

# Role and Importance of INDEPTH HDSS Sites for Health Systems Strengthening



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# Since inception of INDEPTH

## How has the scene changed?

### Reflecting back - - - - and looking forward

#### 1998

- Health services in disarray and decay; Health for all by 2000 failing;
- Stagnation of health spending
- Health reforms aimed at cost efficiency
- Stagnation of health indicators

#### Since 2000

- Reconception of health systems (2000, 2007, 2009);
- Explosion of GHI's and health spending
- Health reforms aimed at universalism and equity
- Health indicators starting to improve mid-decade



# Foundation documents



2000

2007

2008

2009

# The future is not what it used to be

- **What is changing now?**

- GHI's are paying more attention to health systems

- But still increasing fragmentation of health systems

- And still increasing verticalization; less decentralized ownership

- **What is still lacking?**

- **Integration:** Need to fuse vertical with horizontal initiatives

- **Governance:** Need to establish the architecture and leadership for global health and national health systems



# Health systems

A non-linear framework of connected sub-systems

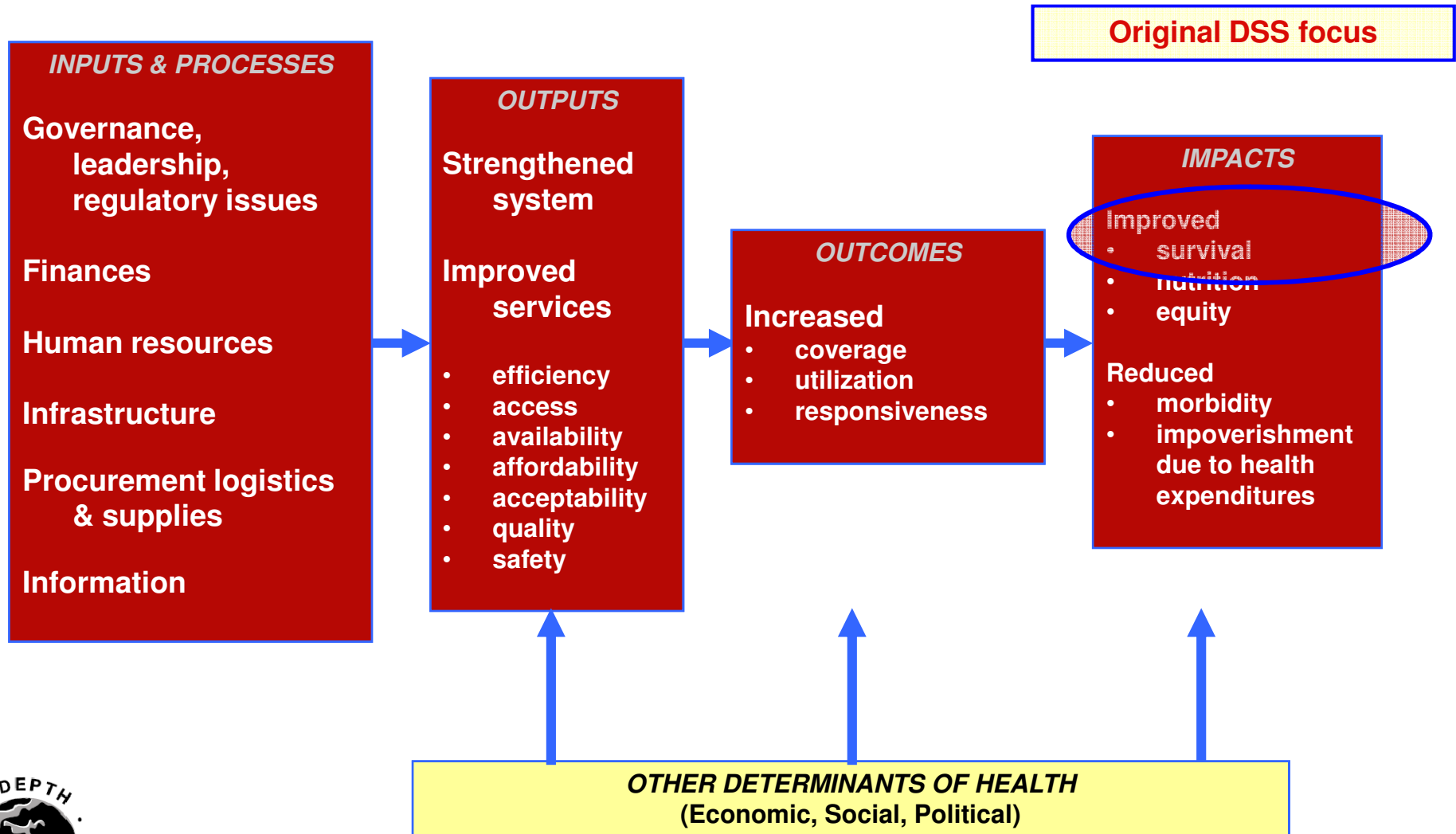
*“What happens in the spaces between the sub-systems is as important as what goes on within them; and is usually neglected”.*



Source: de Savigny and Adam (2009)

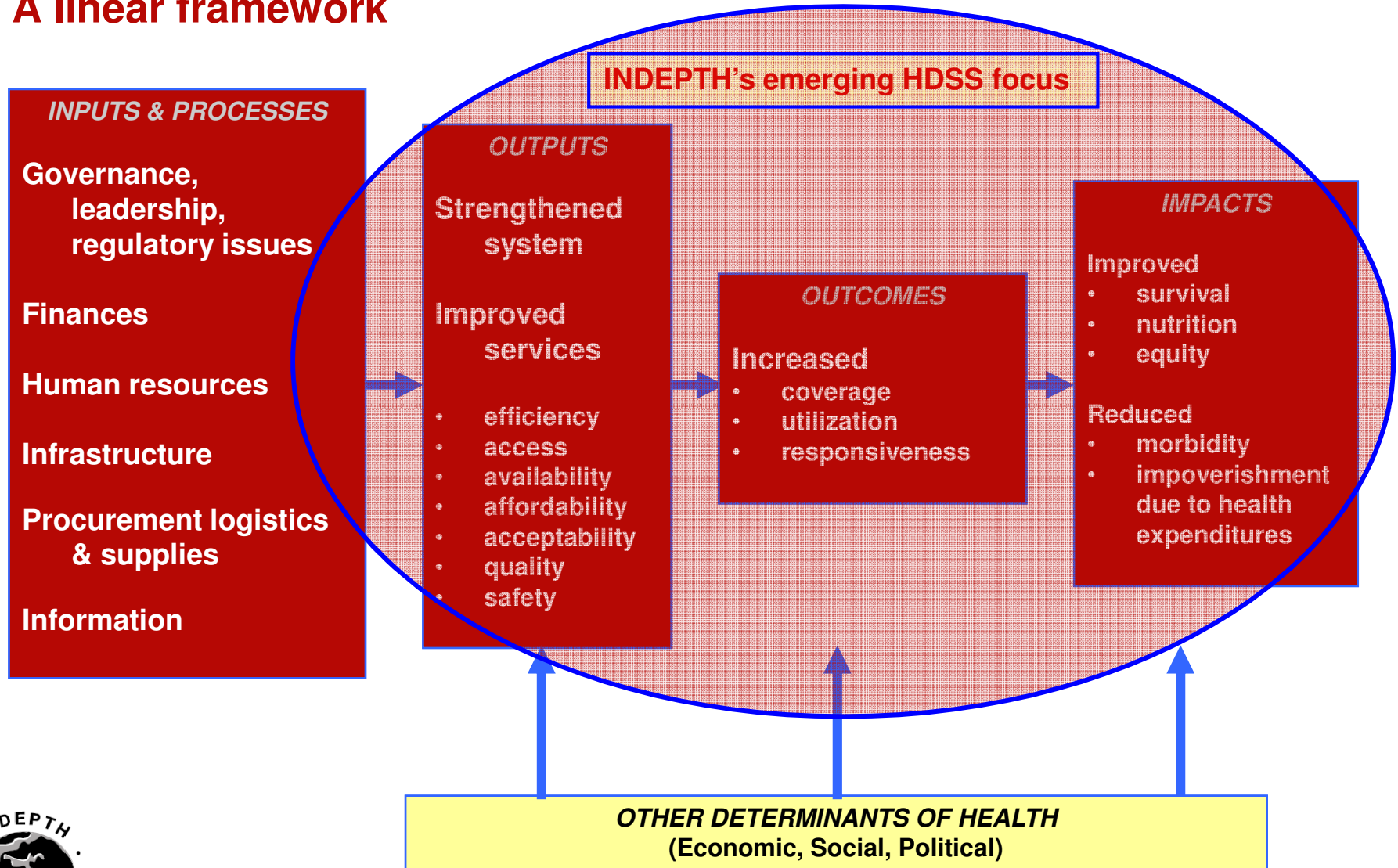
# Basic health system framework

## A linear framework



# Basic health system framework

## A linear framework



# Why health systems in INDEPTH?

Context matters....





# Health system change is now the major determinant of progress to health MDGs

- In HDSS districts in the past decade in Africa ....

→ Progress towards MDG 4 has been driven mostly by changes in:

- health spending, health services and intervention coverage (i.e. health system change)

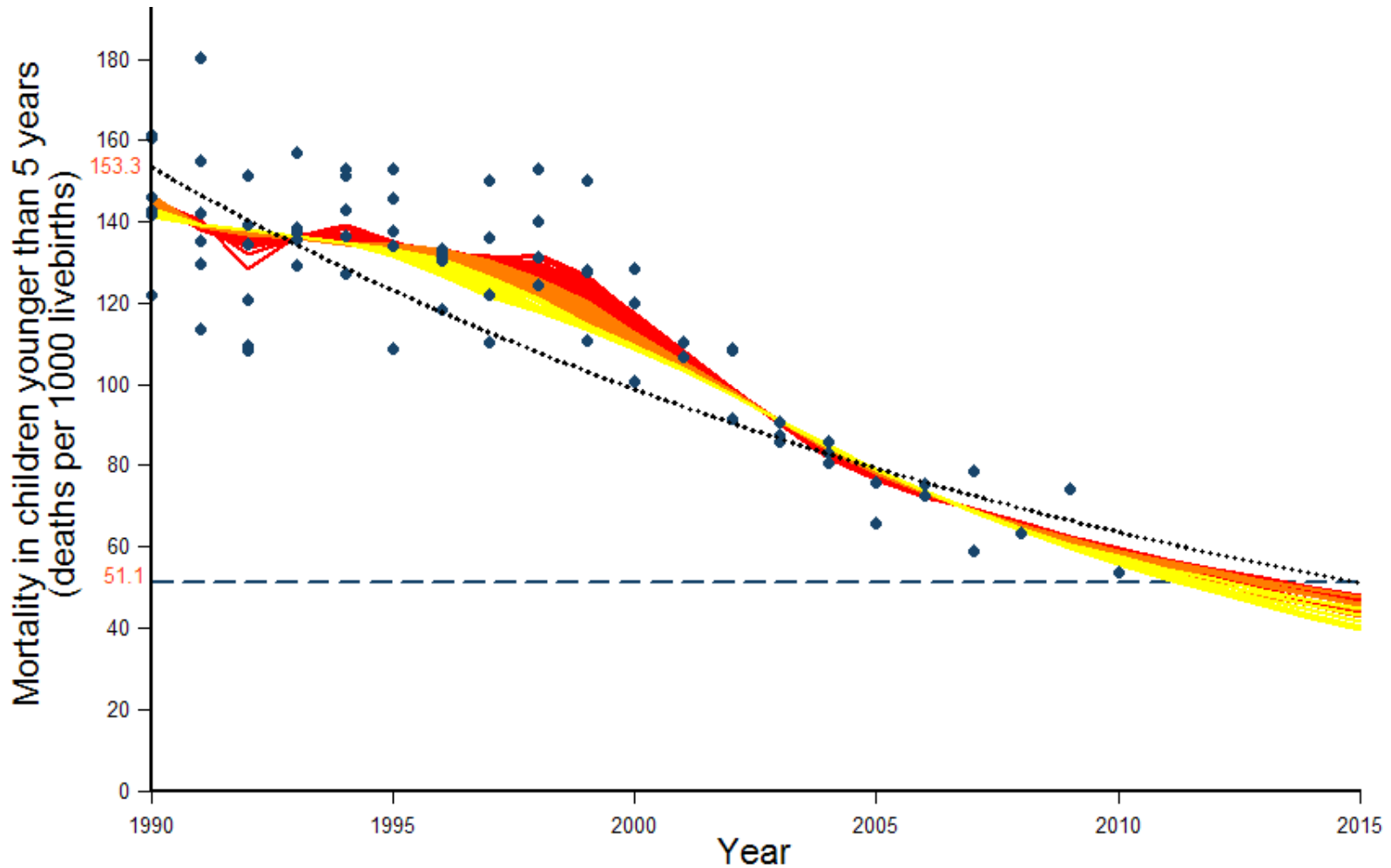
→ And not by changes in:

- National wealth
- Household wealth
- Climate
- Fertility
- Nutrition or
- Education



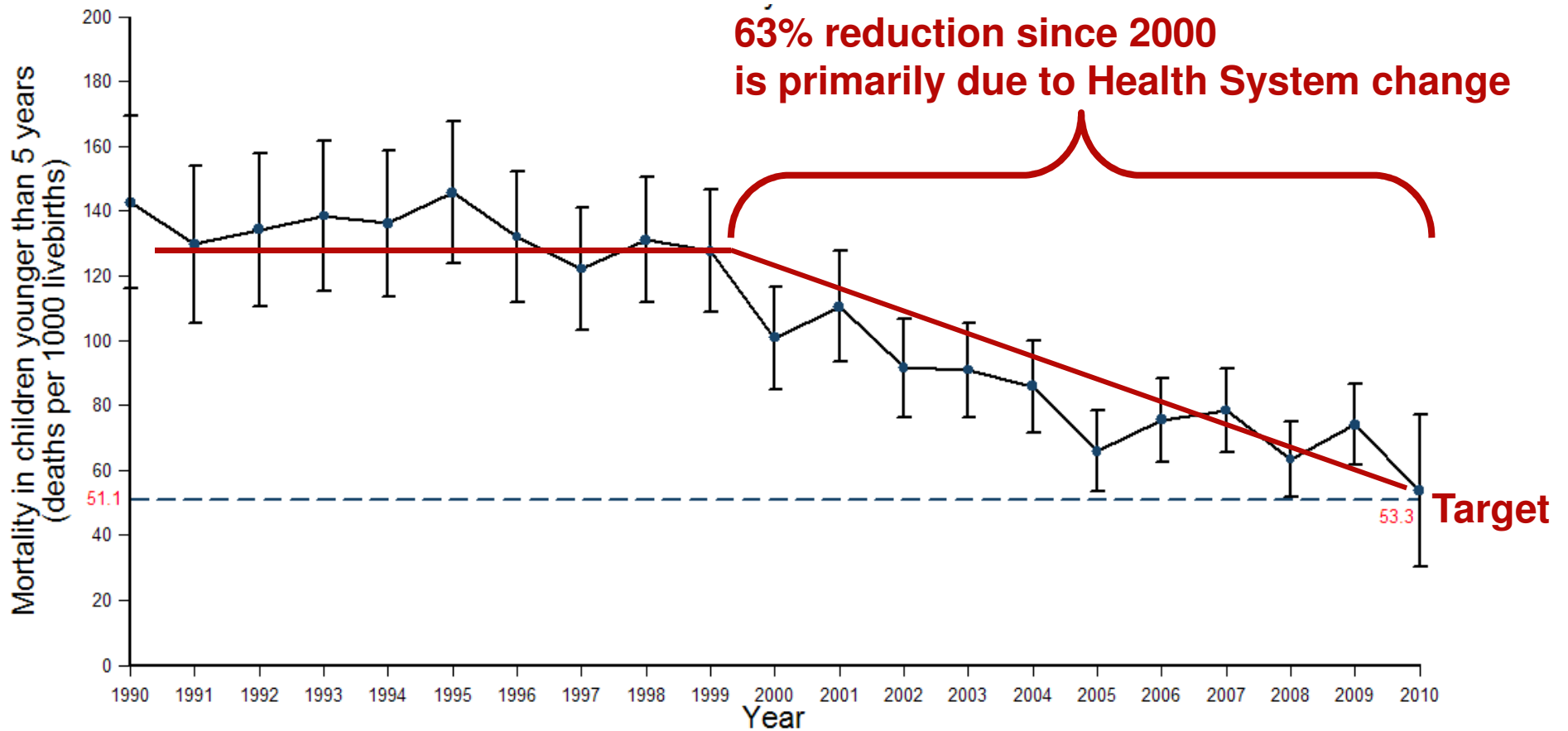
- But how well do HDSSs monitor their District Health System?

# Giving weight to all available DHS data, Tanzania is forecasted to achieve MDG 4 ahead of schedule...



Source: Data from Tanzania DHS 1992, 1996, 1999, 2004, 2010

# Tanzania's national progress to the MDG 4:



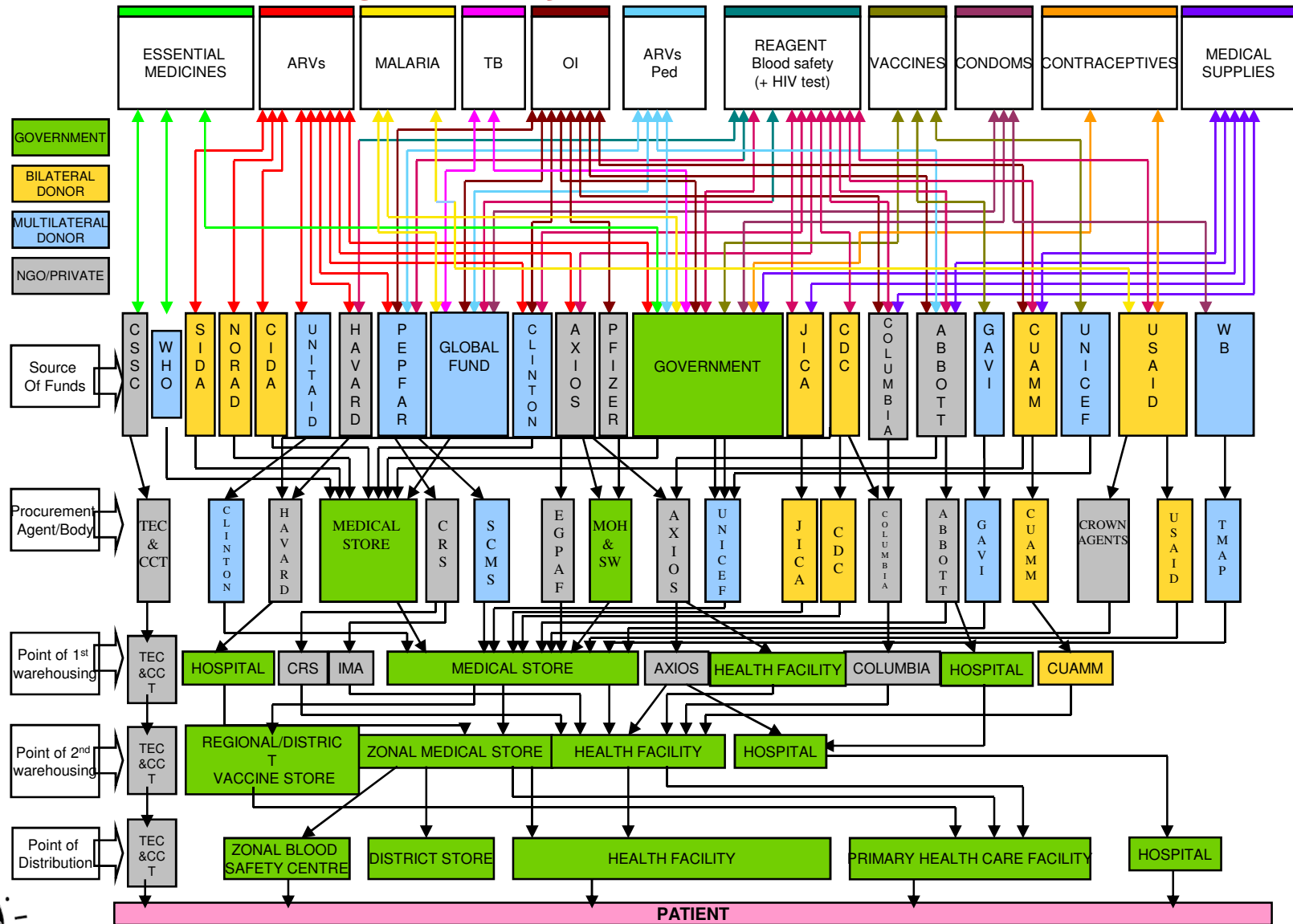
Source: Data from Tanzania DHS 2010

# Some contemporary health system realities in our HDSS Districts



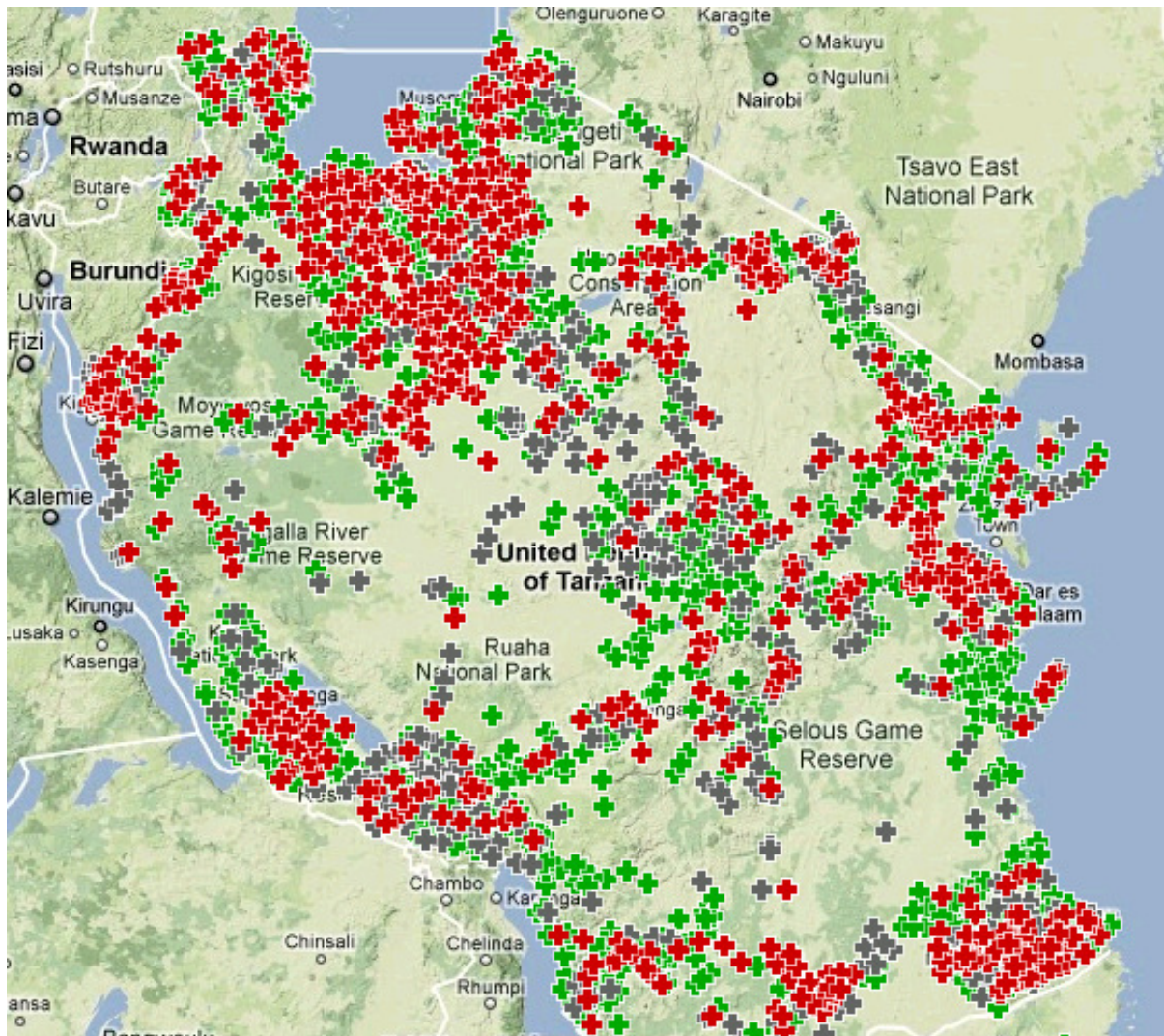
# Fragmentation !!

## Medicines & Technologies sub-system – Tanzania 2007



And all health system building blocks are increasingly fragmented !

# Consequences? Sub-system failure



## Antimalarial stock outs!

A continuing challenge of global, national and local drug procurement and supply chain systems.

Situation last week in 5,061 public health facilities in Tanzania (October 20, 2011)

Red if a stock-out this week

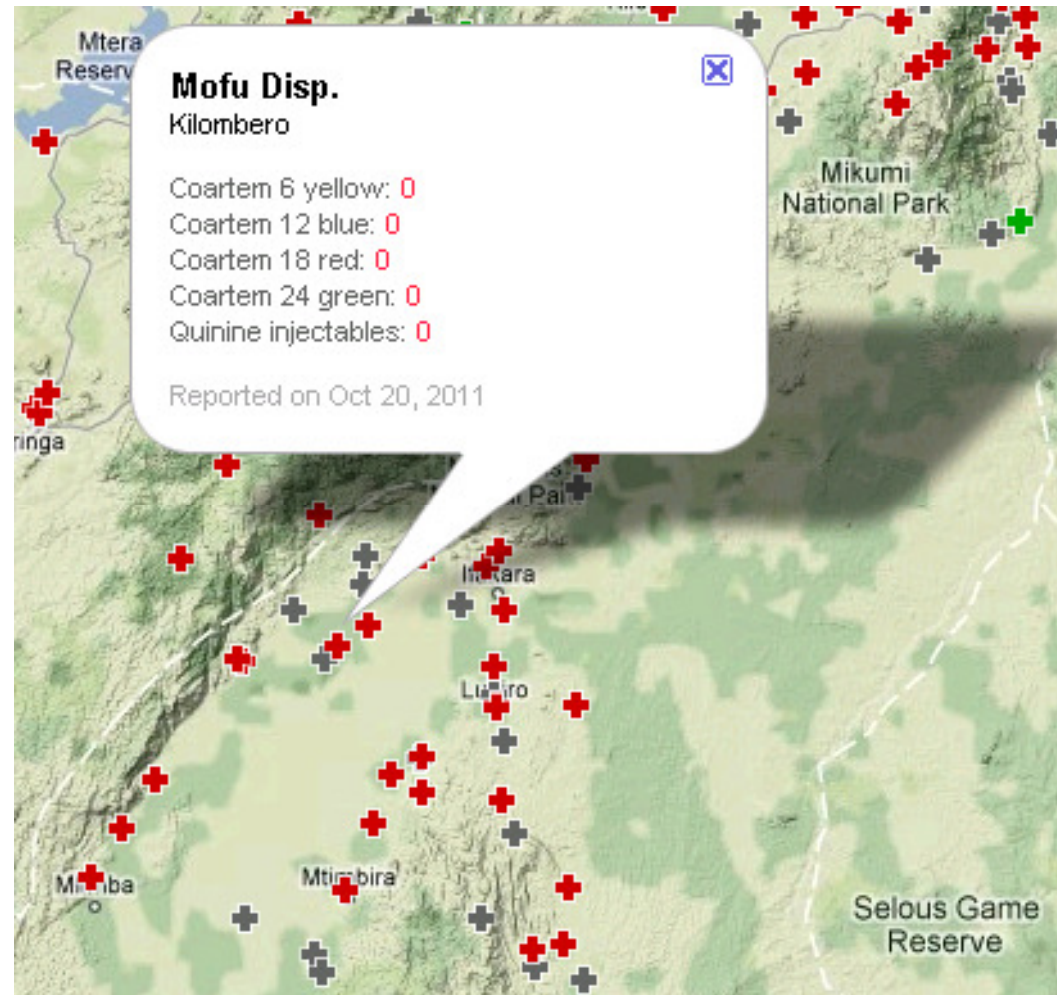
Green if in-stock this week



Source: Real-time weekly monitoring and visualization of ACT supply chains.

SMS for Life Tanzania

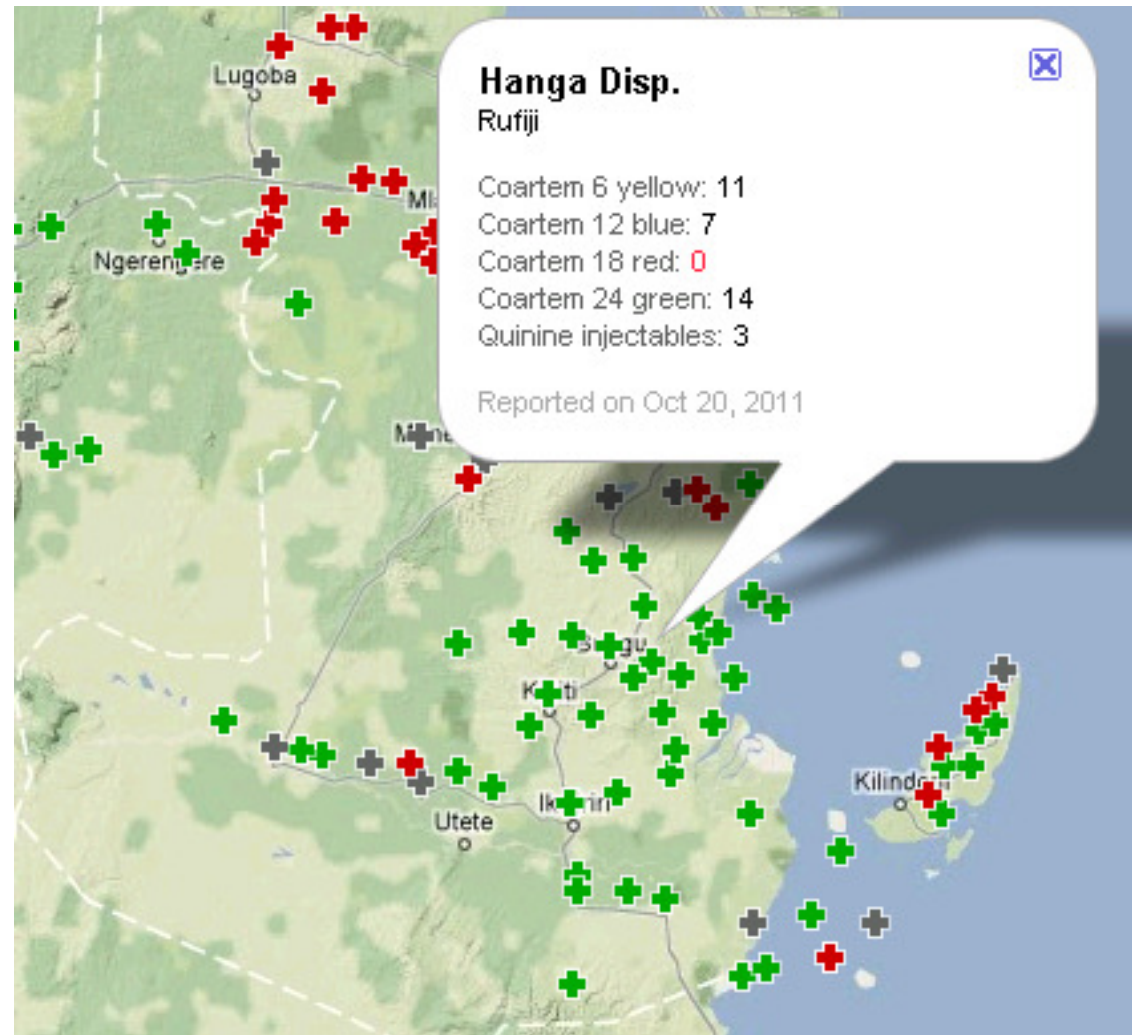
# Even in our HDSS districts - Ifakara, Tanzania



Source: Real-time weekly monitoring and visualization of ACT supply chains.

SMS for Life Tanzania

# But some HDSS districts do better - Rufiji, Tanzania

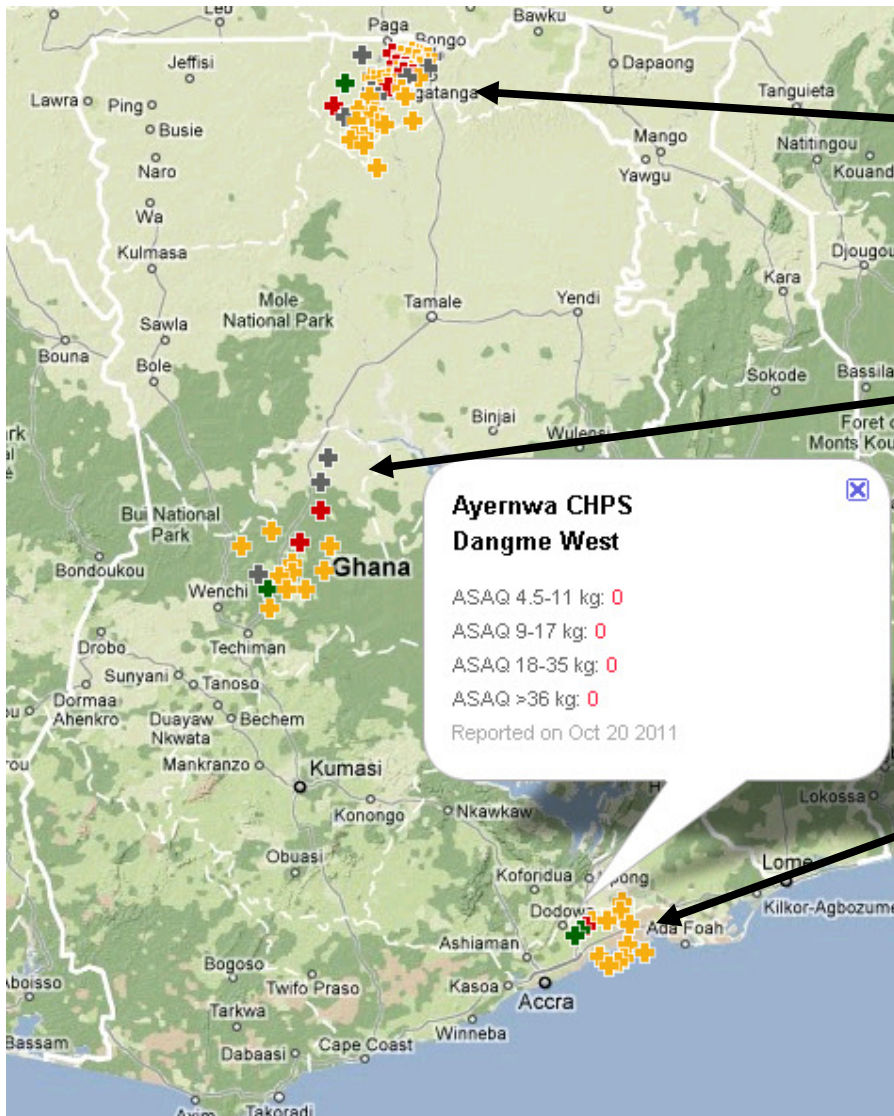


Source: Real-time weekly monitoring and visualization of ACT supply chains.

SMS for Life Tanzania



# Anti-malarial stock outs in HDSS Districts in Ghana last week...



**Navrongo**

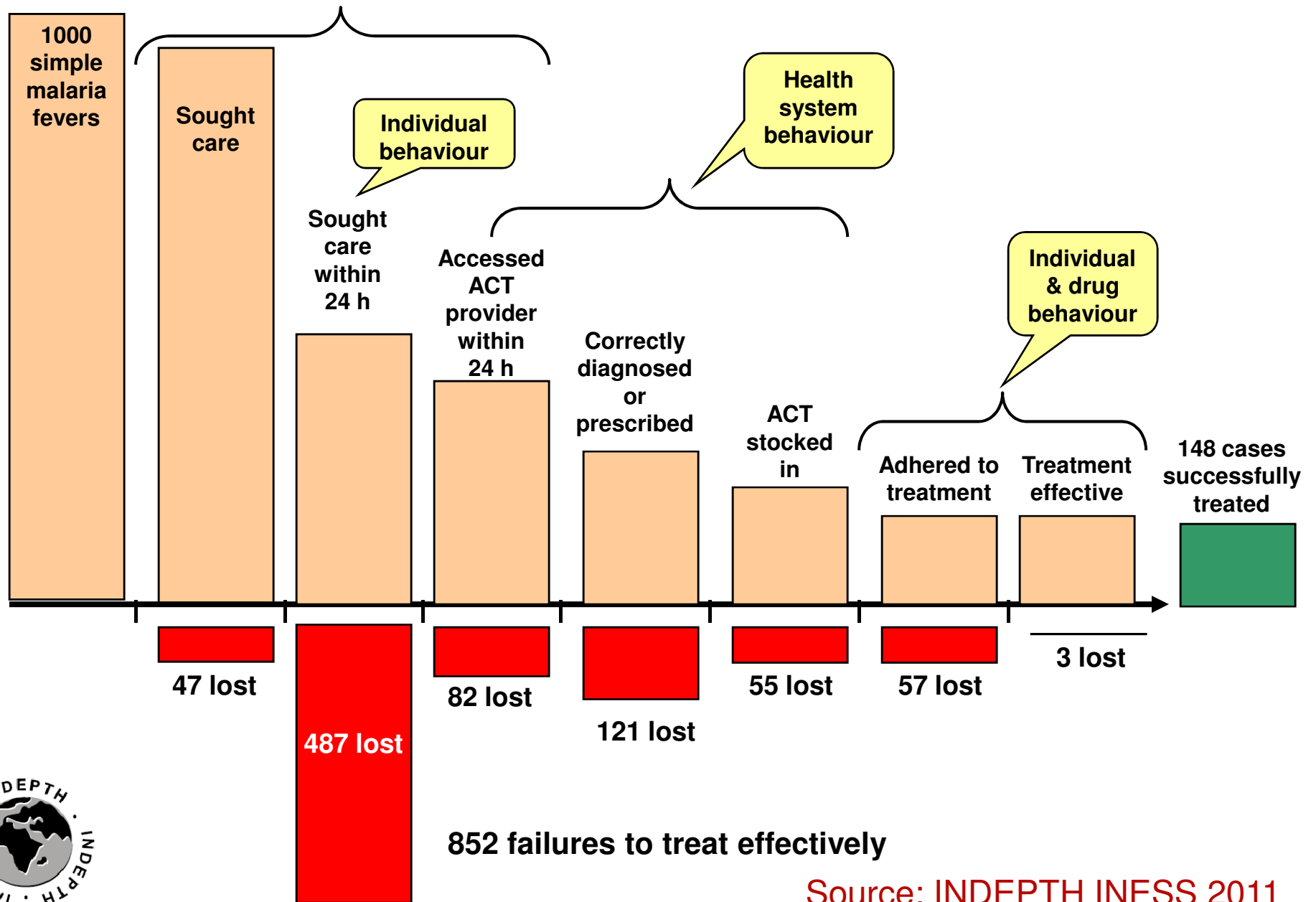
**Kintampo**

**Dodowa**

Source: Real-time weekly monitoring and visualization of ACT supply chains.

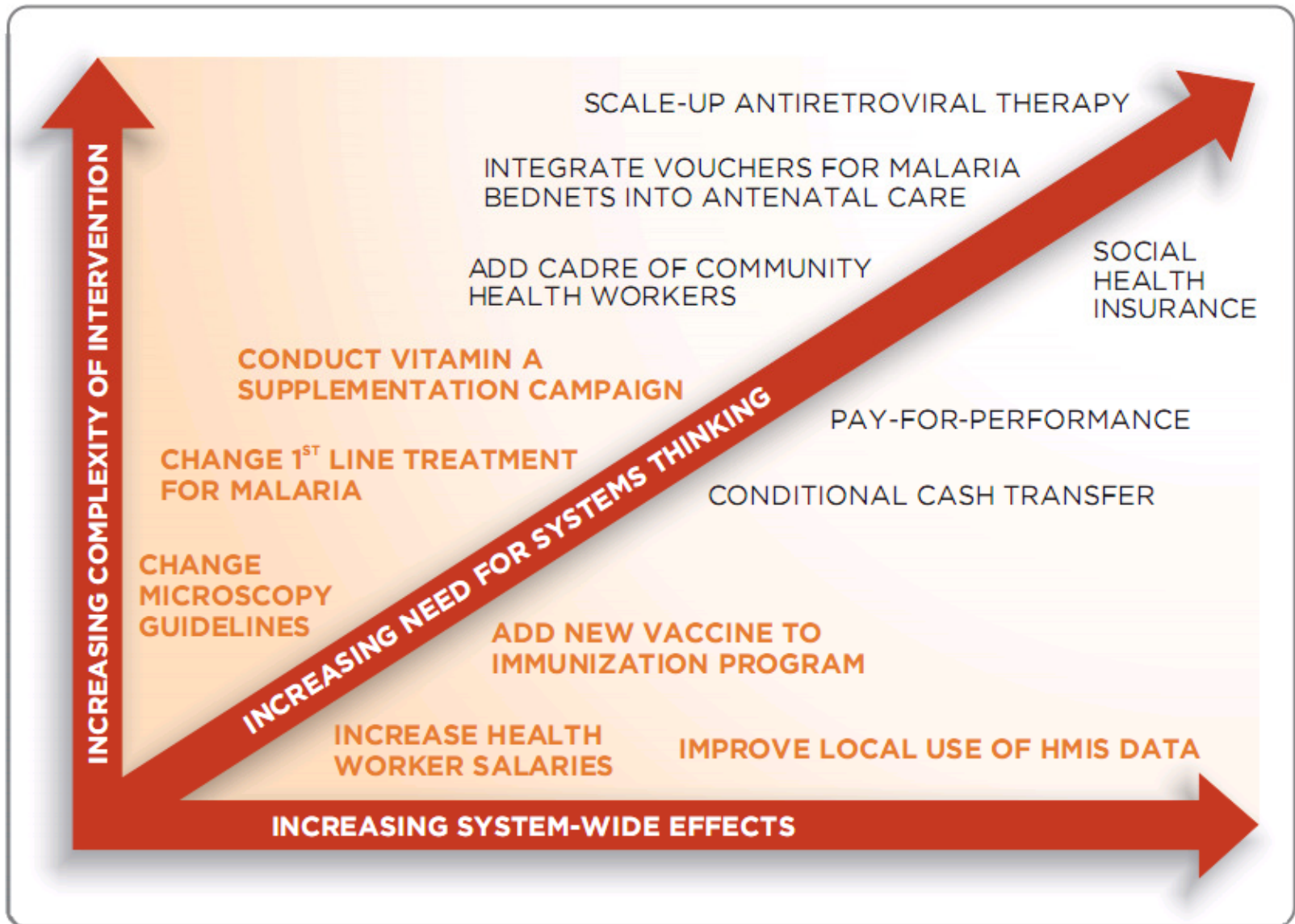
SMS for Life - Ghana Health Service

# System effectiveness of ALU in Kilombero Ulanga Tanzania



Source: INDEPTH INESS 2011

# All interventions have system-wide effects



**But some interventions are “system-level”**

**i.e. interventions aimed at ailing health systems**

**And they are already happening in our HDSS Districts**



Building block	Common types of interventions
Governance	<ul style="list-style-type: none"><li>- Decentralization</li><li>- Civil society participation</li><li>- Licensure, accreditation, registration</li></ul>
Financing	<ul style="list-style-type: none"><li>- User fees</li><li>- Conditional cash transfers (demand side)</li><li>- Pay-for-performance (supply side)</li><li>- Health insurance</li><li>- Provider financing modalities</li><li>- Sector Wide Approaches (SWAps) and basket funding</li></ul>
Human Resources	<ul style="list-style-type: none"><li>- Integrated Training</li><li>- Quality improvement, performance management</li><li>- Incentives for retention or remote area deployment</li></ul>
Information	<ul style="list-style-type: none"><li>- Shifting to electronic (versus manual) medical records</li><li>- Integrated data systems &amp; enterprise architecture for HIS design</li><li>- Coordination of national household surveys (e.g. timing of data collected)</li></ul>
Medical products, vaccines and technologies	<ul style="list-style-type: none"><li>- New approaches to pharmacovigilance</li><li>- Supply chain management</li><li>- Integrated delivery of products and interventions</li></ul>
Service delivery	<ul style="list-style-type: none"><li>- Approaches to ensure continuity of care</li><li>- Integration of services versus centrally managed programmes</li><li>- Community outreach versus fixed clinics</li></ul>
Multiple building blocks	<ul style="list-style-type: none"><li>- Health sector reforms</li><li>- District health system strengthening</li></ul>

# Some health system revolutions that will be transformative

- Point of care diagnostics (RDTs)
- mHealth (mobile technologies)
  - Improving real-time HMIS
  - Improving procurement & supply chain management
  - Improving patient adherence
  - Improving continuity of care
  - Improving surveillance as an intervention
- Systems thinking and systems science



# How can INDEPTH and HDSS sites better position themselves to account for health systems contexts?



# What are some implications for INDEPTH and HDSS sites?



# Some potential approaches

- Initial focus: **District Health Systems**
- Produce **District Health Profiles** from HDSS data
- Share INESS tools for **monitoring District Health System** context and change
- Share **experiences in data linkage** between HDSS data and Health Facility data
- Work towards **interoperability between Open HDS Open DHIS and**
- Develop and apply **District Health System Audits**; for example, for:
  - Neonatal deaths; Maternal deaths
  - Social protection and equity
  - Health care access and cost of illness studies
  - Systems effectiveness in achieving effective universal coverage for essential interventions
  - NCD effects





# Messages

RCTs for single intervention efficacy insufficient, unacceptable and unnecessary for social and health policy changes in health systems

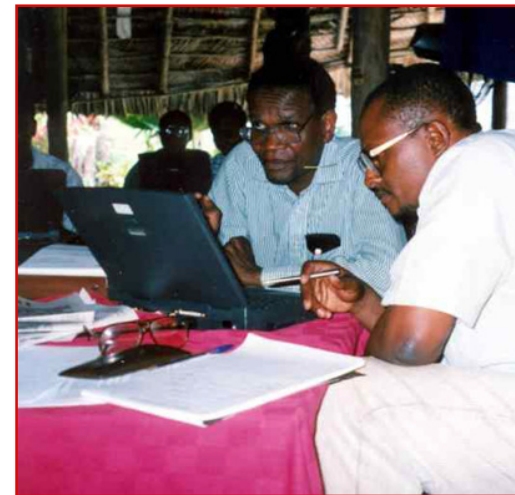
System interventions are already happening; we just need to document their effects

- Systems-level interventions and monitoring in HDSS sites will:
  - Document synergistic effects real-world implementation of proven interventions
  - Have greater relevance to systems and policy development
  - Enhance demand and sustainability for HDSS



# Future?

**Documenting health systems contexts and effects needs to become core in order to interpret population health changes in the HDSS**



- INDEPTH's next five years... Time to:

- Develop, test, learn from, and extend system-wide interventions / innovations
- Maximize knowledge and policy impact of HDSS efforts and investments
- Evolve to ***population, health and health system observatories***



# Thank you

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