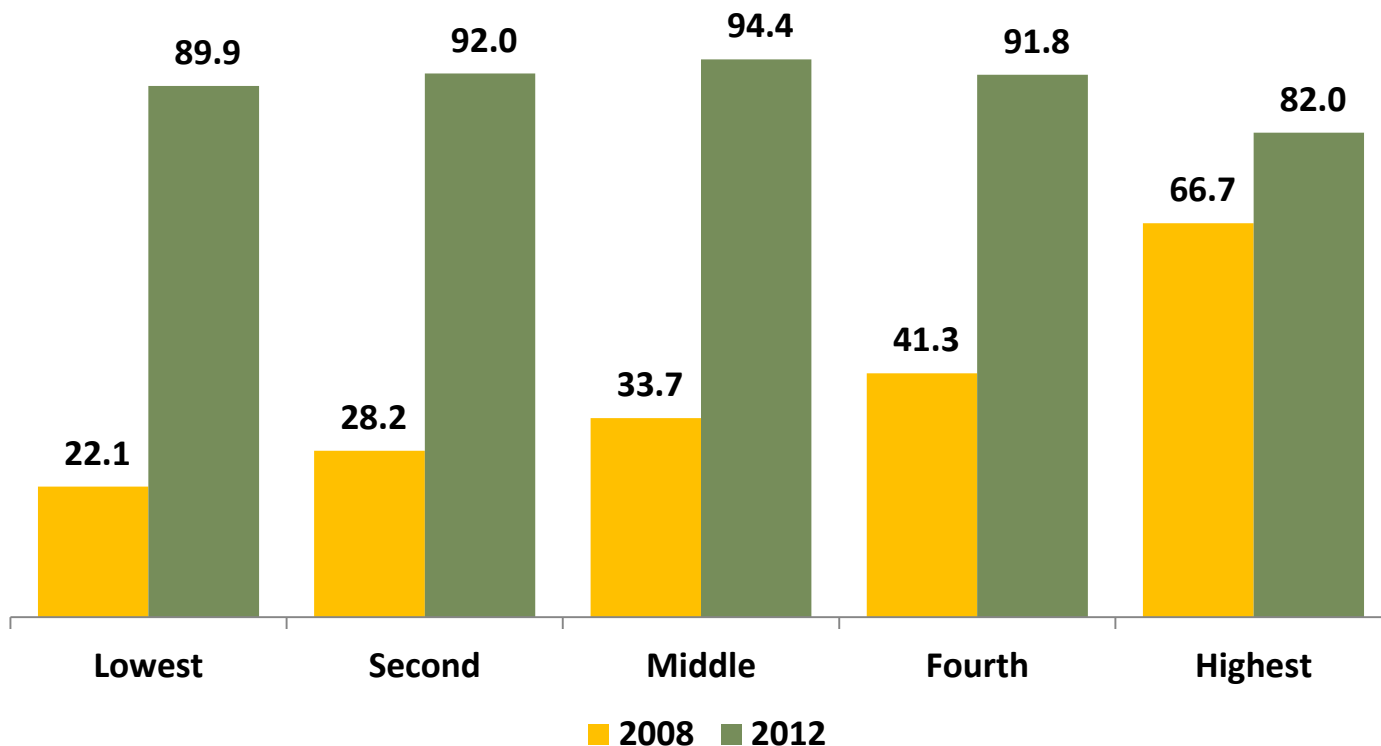
Household with at least one ITN/LLIN by Residence, 2008-2012



Use of ITN/LLIN by different groups



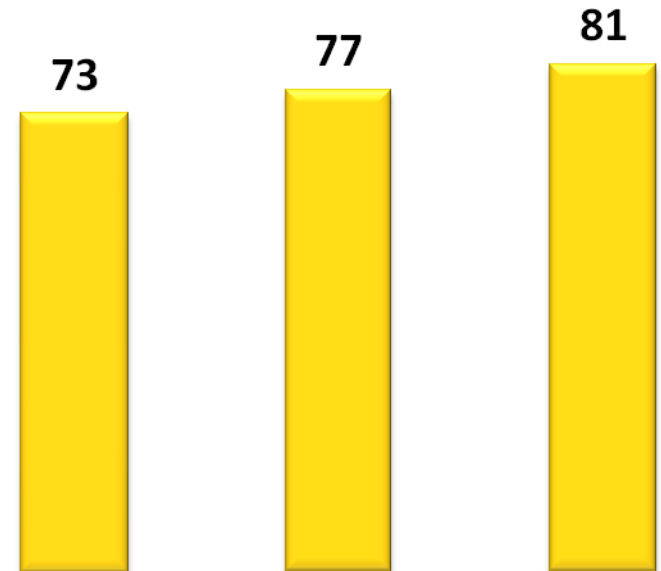
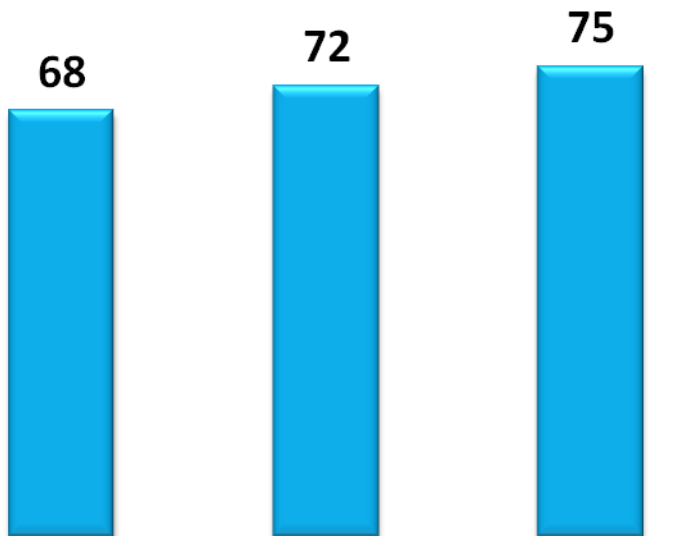
Percentage of Household with at least one ITN by wealth quintile



Use of ITNs among all household members

Percentage who slept under an ITN the night before the survey among all households

Percentage who slept under an ITN the night before the survey among households with an ITN



All members of household

Children <5

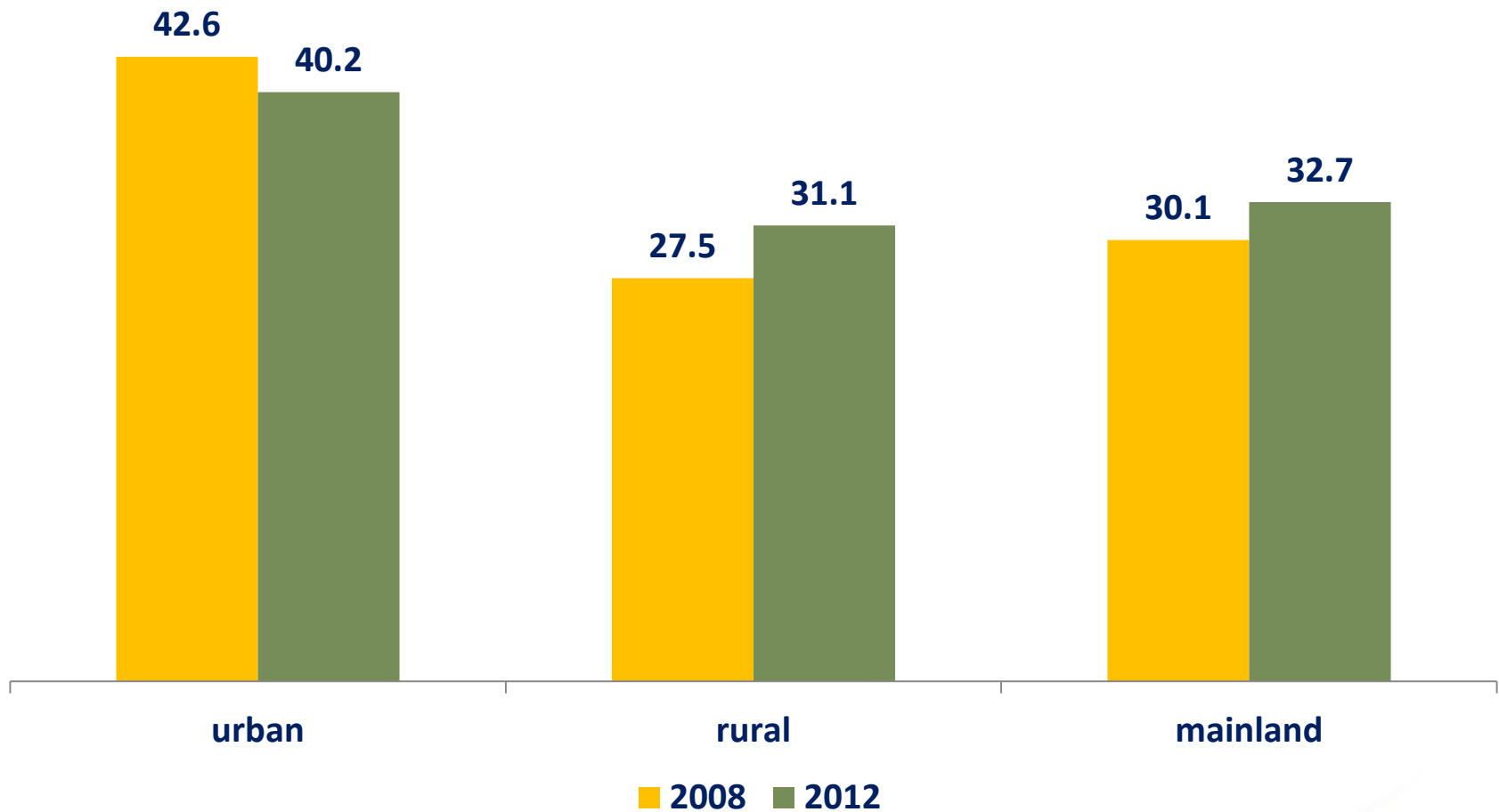
Pregnant women

All members of household

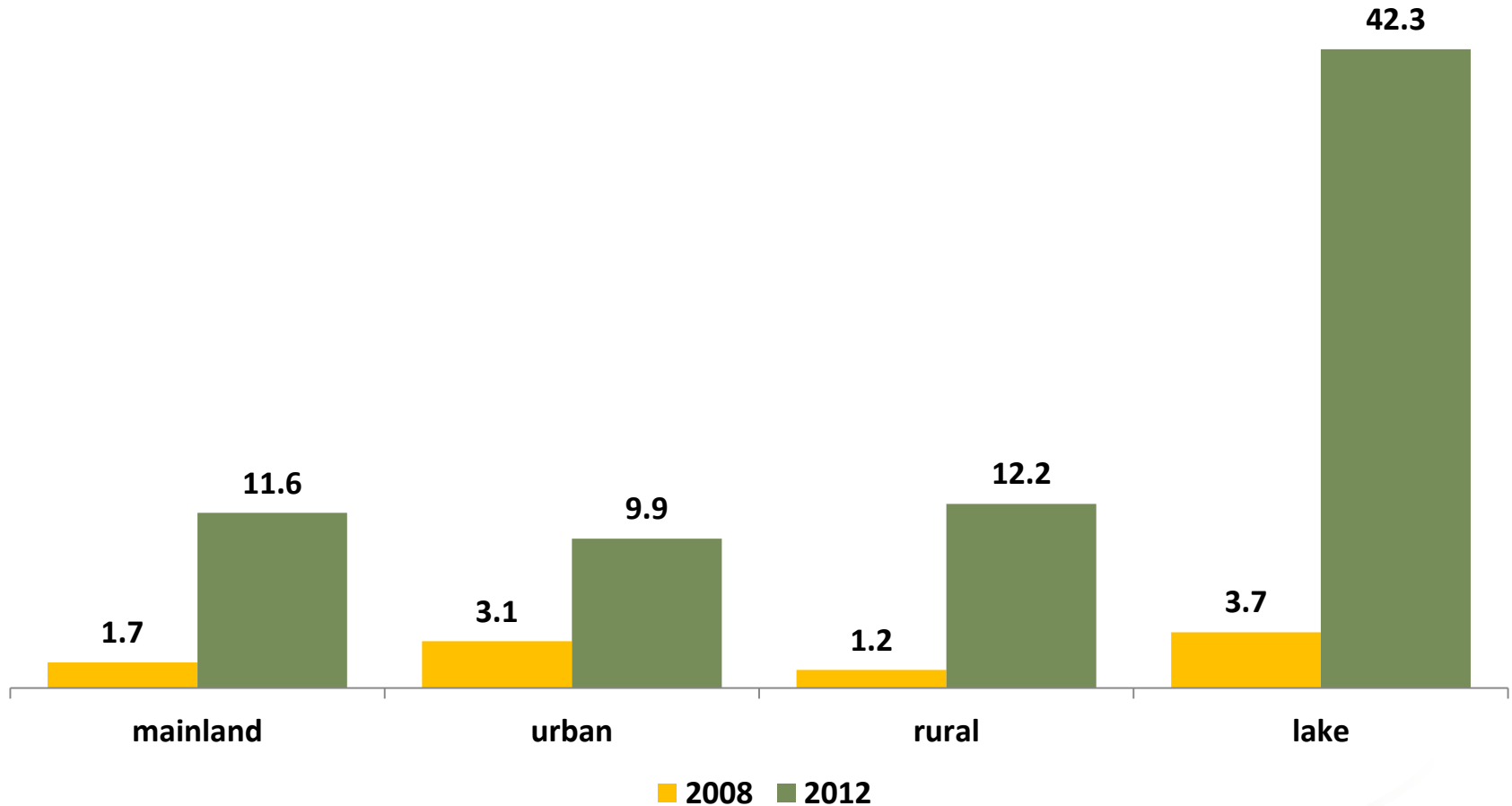
Children <5

Pregnant women

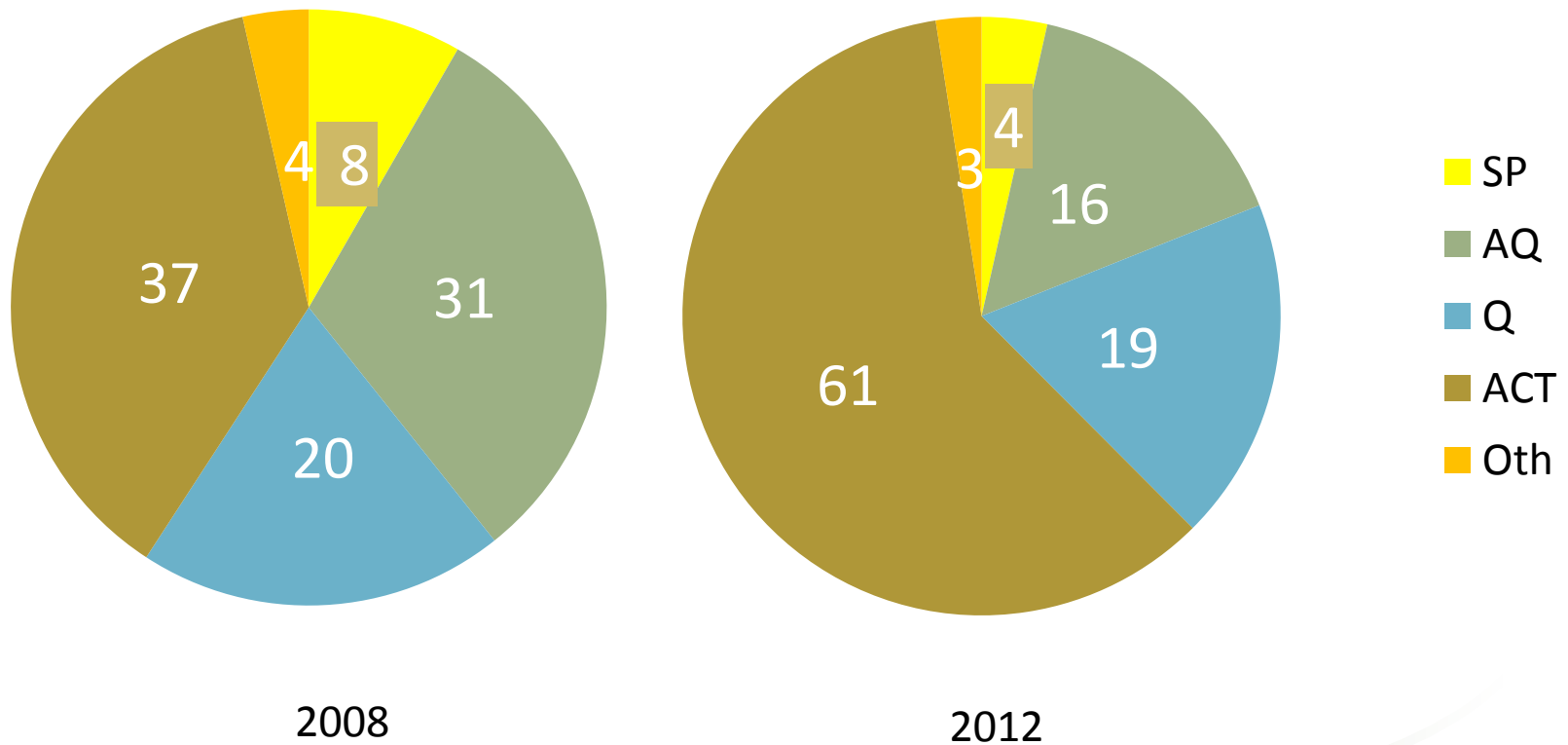
Proportion of women receiving SP for IPTp: 2+ doses in last pregnancy



IRS: Proportion (%) of household sprayed by residence



Proportion of children with fever who took anti-malarials by type of medicine






Current malaria status (Malaria Epidemiological Profile)

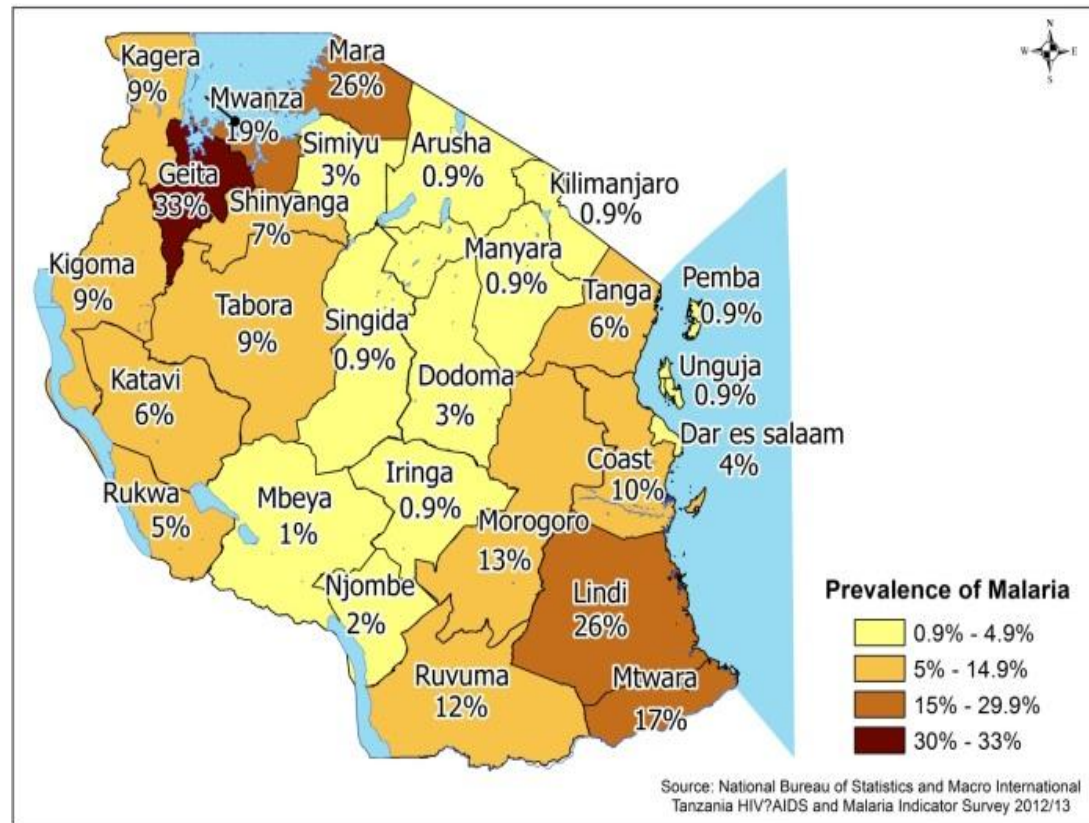


Malaria Epidemiological Profile

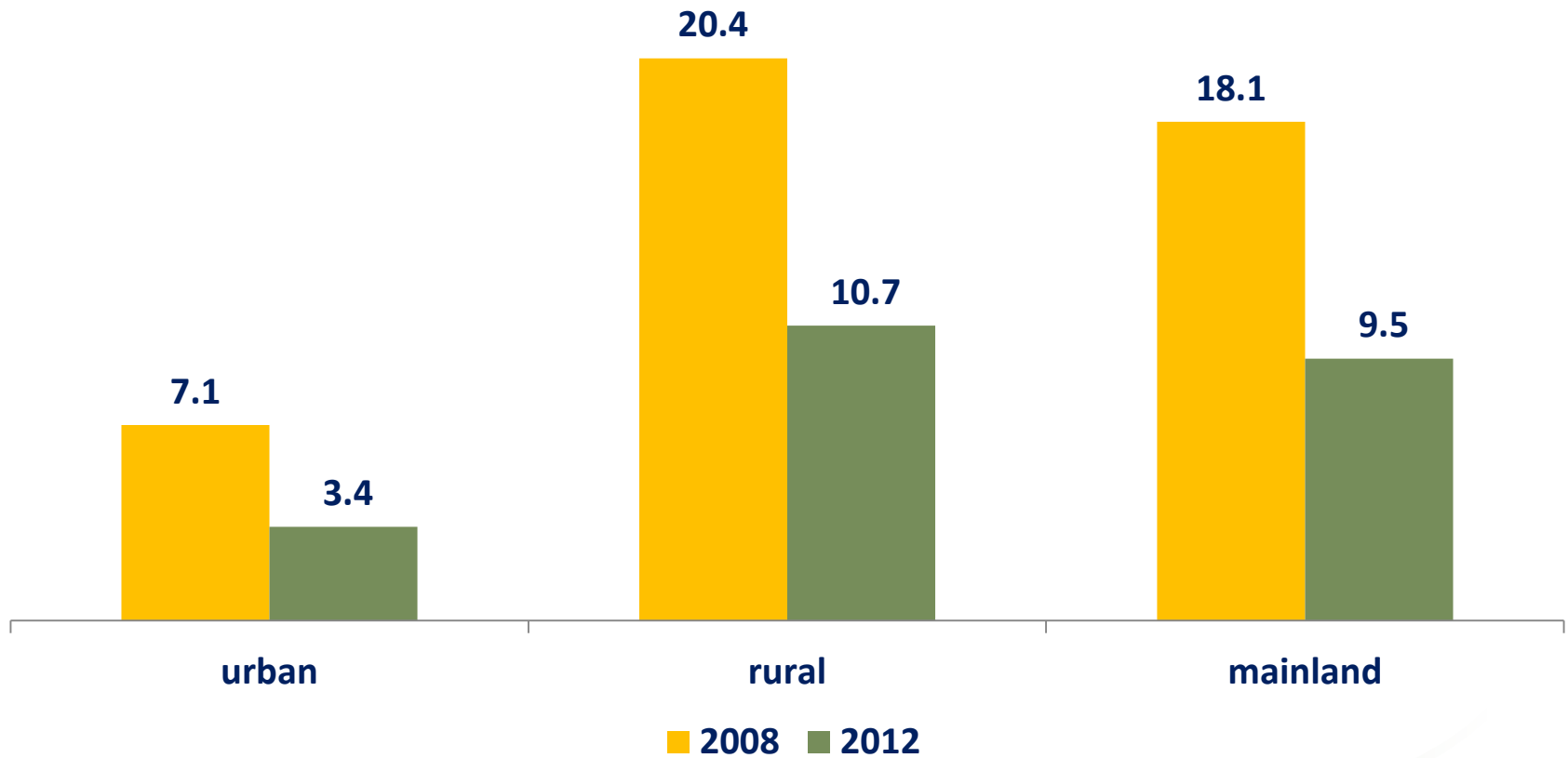
- Available evidence suggest that malaria prevalence have dropped significantly over the last decade
 - National surveys conducted between 2008 and 2012 (Tanzania HIV/AIDS and Malaria Indicator Survey_THMIS)- underfive children
 - A temporal analysis of available malaria prevalence surveys between 1980 and 2012- children 2 to 10 years
 - Health Management Information system (DHIS2)
- 

Malaria Epidemiological Transition_ National Surveys

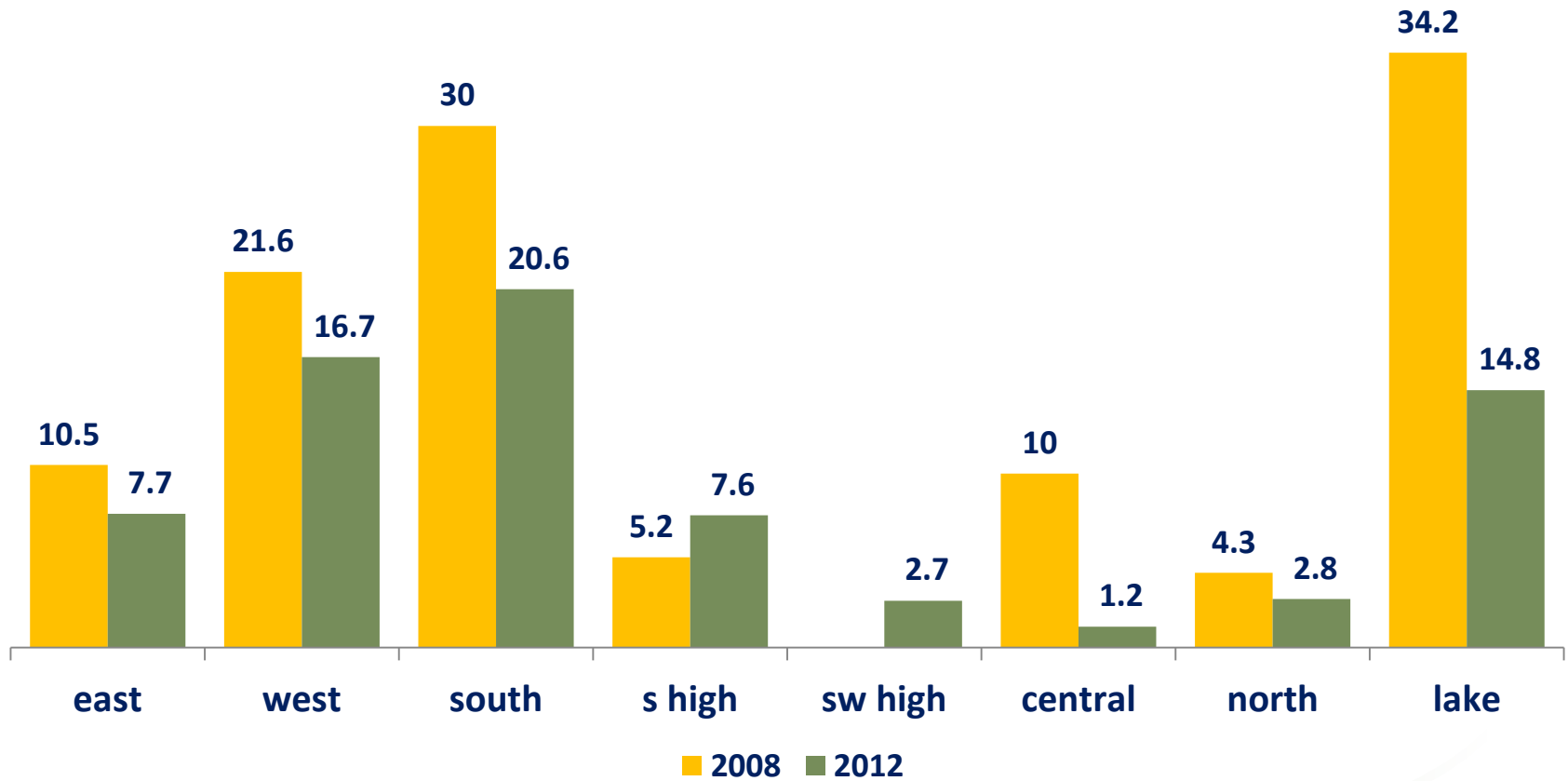
- Prevalence in underfive children 6–59 months old halved from 18.1% to 9.5% between 2008 and 2012 (THMIS 2008, 2012)
- Varies from <1% (Arusha, Manyara, Kilimanjaro, Singida and Iringa to 33% in Geita



Malaria prevalence by Residence



Malaria prevalence by zone

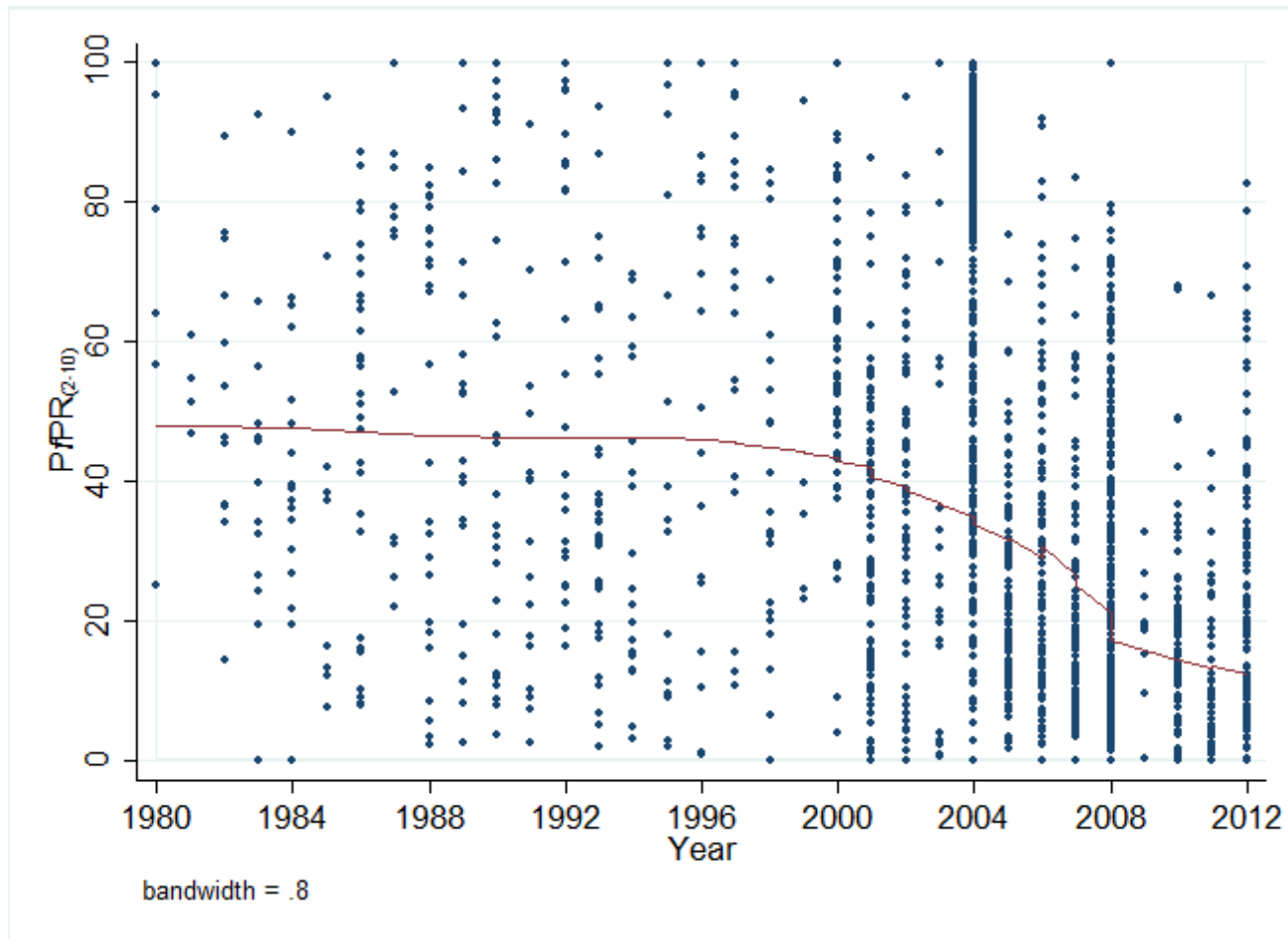


Malaria epidemiological profile_ A temporal analysis of prevalence surveys between 1980 and 2012

- The proportion of Tanzania's population living in areas of intense transmission (Population Adjusted Parasite Prevalence ($PAPfPR_{2-10} \geq 50\%$) declined from 11.6% to 2.3% by 2010
- Population living in areas where transmission is categorized as hypo-endemic (parasitaemia 0 - <10 %) increases from about 30% in 2000 to 60% in 2010
- Areas with limited/no epidemiological transition are located in the Southern and parts of the Northwestern regions of Tanzania.

The malaria epidemiological transition

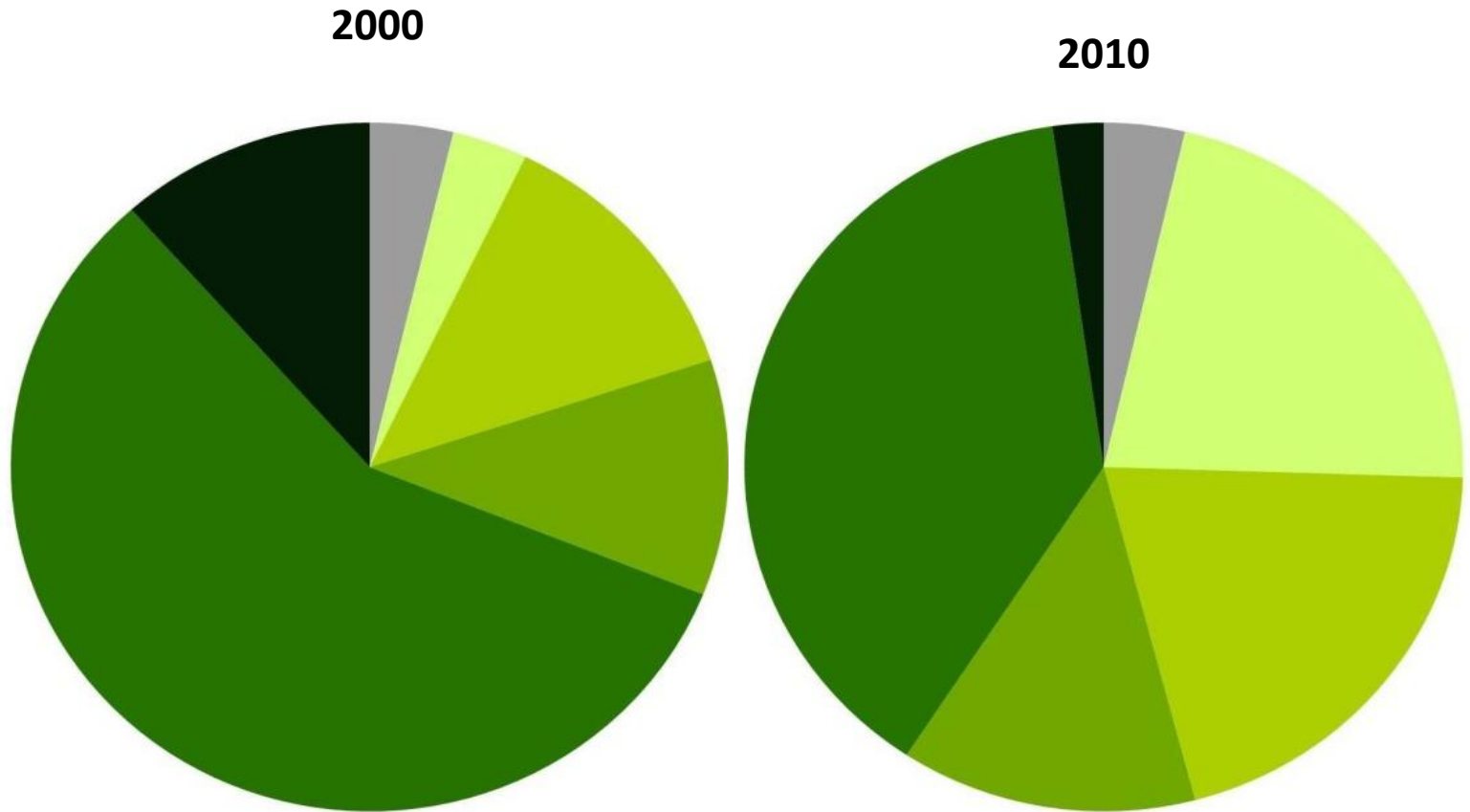
Loess regression line of 2193 survey data points assembled between 1980 and 2012



The malaria epidemiological transition

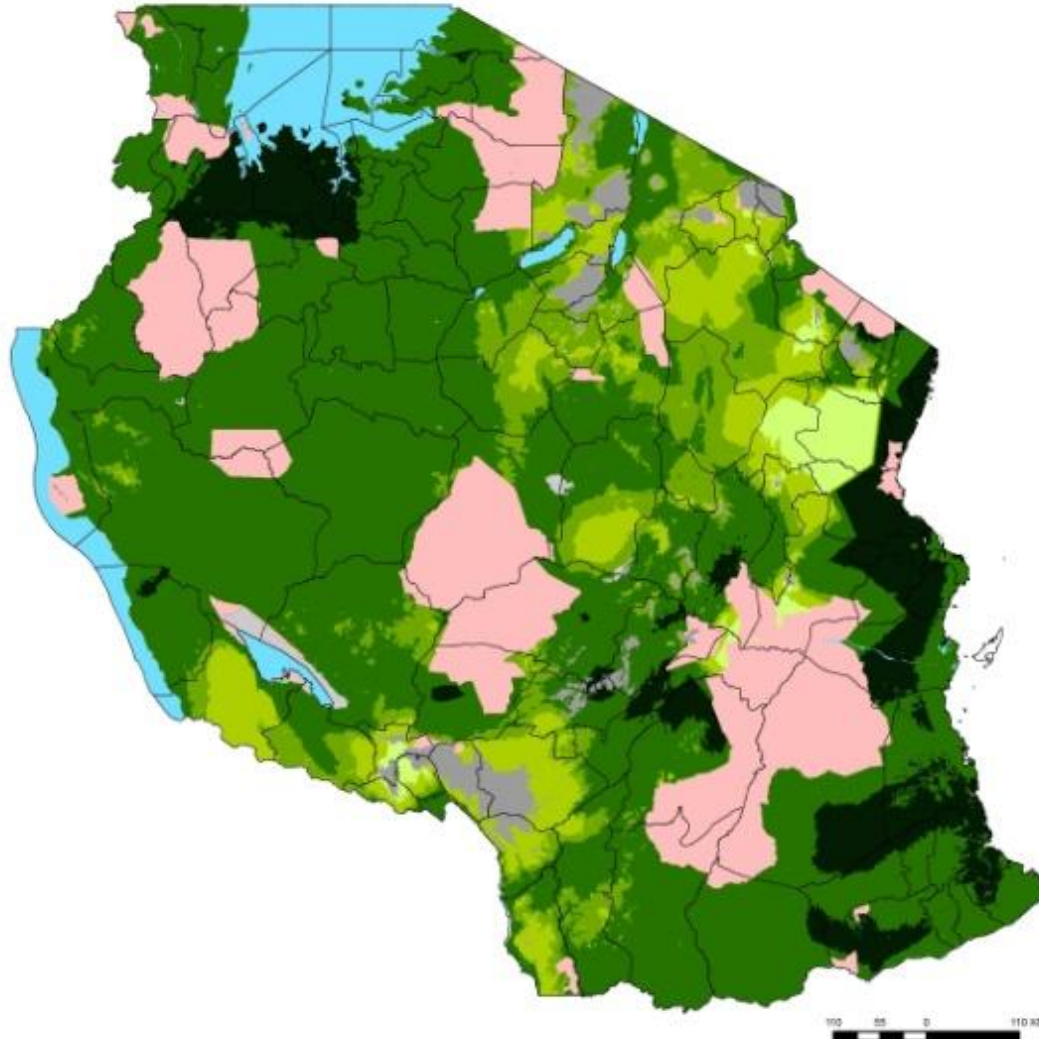
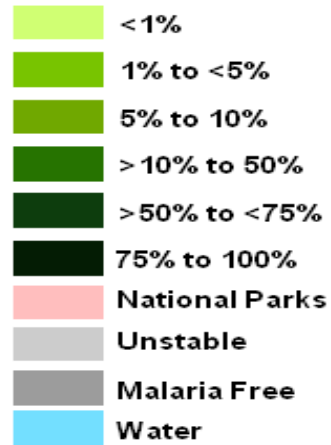
Percentage of Tanzania's population at various classes of *P. falciparum* endemic risk in 2000 and 2010

- Malaria Free
- <1%
- 1% to <5%
- 5% to <10%
- 10% to <50%
- 50% +



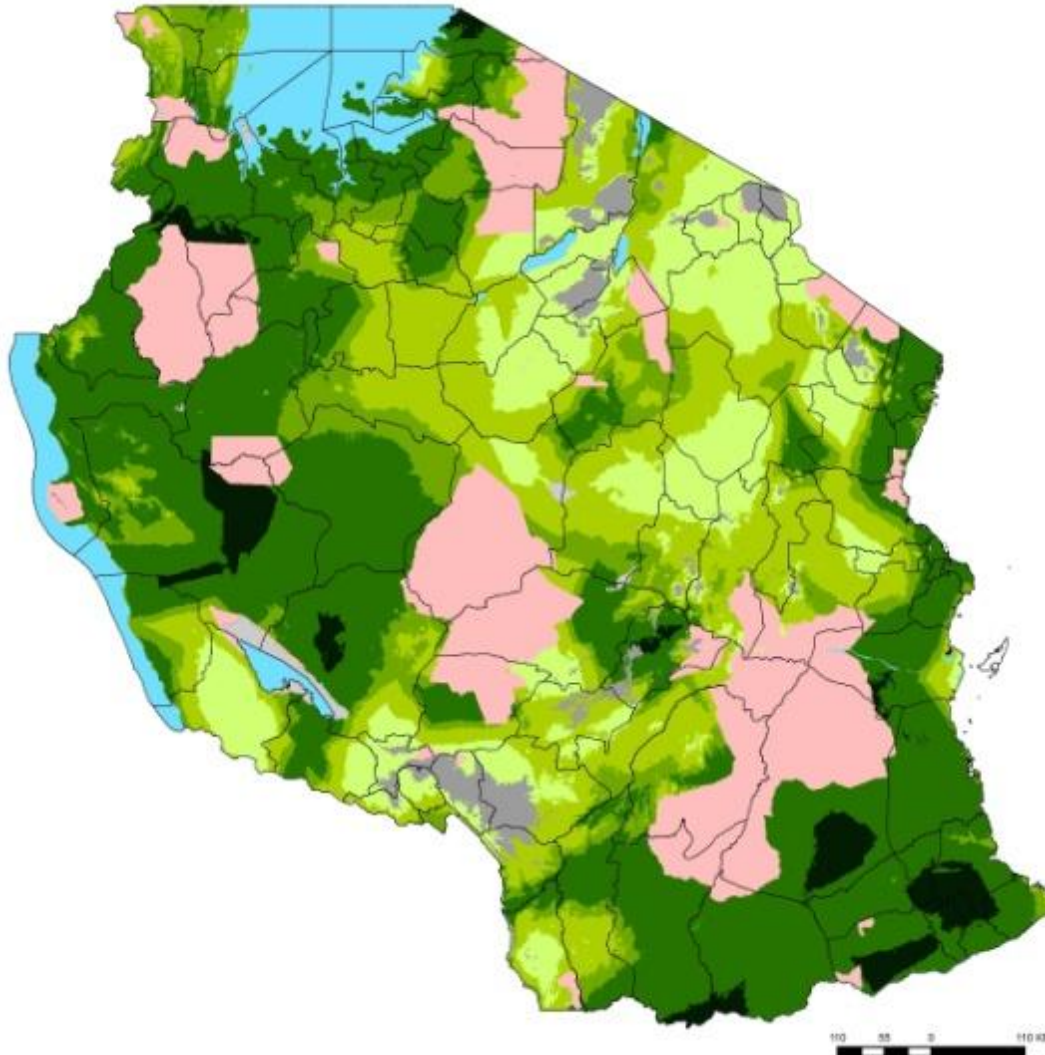
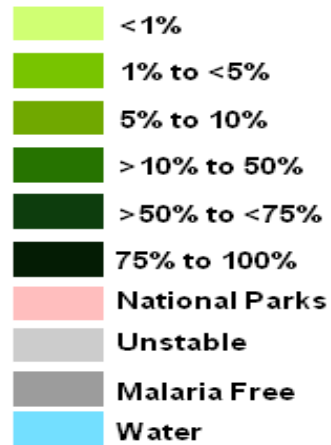
The malaria epidemiological transition endemicity classes for the year 2000

Legend



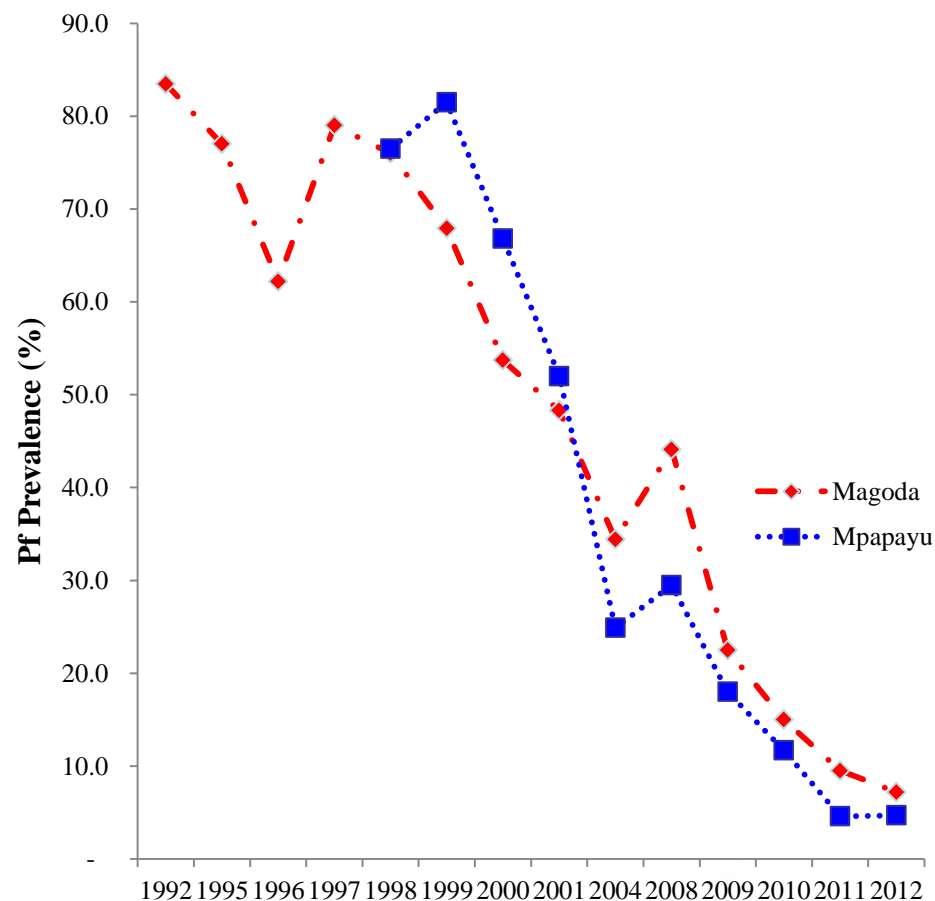
The malaria epidemiological transition endemicity classes for the year 2000

Legend



Declining parasite prevalence_ NIMR Tanga _experience from Magoda and Mpapayu villages from 1992 to 2012

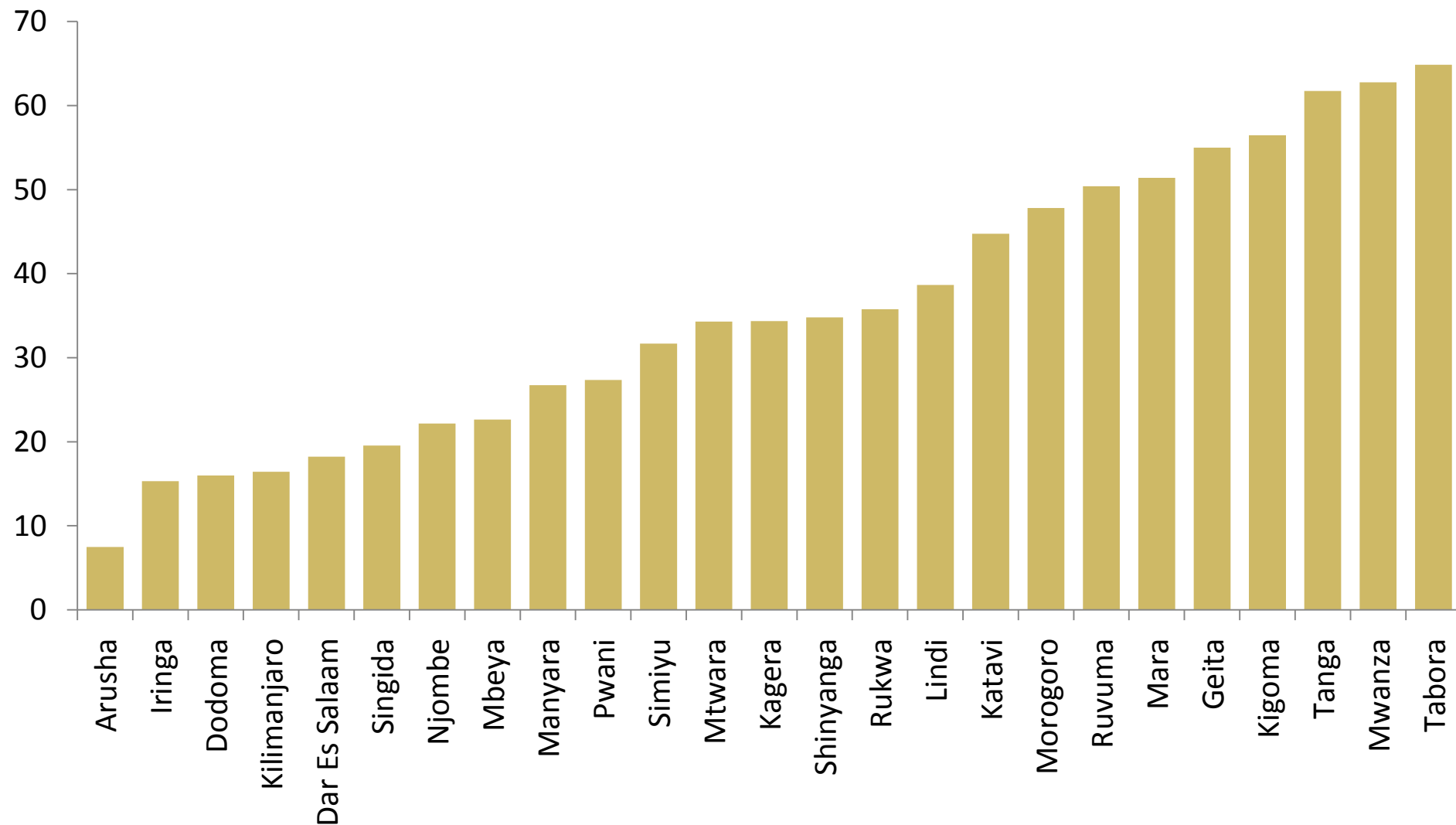
- Objectives: To assess the trend of malaria burden in two villages in Muheza district over a period of 20 years (1992 – 2012)
Muheza district (2 villages)
- Study sites
 - Magoda ---1992-2012
 - Mpapayu --1997-2012
- Complete surveys data of 6050 individuals available from 1999
- Blood smears tests



Source, NIMR Tanga presentation

Proportion of OPD malaria cases reported from August 2013 - March 2014 (DHIS2)

Proportion of Malaria cases diagnosed at OPD

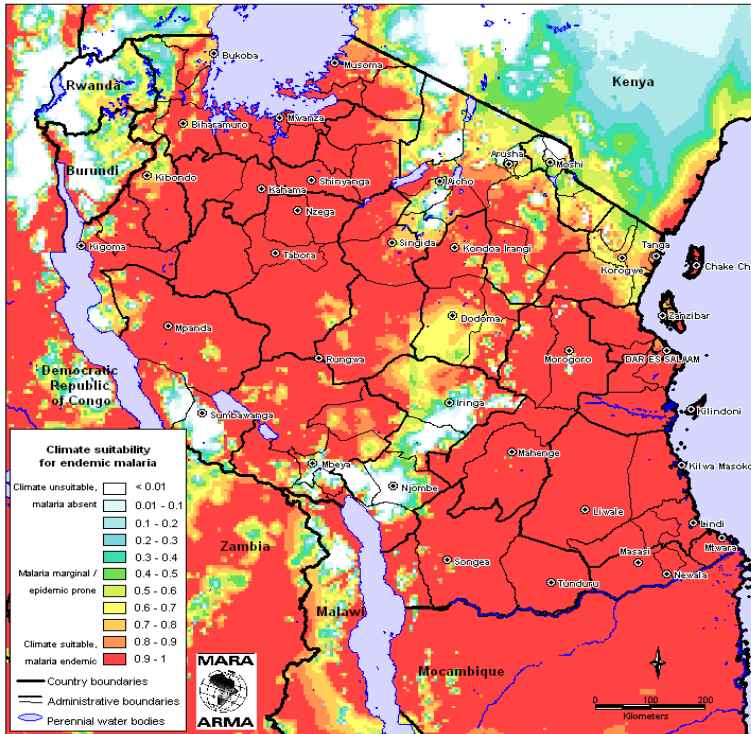




Major Challenges

Malaria transmission risk

Tanzania: Distribution of Endemic Malaria

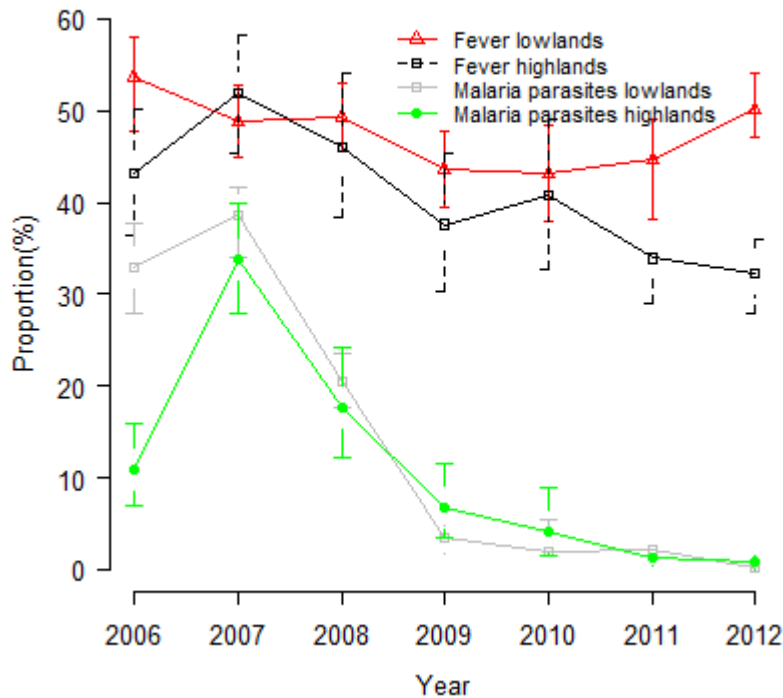


This map is a product of the MRAVA/ARMA collaboration (<http://www.marva.org.za>). July 2002. Medical Research Council, PO Box 70260, Overport, 4007, Durban, South Africa
CORE FUNDERS of MRAVA/ARMA: International Development Research Centre, Canada (IDRC); The Wellcome Trust UK; South African Medical Research Council (MRC); Swiss Tropical Institute, Multilateral Initiative on Malaria (MIIM) / Special Programme for Research & Training in Tropical Diseases (TDR), Roll Back Malaria (RBM).
Malaria distribution model: Craig, M.H. et al. 1999. Parasitology Today 15: 105-111.
Topographical data: African Data Sampler, WRI, http://www.igoc.org/inf/ids/maps/ads/ads_idx.htm

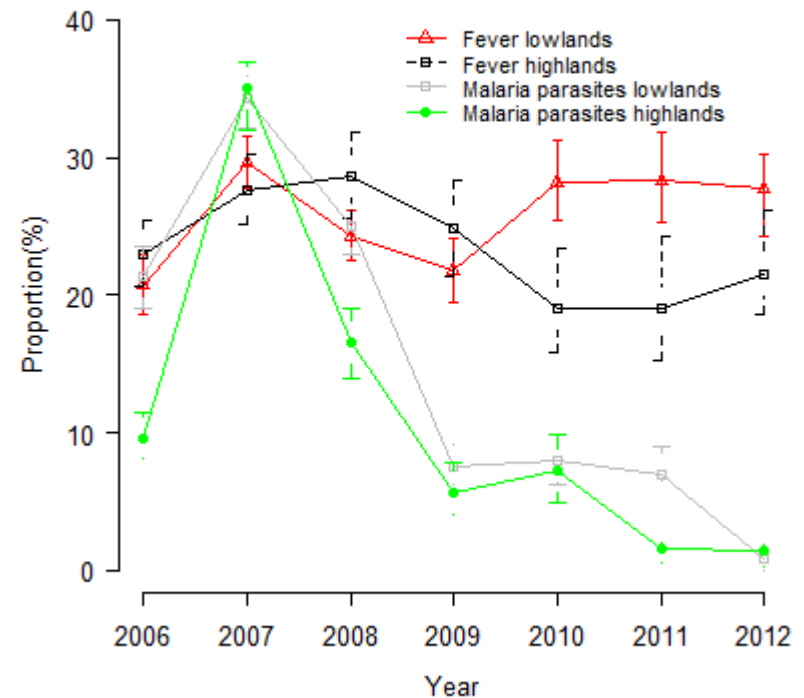
- Vulnerability to malaria transmission remain high due to suitable climatic conditions
- Need to sustain the low levels of transmission with sustained vector control interventions
- Challenge to everybody to ensure continuous and appropriate use of recommended interventions

Proportions of cases with fever, and malaria parasites

<5 yrs old




≥ 5 yrs old



Parasite positivity rates declined significantly but fevers remained high in all age groups and altitude strata



Challenges.....

- Health System Issues including HIS, logistics
 - Data Management; Completeness, Timely Reporting, and Use of data.
 - Emerging Malaria vector resistance against pyrethroid.
 - Need for continuous mobilization & Advocacy programmes on all interventions.
 - Funding to Sustain the achieved coverage and scale up recommended interventions.
- 




New Malaria Strategic Plan 2014-2020 (Draft)

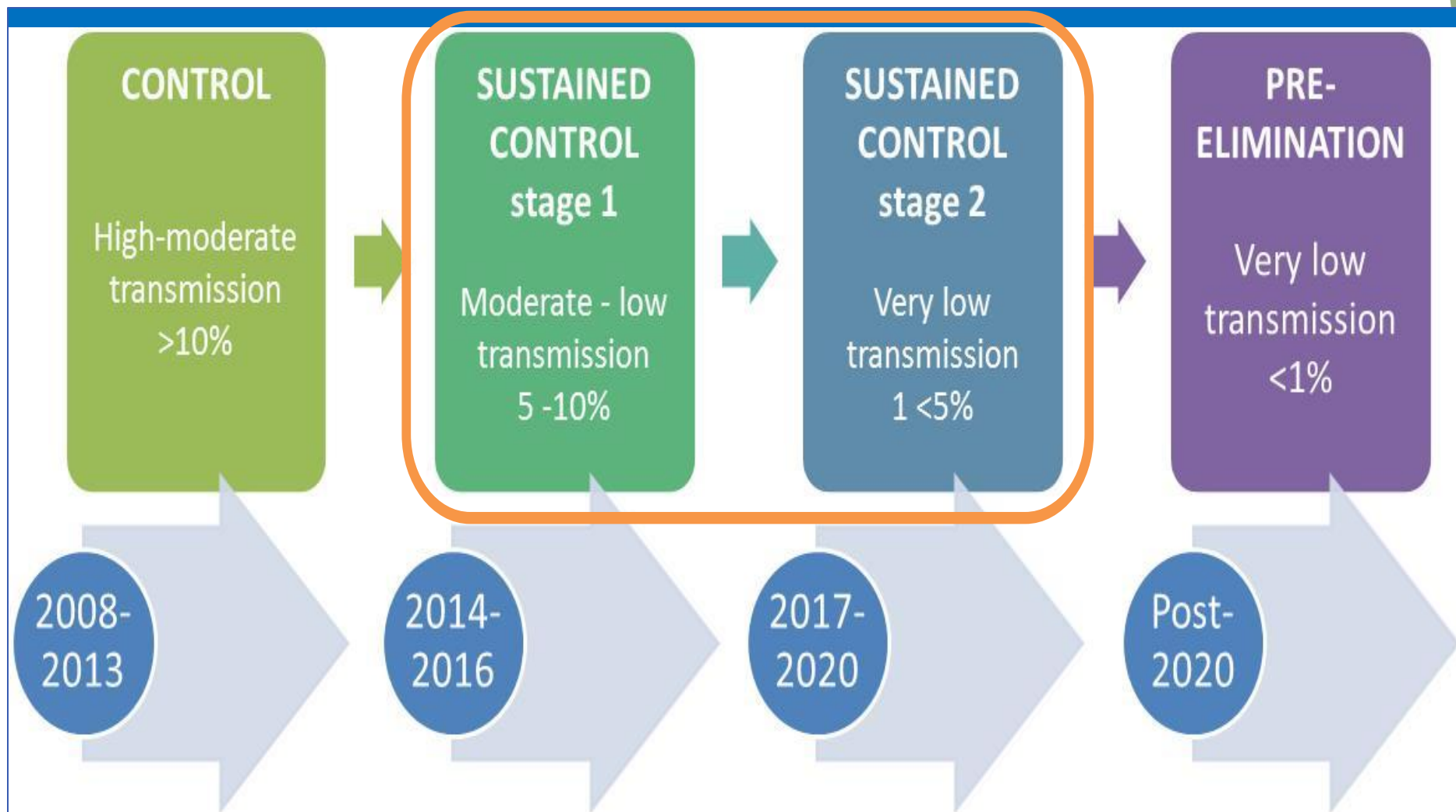




VISION, MISSION & GOAL

- Vision: Tanzania is a society free from malaria
 - Mission: All Tanzanians have access to quality, effective, safe and affordable malaria interventions through timely and sustainable collaborative effort with partners and communities at all levels
 - Goal: to reduce the average malaria prevalence from 10% in 2012 to 5% in 2016 and further down to less than 1% in 2020
- 

Malaria Control Phases and Timelines

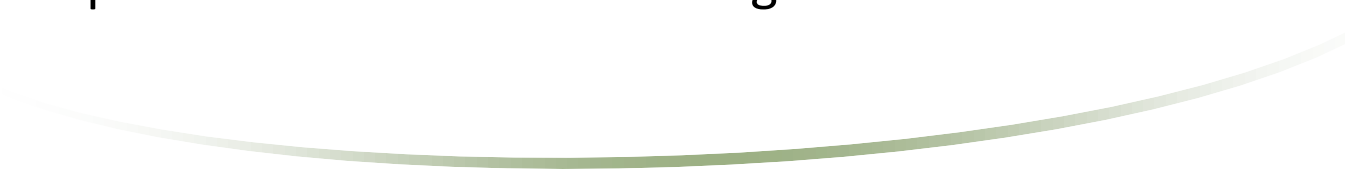




Strategies




Integrated Malaria Vector Control

- **Main Objective: To reduce transmission of malaria by scaling up and maintaining effective vector control interventions**
 - Maintain universal access of **LLINs** through replacement campaign, continuous distribution mechanisms, targeted distribution, re-create viable commercial sector, promotion)
 - Consolidate and expand **IRS** in epidemiologically and operationally suitable areas: capacity building local govt and implementation in targeted areas
 - Implement **larviciding** and **environmental measures** to complement LLINs and IRS in targeted communities
- 



Integrated Malaria Vector Control...

- Promote effective environmental management for malaria control amongst targeted communities (development projects, promote intervention at community level, community led initiatives in urban areas)
- 




Malaria case management

- **Main Objective: To prevent the occurrence of severe morbidity and mortality related to malaria infection through promotion of universal access to appropriate early diagnosis and prompt treatment and provision of preventive therapies in vulnerable groups**
 - Provide universal access to high-quality malaria diagnosis to guide appropriate treatment both from the public and private sector
 - Provide universal access to high-quality malaria treatment as guided by malaria diagnostic test results and SOPs
 - Reduce vulnerability to malaria infection and complications among vulnerable populations: PW, infants, PLWHIV, Sickle cell , non immune travelers
 - Provide appropriate logistics for continuous availability of quality commodities for malaria case management and ensure commodities are of high quality




Supportive interventions

- **BCC/IEC:** Increase awareness on malaria and appropriate use of prevention, diagnosis and malaria treatment, and advocate for more resources (local and external)
 - **Surveillance, Monitoring and Evaluation:**
- 




Summary

- When **resources are well invested** in proven effective malaria control, **targets are achievable**
 - **Reduced burden** of the disease have significant **social and economic benefits**
 - Despite declining **malaria prevalence**, Tanzania remains **highly vulnerable** for malaria transmission due to climatic conditions suitability
 - Evidence has shown that, a **rebound effect** is likely, if control measures were **scaled down or stopped completely**.
- 



Summary...

- Malaria is too big a burden to be left to individual countries, to the MoHSW alone, we **need to work together**; Partnership is central to the achievements
 - As we move into a new strategic plan, need engagement of the community, different sectors, donors etc to ensure maintenance and further reductions
 - Community engagement is important to ensure **appropriate actions are taken for malaria prevention and treatment**
 - **Mobilisation of resources including funds is critical** to maintain the coverage and sustain the gains achieved so far
- 



Thank you....

