



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

**Laboratory systems improvement through an integrated approach: *Experience of peer laboratory review program under the East African Public Health Laboratory Networking project***

***2<sup>nd</sup> ASLM Conference in Cape Town 1-4, December 2014***

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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*



# Background

## Laboratories support for disease surveillance and management

### Detection/Diagnosis

- Early warning signals
- Outbreak detection

### Disease management

- Outbreak response and management

### Monitoring/surveillance

- Trend monitoring
- Intervention evaluation
- Monitoring progress towards a control objective



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# Background.....

- Limited utilization of laboratory due to perceived low quality of results
- Laboratory accreditation is critical to instilling a culture of continuous quality improvements in laboratory service.
- The WHO-AFRO Stepwise Laboratory Improvement Process towards Accreditation (SLIPTA) aims to put in place quality systems for achieving systematic and continuous improvements in laboratory services.
- Assessment of laboratory systems helps to bench mark the level of performance to meeting the quality standards.



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*“In the new 21st century paradigm, the role of the laboratory will increasingly be one of helping the physician answer the question: What will happen to this patient and will any of several interventions likely change what will happen in a favorable way?” NC Med J, 2007, Volume 68, Number 2*

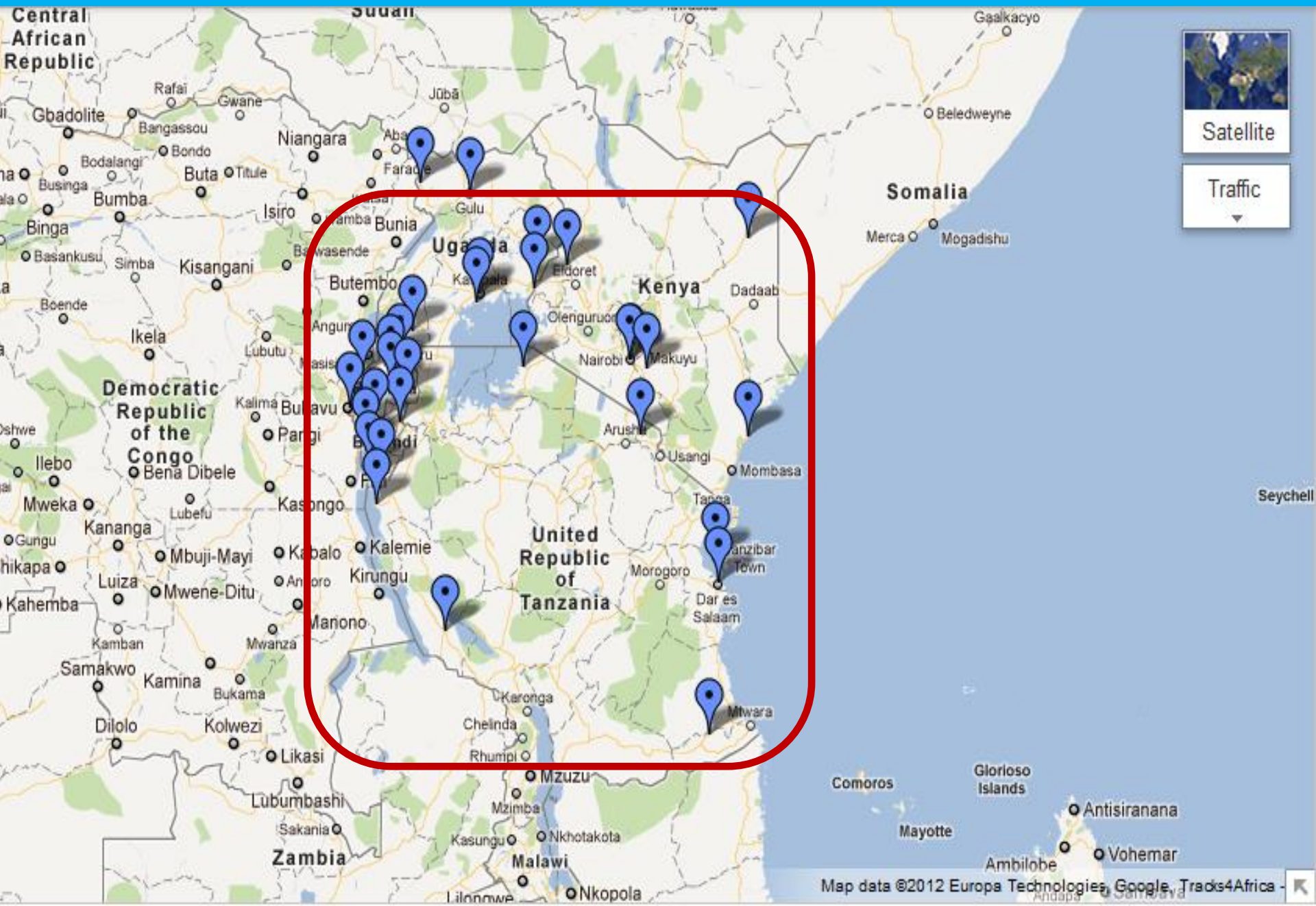


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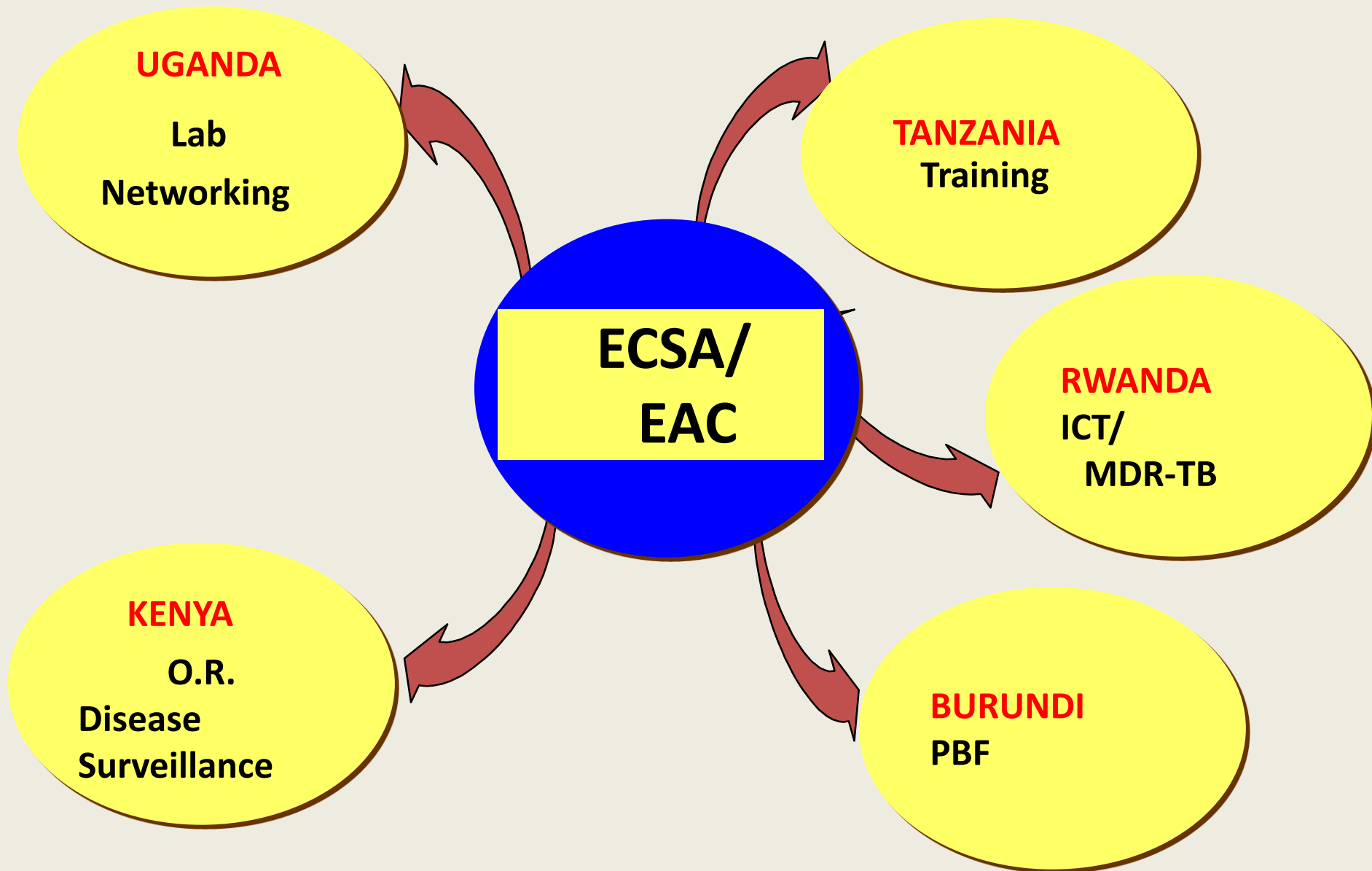
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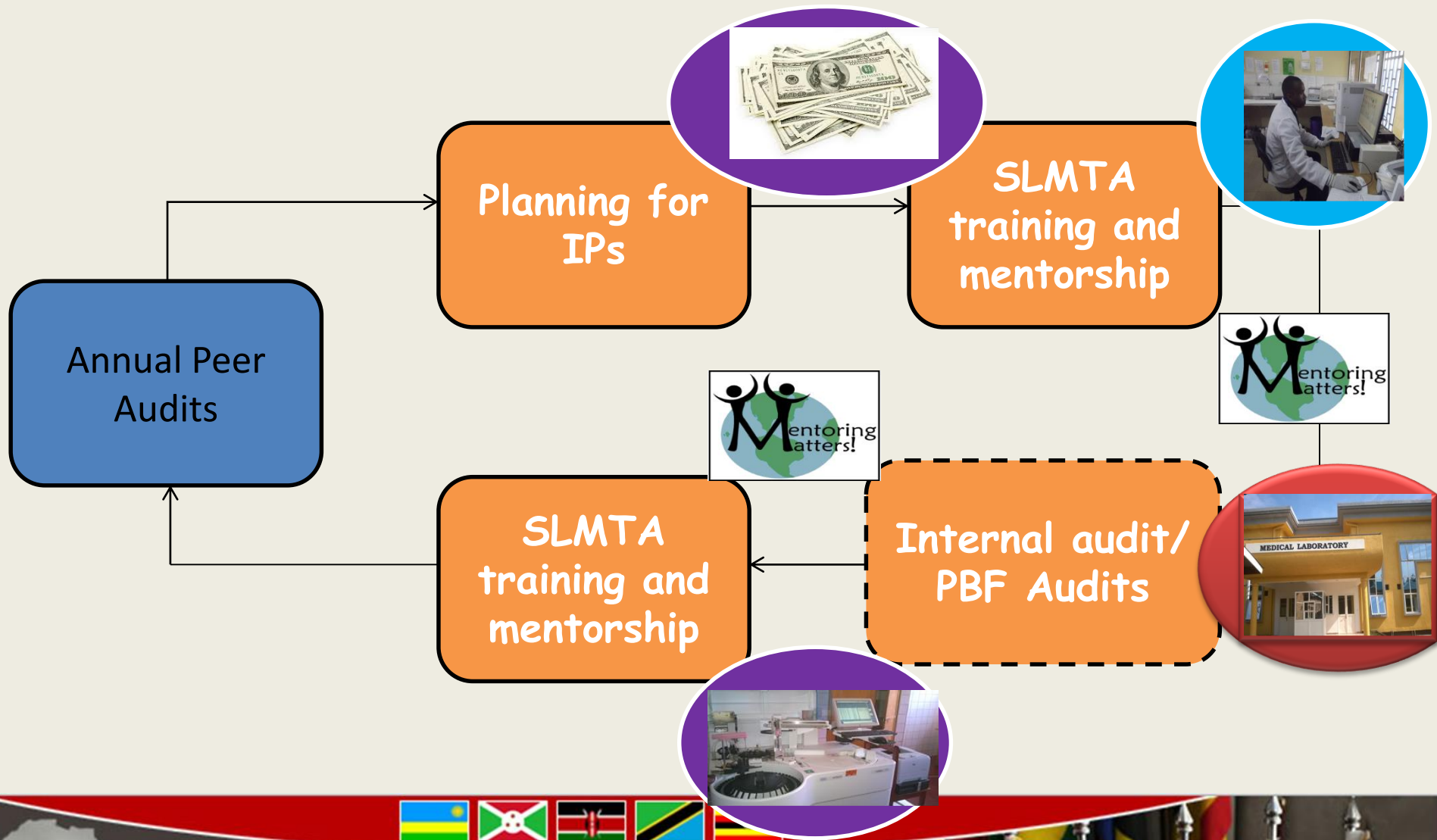
# EAPHLNP supported Sites



# Networking with shared responsibilities



# Our approach on Quality Improvement



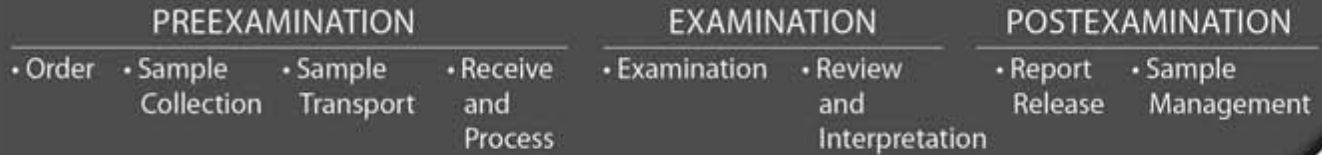
# Quality systems building blocks

## The quality Management System Model for Laboratory Services (CLSI GP26-A4)

### DISCIPLINES

- Chemistry
- Hematology
- Microbiology
- Transfusion Medicine
- Anatomic Pathology
- Cytology
- Immunology
- Genetics
- Etc.

### LABORATORY PATH OF WORKFLOW



Assessments

### QUALITY SYSTEM ESSENTIALS

Continual Improvement

Documents and Records

Information Management

Nonconforming Event Management

Personnel

Purchasing and Inventory

Equipment

Process Management

Organization

Customer Focus

Facilities and Safety

International • National • Regional • Local • Organizational Requirements



# Regional peer audits

- ASLM trained laboratory assessors conducts annual peer assessments of 32 laboratories in East Africa using the WHO-AFRO SLIPTA checklist.
- To ensure objectivity and transparency, trained assessors from one country assessed participating laboratories in the other four countries in a coordinated manner ensuring that no assessor, assessed their laboratories from their own countries



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**Assessors**  
Uganda, Kenya

**Assessors**  
Uganda, Tanzania,

Burundi

Kenya

Uganda

Rwanda

**Assessors**  
Kenya, Tanzania

**Assessors**  
Uganda, Kenya,  
Tanzania, Burundi

Tanzania

**Assessors**  
Uganda, Kenya

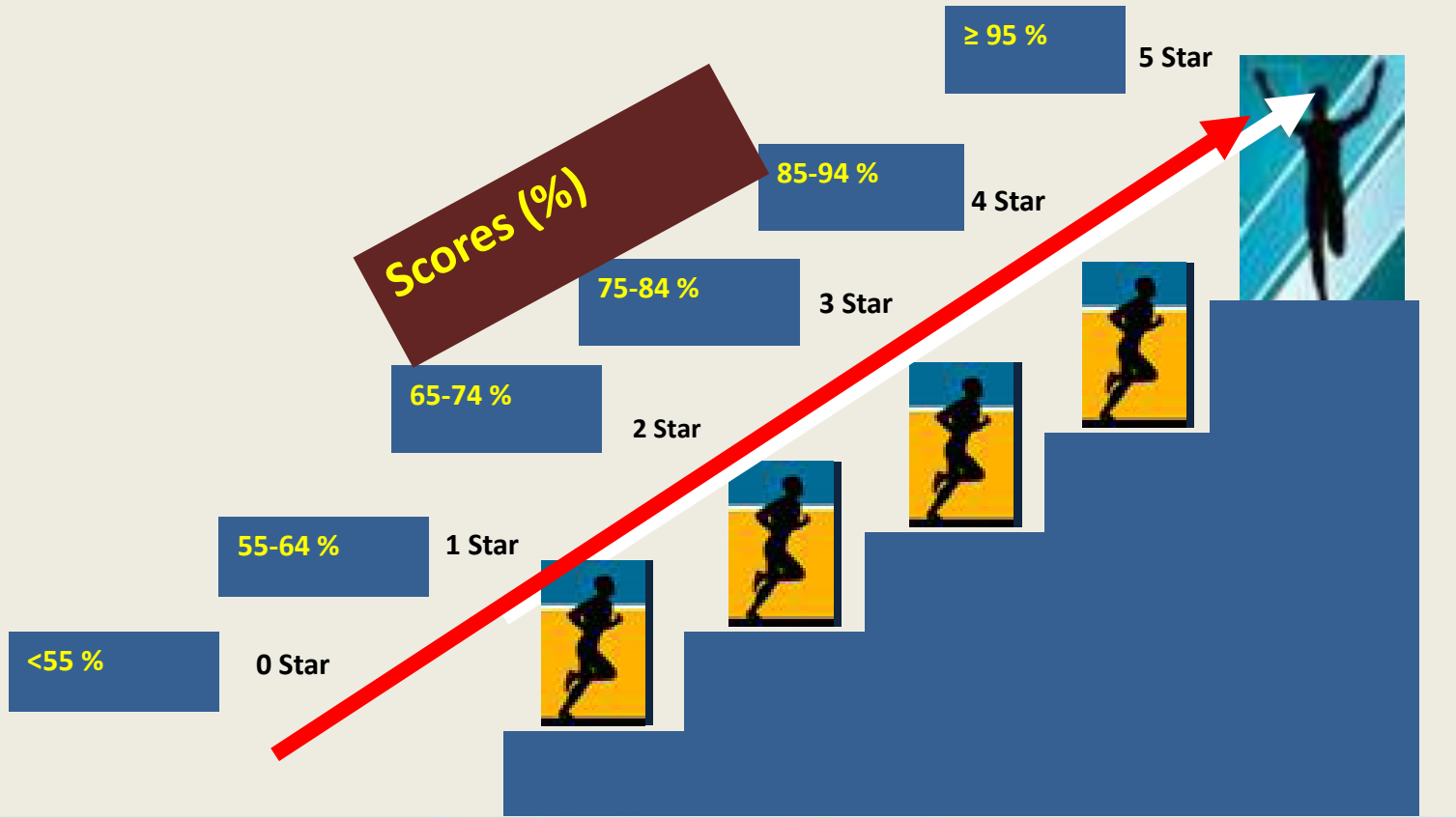


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No Stars	1 Star	2 Stars	3 Stars	4 Stars	5 Stars
(0 – 142 pts)	(143 – 165 pts)	(166 – 191 pts)	(192 – 217 pts)	(218 – 243 pts)	(244 – 258 pts)
< 55%	55 – 64%	65 – 74%	75 – 84%	85 – 94%	≥95%

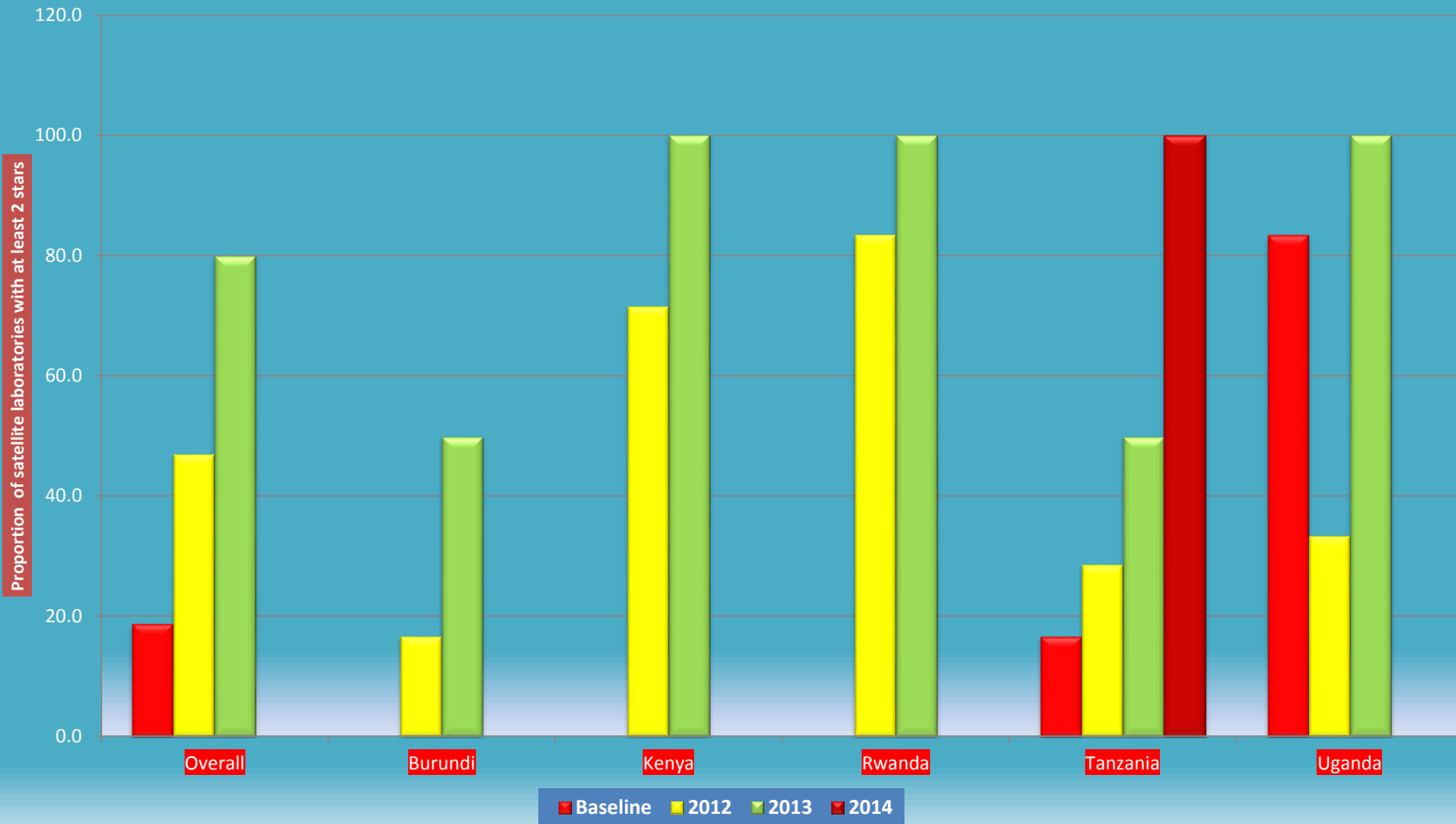


**East Africa**

## Stepwise Process

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# Performance by countries 2012-2013, by country

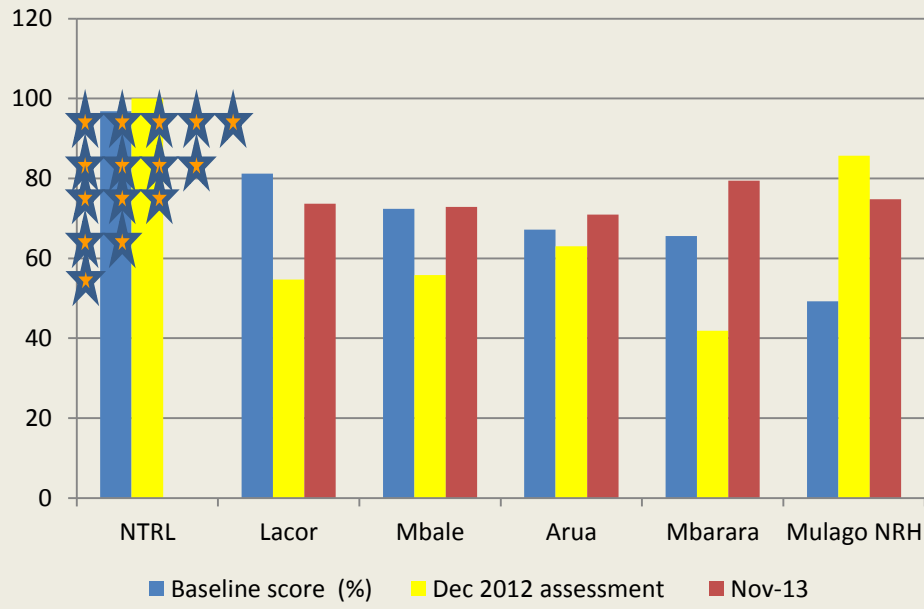
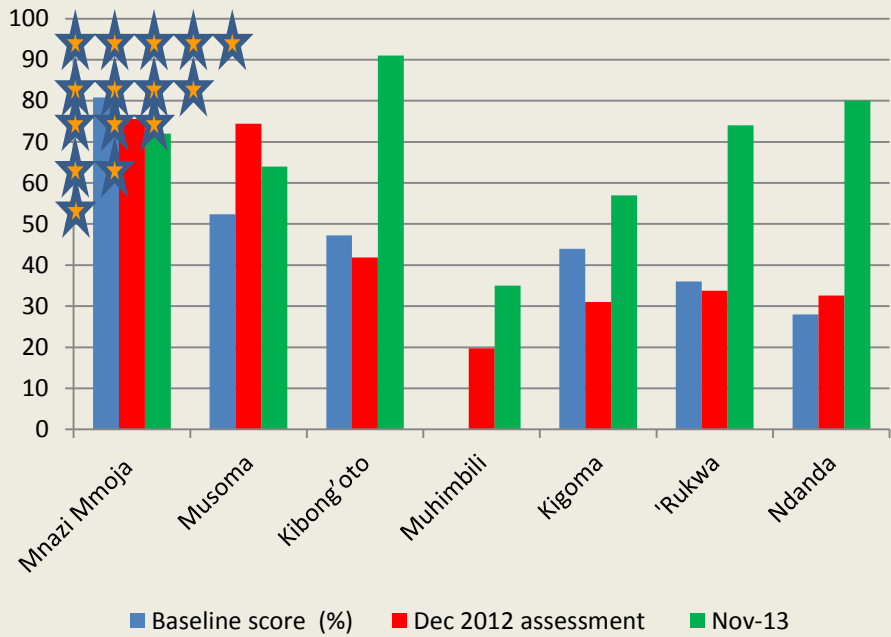
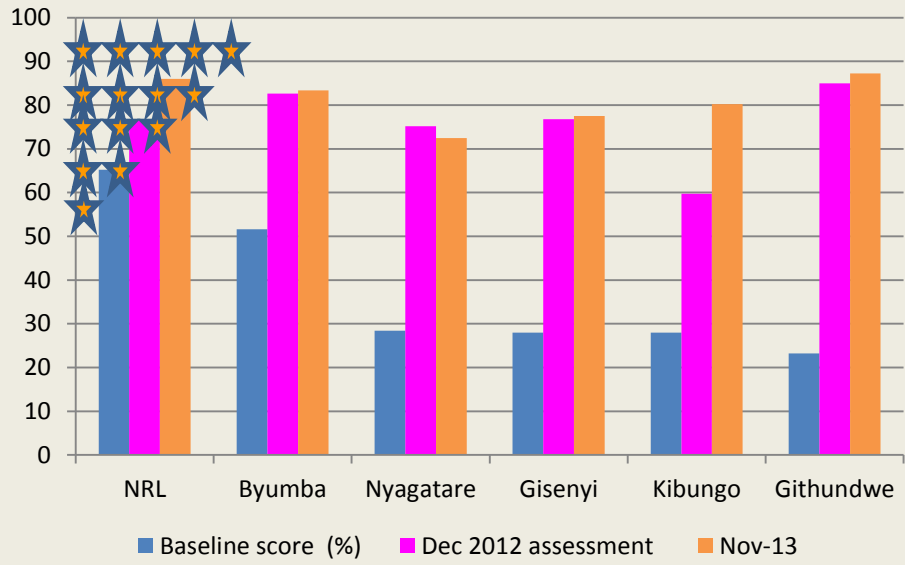
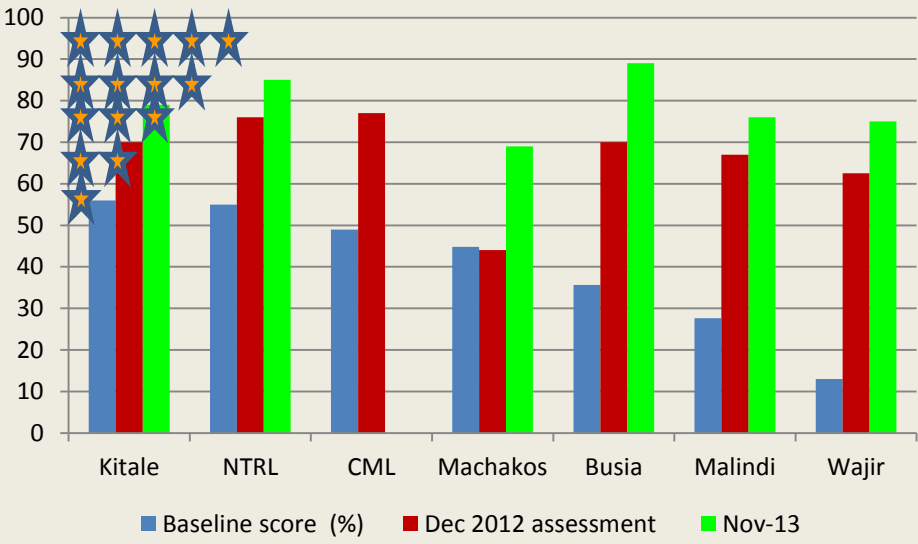


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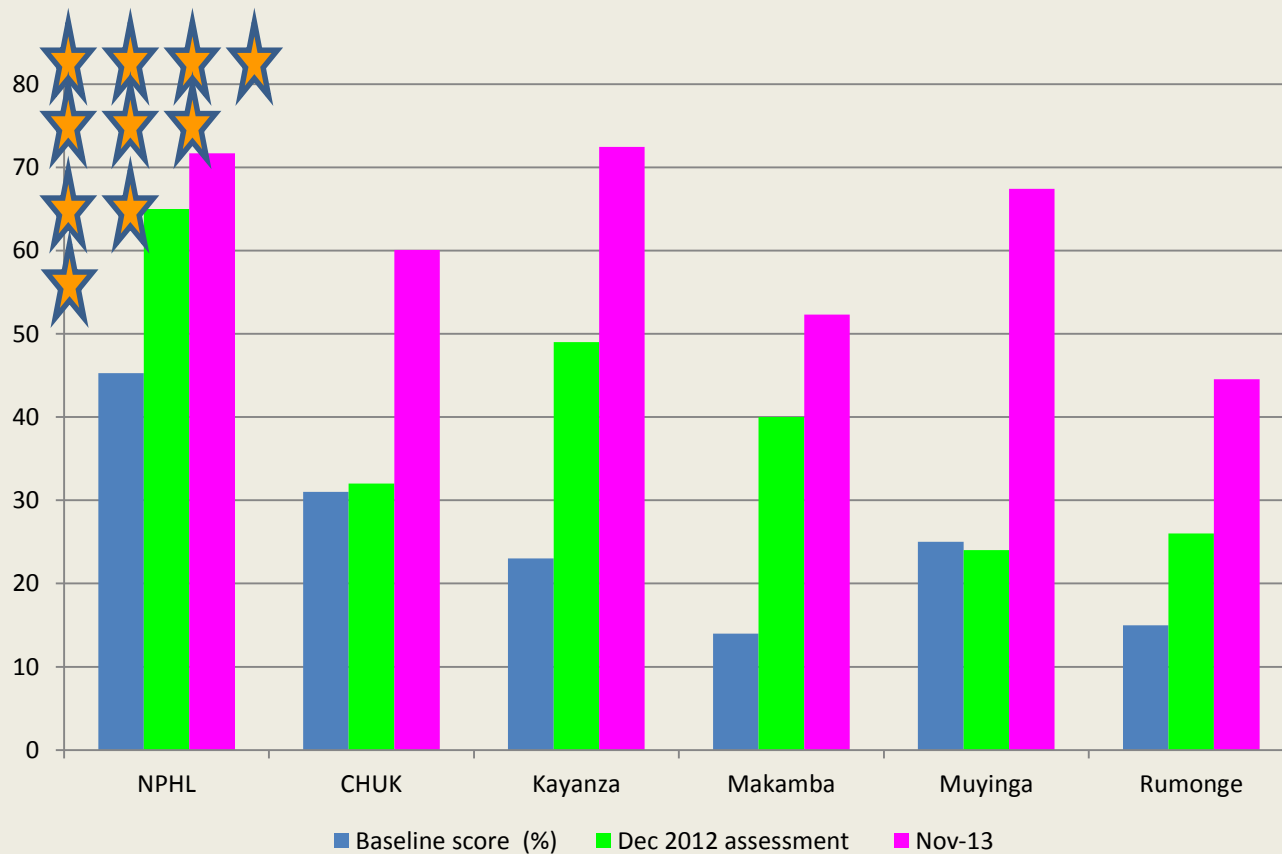
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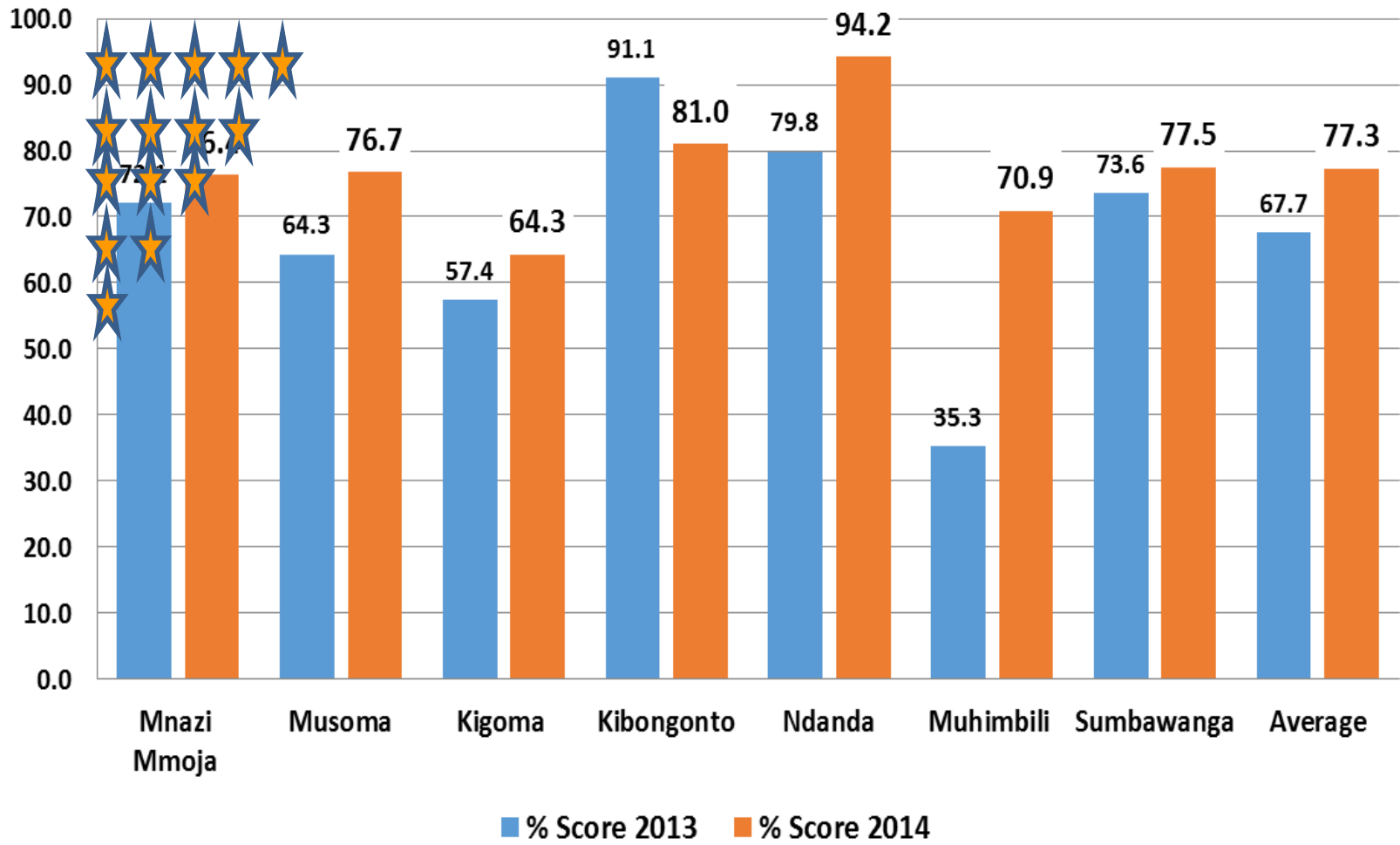
# Performance by countries 2011-2013, by country



# Performance by countries 2011-2013, by country



## Comparison of Total % Score of 2013 Vs 2014 for Laboratories in Tanzania under EAPHLN Project



# Driving factors for improvement



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# Lessons

- Laboratory improvement requires integrated approach to realize accelerated improvement; *Improvement is attributed to a number of factors and not a single element..... Need for partnerships*
- Peer audits provides a less expensive and objective laboratory audits while providing an opportunity for complementary mentorship and exchange of knowledge and experience among auditors;
- *Strong networking is important to accelerate the improvements*
- Laboratory accreditation is a journey and a culture of continuous improvement is critical for sustainability of high standards



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# Thank you



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