



Countdown to 2015 In-Depth Case Study: Tanzania

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WHO Tanzania**

**LSHTM Tanzania Network
Meeting, 13 April 2015**

Part I

Countdown to 2015:

Background



What is Countdown?

A global movement initiated in 2003 that tracks progress in maternal, newborn & child health in the 75 highest burden countries to promote action and accountability

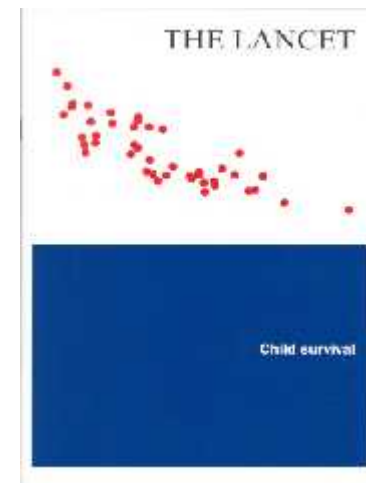
Countdown origins

2003 *Lancet* Child Survival Series

2005 *Lancet* Neonatal Series

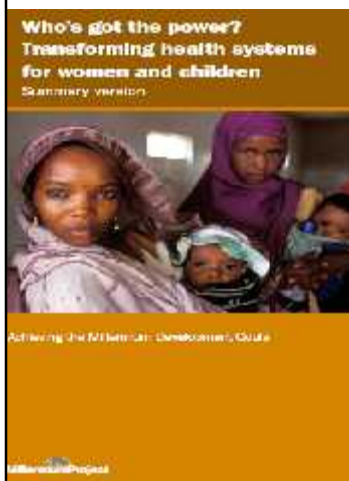
A refrain from the United Nations, NGOs, and civil society:

- Effective interventions are available
- Coverage is unacceptably low and inequitable
- We need to MAKE NOISE



"Of the 130 million babies born every year, about 4 million die in the first 4 weeks of life—the neonatal period. A similar number of babies are stillborn..."

More than 100 million children are stillborn



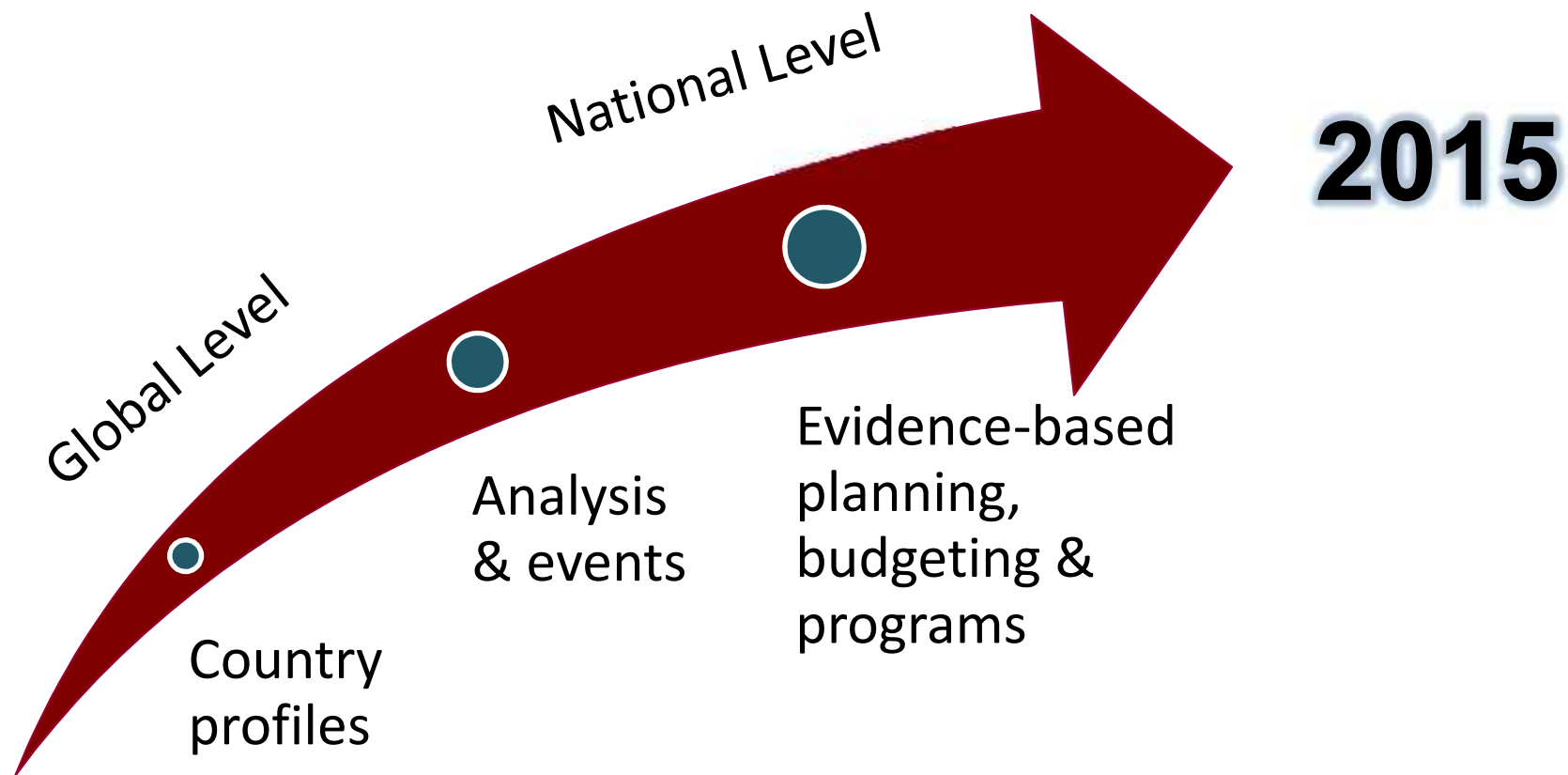
Countdown aims

- To disseminate the best and most recent information on country-level progress
- To take stock of progress and propose new actions
- To hold governments, partners and donors accountable wherever progress is lacking

What does Countdown do?

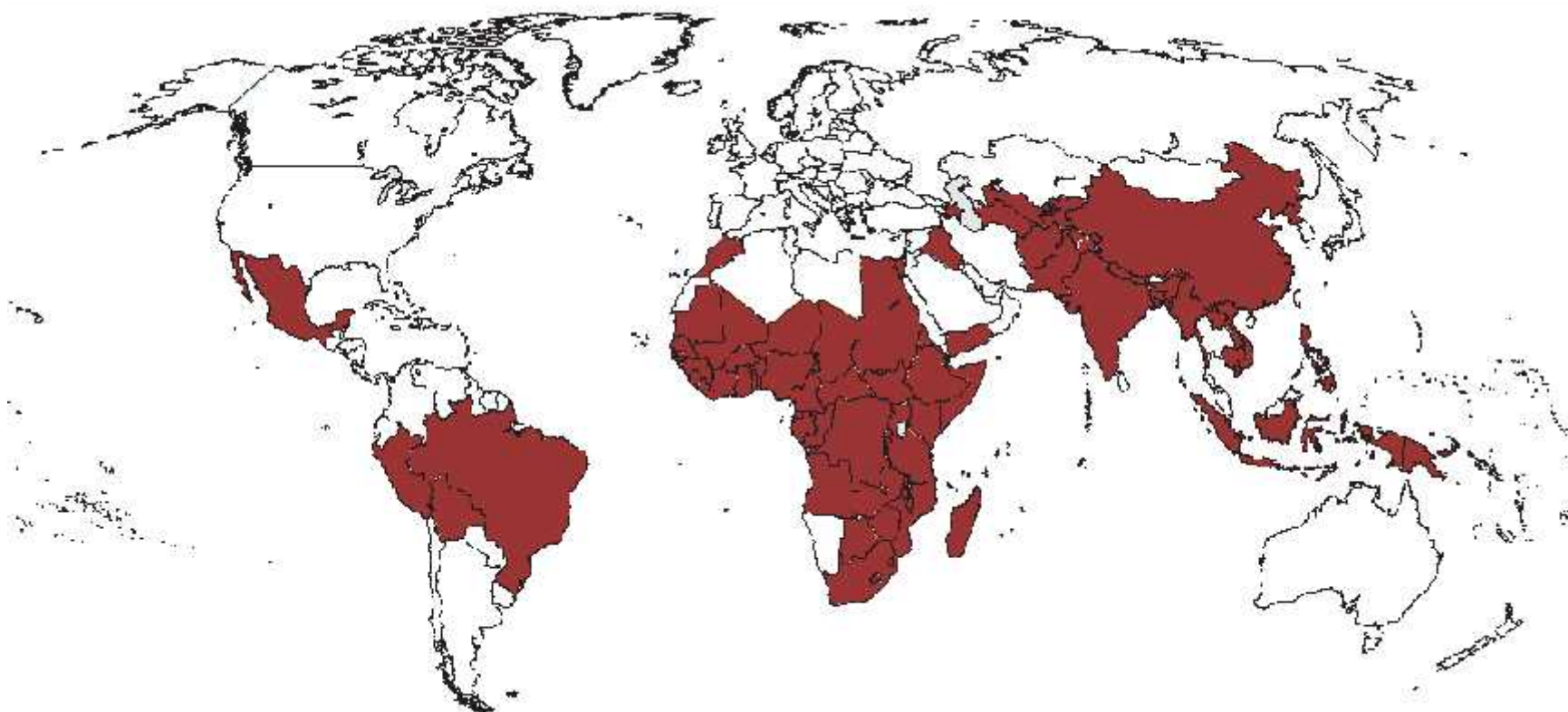
- **Analyze country-level coverage and trends** for interventions proven to reduce maternal, newborn and child mortality
- **Track indicators** for determinants of coverage (policies and health system strength; financial flows; equity)
- **Identify knowledge and data gaps** across the RMNCH continuum of care
- **Conduct research and analysis**
- **Support country-level Countdowns**
- **Produce materials, organize global conferences and develop web site** to share findings

Countdown: Promoting accountability for action



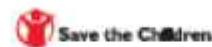
Where is Countdown?

75 countries that together account for **> 95% of maternal and child deaths** worldwide



Who is Countdown?

- **Individuals:**
scientists/academics,
policymakers, public health
workers, communications
experts, teachers...
- **Governments:**
RMNCH policymakers,
members of Parliament...
- **Organizations:**
NGOs, UN agencies,
health care professional
associations, donors,
medical journals...



Countdown moving forward

Four streams of work to promote accountability, 2011-2015

- Responsive to global accountability frameworks
 - Annual reporting on 11 indicators for the Commission on Information and Accountability for Women's and Children's Health (COIA)
 - Contribute to follow-up of A Promise Renewed/Call to Action
- Production of country profiles/report and global event(s)
- Cross-cutting analyses
- **Country-level engagement**

DEMOGRAPHICS

Under-five mortality rate
(per 1,000 live births)

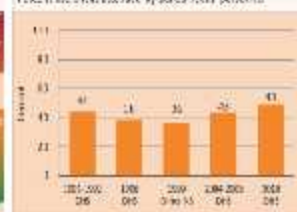
Year	Rate (per 1,000 live births)
2000	156
2005	156
2011	76
2015 (MDG target)	54

Source: UNICEF, 2012



MATERNA AND NEWBORN HEALTH

Prevention of mother-to-child

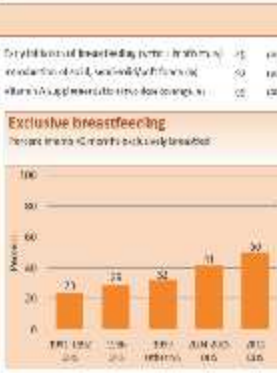


CHILD HEALTH

Immunization

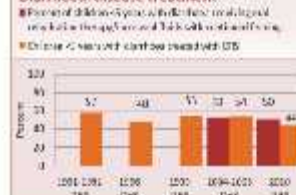


NUTRITION



CHILD HEALTH

Diarrhoea: disease treatment

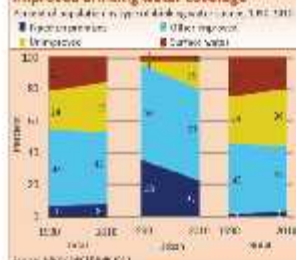


Malaria prevention and treatment

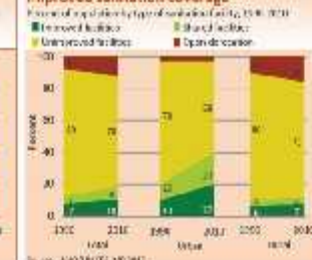


WATER AND SANITATION

Improved drinking water coverage



Improved sanitation coverage



POLICIES

[illegible]

SYSTEMS AND FINANCING

United Nations implementation of the Western, northern and of the south side	70	100
Democracy, justice and rule of law (per 100 population)	24	100
Infected with HIV/AIDS (per 100 population)	21	100
Female illiterates (per 100 population)	180	100
General government expenditure on health as % of budgetary expenditure	37	100
Child and adolescent reproductive health services (per 100 population)	34	100
Child development outcomes (per 100 population)	30	100
Child development outcomes (per 100 population)	29	100

Part 2

United Republic of Tanzania Countdown

Case Study



The Tanzanian Team

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Melisa Martinez-Alvarez (LSHTM)

On behalf of the Tanzanian Countdown Country Case Study Team

Why a Country Case Study in Tanzania?

1. National leadership support
2. Tanzania committed to doing a Countdown Case Study – multi-stakeholder support
3. Good timing - to help inform the midterm review of:
 - ☐ The Health Sector Strategic Plan (2009 – 2015)
 - ☐ The One Plan - The National Road Map Strategic Plan To Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania (2008-2015)
4. Previous study described child survival gains in Tanzania (Lancet, 2008)



... what about maternal and newborn survival?

Tanzania

- ❑ **Mixed progress** for maternal, newborn and child survival since 1990.
- ❑ **Achieved MDG 4** (U5MR = 54 deaths per 1000 live births*)



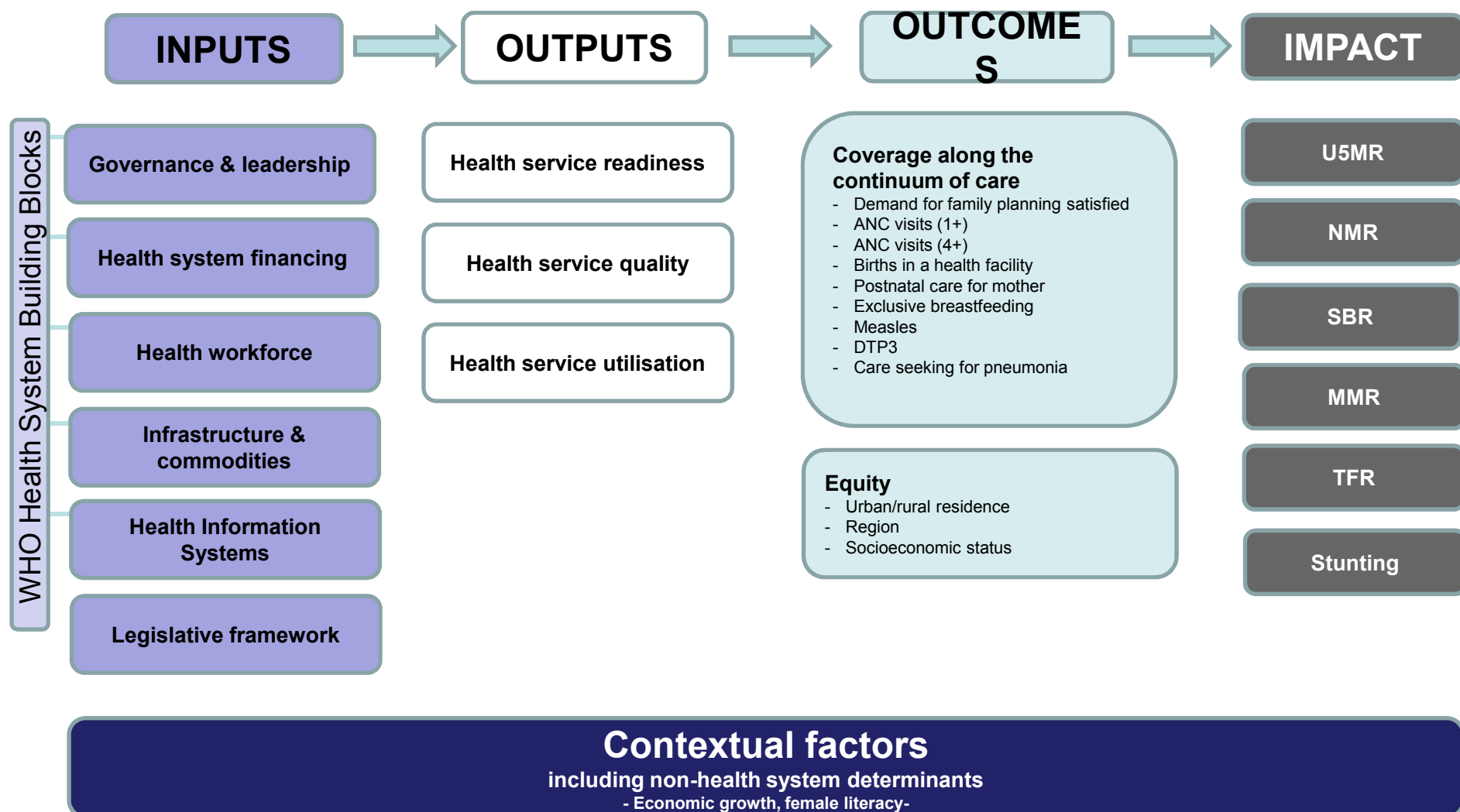
However...

- ❑ **Neonatal mortality** (21.4 deaths per 1000 live births*) makes up **40%** of all deaths in children less than 5 years.
- ❑ Tanzania is **off track to achieving MDG 5** with a MMR of 410 deaths per 100 000 live births (2013 UN estimates).

Tanzanian mothers and newborns are being left behind

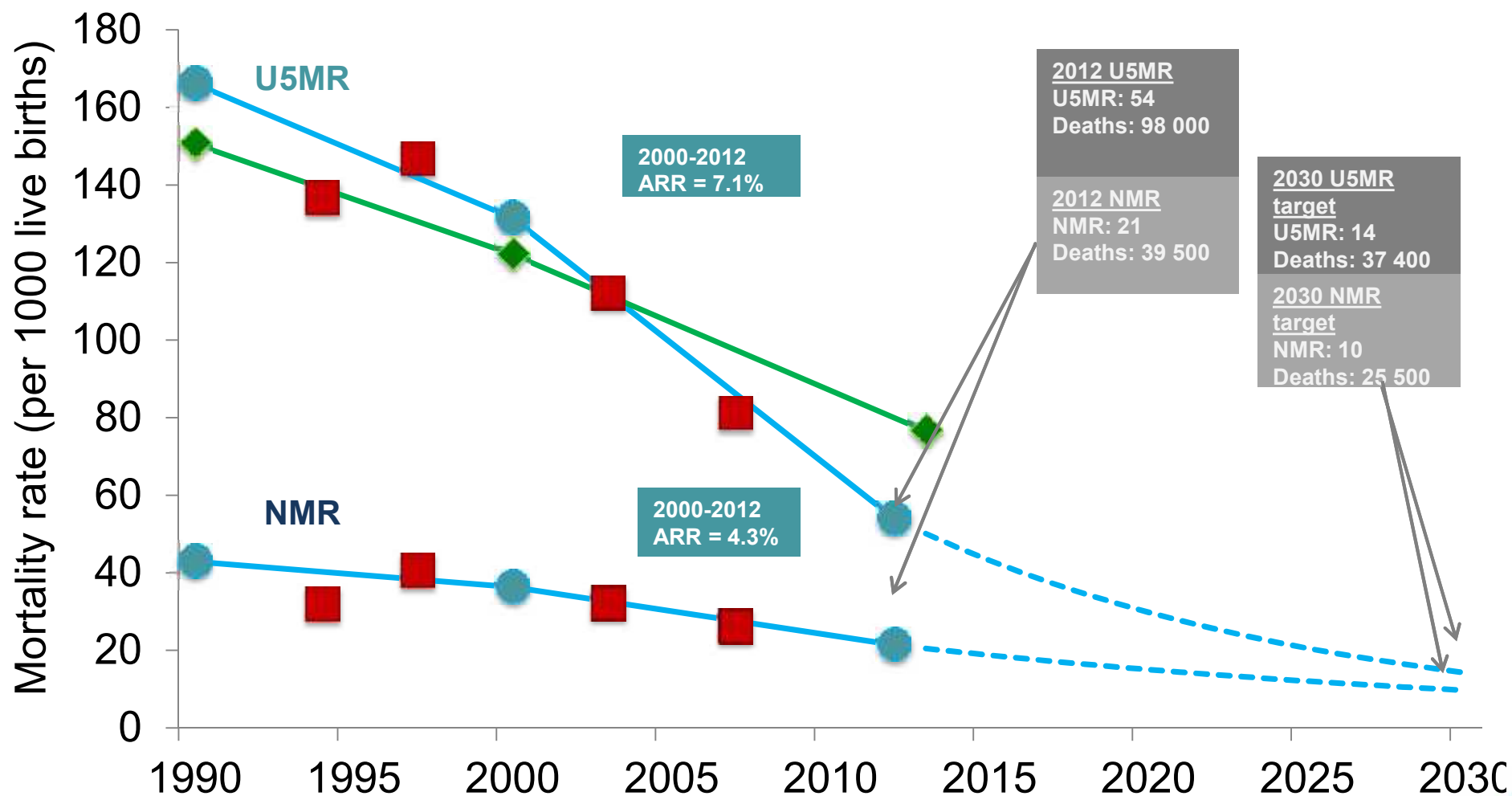
(* = 2012 UN estimates)

Evaluation Framework

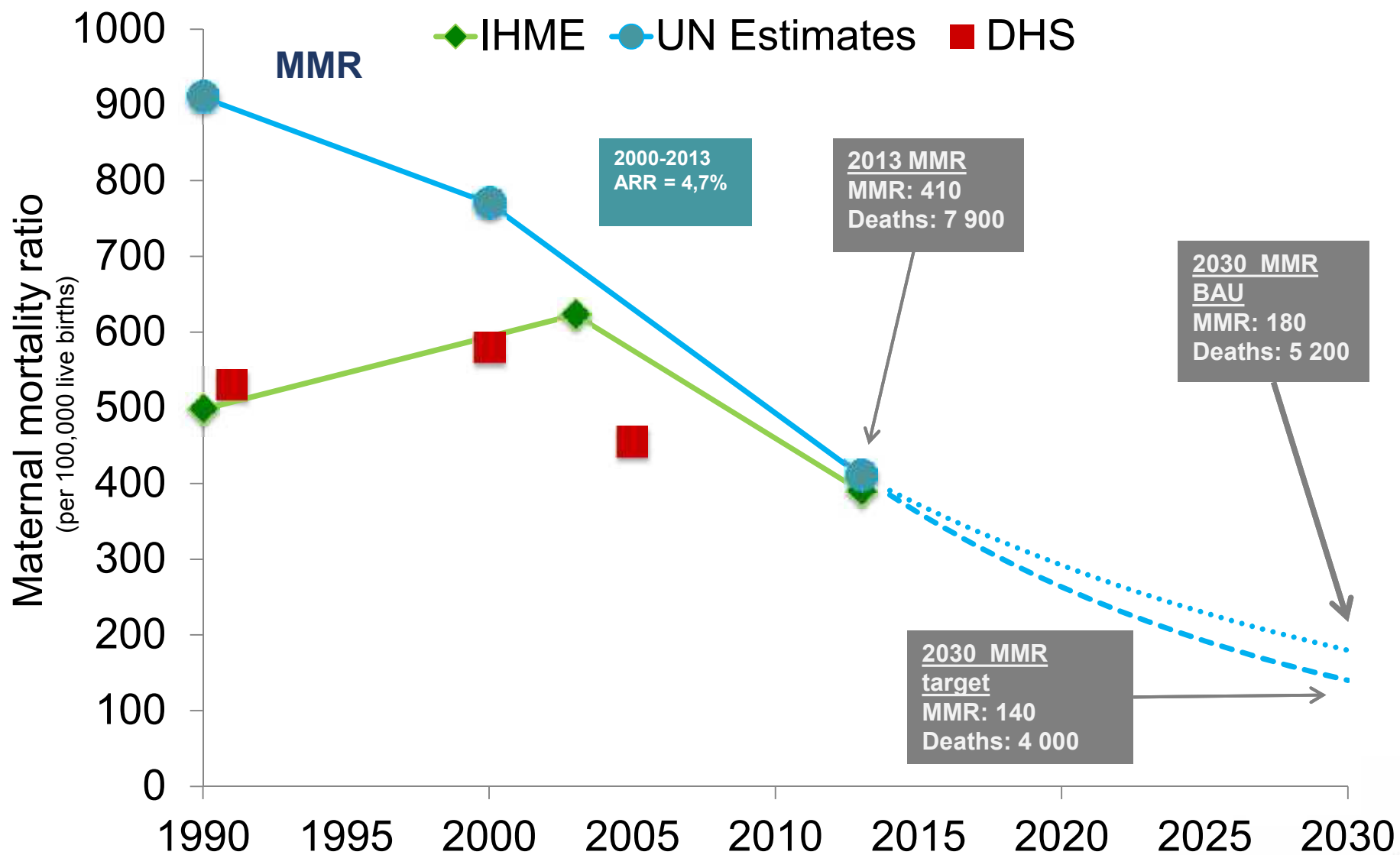


Progress on MDG 4 Reduce the under-five mortality rate by two-thirds

● UN Estimates ■ DHS ◆ IHME



Progress on MDG 5.A. Reduce the maternal mortality ratio by three quarters



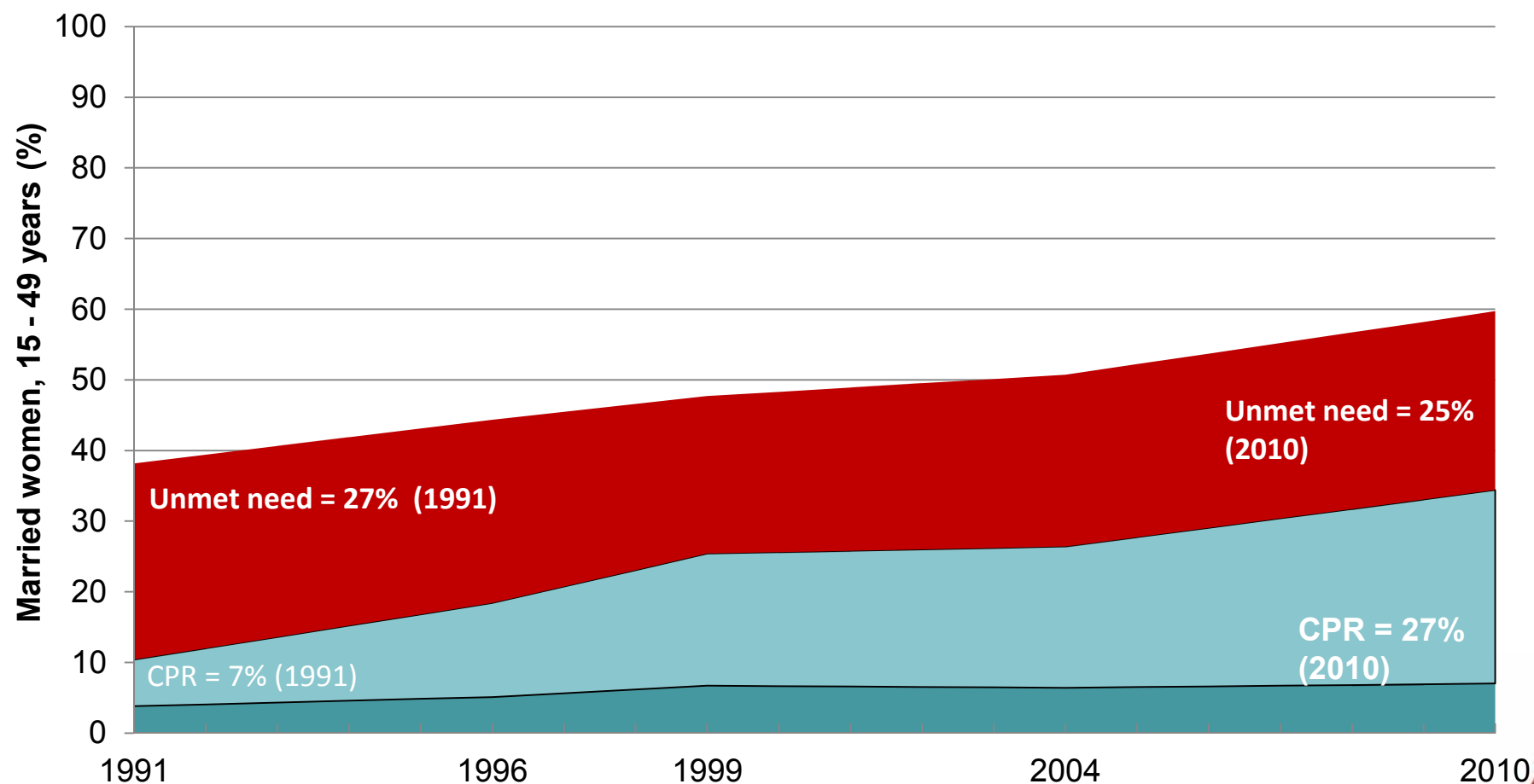
Progress on MDG 5.B. – FAMILY PLANNING

Achieve universal access to reproductive health

Demand for family planning

(Contraceptive prevalence rate plus unmet need for family planning)

- Traditional method of contraception
- Modern method of contraception
- Unmet need for family planning



- Document and critically evaluate **the reasons for the mixed progress in maternal, newborn and child survival in Tanzania.**
- Accounting for the **broader contextual factors** when assessing the effects of health system strengthening reforms and RMNCH interventions on impact indicators.
- Focus on **coverage, equity, financing and health system and policy** (the 4 focus areas for *Countdown to 2015*)



OBJECTIVES

Objective 1

Systematically evaluate trends in maternal, newborn and child mortality in Tanzania since 1990, considering contextual changes.

Objective 2

Examine the health system, through a standardized analysis of Reproductive, Maternal, Newborn and Child Health System & Policy, Finance and Workforce.

Objective 3

Critically explore the coverage and equity levels for the Commission on Information and Accountability indicators that may contribute to progress, or lack thereof in the: Under-five Mortality Rate; Neonatal Mortality Rate, and Maternal Mortality Ratio.

Objective 4

For the impact indicators **on track** to achieve the MDG's: conduct a retrospective Lives Saved Tool Analysis to identify coverage determinants that may have contributed to this progress in survival.

For the impact indicators **not on track** to achieve the MDG's: conduct an in-depth equity analysis of the pertinent Commission on Information and Accountability indicators, to explore who is being left behind and why.

Objective 5

Highlight the implications of this research through a prospective Lives Saved Tool Analysis that calculates the number of lives that could be saved by addressing the key coverage and equity gaps identify through the analyses above.

Results

Objective 1

Systematically evaluate **trends** in maternal, newborn and child mortality in Tanzania since 1990, considering **contextual changes**.

Average annual rate of reduction	1990 – 2012 or 13	2000 – 2012 or 13
Under-five mortality rate (2012)	5.0%	7.1%
Children 1- 59 months mortality rate (2012)	5.9%	8.5%
Neonatal mortality rate (2012)	3.1%	4.3%
Maternal mortality ratio (2013)	3.4%	4.7%

- ❑ Tanzania is on track for MDG4 (child survival), with rapid child mortality reduction in last 10 years.
- ❑ Improvements for newborn survival have been slower, with insufficient progress towards MDG5.

Objective 2

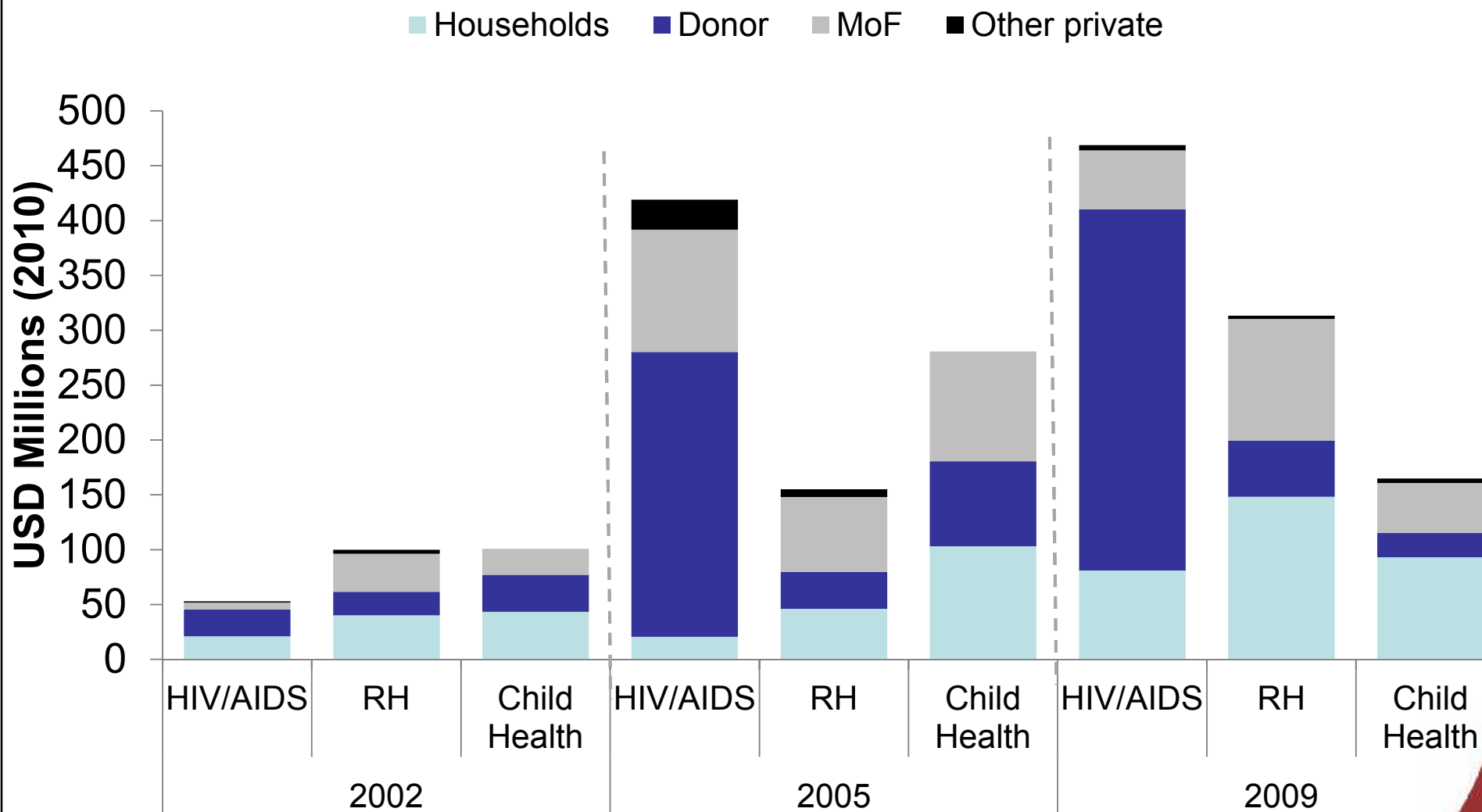
Examine the health system, through a standardized analysis of Reproductive, Maternal, Newborn and Child **Health System & Policy, Finance and Workforce**

Health Finance

- ❑ Health sector finance doubled in the last decade, with increased reliance on external donors. Abuja target has not been met.
- ❑ Child health and HIV received substantially more donor funding than maternal, and particularly newborn health 2003-2010.

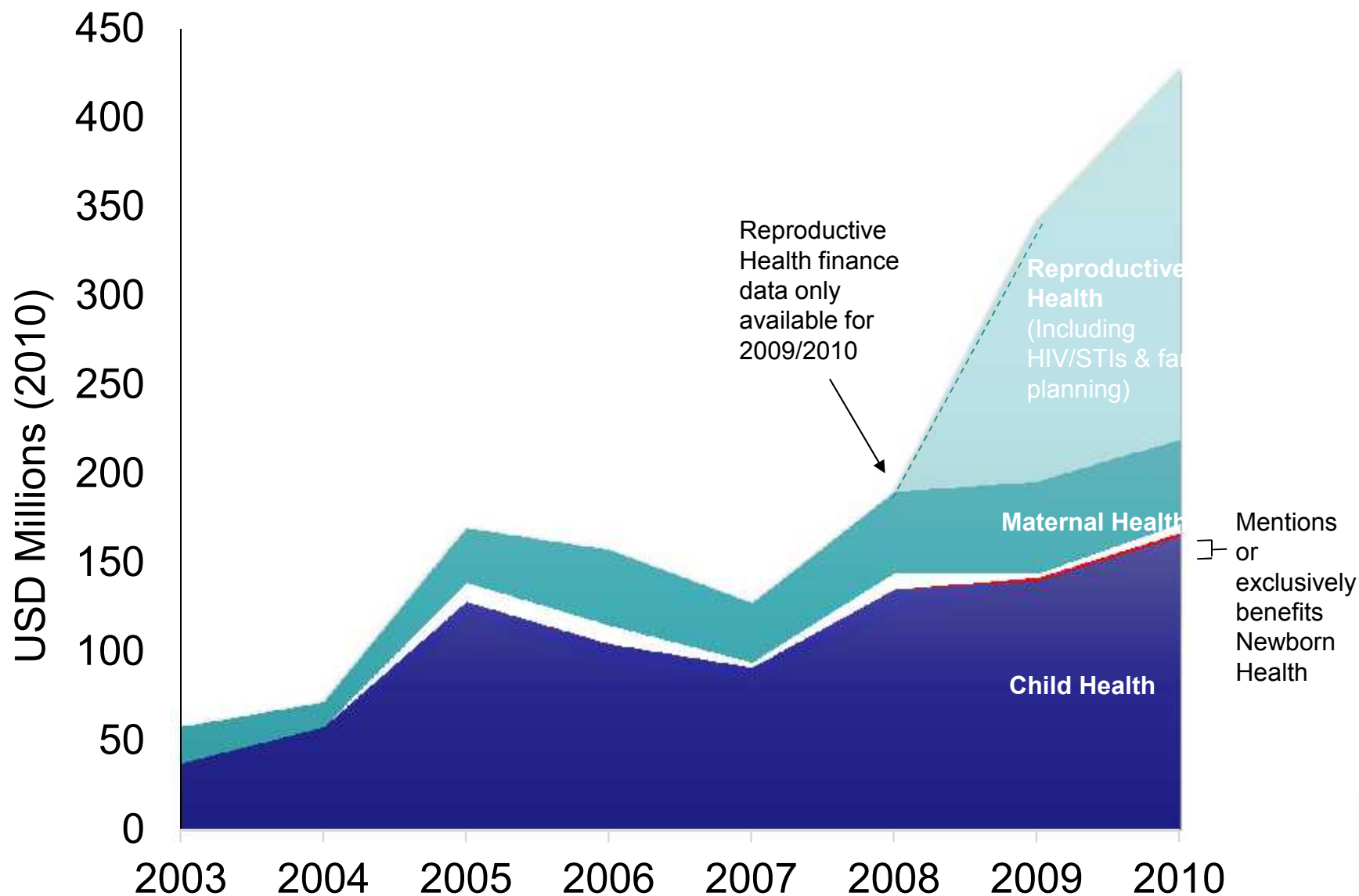
National Health Accounts

Trends in funding sources to Reproductive and Child Health



Source: NHA, 2003; 2006; 2010

DONOR FUNDING



Objective 2

Examine the health system, through a standardized analysis of Reproductive, Maternal, Newborn and Child **Health System & Policy, Finance and Workforce**

Investments, policy inputs and implementation:

Health Finance

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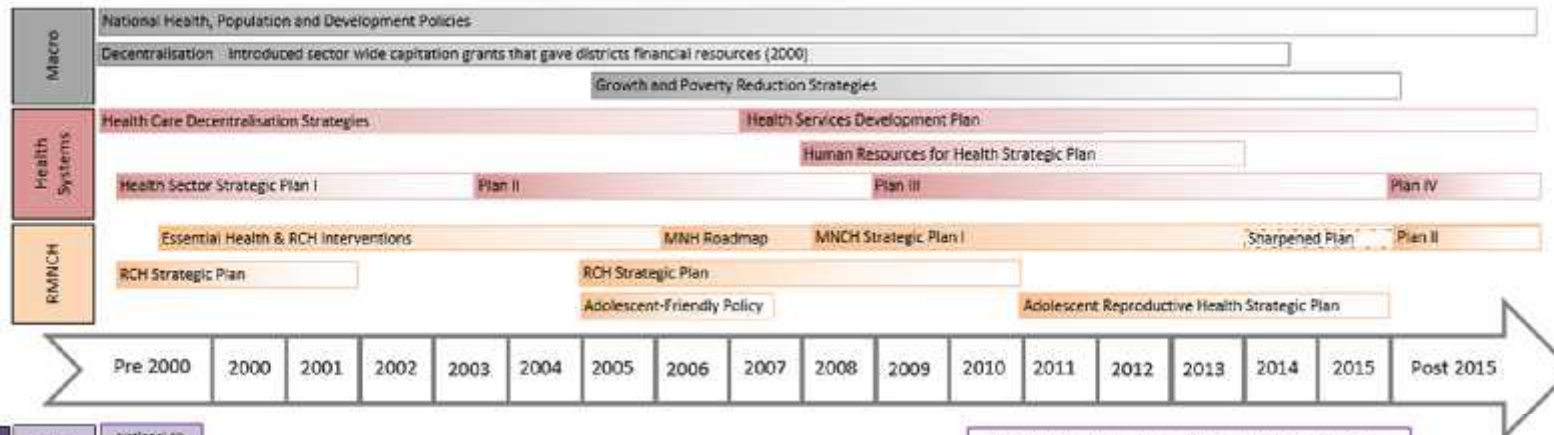
Health Workforce

Chronic health workforce crisis exists with urban/rural inequities.

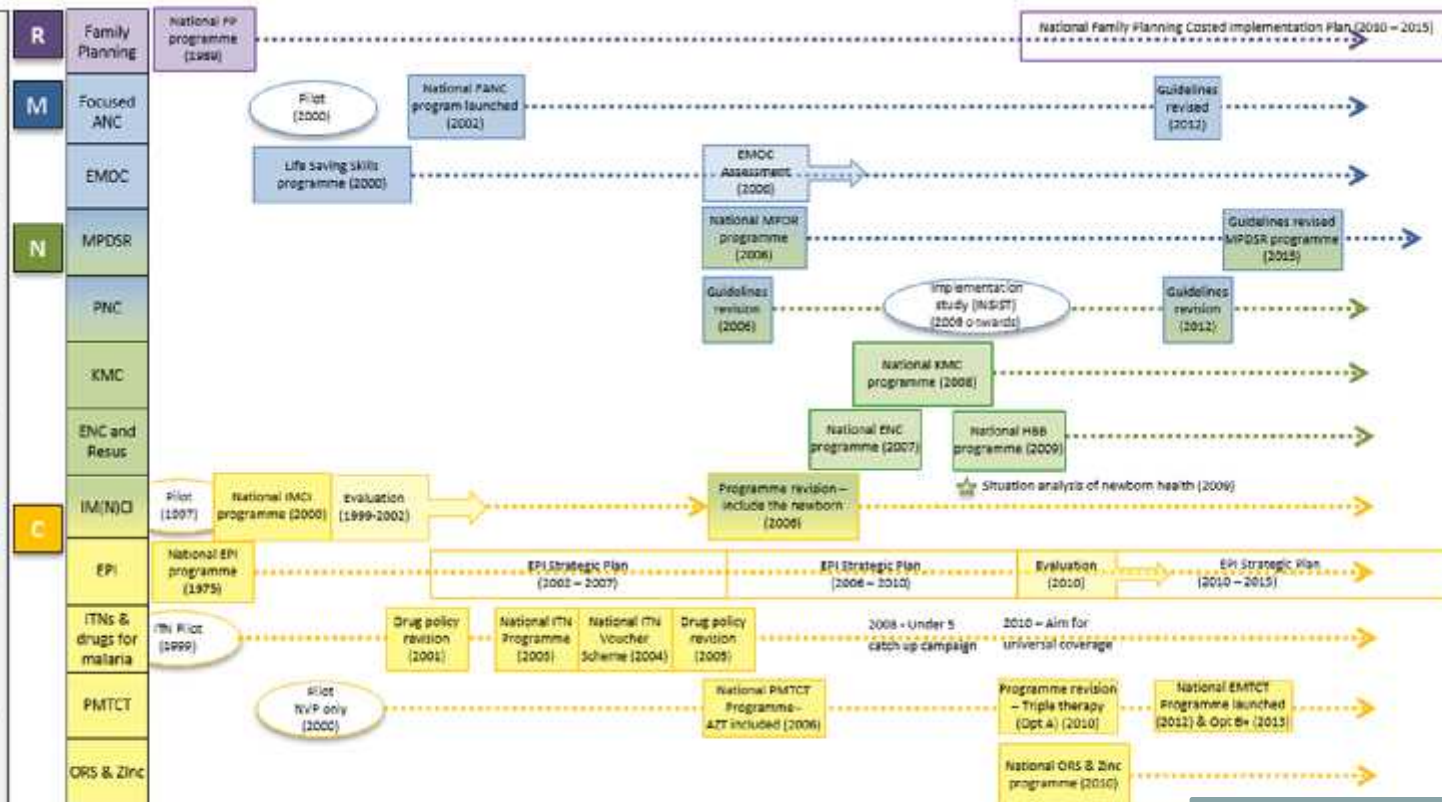
Health Policy

An increasingly complex policy environment with proliferating national policies not always linked to implementation, especially for maternal health.

National policies and strategies that address RMNCH



Policy formulation, implementation, and evaluation of key interventions



Health Systems and policy timeline

Health policies dashboard for tracer indicators

	Policy not available
	Policy partially available
	Policy available

Policy Tracer Indicators		Pre-2000	2001-2005	2006 - 2010	Post -2010
R	Laws or regulations that allow adolescents to access contraceptives without parental or spousal consent				
	Legal status of abortion (X of 7 circumstances)	1/7	1/7	1/7	1/7
M	Midwives authorized for specific tasks (X of 7 tasks)	0/7	0/7	7/7	7/7
	Maternity protection (Convention 183)				
	Maternal deaths notifications				
M N	Postnatal home visits in the first week after birth				
N	Kangaroo Mother Care in facilities for low birthweight/preterm newborns				
	Antenatal corticosteroids as part of management of preterm labour				
	International Code of Marketing of Breastmilk Substitutes				
C	Low osmolality ORS and zinc for management of diarrhoea				
	Community treatment of pneumonia with antibiotics*	N/A	N/A	N/A	N/A

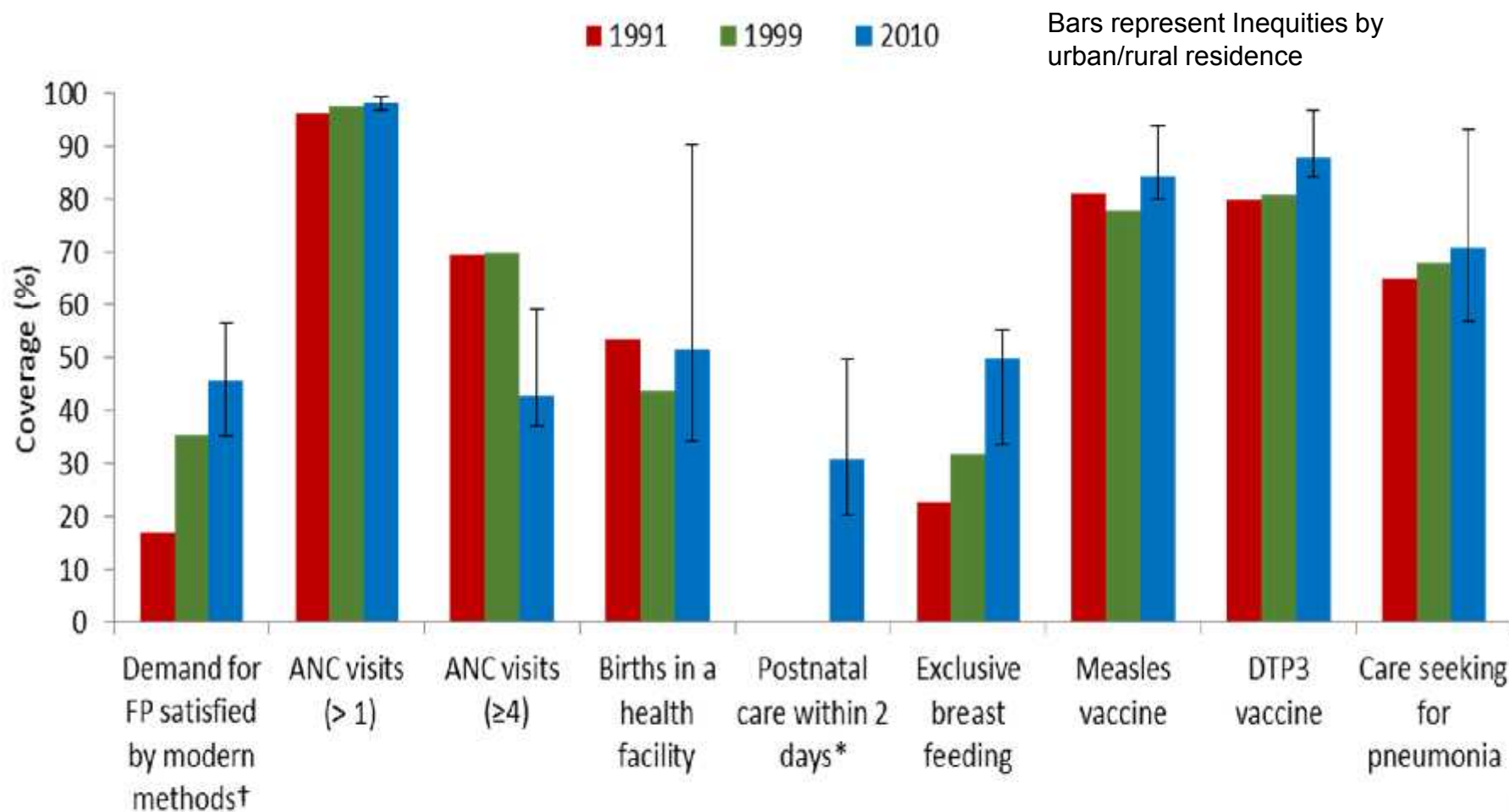
* Case management of pneumonia in Tanzania is provided at prephical health facilities, not in the community.

Objective 3

Critically explore the **coverage and equity levels** for the Commission on Information and Accountability indicators that may contribute to progress, or lack thereof in the: Under-five Mortality Rate; Neonatal Mortality Rate, and Maternal Mortality Ratio.

- Preventive child health services, especially immunisation, have higher coverage with smaller inequities, compared with curative care services.

Coverage and Equity

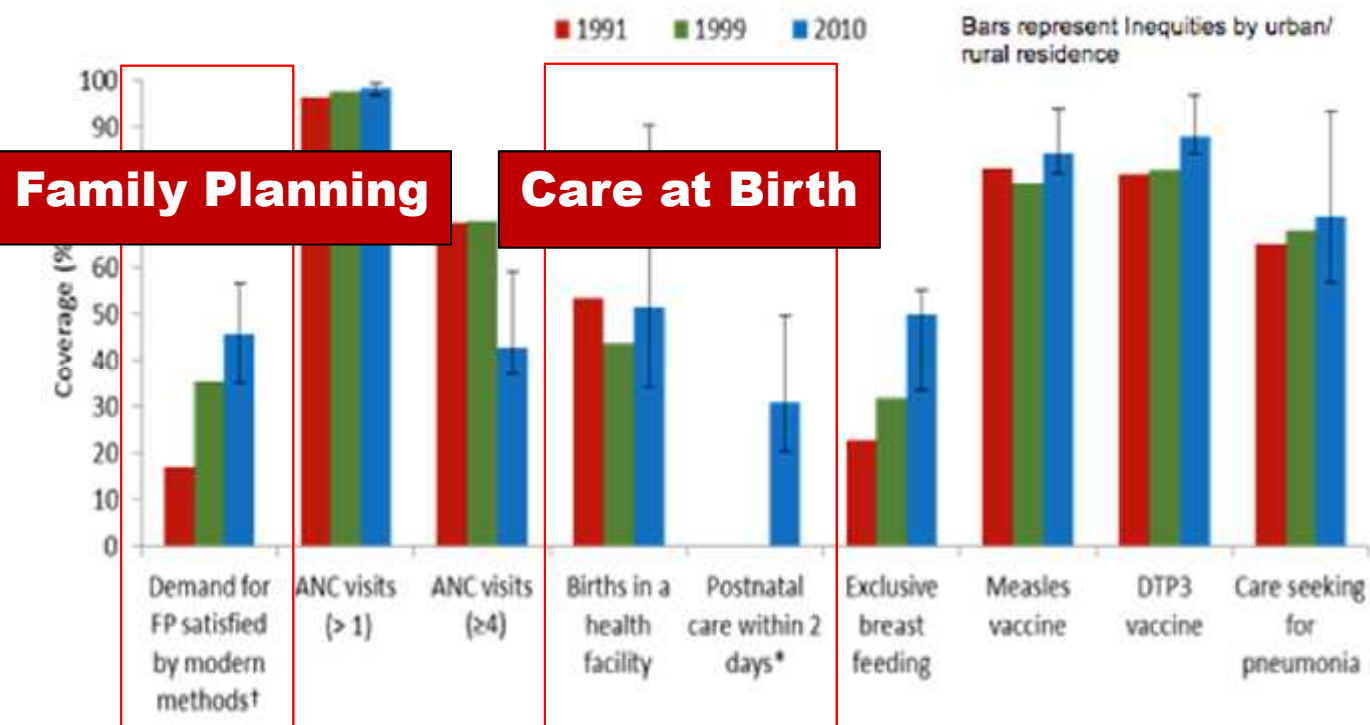


Results

Objective 4

For the impact indicators **not on track** to achieve the MDG's: conduct an in-depth equity analysis of the pertinent Commission on Information and Accountability indicators, to explore who is being left behind and why.

- Insufficient progress noted for MMR, NMR, SBR and TFR therefore indepth equity analyses were performed for **demand for family planning** and **care at birth**.



Family Planning

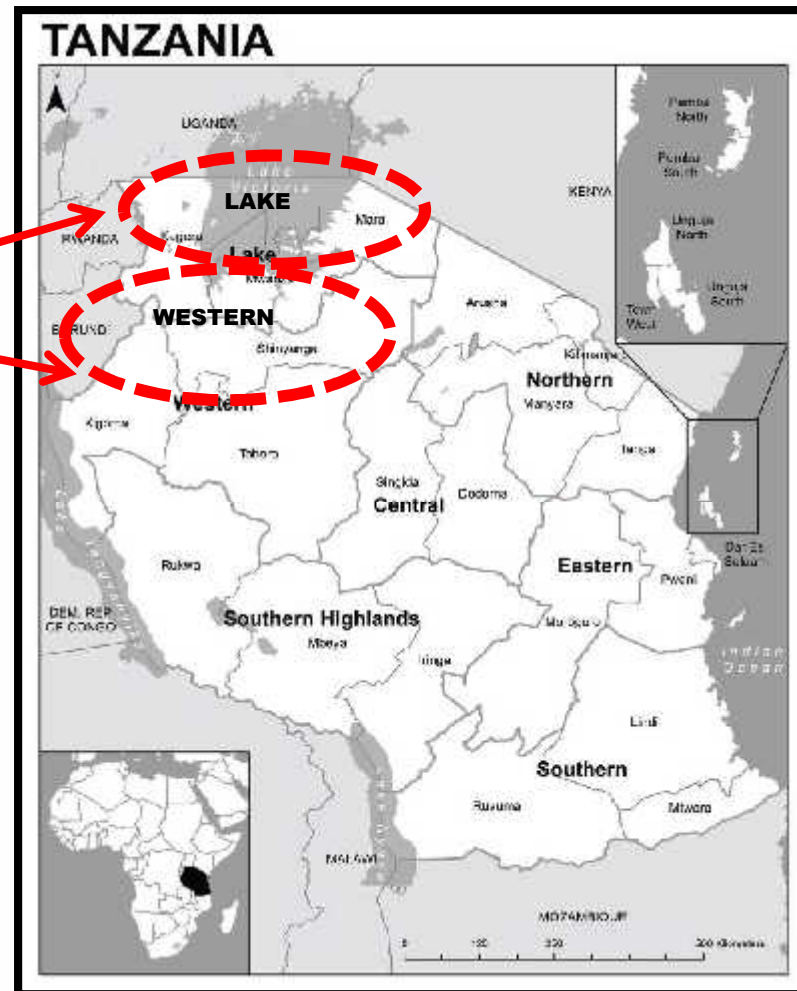
Who isn't being reached?

Equity gaps:
Who's being left behind?

W O M E N

**FROM THE
WESTERN
& LAKE ZONE**

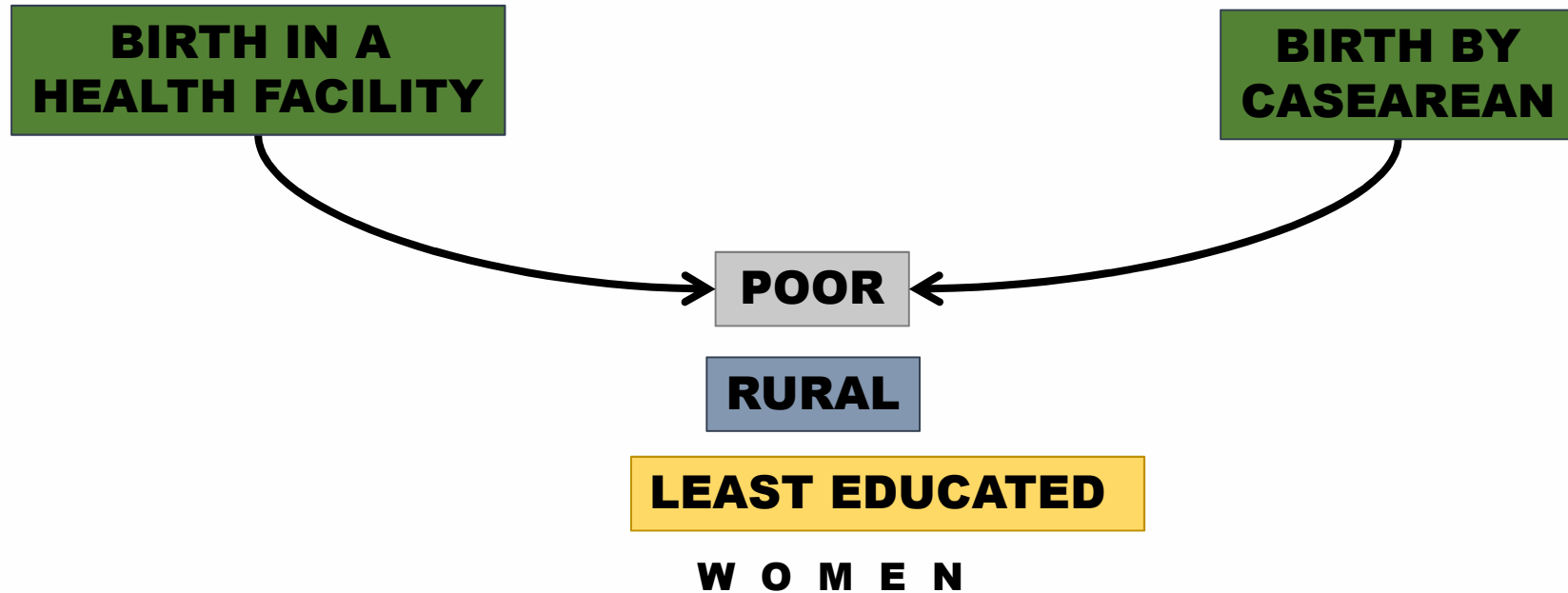
**MWANZA, MARA,
SHINYANGA, KIGOMA &
TABORA**



Care at Birth

Who isn't being reached?

Equity gaps:
Who's being left behind?



Objective 4

For the impact indicators **on track** to achieve the MDG's: conduct a retrospective Lives Saved Tool Analysis to identify coverage determinants that may have contributed to this progress in survival.

Retrospective LiST suggested that 140,300 U5 deaths were averted in 2012 compared to 2000.

- ☐ U5 child mortality; around 39% of the mortality difference is accountable to changes in coverage of interventions. Highest impact interventions are immunisations, ITN bednets, and HIV interventions including PMTCT and ART.
- ☐ Newborns; the most effective interventions contributed 76% of lives saved in 2012 – these were skilled birth attendance and emergency obstetric care (29%), essential newborn care and neonatal resuscitation (19%), case management of severe neonatal infections (11%), Antenatal corticosteroids for preterm births (11%), and KMC (6%).
- ☐ Maternal; majority of lives saved due to skilled birth attendance and emergency obstetric care (73%). Small effects from active management of third stage labour (9%) and clean birth practices (8%).

Drivers of Progress for RMNCH in Tanzania

Reflect a **complex interplay** between **global and national attention, funding flows and variable focus on implementation**, with faster progress for interventions with more funding and with universal consistent national leadership and feasibility of implementation at lower levels of the health system.

- ❑ Child health programmes focused on high-impact interventions and used lower levels of the health system to reach high coverage.
- ❑ Despite its high political priority, maternal health care implementation has been less consistent and not at wide scale.
- ❑ Newborn survival only gained attention after 2005 and quickly focused on high-impact interventions for the leading causes of death (e.g. neonatal resuscitation, KMC and Essential Newborn care).
- ❑ Family planning had consistent policies but has had more recent reinvestment in implementation.

Prospective LiST Analysis

Implications for the last push towards the MDGs and then beyond 2015

Lives Saved Tool suggests **18,400 Tanzanian** lives could be saved by the end of 2015 if we:

- (i) address unmet need for family planning especially in Lake and Western Zones;
- (ii) close gaps for coverage and quality of care at birth especially for rural births; and
- (iii) continue the progress for child health.

With universal coverage of RMNCH care by 2030, deaths of Tanzanian mothers, newborns, children as well as stillbirths could be reduced by over 80%, saving **60,000 lives per year**.

Prospective LiST Analysis

Estimated lives saved by the end of 2015 if the accelerated plan is acted on nationally and by 2030 with universal coverage

	SHARPENED ONE PLAN By end of 2015 with faster progress for the 3 priority strategies at national level			UNIVERSAL COVERAGE By 2030 with 95% coverage of MNCH care + family planning demand satisfied	
	Reduction (%)	Mortality rate	Lives saved	Reduction (%)	Lives saved
Under-five deaths	25%	46	14,500	84%	45,000
• Neonatal deaths	31%	16	9,400	89%	22,000
• Deaths 1-59 months	21%	30	5,100	80%	23,000
Maternal deaths	30%	382	1,400	83%	3,600
Stillbirths	22%	20	2,500	76%	11,400
Total lives saved			18,400	81%	60,000

Outputs from the Countdown Case Study



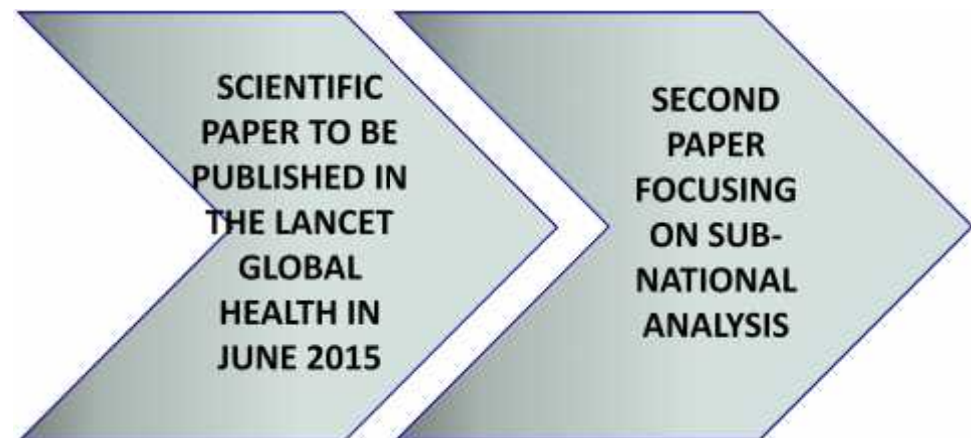
What is the research agenda for Tanzania's mothers, newborns, children and adolescents?



MAY 2014



Alongside the Sharpened One Plan 2014-2015 and Regional Scorecards



Research agenda for RMNCH in Tanzania

1. Tanzania selected as 1 of 3 countries internationally to test the Every Newborn Core Metrics.
- 2.

To be finalised....



Other suggestions...?



EVERY WOMAN
EVERY CHILD

EVERY NEWBORN

An Action Plan To End Preventable Deaths

Measurement Improvement Roadmap

April 2015



World Health
Organization

unicef 

#EveryNewborn



COMMITTING TO CHILD SURVIVAL
A PROMISE RENEWED

Every Newborn Series

5 papers

6 comments

55 authors from 18+ countries

60+ partner organisations



THE LANCET

Every Newborn

An Executive Summary for the Lancet's Series



"A healthy start is central to the human life course, with birth holding the highest risk of death, disability, and loss of development potential, leading to major societal effects."

Main funders: Bill & Melinda Gates Foundation, USAID, Children's Investment Fund Foundation

Every Newborn Action Plan

Based on the evidence from the Series
Co-led by UNICEF & WHO,
Consultation >60 country governments
>80 organisations, >1000 individuals
World Health Assembly 2014 resolution
Launched June 2014

Now to action in many countries...

THE LANCET



EVERY WOMAN
EVERY CHILD

EVERY NEWBORN
An Action Plan To End Preventable Deaths



www.lancet.com/series/everynewborn

@joylawn

#EveryNewborn



World Health
Assembly



May/June 2014

Metrics testing and use in countries
for programme improvement and accountability

2020

2030

End
Preventable
Maternal
and
Newborn
Deaths
including
Stillbirths

PLAN

Process including a
WHO meeting to scope
ENAP metrics definitions,
research gaps

Sep-Dec 2014

REFINE

Consult, refine
Roadmap to improve
ENAP metrics , map
current work etc

Jan- Sept 2015

TEST

Testing indicators and tools
in countries, and in various
data platforms (CVRS, audit
facility HMIS, surveys)

Oct 2015- Sept 2018

DATA LINKAGE

Wide use in countries ,
linking data sources .
testing E-health- based
min perinatal dataset

Oct 2018- Sept 2020

Effective use
of data in
national
health
information
systems to
improve
coverage,
quality and
equity

ENAP Milestones regarding measurement to be met by 2020

- Count births and deaths in CVRS (women, newborns and stillbirths)
- Minimum perinatal dataset & perinatal mortality audit being widely used in countries
- ENAP core indicators to be defined , incorporated in national metrics platforms and widely used

Table 1: Core and additional indicators to track progress of Every Newborn Action Plan

Current status		Core ENAP Indicators	Additional indicators
Definitions clear – but quantity and consistency of data lacking	Impact	1. Maternal mortality ratio 2. Stillbirth rate 3. Neonatal mortality rate	Intrapartum stillbirth rate Low birth weight rate Preterm birth rate Small for gestational age Neonatal morbidity rates Disability after neonatal conditions
Contact point definitions clear but data on content of care are lacking	Coverage: Care for All Mothers and Newborns	4. Skilled attendant at birth 5. Early postnatal care for mothers and babies 6. Essential newborn care (tracer is early breastfeeding)	Exclusive breastfeeding up to 6 months
Gaps in coverage definitions, and requiring validation and feasibility testing for HMIS use	Coverage: Complications and Extra Care Input: Service Delivery Packages for Quality of Care	7. Antenatal corticosteroid use 8. Neonatal resuscitation 9. Kangaroo mother care 10. Treatment of severe neonatal infections Emergency Obstetric Care Care of Small and Sick Newborns Every Mother Every Newborn Quality Initiative with measurable norms and standards	Caesarean section rate Chlorhexidine cord cleansing
	Input: Counting	Birth Registration	Death registration, cause of death

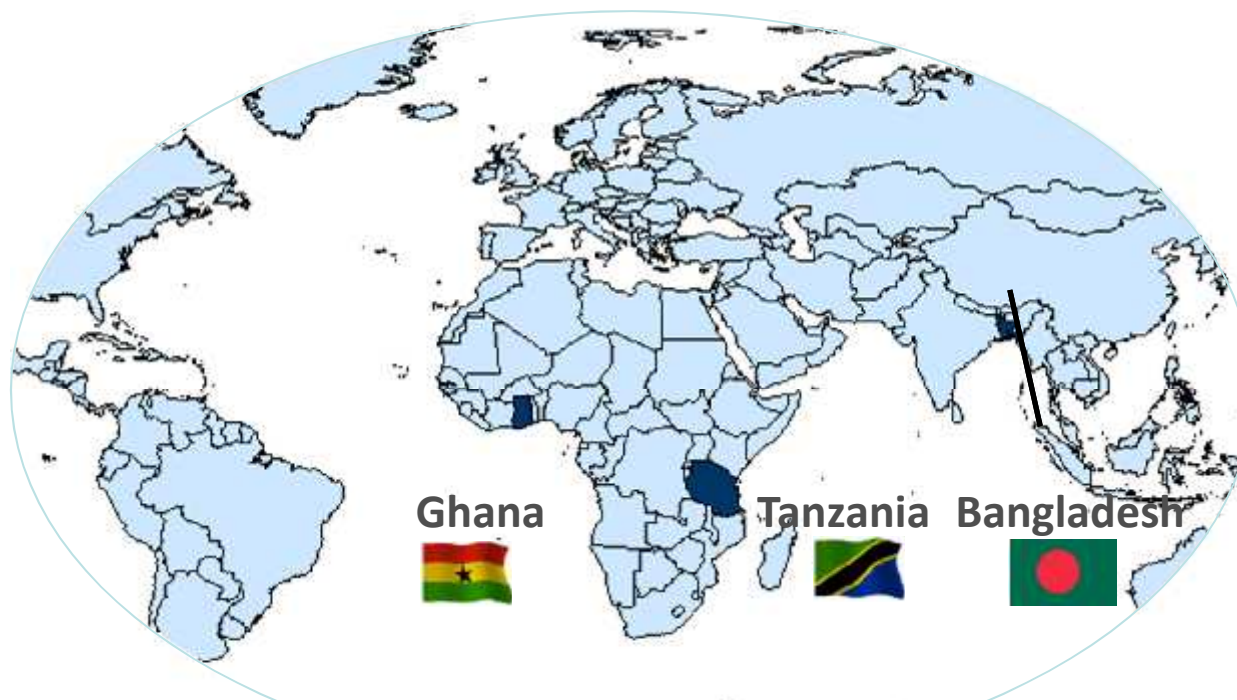
Shaded= Not currently routinely tracked at global level

Bold red= Indicator requiring additional testing to inform consistent measurement

Indicators to be disaggregated by equity such as urban/rural, income, and education

Adapted from WHO and UNICEF, Every Newborn Action Plan. WHO, 2014. www.everynewborn.org and Mason et al Lancet 2014

3 countries as hubs for testing Every Newborn core metrics



Validation and feasibility testing for facility-based coverage data
Also tools such as audit, min perinatal dataset, simplified gest age assessment etc

Also opportunities to test similar questions in other countries
and with other organisations.

Coordinated approach will yield the fastest collective progress



Networks for metrics testing and use in a range of contexts, with leadership from high burden countries

Mortality and population-based data



INDEPTH Network
Better Health Information for Better Health Policy

INDEPTH Maternal & Newborn Interest Group
20+ sites in Africa and Asia, led by Makerere University, Uganda

- Population-based pregnancy surveillance of births, stillbirths, neonatal deaths.
- Opportunities to advance validation of pregnancy history modules, verbal autopsy, improved LBW assessment etc.

“Beyond newborn survival” data

WHO COLLABORATING CENTER FOR
TRAINING AND RESEARCH IN NEWBORN CARE

Department of Pediatrics, All India Institute of Medical Sciences, New Delhi, India

With UNICEF and other partners in India and beyond

- Follow up at risk newborns by varying levels of health care
- Opportunities to validate and test feasibility of follow up, screening for disability, ROP and models to improve care





Thank you!