



# Laboratory Workforce Development through Public Health Laboratory Networking in East Africa

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**Tanzania**



# Outline



- Introduction
- Key components
- Training and Capacity Building
- Training approach
- Achievements
- Lesson Learned





# Background



- The EAPHLN Project aims to:-
  - Establish a network of cross-country, high-quality public health laboratories within 5 East African Countries
  - Address the common challenges facing the five countries
    - Dilapidated infrastructure built decades ago
    - Inadequate supplies
    - Inadequate quality human and financial resources
    - Manual information systems which are not effective for decision making
  - Address the capacity to communicate outbreak-related information across national borders in real time

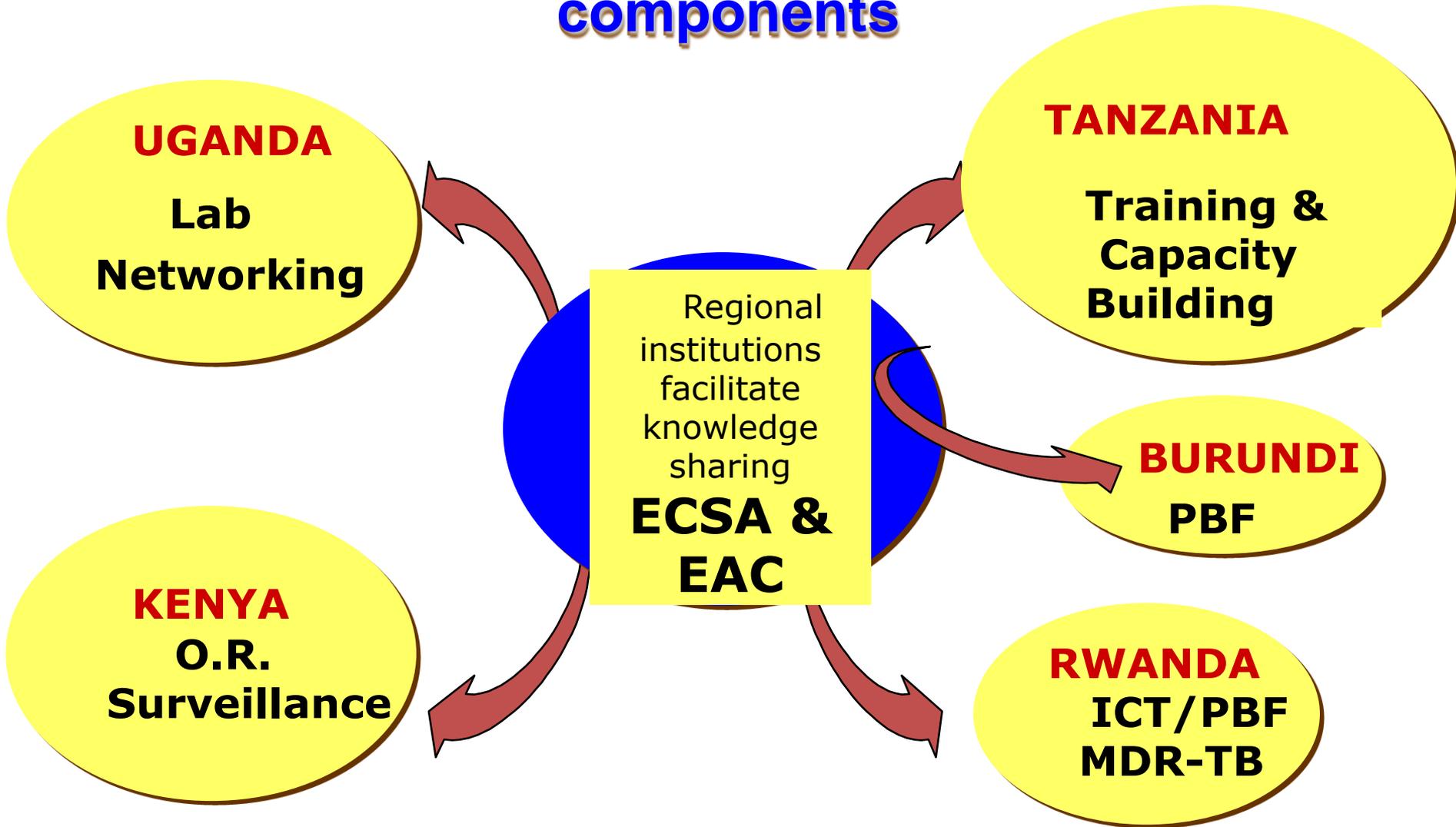


# Key components



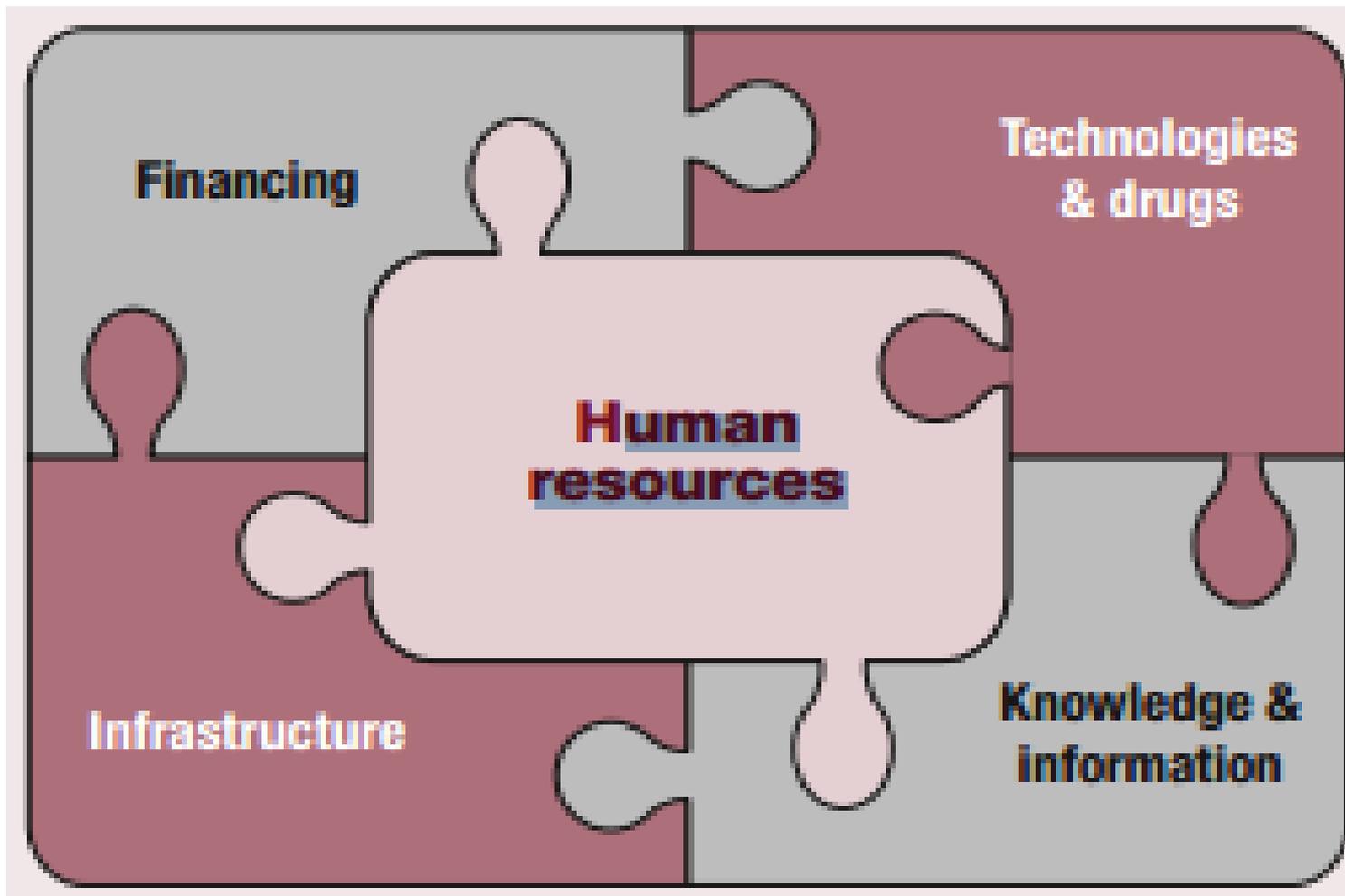
- There are three technical components of the project
  - Networking and Laboratory Accreditation
  - Joint training and capacity building
  - Joint operational research, knowledge sharing, regional coordination, and program management
- Each country takes leadership in specific aspect of the technical component in the project
  - A center of excellence in the area of strength

# Countries Leading various technical components





# Capacity Building: Glue to the health system strengthening





# Training & Capacity Building



NHLQATC as a regional training hub

- Conduct joint training for assessors (ASLM) to establish a regional pool
- Provide training in laboratory management using a TOT approach
- Strengthen ICT skills for laboratory professionals to improve productivity
- Developing e-learning modules
- Providing mentorship and hands on bench training



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



# Partners



- ASLM - African Society of Laboratory Medicine
- APHL – Association of Public Health Laboratory
- Amref Health Africa
- ESAMI - Eastern and southern African Management Institute
- East Africans Universities
- AFENET- African Field Epidemiology Network
- CDC - Center For Disease Control
- CHAI – Clinton Health Initiative
- WHO – World Health Organization





# Objectives for Training and Capacity building



- Support training and capacity building for laboratory personnel
  - Increase the pool of experts in the sub-region
  - Improve the effectiveness of public health laboratories
- Develop a competent health workforce and focus into the future improvement in health programs
- Target to train 10888 health personnel in 5 years
  - Short Courses
  - Long Courses; BSc, MSc and PhD
- Training Modules conversion into e-learning format



# Training and Capacity building activities



- Implementation of strategies for harmonizing regional training curriculum for medical laboratory professionals
- Implementation of strategies for cascading of training and follow up plans in country and at regional Level
- Certification of lab personnel–upgrading of the lab Management course and registration of the course in the University
  - Universities offer certificates to trainees
  - Plans to upgrade the rest of the courses is underway



# Training approach



- International organized trainings
  - Training of Trainers (TOT)
- Regional trainings
- In country trainings
- E-learning methods



# Cascade model to reach more staff



Tanzania

3 Regionally trained staff

4 Nationally trained teams

365

Kibongoto  
Satellite site 35  
staff trained

Sumbawanga  
Satellite 83 staff  
trained

Ndanda Satellite  
site 142 staff  
trained

Musoma Satellite  
site 55 staff  
trained

Mnazi Mmoja 50  
staff trained

Rwanda

5 Regionally trained staff

8 National staff trained

291

Kibungo  
Satellite site 68  
staff trained

Nyagatare  
Satellite 28 staff  
trained

Byumba  
Satellite site 68  
staff trained

Gisenyi Satellite  
site 77 staff  
trained

NRL 50 Staff  
trained





# Expanding training through e-learning



- To improve access to training materials and opportunities
  - Develop an accessible, user friendly web environment to support e-learning ([www.elearning-eaphln.org](http://www.elearning-eaphln.org))
  - Electronic distribution of courseware
  - The tool is for the delivery of the following courses :
    - Laboratory Management (Tanzania)
    - Biorisk Management (Uganda)
    - Laboratory Based Disease Surveillance (Kenya)
    - Basic ICT (Rwanda)
    - Research Methodology (Kenya)

# East Africa Public Health Laboratory Networking Project E-learning Platform

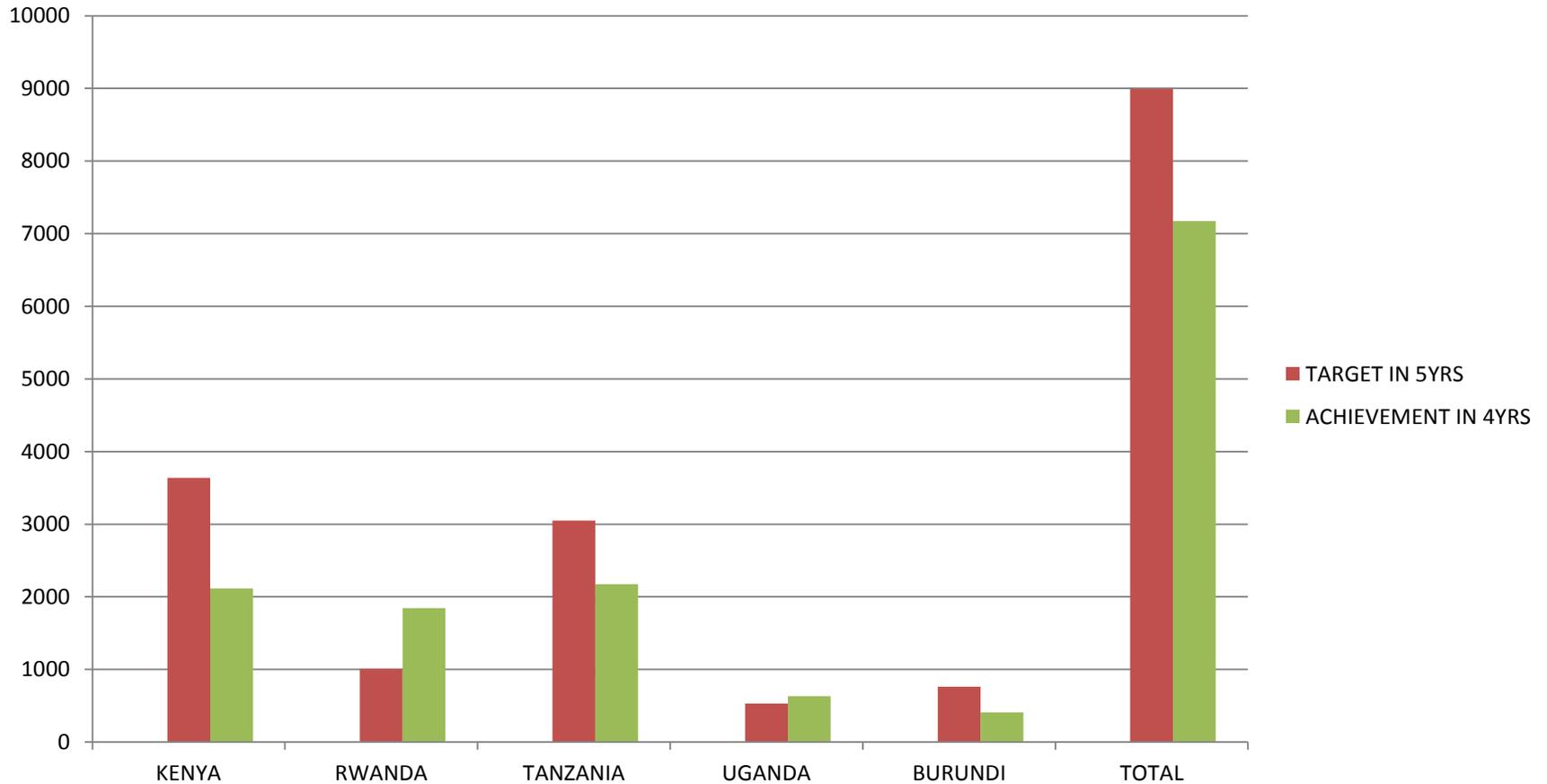


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# Achievements



Setting targets that are excessively ambitious



# Long-Term Trainings



	Course	Rwanda	Tanzania	Kenya	Burundi	Uganda	Total
1	PhD	1	2	0	0	0	3
2	FELTP	7	7	8	0	0	22
3	MSc in Microbiology & Parasitology, Pathology, Molecular Biotechnology	6	9	4	0	0	19
4	M Med in Health Sciences		3	1			4
5	MPH, Health Economics, Epidemiology, Radiology,	1	0	2			3
6	Msc Monitoring and evaluation, ICT		4				4
6	BSc in Laboratory Sciences		10				10
7	Higher Diploma			2			2
<b>TOTAL PER COUNTRY</b>		<b>15</b>	<b>35</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>67</b>



# Achievement for sustainability



- Training packages developed
  - Laboratory based surveillance,
  - Bio risk and Laboratory management,
  - Research Methodology and ICT
- E- learning platform for laboratory trainings
- Certificate level Laboratory Management Course
- Pool of regional trainers for Laboratory Based trainings
- Pool of Lab Assessors and Mentors
- Networking and Knowledge exchange Forum



# Lessons learnt 1/2



- Knowledge sharing is critical to strong implementation
  - Cascading training down to lower levels
- Partnerships within county, national and regional institutions and other stakeholders
  - Do more with little resources
  - Countries working together
  - International standardized programs like SLMTA
- Regional project can serve as a base for broadening collaboration within member states



# Lessons learnt 2/2



- Raise the visibility of the Laboratory services
- Strong dedicated and focused leadership approach
  - Team developed over time
- Improved capacity and self esteem of staff through various training which has been greatly improved the quality of lab services



# Acknowledgements



- MOHs in EA
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