



**East Central and Southern Africa Health Community (ECSA-HC)**

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# **Regional Laboratory Networks: The East Africa Public Health Laboratory Network**

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**East Africa Public Health Laboratory Network Project**

*Controlling the Spread of Communicable Diseases in Eastern  
Africa through Improved Diagnostic and Surveillance Capacities*



# About ECSCA Health Community



- Kenya
- Lesotho
- Malawi
- Mauritius
- Swaziland
- Tanzania
- Uganda
- Zambia
- Zimbabwe

The East, Central and Southern Africa Health Community (ECSCA HC) **regional inter-governmental health organization** established in 1974 to foster and promote regional cooperation in health among member states.



# Objectives for the network

**Establish a network of efficient, high quality, accessible public health laboratories for the diagnosis and surveillance of tuberculosis and other communicable diseases by:**

*Strengthening access to diagnostic services for vulnerable groups*

*Improving capacity to provide specialized services, and laboratory based disease surveillance*

*Expanding training and capacity building*

*Conducting joint research and knowledge sharing*

# Rationale for the network

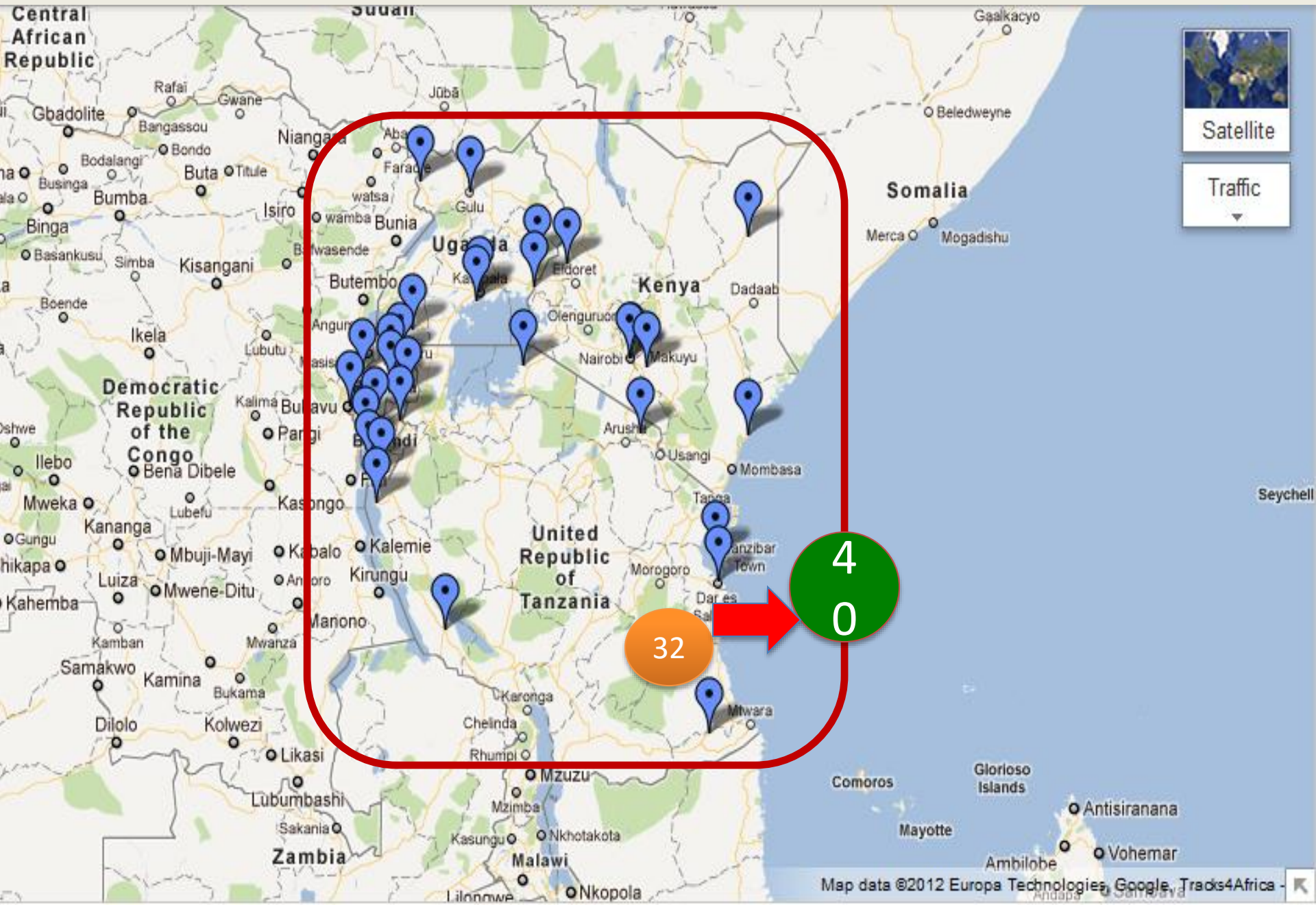
- ❑ Tackle common health challenges, promoting efficiencies and synergies
- ❑ Enhance capacity of public health laboratories that are critical for conducting clinical diagnosis, guiding treatment, and managing epidemics
- ❑ Conduct joint disease surveillance activities, including table top simulations, joint investigations, and sharing of critical information on disease outbreaks
- ❑ Roll out service delivery innovations to underserved locations, and foster evidence-based approaches
- ❑ Leverage comparative advantages of each country and promote south-south knowledge sharing

# Shared vision and collective action

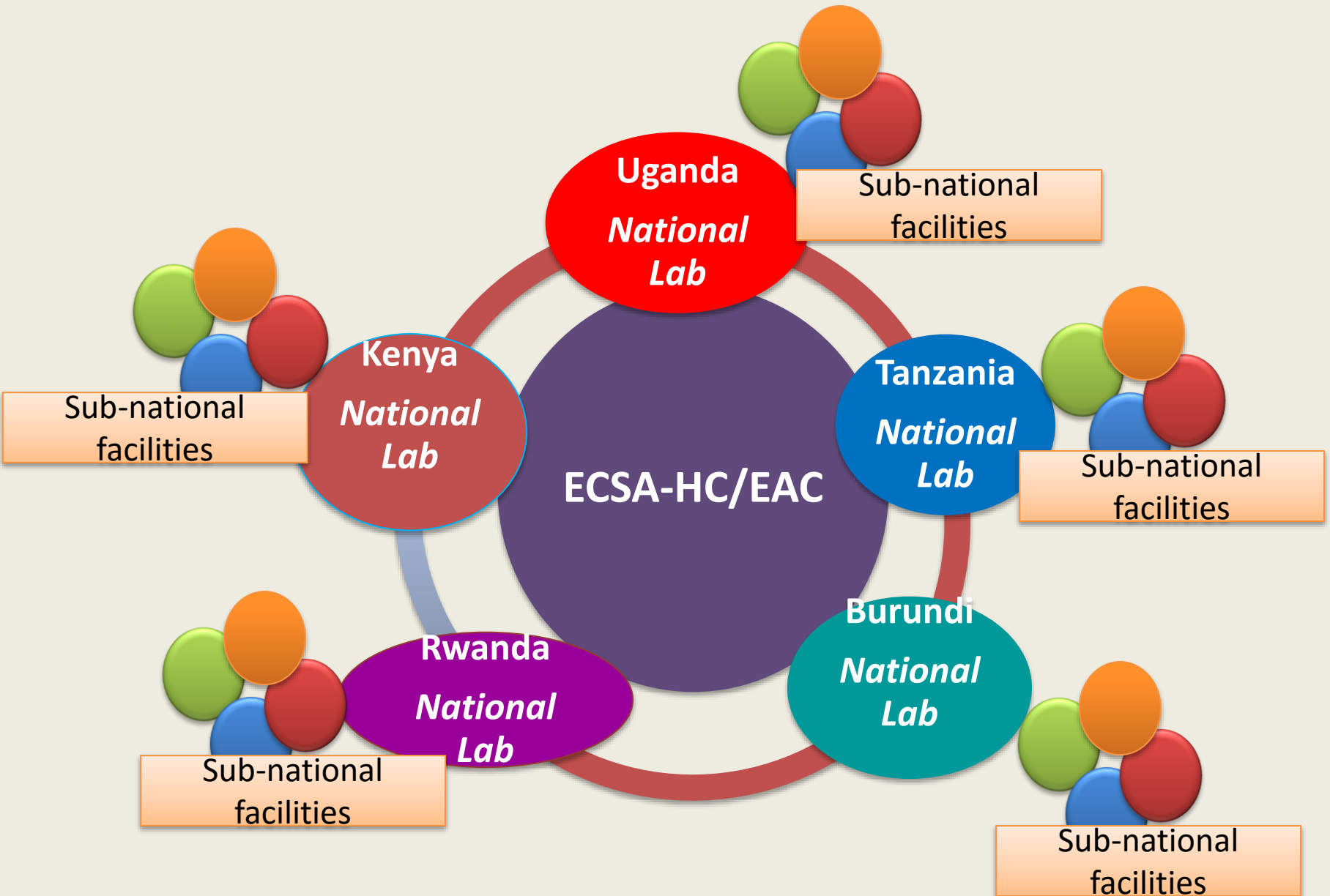
*Controlling the spread of communicable diseases in eastern Africa region through improved diagnostic and surveillance services*

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- ❑ **LEADERSHIP** : Countries taking lead in promoting innovations and sharing experiences ; Regional bodies support knowledge sharing
  - ❑ **PARTNERSHIP** : Synergy with key actors (ASLM, CDC, WHO, GLI, TB Union, UNITAID, USAID/KNCV, GFATM, AMREF)
  - ❑ **PROMOTING EXCELLENCE** : Adhering to regional and international standards, commitments and strategies - IHR, IDSR, ISO

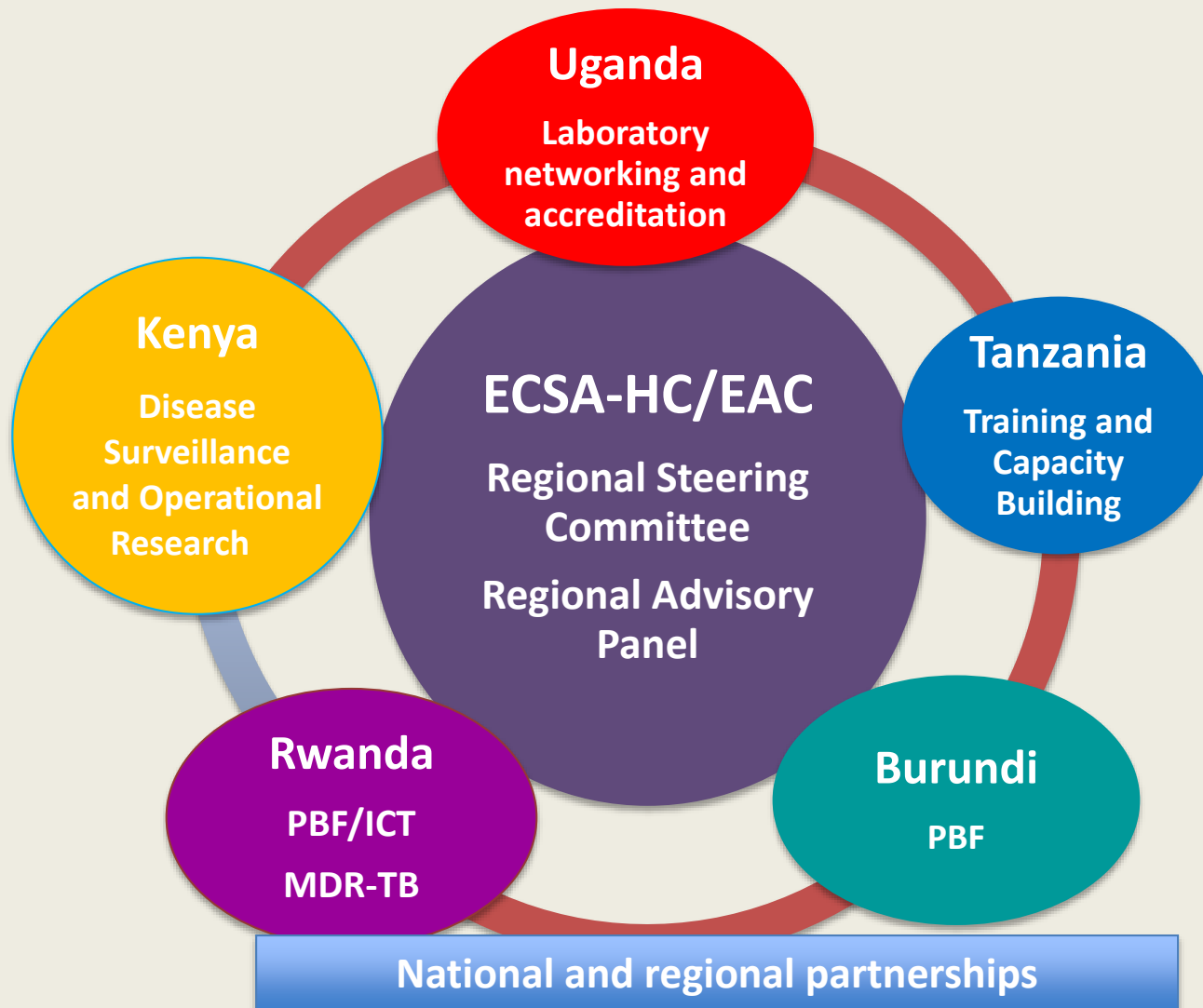
# Laboratories in the network at cross border areas



# Network structure



# Network governance and leadership



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# Project investments



## East Africa Public Health Laboratory Network Project

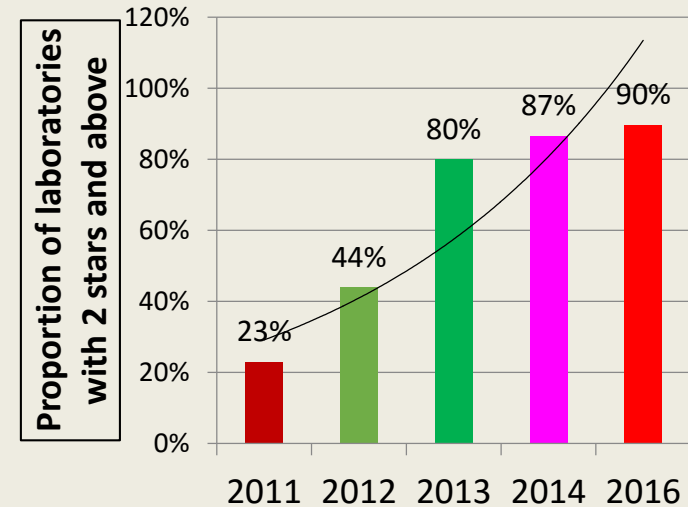
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# Laboratory systems improvement

- ❑ Enhanced capacity for specialized testing at sub-national facilities
- ❑ Improved quality laboratory systems with progressive rise in SLIPTA scores with three laboratories receiving ISO15189 accreditation
  - ❑ Piloted PBF to accelerate improvement
- ❑ Uganda became part of SRL global TB network and is now providing technical support to over 20 countries on the continent

*Facilities attaining two stars and above in the annual peer audits*



*Uganda TB Supranational Laboratory*



# **Disease Surveillance and preparedness**

*East African Community Integrated Disease Surveillance and Response Network (EAIDSNet) coordinated at EAC*

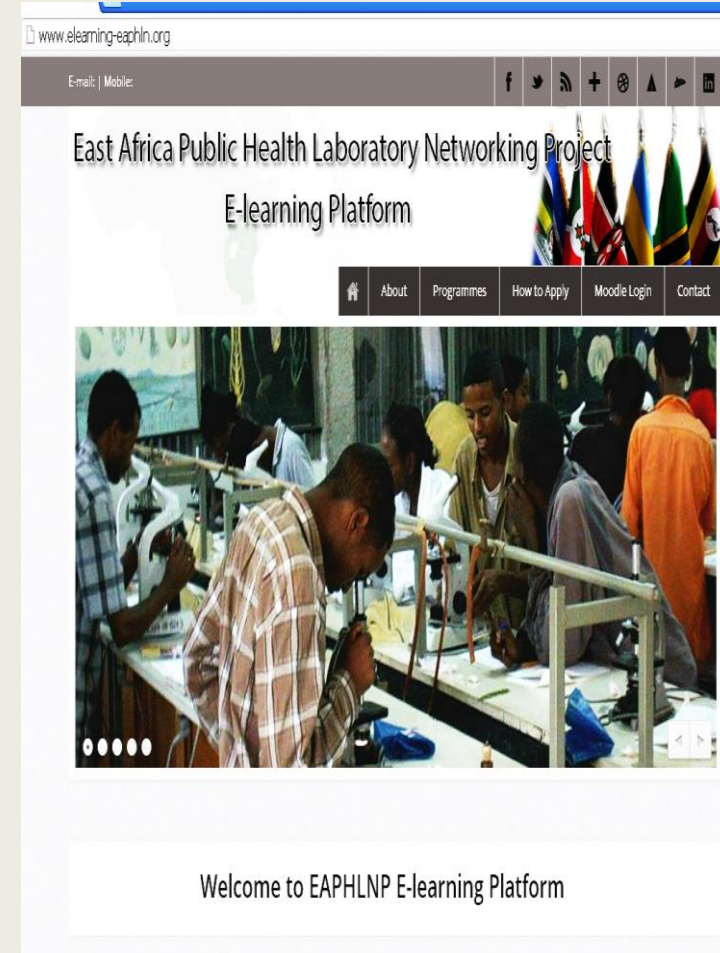
- ❑ **Regional collaboration frameworks and contingency plans**
- ❑ **Established cross-border committees in hot spot areas and supported joint simulation exercises for viral hemorrhagic fever diseases**
- ❑ **Developed an electronic surveillance reporting system (eEAIDSNet)**
- ❑ **Conducted joint outbreak investigations during outbreaks (Ebola, Marburg, cholera etc) with enhanced lab surveillance**
- ❑ **Collaborating with partners to support implementation of JEE findings**



**EAC technical experts in isolation unit during an outbreak in Kabale, Uganda in 2012**

# Training and Capacity Building

- ❑ Boosted human resource capacity at the laboratories with absorption into the service at the project end
- ❑ Trained over 10,000 individuals to expand pool of qualified personnel
- ❑ Provided mentorship training and hands on bench training to accelerate laboratory systems improvement
- ❑ Developed lab management course and upgraded it to university level and designed e-learning modules



**Human resources are the backbone of quality diagnostics**

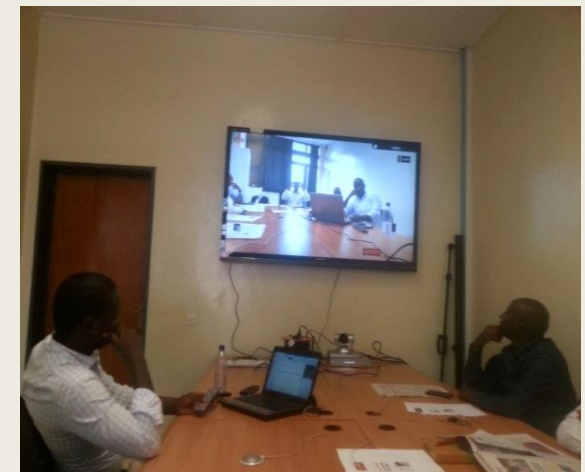
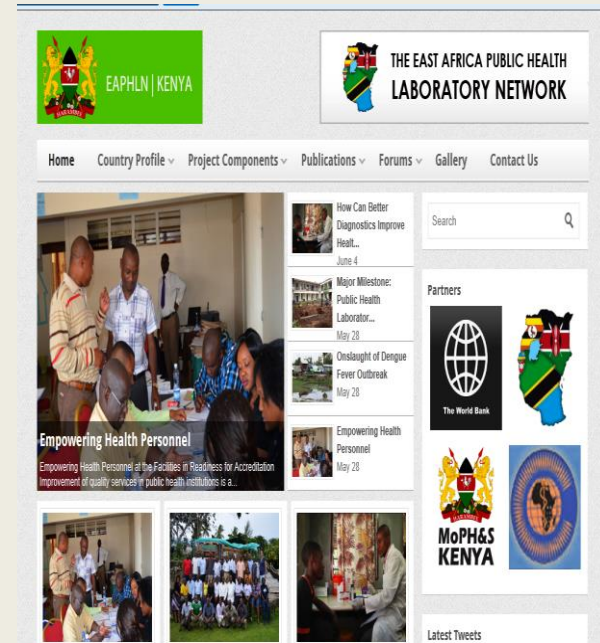
# Operational Research

- ❑ Implemented three multi-country studies (TB diagnostics, malaria drug resistance, enteric) which generated evidence of:
  - ❑ Effectiveness of new TB diagnostics
  - ❑ Emerging resistance of bacterial causes of diarrhea (typhoid fever and shigellosis) to fluoroquinolones
  - ❑ Increasing clinical treatment failure to Artemisinin Combination Therapy
- ❑ Conducted over 20 offshoot studies at satellite facilities in remote areas, empowering local staff to address day to day issues
- ❑ Published over 10 papers to disseminate preliminary findings at national and regional scientific meetings



# Knowledge exchange and dissemination

- ❑ Used different platforms to disseminate key findings including policy level fora at EAC and ECSCA
- ❑ Established a robust website to facilitate information sharing and enhance the project's visibility
- ❑ Rolled out video conferencing and other ICT innovations to support learning, and reduce cost of communications
- ❑ Supported development of e-learning platform to increase access to learning for staff in remote areas



# Partnerships



East, Central and Southern  
Africa Health Community  
*Fostering Regional Cooperation for Better Health*



# Opportunities

- ❑ Take advantage of new opportunities for exchange of experiences among countries in Eastern and Southern Africa engaged in regional approaches to communicable disease control (SATBHSS) as well as other networks in other regions including the Africa CDC Regional Coordinating Centers (RCC)
- ❑ Promote sustainability, ensuring countries absorb personnel, pick up recurrent costs, utilize smartly capacity established under project, mainstream innovations, and advocate for continued buy-in
- ❑ Use of the laboratories with enhanced capacity to implement National Antimicrobial Resistance Surveillance programs and support other services including diagnostics for Oncology and other NCD



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# Key Lessons

- ❑ Promote a client-driven approach, which empowers countries to innovate and provide regional leadership
- ❑ Adopt a gradual, “learn by doing approach” -- start small and grow and expand building on initial successes
- ❑ Strengthen multi-sectoral collaboration disease outbreak management to minimize protracted outbreaks by key sectors playing their roles
- ❑ Promote partnerships to leverage technical expertise and ensure coordinated action



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**Innovate  
Implement  
Replicate**



**Thank you**