



The three INDEPTH sites in

Ghana (Navrongo)
Guinea-Bissau (Bandim)
Burkina Faso (Nouna)

Reaching MDG4?



MINISTRY OF FOREIGN AFFAIRS OF DENMARK

DANIDA | INTERNATIONAL
DEVELOPMENT COOPERATION

- Bandim

- Nouna

- Navrongo



Navrongo

**Navrongo Health Research Centre
Ghana Health Service
Ministry of Health**

**Abraham Oduro
Director**



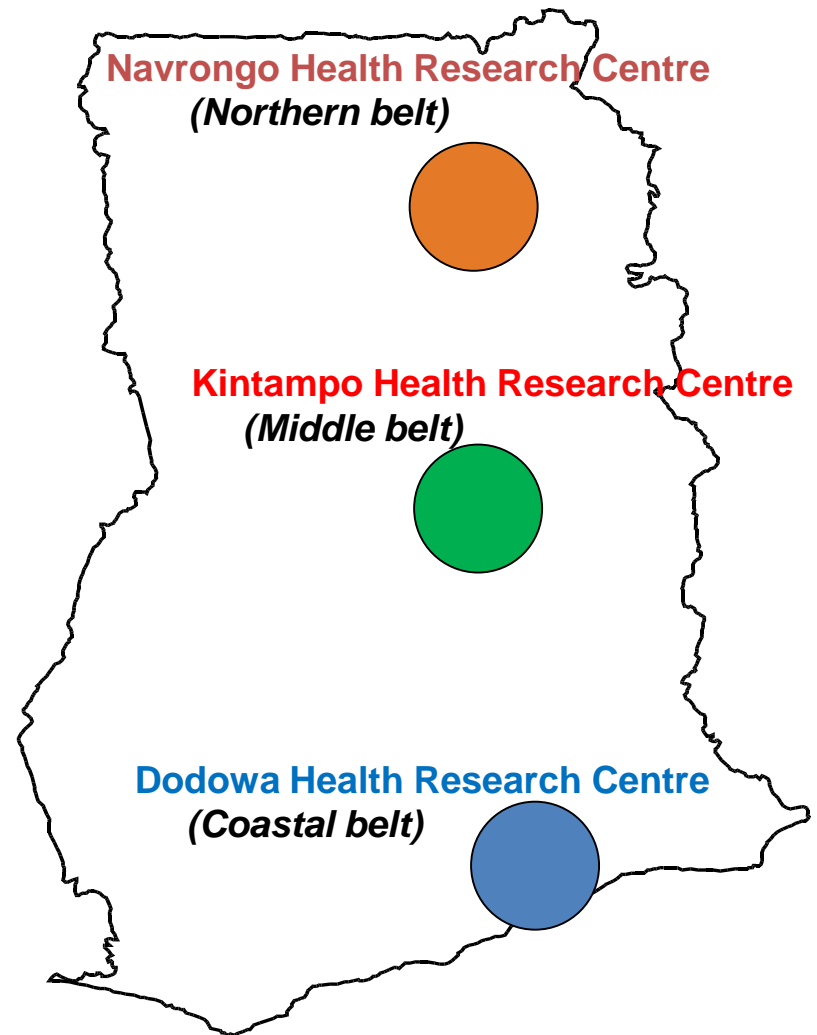
Structure and Affiliations

Ministry of Health, Ghana

Ghana Health Service

Research & Development Division

Navrongo Health Research Centre



Background

History

- Started in 1989 as Field station for the Ghana Vitamin A Supplementation Trial
- Upgraded in 1992 into Health Service Research Centre by Ministry of Health
- In 2009 became part of R & D Division of the Ghana Health Service

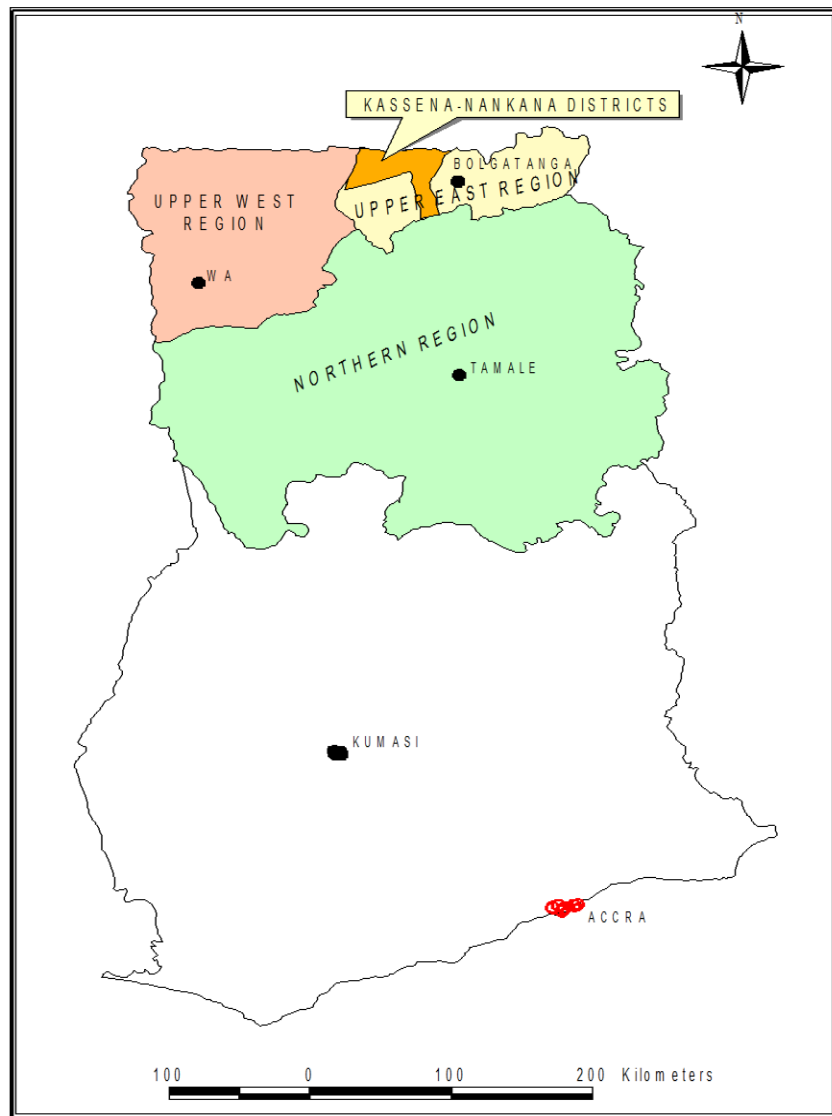
Vision statement

- To be a centre of excellence for the conduct of high quality research and training for national and international health policy development .

Mission statement

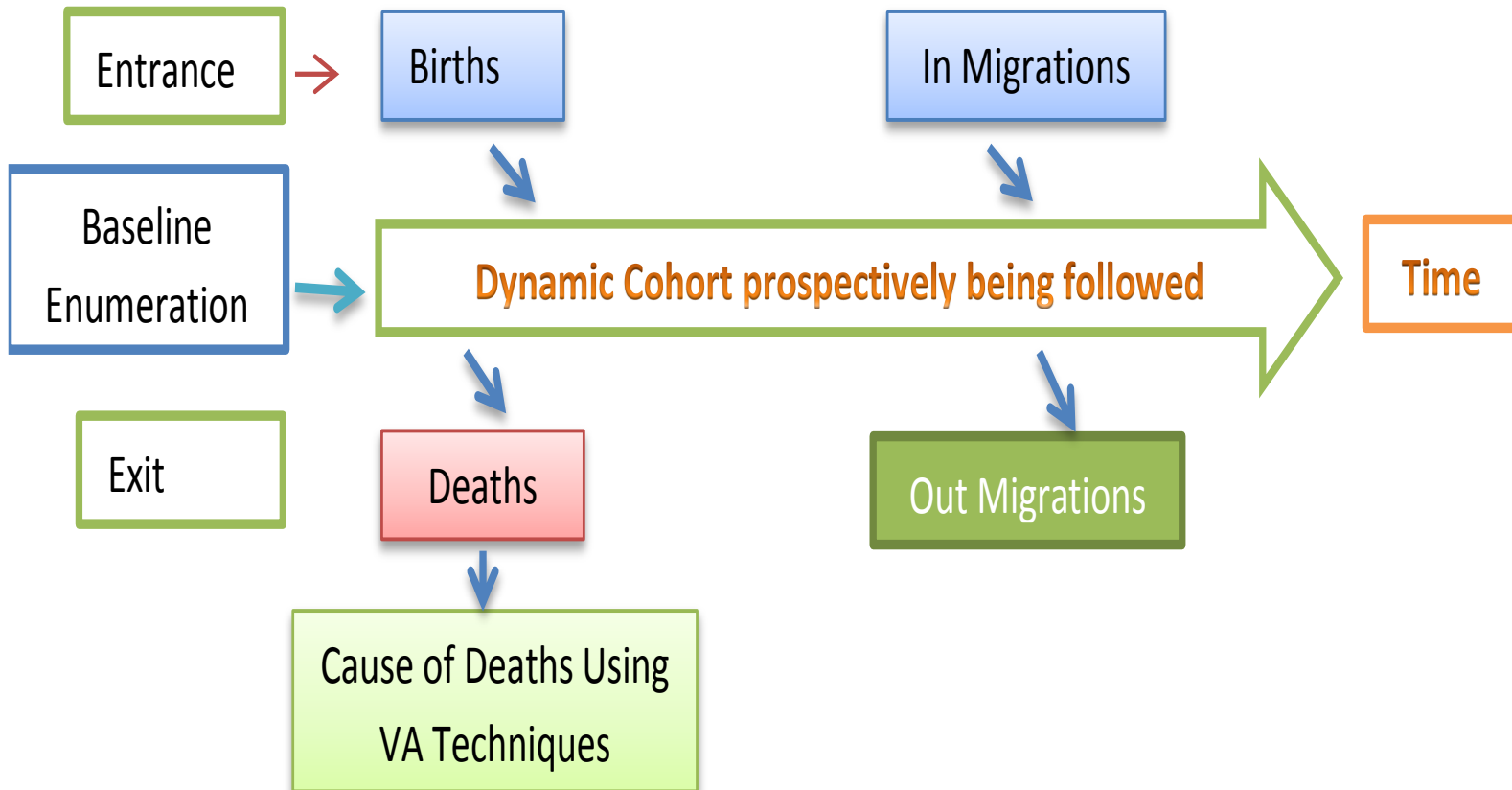
- To undertake health research in major national and international health problems with the aim of informing policy for the improvement of health.

Core Operational Areas

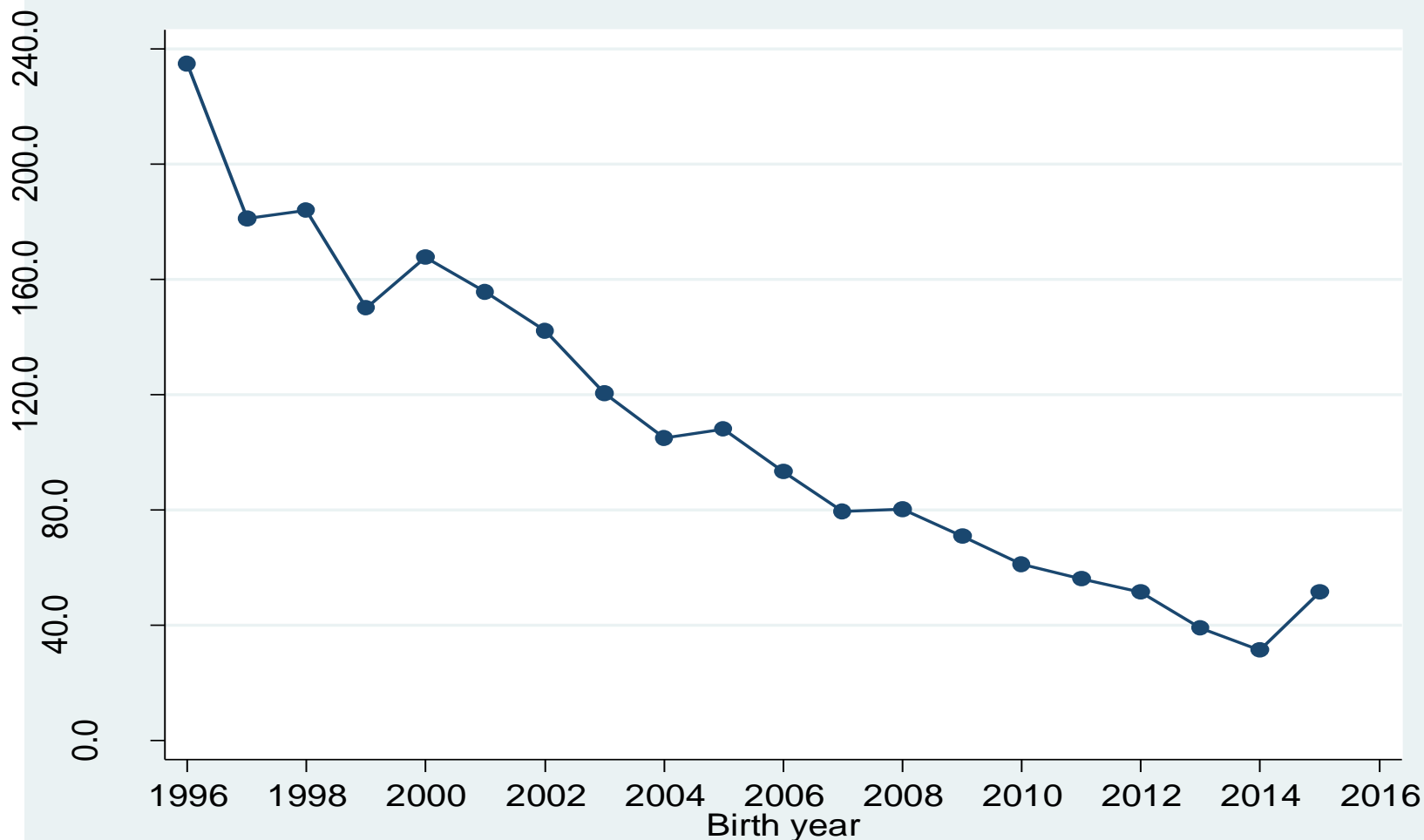


- **The 3 regions of the north of Ghana**
 - Northern, Upper East & west
 - About 40% land mass
 - About 20% of the population
- **Demographic Surveillance areas**
 - Two administrative districts:
 - Kasse-na-Nankana Municipal
 - Kasse-na-Nankana West

Introduction to HDSS



Trends in under-five mortality per 1000 live births in Navrongo HDSS: 1996-2015



**Navrongo HDSS: MDG-4 reached:
78% reduction from 1996-2015: 235/1000 to 51.6/1000**

Interventions in Navrongo

- Vitamin A trial: 1989-1991
- Bednet Trial: 1993-1995
- CHFP (CHPS): 1994-2004
- OPV and Measles Campaigns: 1996-2015

Bandim

Bandim Health Project
National Institut of Public Health, Guinea
Bissau

Amabelia Rodrigues

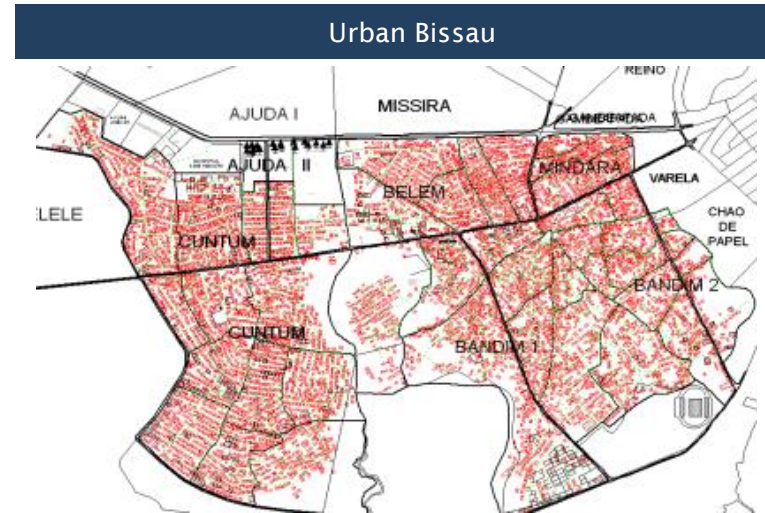


BANDIM

Bandim Health Project

Urban: Since 1978

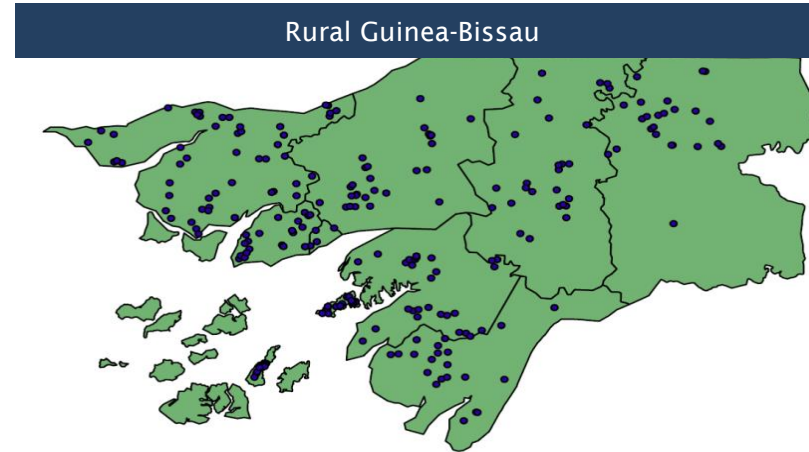
- All individuals in 6 suburbs in the capital Bissau
- Population: ~100,000
- Birth cohort: 2800
- Census: Every 2-4 years
- Pregnancy registration: Monthly
- Children 0-3 years: 3-monthly visits



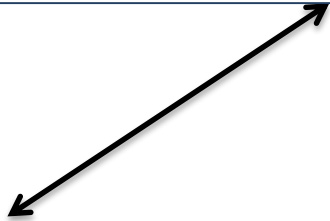
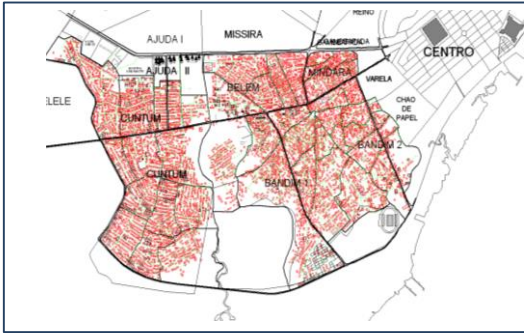
Bandim Health Project

Rural: Since 1990

- Women of fertile age and children 0-4 years in 182 randomly selected village clusters
- Population: ~100,000
- Birth cohort: 3900
- Pregnancy registration: every 6 months
- Children 0-4 years: every 6 months



HDSS ID



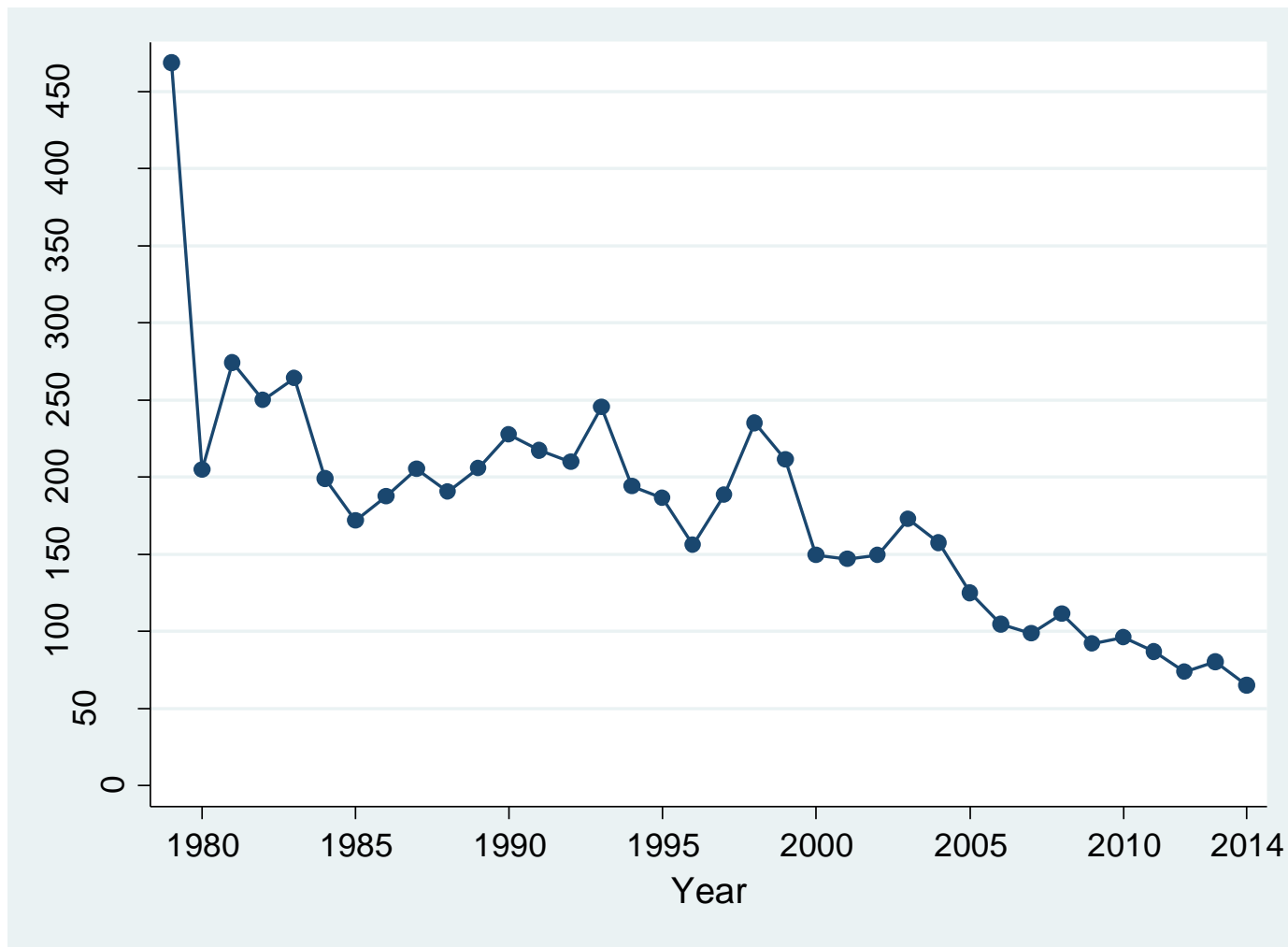
National Hospital Simao Mendes:
Births at maternity ward, consultations and admissions at pediatric ward. HIV diagnostics and treatment

Urban Study Area Health Centers:
Births, child vaccinations and consultations. HIV and TB diagnostics and treatment

Rural Area Health Centers/Hospitals:
Admission and consultations for children enrolled in specific studies

Under 5 mortality 1978-2014

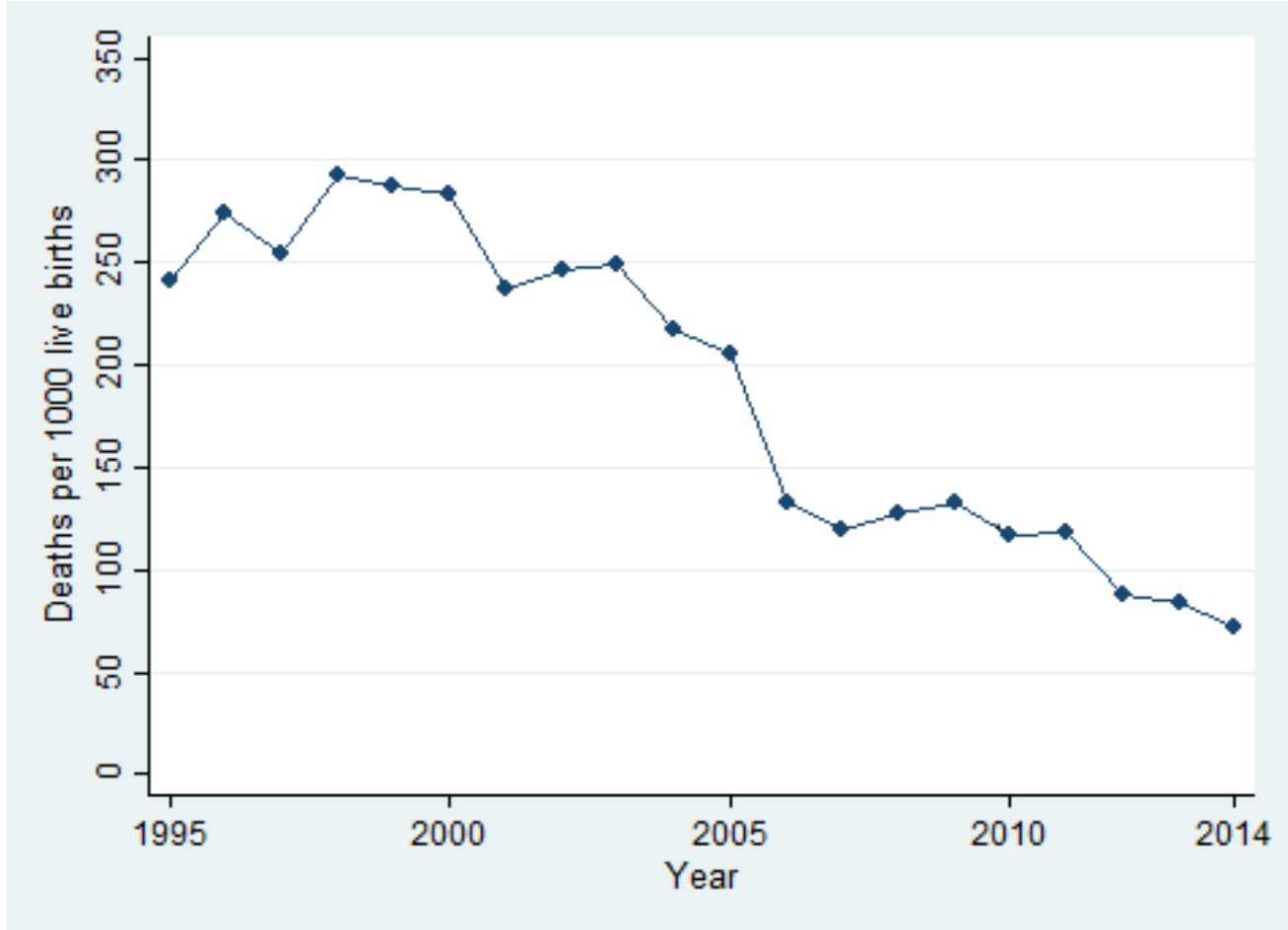
Bandim Health Project - Urban



Urban area: MDG-4 reached:

71% reduction from 1990-2014: 227/1000 to 65/1000

Under 5 mortality 1995-2014 Bandim Health Project - Rural



Rural area: MDG-4 reached:

68% reduction from 1995-2014: 241/1000 to 76/1000

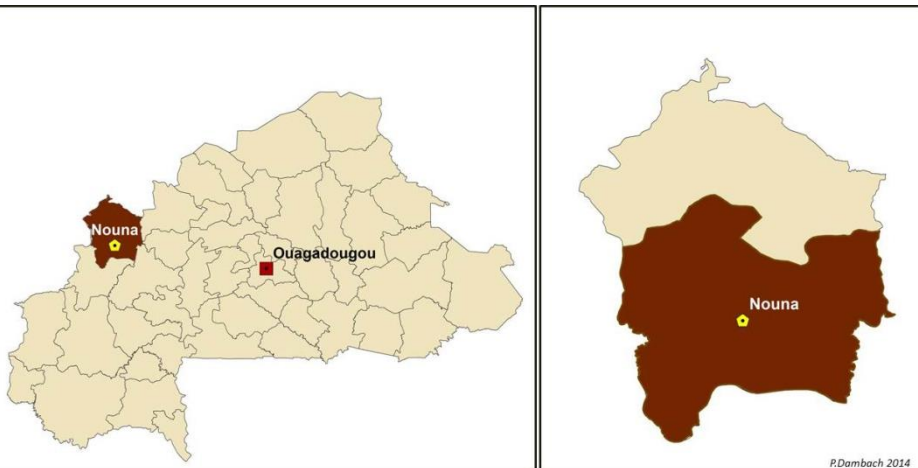
Nouna

**Nouna Health Research Centre
Ministry of Health, Burkina Faso**

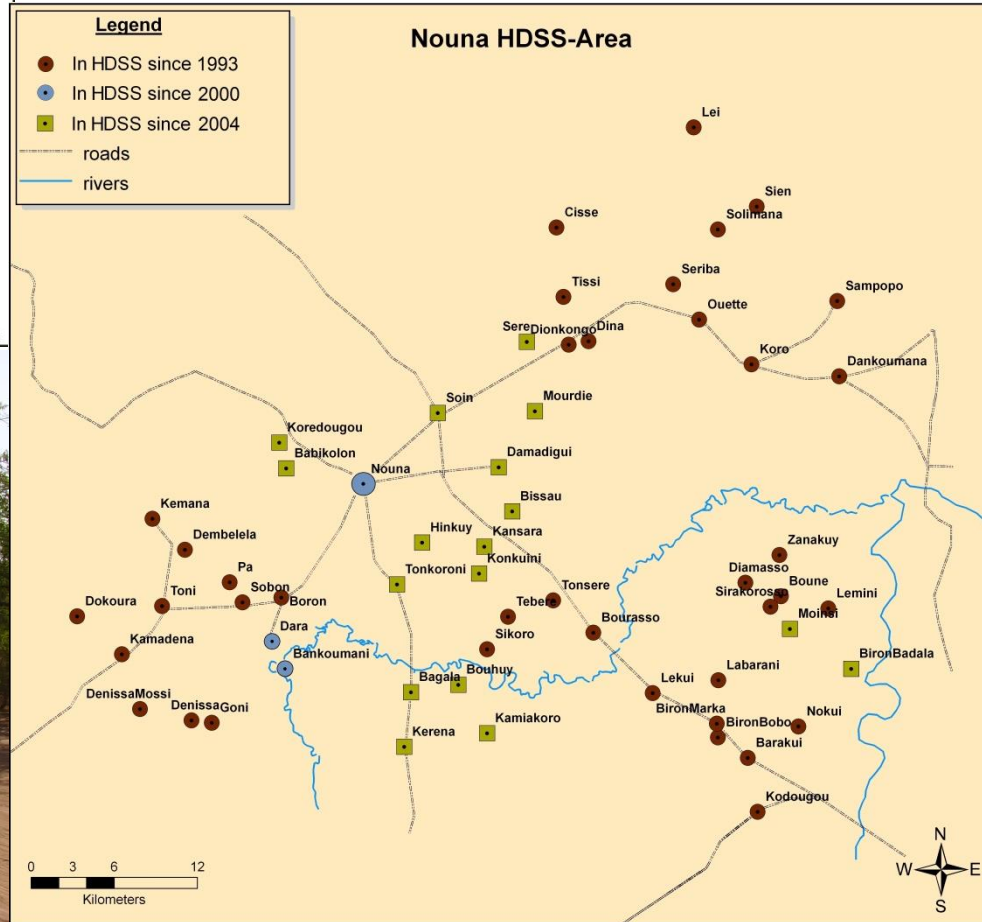
Ali SIÉ
Director



Nouna Health and Demographic Surveillance System (HDSS)



P.Dambach 2014



Missions & priority research areas

- **Missions**

- Provide evidence for better policies/health care interventions
- Create formal training capabilities on site
- Reinforce research capacity within the country

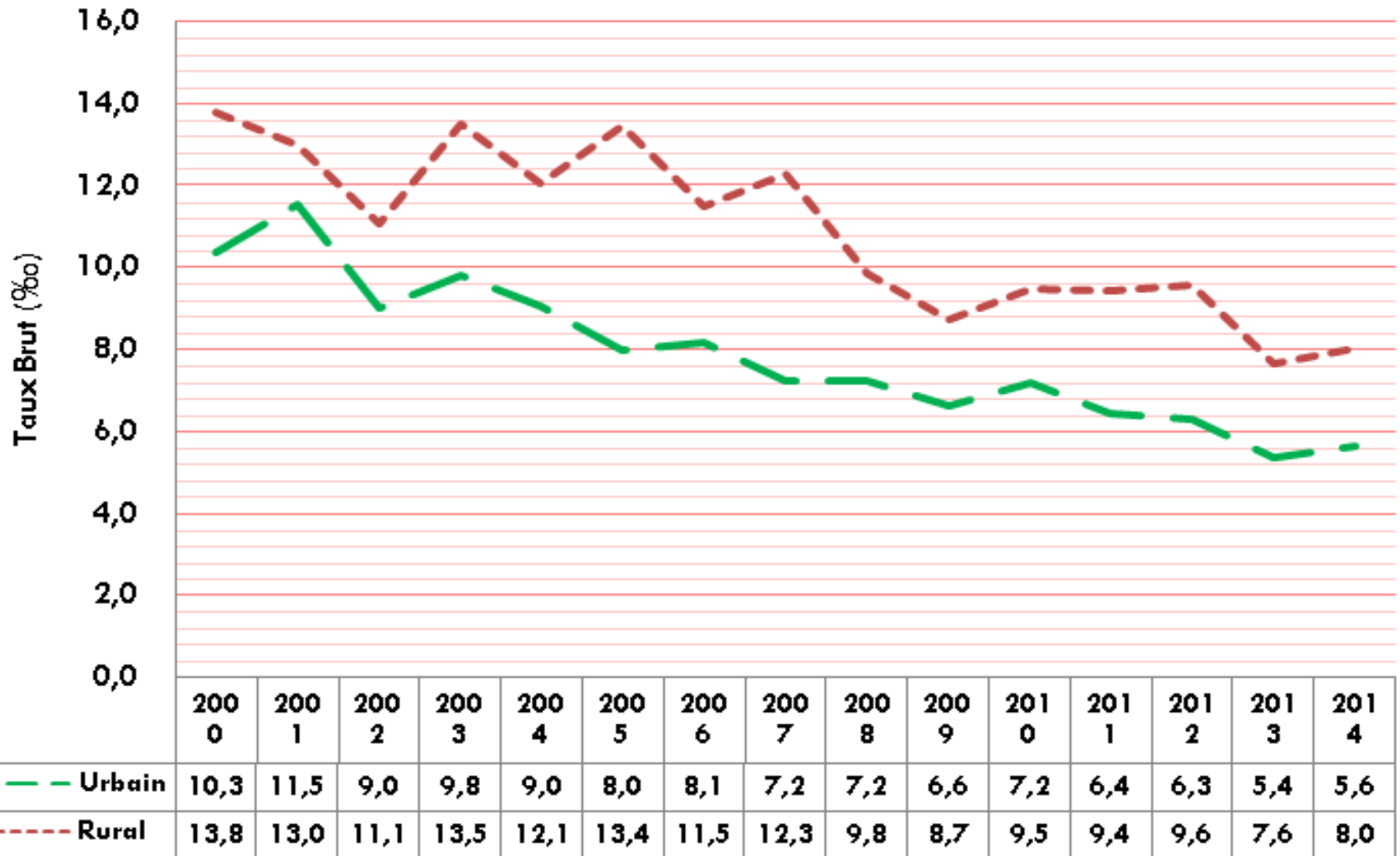
- **Priority Research Areas**

- Health System Research (treatment seeking behaviour, quality of care, health financing, reproductive health, health and equity, adult health, migration, assessment of poverty reduction strategies)
- Biomedical Research (parasitology, entomology, biochemistry in malaria and virology in HIV/AIDS, bacteriology in meningitis)
- Clinical Research (drug & vaccine trials, clinical epidemiology of infectious diseases,...)
- Environmental issues and health

Nouna HDSS

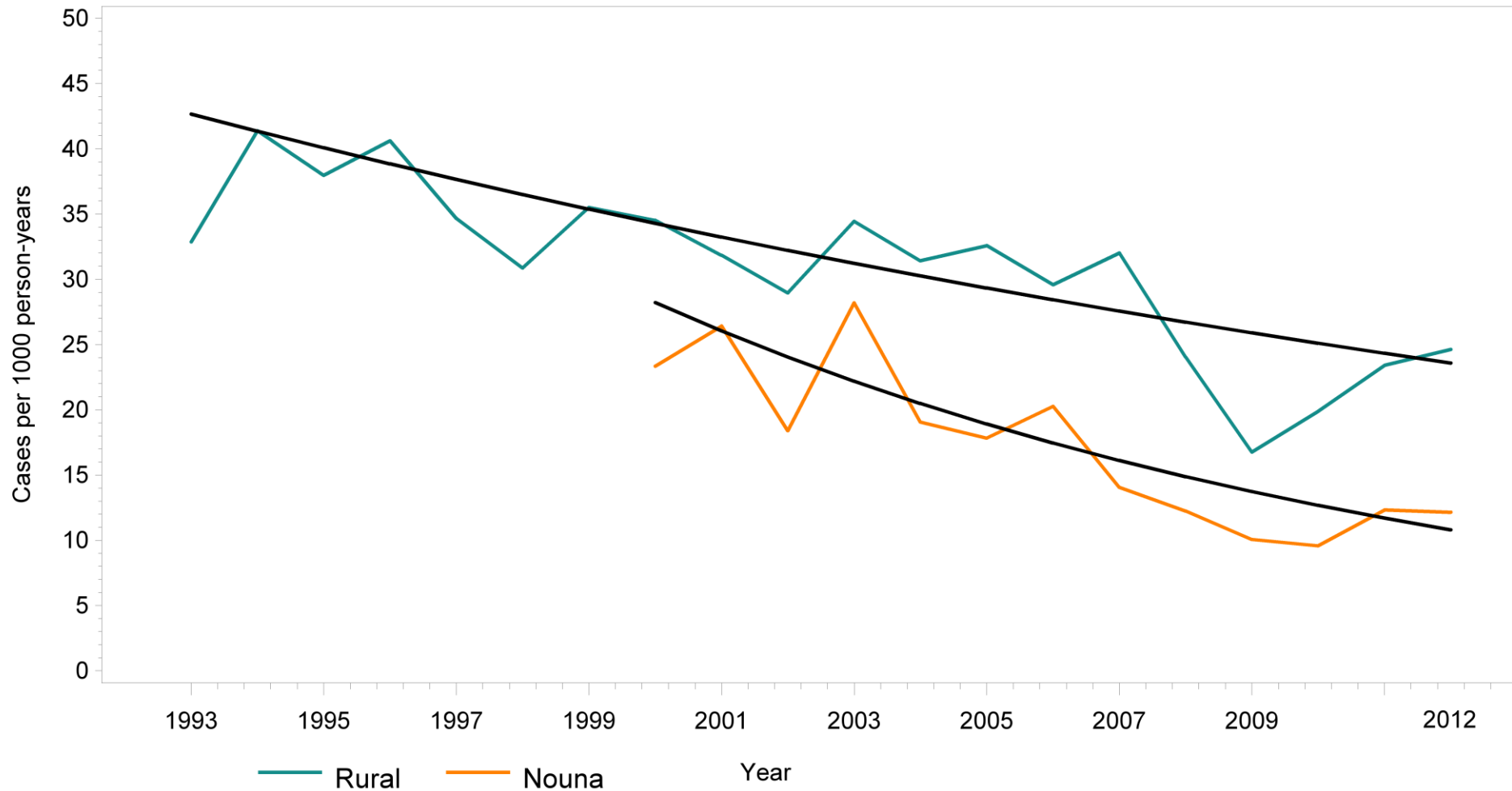
- 58 villages and the town of Nouna
 - 1992: HDSS started with 39 villages
 - 2000: Nouna and 2 further villages added
 - 2004: further 17 villages added
- Total population (2014) ~ 103,575
- Censuses in 1993, 2000, and 2009
- All households visited 3 times per year to register births, deaths, migration,...
- Area served by 1 district hospital and 17 peripheral health centers (2016)

CDR Nouna HDSS



Overall = 44.6% reduction (Urban 45.6% vs Rural 42%)

Under 5 mortality rate Nouna HDSS



Extrapolated to 1990 - 2015:

Estimated reduction in child mortality: 54%

Health Interventions

- Doubling the number of HF 2004-2015
- ITN interventional study (2004) follow by national scale up in 2010-2013-2016
- EPI program
 - Introduction of Hep-Hib 2006
 - November 2013: Pneumo & Rota
 - October 2014: 2nd Measles dose at 15 months:
 - Several OPV, Measles campaign (RR Nov 2014,..)
- MenAfriVac in December 2010
- IMCI

Conclusion

- In all the 3 HDSS sites mortality has drastically declined over the past 15 years.
 - Navrongo and Bandim reach MDG 4
 - Nouna nearly but not
- Continuous data collection ongoing on
 - mortality
 - morbidity
 - health interventions
- Serve as important platforms to assess the effect of interventions