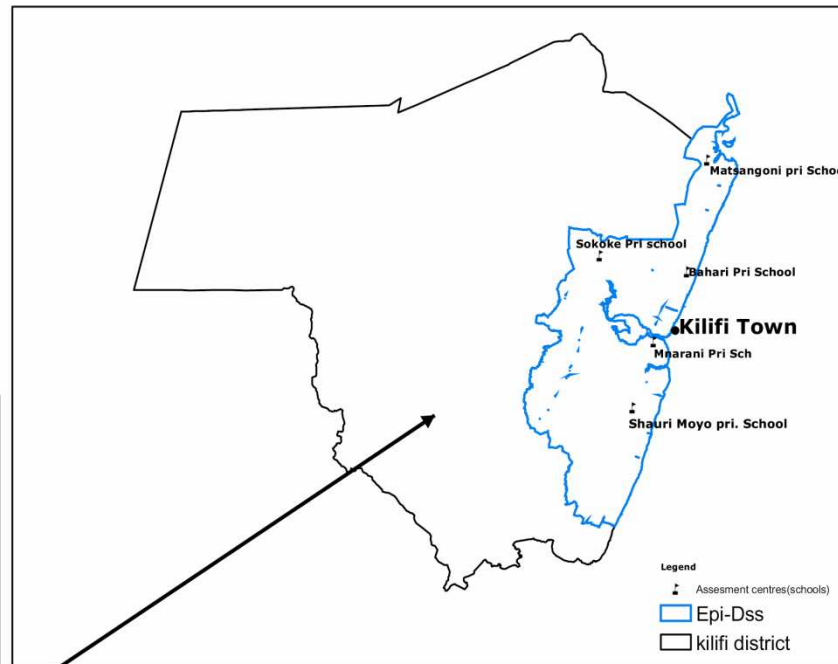
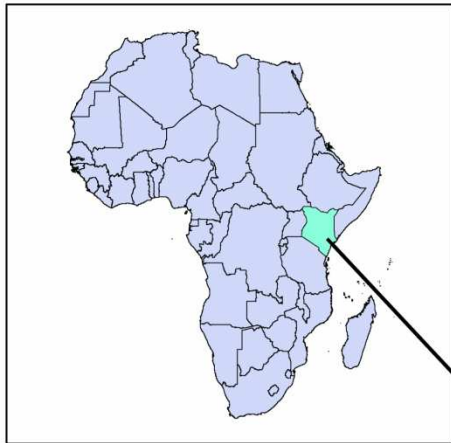


# KEMRI Wellcome Programme Kenya



**wellcome**trust





Source: Kilifi Epi-Dss  
GIS & Cartography by Census Department

# KEMRI Wellcome programme

KEMRI: Parastatal established in 1979 by the Kenya Government and mandated to carry out health research in Kenya

Oxford University: A major teaching and research university providing academic and logistic support

Wellcome Trust : an international charity funding health research

## Evolution of Programme

1987 discussions on collaborative projects KEMRI - Oxford, with Wellcome funding

1989 Projects begin

1995 Kilifi made KEMRI Centre

1998 Kilifi and Nairobi WTRL form a single Unit

2005 Full integration of MOP within KEMRI

# **KEMRI Centre for Geographic Medicine research Coast 1989-2009**



**1989**

Wellcome Trust-KEMRI collaborative project

3 Kenyan scientific staff

4 expatriate scientific staff







# KEMRI Centre for Geographic Medicine Research Coast 1989-2009



KEMRI Centre (Wellcome Trust 70% funding). Over 600 staff.

90 Kenyan scientific staff

18 expatriate scientific staff

80 International collaborations



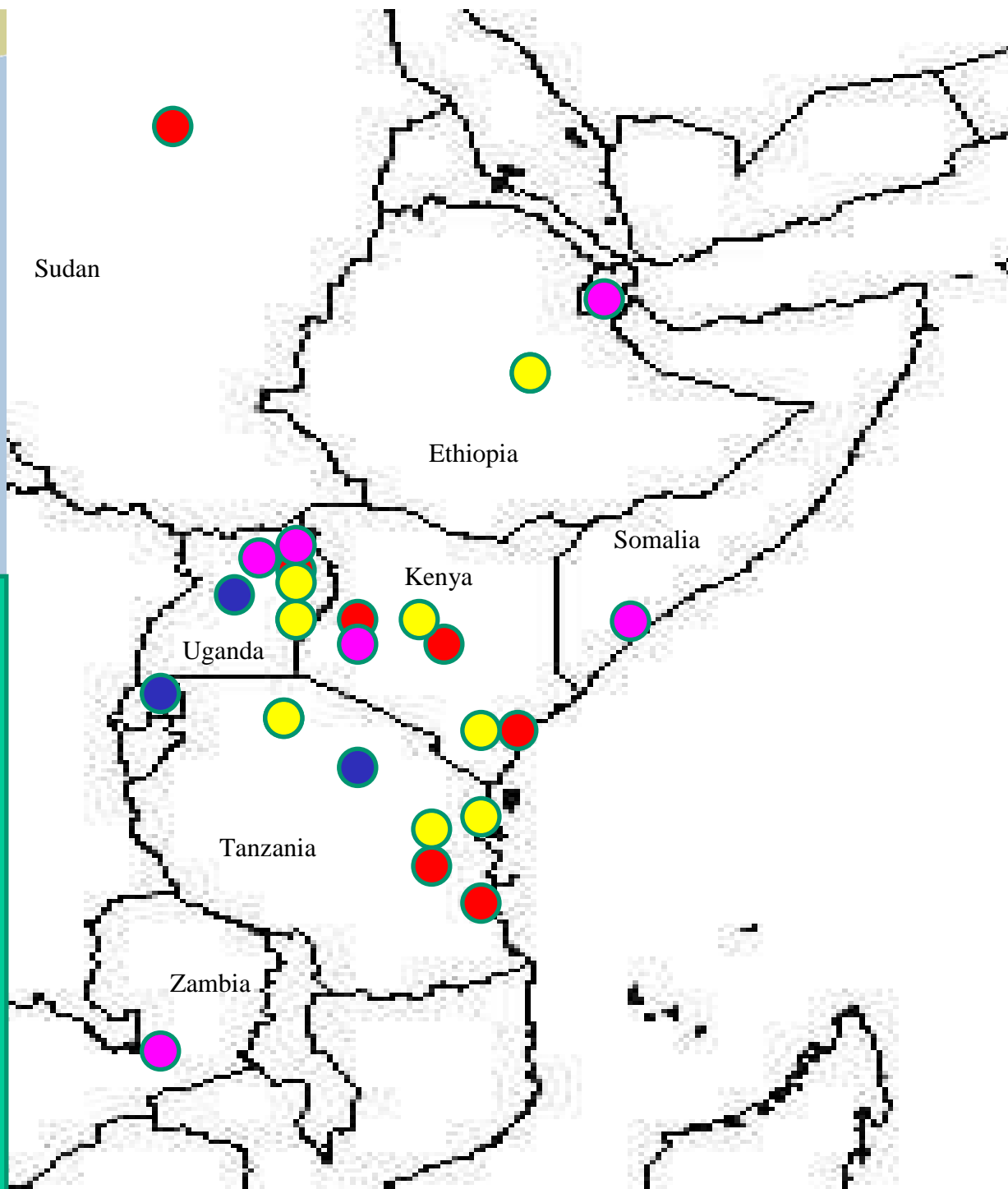
## KEMRI Wellcome Links

 SEARCH

 Clin Trials Net

 Other collaborations

 Other links

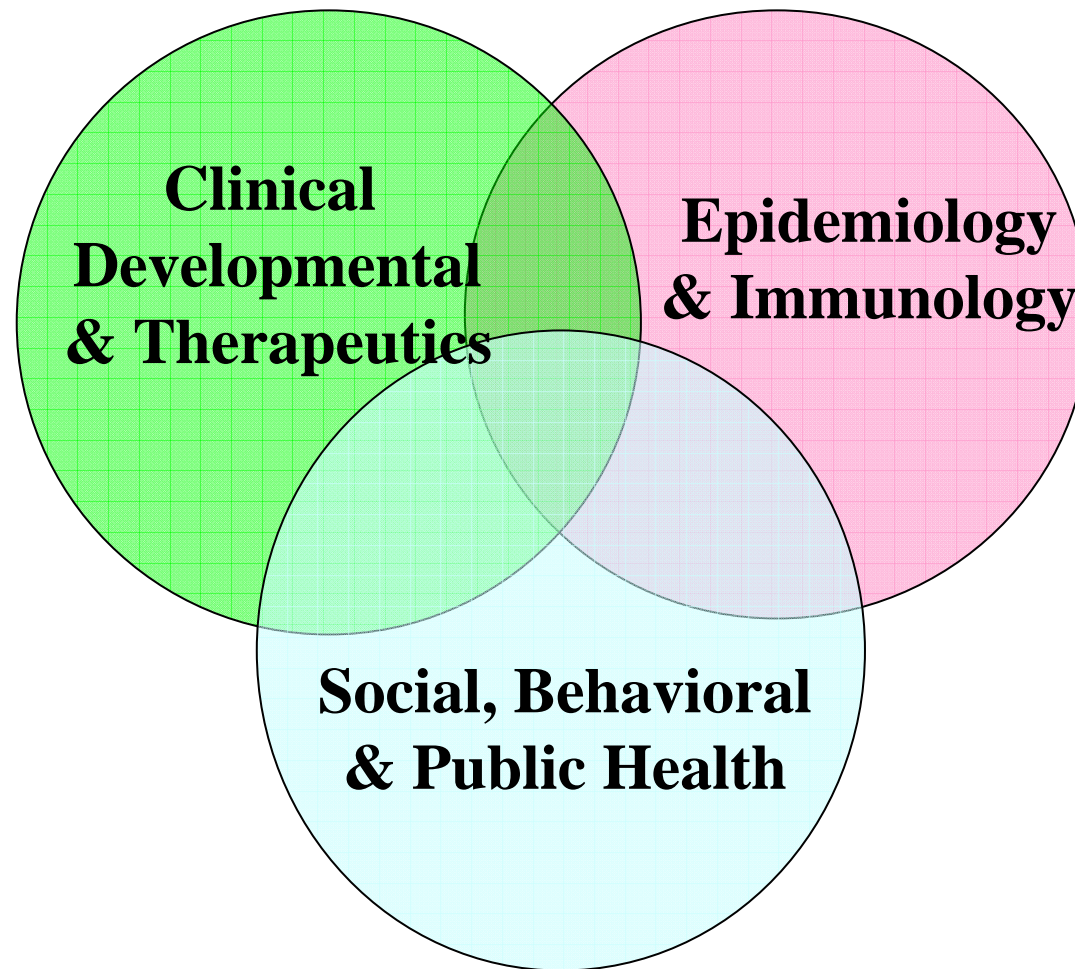




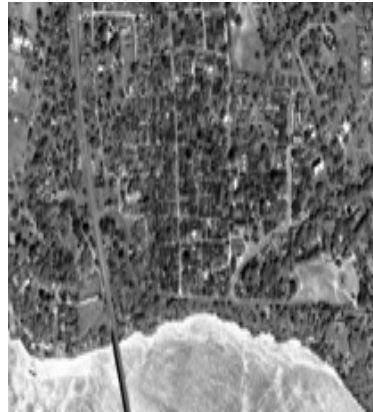
## Principles of Programme

- Research to highest international scientific and ethical standards on major causes of morbidity and mortality in Africa.
- To build strong and sustainable internationally competitive, national and regional research capacity.
- Integration and cross fertilization of scientific disciplines.
- Intervention research and basic research in parallel.
- Direct input to local and international health policy.

# Major Research Themes



# Research Infrastructures1



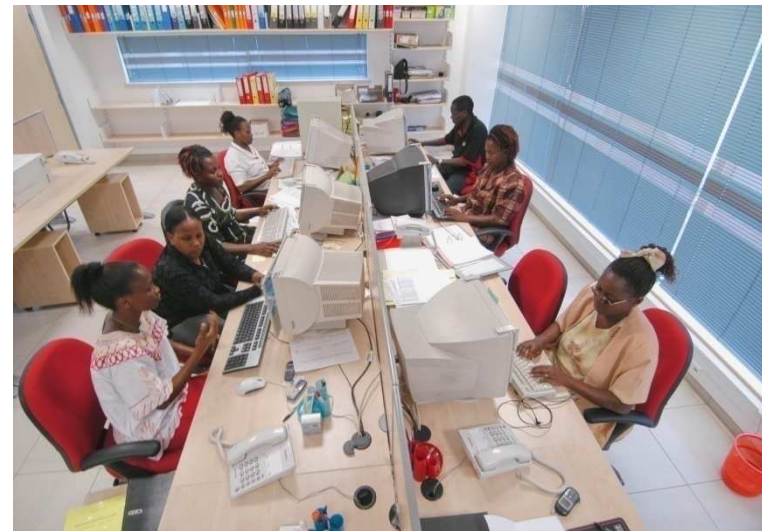
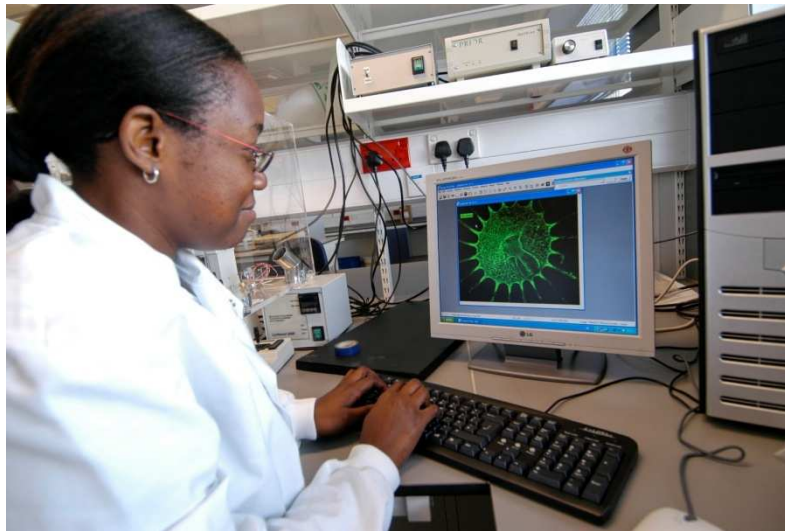
**Demographic & Epidemiological surveillance – 240,000 people**



**Clinical surveillance and investigation > 5,000 admissions p.a.**



# Research Infrastructures 2



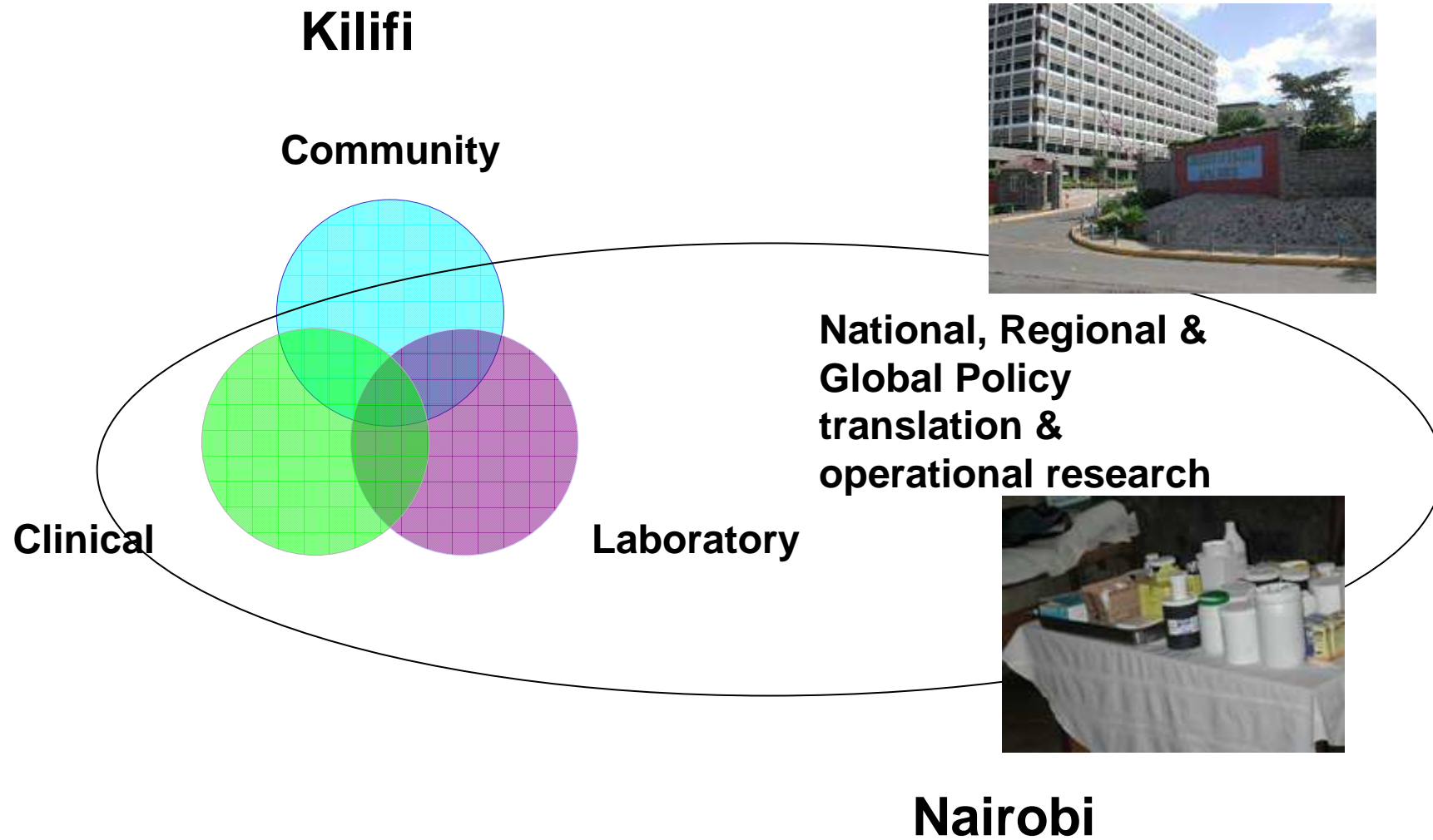
**Laboratory and IT services linked to clinical and field**







# Integrated research framework



# Clinical Research

Clinical surveillance: over  
50,000 consecutive admissions

Focus on the sick child

Malaria

LRTI

Invasive bacterial  
disease

Neonatal disease

HIV

Malnutrition



# Therapeutics Research

Pharmacokinetics and dynamics  
to optimize regimens for  
children

Randomized Controlled Trials

Antimalarials

Antibiotics

Anticonvulsants

Fluids





# Laboratory Based Research

Immune response  
and pathogenesis

Malaria

Pneumococcal  
disease

RSV



# Epidemiology Research

Birth Cohorts:

Risk factors

Natural history studies

Genetic associations

Entomological studies:

Force of transmission

Larval ecology



# Community Based Research

Surveillance of 200,000

Epidemiological studies:

Malaria

Pneumococcal disease

RSV

Interventions:

Impregnated bed nets

Home based Care

Vaccines





# Health Policy and Systems Research

Burden of Malaria  
In Africa

Economic Basis of Control

National Drug Policy

Access and Quality of care





# Training and capacity building key issues

- Critical mass- scientific and intellectual support
- Career structure
- Long term strategic view

## Capacity building in the KEMRI Wellcome programme

Attract and screen the brightest science undergraduates.



**150-300**  
**6 month internship**

well educated  
science graduates with  
exposure to research will go  
into teaching, Industry, MSc  
training etc.

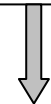
Recruit mostly from  
the intern pool.



**50**  
**4 year PhD**  
**plus 1 year post doc.**

PhDs with excellent training will  
go into academia, Ministry of  
Health, other government  
departments, industry, NGOs

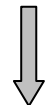
Additional visiting  
fellowship schemes to  
attract researchers from  
the African Diaspora to  
spend time in centres,  
some of whom would  
apply for Post doctoral  
Fellowships.



**25**  
**5 year post doctoral fellowships**

experienced Post doctoral  
researchers will go into  
academia, industry, government  
and international organizations

Not all Post doctoral  
Fellows will complete  
10 years, applications  
for senior posts would  
be from 7 – 10 years  
Post doctoral experience



**15**  
**5 year post doctoral fellowships**



world class researchers  
with secure posts will develop  
their own research groups,  
draw in international funding and  
be the driving force for the  
long term development of health  
research in Africa.



**10**  
**Senior researchers**

# Vision

- International Centre of excellence in basic and applied research
- Strong integration with Ministry (s) of Health
- Providing definitive evidence base for health policy
- Development of a strong basic science platform to support long term development of new interventions
- Playing key role in a regional network of developing centres
- Developing a cadre of internationally competitive research leaders

