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LabCoP: Enhancing Diagnostic Capacity & Sustaining Laboratory System Resilience

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ASLM

The Laboratory Systems Strengthening Community of Practice (LabCoP)

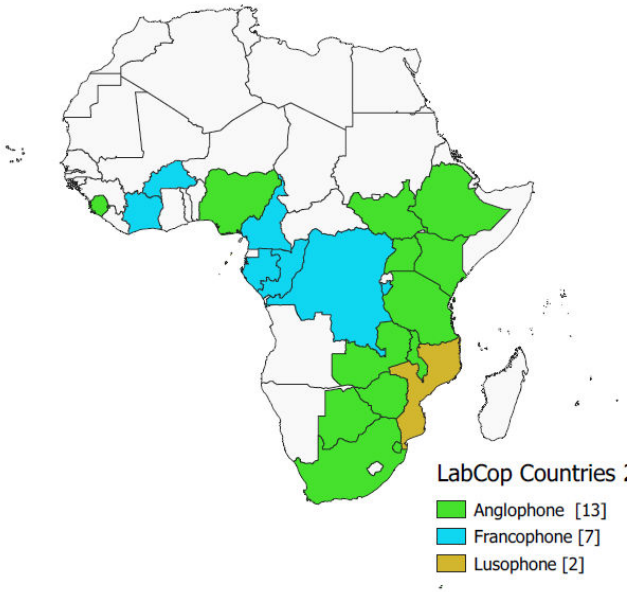
LabCoP Partners

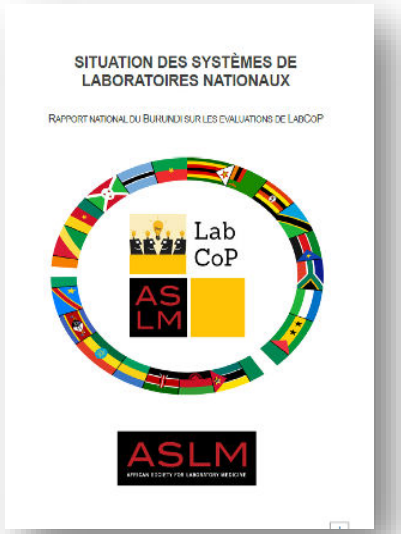
- ❑ WHO
- ❑ Africa CDC
- ❑ WHO-AFRO
- ❑ CDC ILB
- ❑ Unitaid
- ❑ CHAI
- ❑ Global Fund
- ❑ ITPC
- ❑ PEPFAR
- ❑ MSF

LabCoP country teams

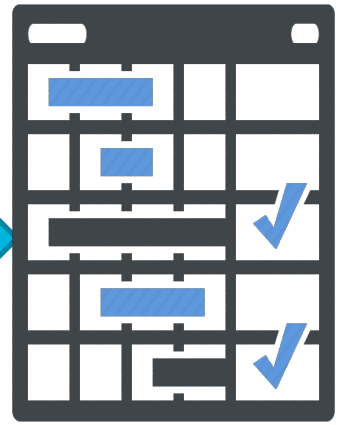
- ❑ Designated by the MoH
- ❑ Central level
- ❑ Include:
  - laboratory (at large)
  - clinicians
  - civil society
  - Implementing partners

24 countries



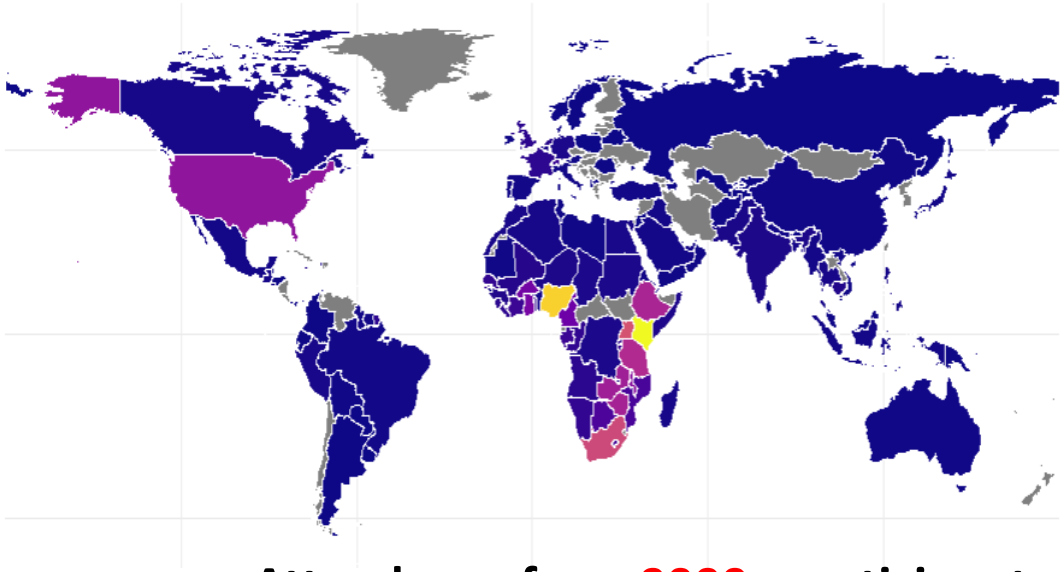


- **Advocacy**
- **Webinars/ECHO sessions**
- **Recipes, guidance, publications**
- **South to South collaboration**
- **Supportive technical assistance**

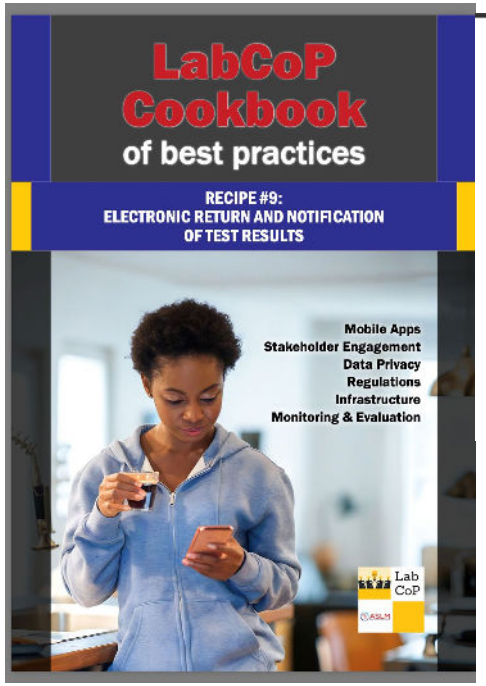


- Improved laboratory systems
- Improved patient and public health outcomes

Wide Disessmination of Best Practices



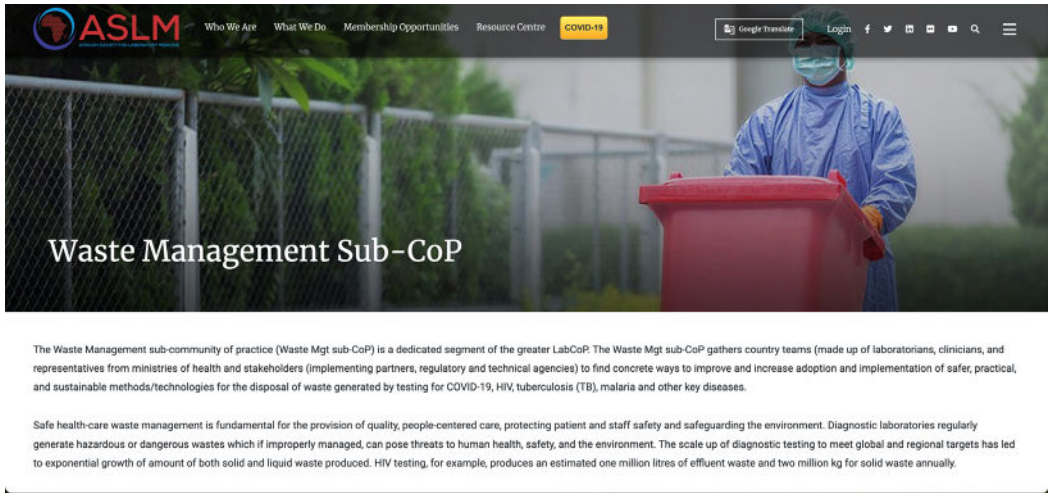
Attendance from 9000+ participants from over 160 countries



frontiers | Frontiers in Lab on a Chip Technologies

Part of the problem or part of the solution? An interdisciplinary action call for more research on the environmental sustainability of lab-on-a-chip and point-of-care devices

Anne-Laure Deman[1]*, Rosanne M. Guijt[2], Collins Otieno Odhiambo[3], Zibusiso Ndlovu[4] and Maïwenn Kersaudy-Kerhoas[5]*



The Waste Management sub-community of practice (Waste Mgt sub-CoP) is a dedicated segment of the greater LabCoP. The Waste Mgt sub-CoP gathers country teams (made up of laboratorians, clinicians, and representatives from ministries of health and stakeholders (implementing partners, regulatory and technical agencies) to find concrete ways to improve and increase adoption and implementation of safer, practical, and sustainable methods/technologies for the disposal of waste generated by testing for COVID-19, HIV, tuberculosis (TB), malaria and other key diseases.

Safe health-care waste management is fundamental for the provision of quality, people-centered care, protecting patient and staff safety and safeguarding the environment. Diagnostic laboratories regularly generate hazardous or dangerous wastes which if improperly managed, can pose threats to human health, safety, and the environment. The scale up of diagnostic testing to meet global and regional targets has led to exponential growth of amount of both solid and liquid waste produced. HIV testing, for example, produces an estimated one million litres of effluent waste and two million kg for solid waste annually.

Expert Experience: Malawi's Contingency Planning During the USG Funding Pause

In response to ongoing reductions in external funding for HIV programming and in anticipation of the USG funding pause, Malawi emerged as a frontrunner in contingency planning to protect its HIV response. ASLM spoke with Chifundo Hiwa Kamuloni, Assistant Deputy Director, HTSS - Diagnostics, Ministry of Health, Malawi, who shared how the country developed and implemented a proactive strategy that prioritized essential services, preserved laboratory capacity, and maintained public trust during a time of uncertainty. The lessons from Malawi offer a compelling model for other countries seeking to build resilient, adaptable health systems.

ASLM: Malawi was one of the first countries to develop a contingency plan in light of the USG funding pause. What informed its development, and

Non-essential services, such as outreach programs and research, are temporarily scaled down to preserve resources and workforce capacity for critical care and

diagnostics. To support this, we strategically reallocated resources to keep key testing hubs operational, maintain sample transportation

Expert Experience

The LabCoP management team recently sat down with Dr. Grania Brigden, Senior TB Advisor at The Global Fund, to discuss exciting updates to TB diagnostics. Near point-of-care (NPOC) tests are on the horizon that meet the WHO target product profiles, with expectations of a WHO policy update in early 2026.

ASLM: Dr. Grania, can you tell us why there is so much interest and anticipation around this new class of TB diagnostics?

Dr Grania: For me, the excitement stems from the potential of these new diagnostics to transform TB detection. Right now, over 2.5 million people go undiagnosed each year, and only 48% of those diagnosed receive an initial test with a WHO recommended rapid molecular test. That's a huge gap, with the other 52% either being diagnosed with

Plus, sputum collection can be a barrier, especially for children and people living with HIV. NPOC tests—especially those using tongue swabs—are simpler, more accessible, and better suited for peripheral settings. The early platforms in this class look like they will meet WHO's Target Product Profile (TPP) with promising sensitivity and specificity, and they're designed for use by health workers with basic training. The initial products in the class also are likely to be considerably cheaper than the current tests available for TB.

Dr Grania: The Global Fund is working with many partners, including ASLM, to support countries having access to the data and evidence to start the planning for how this class can address the specific TB diagnostic challenges they have – the recent ASLM LabCoP ECHO session was an example of this. Global Fund will be working with early adopter countries to support gaining operational insights to help guide other countries in planning and scaling up this new class in the GC8 funding cycle.

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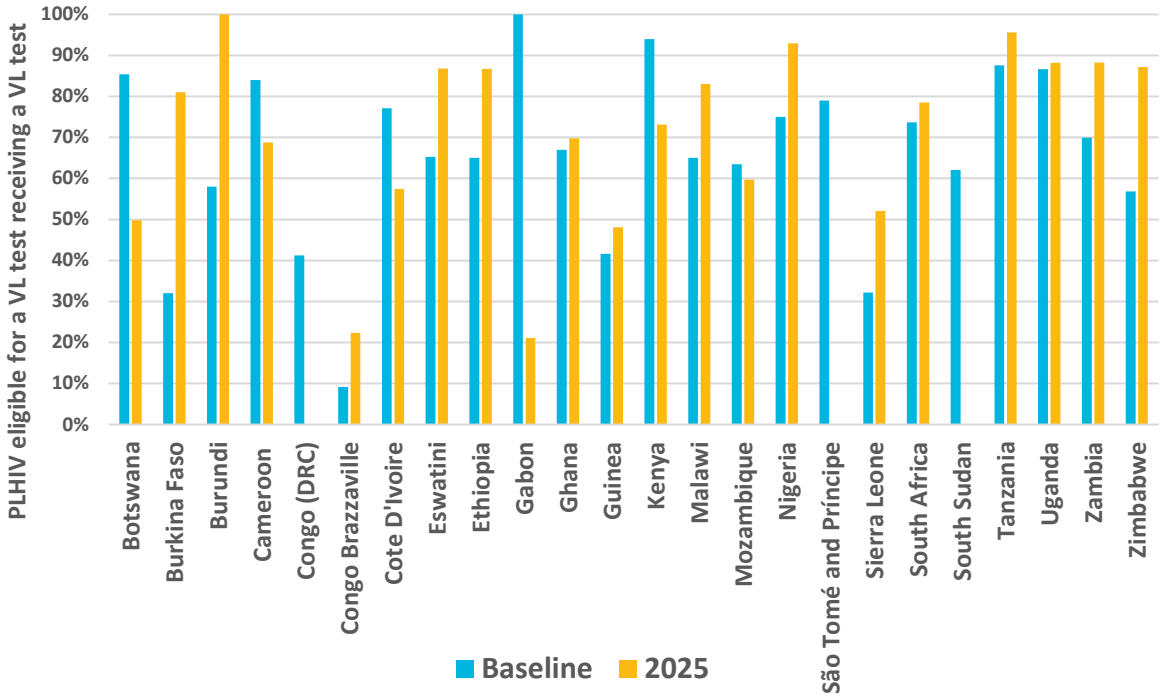
Demonstrated Gains in Diagnostic Capacity

Improvement in Laboratory Systems underlying VL testing-Founder countries

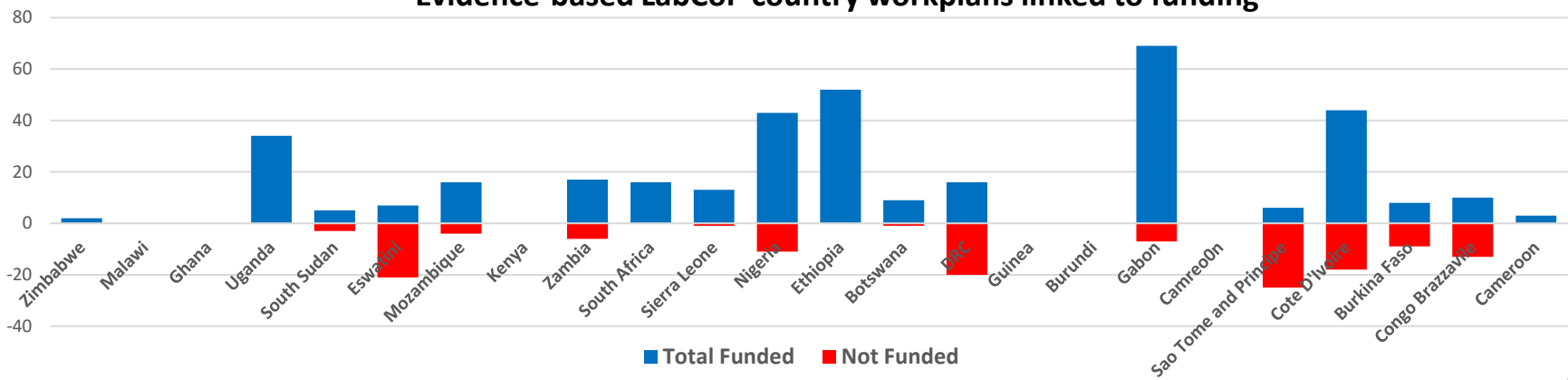
Baseline self assessment 2019	Congo (DRC)	Ethiopia	Kenya	Malawi	Sierra Leone	South Africa	South Sudan	Tanzania	Uganda	Zambia	Zimbabwe
Demand Creation											
Specimen Collection											
Sample Transportation											
HIV VL Testing											
Waste Management											
Supply Chain/ Equipment											
Results Utilization											
Leadership and Management											
2025 self assessment											
Demand Creation											
Specimen Collection											
Sample Transportation											
HIV VL Testing											
Waste Management											
Supply Chain/Equipment											
Results Utilization											
Leadership and Management											

Absence of attribute | Foundational level | Managerial level | Advanced level

Improvement in VL testing uptake from baseline across 15 LabCoP countries



Evidence-based LabCoP country workplans linked to funding

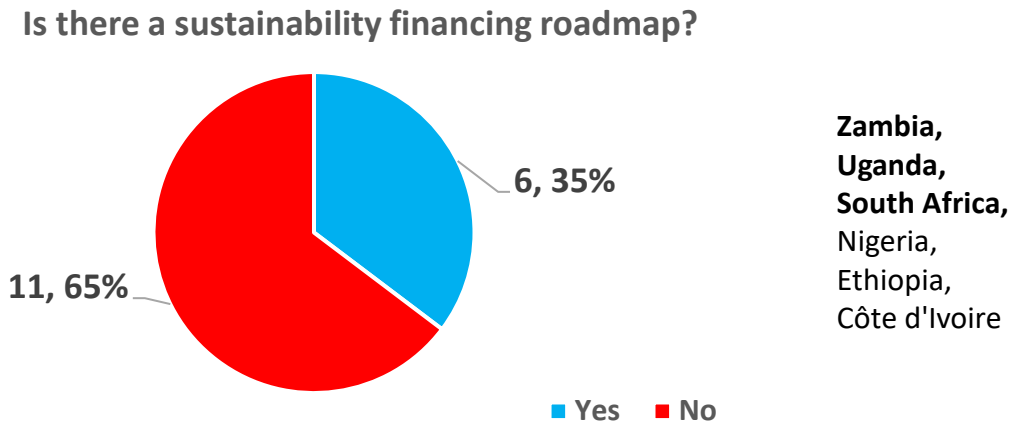


Sustainability Threatened by Donor Transitions

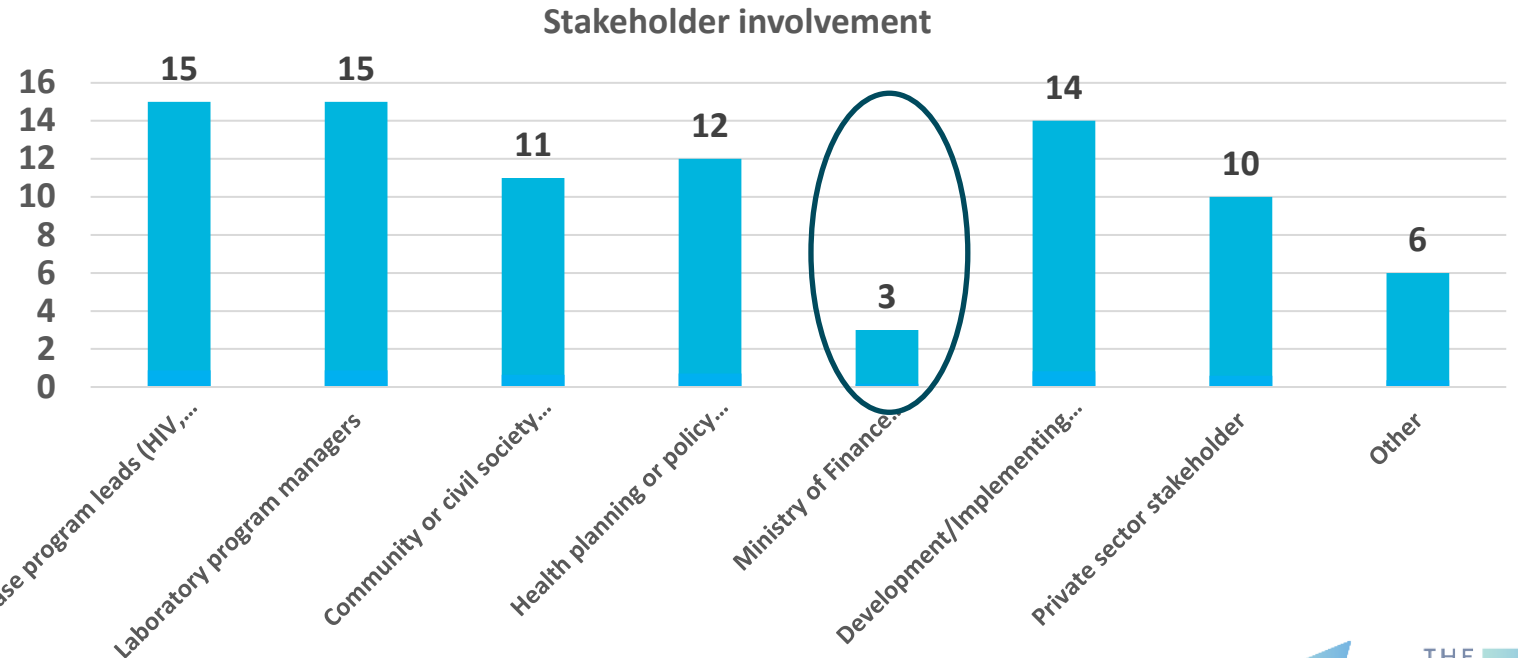
Survey 1: Jan-Feb 2025

- **Only 2 of 20 countries can sustain services >12 months without donor support**
- **65% do not have contingency plans in place**

Survey 2: Aug-Sept 2025



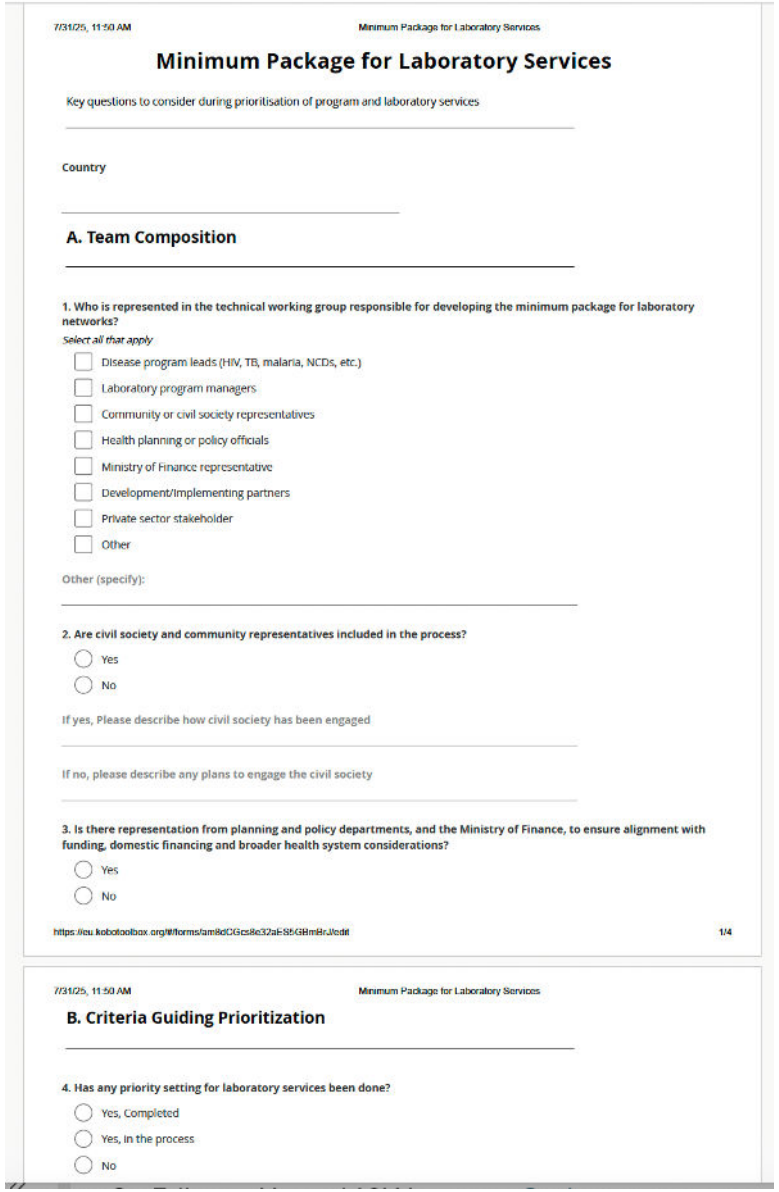
Zambia,
Uganda,
South Africa,
Nigeria,
Ethiopia,
Côte d'Ivoire



How do we achieve Laboratory Systems Resilience?

Structured and evidence-based approach to prioritize and sustain critical diagnostic services amid reduced/limited funding

https://aslm.org/resource/minimum-package-forsustainable-laboratorysystems/



7/31/25, 11:50 AM Minimum Package for Laboratory Services

Minimum Package for Laboratory Services

Key questions to consider during prioritisation of program and laboratory services

Country

A. Team Composition

1. Who is represented in the technical working group responsible for developing the minimum package for laboratory networks?

Select all that apply

- [ ] Disease program leads (HIV, TB, malaria, NCDs, etc.)
- [ ] Laboratory program managers
- [ ] Community or civil society representatives
- [ ] Health planning or policy officials
- [ ] Ministry of Finance representative
- [ ] Development/Implementing partners
- [ ] Private sector stakeholder
- [ ] Other

Other (specify):

2. Are civil society and community representatives included in the process?

- ◯ Yes
- ◯ No

If yes, Please describe how civil society has been engaged

If no, please describe any plans to engage the civil society

3. Is there representation from planning and policy departments, and the Ministry of Finance, to ensure alignment with funding, domestic financing and broader health system considerations?

- ◯ Yes
- ◯ No

https://eu.kobotoolbox.org/#/forms/am8dCGcs8e32aE5t5GBmBrJ/edit 1/4

7/31/25, 11:50 AM Minimum Package for Laboratory Services

B. Criteria Guiding Prioritization

4. Has any priority setting for laboratory services been done?

- ◯ Yes, Completed
- ◯ Yes, in the process
- ◯ No

Minimum Package at a Glance

ASLM | Minimum Package for Sustainable Laboratory Systems

Priority area	Justification	Sustainability plan	Practical solutions
Retention of core staff	Trained and competent staff are essential to quality laboratory testing. Staff retention fosters institutional knowledge and ensures continuity of testing.	Redeploy laboratory staff (including technical, Administrative and other support staff) to affected laboratories to fill gaps due to reduced external funding. Leverage on virtual/online continuous professional development courses (e.g. ASLM Academy).	• Defined minimum staffing per lab tier. • Cross-training personnel to perform multiple functions. • Strengthen laboratory oversight (training, monitoring for non-laboratory professionals). • If insufficient staff numbers as per the staffing norms, consider task sharing and or shifting where possible e.g. use of community health workers to support sample collection. Refer to WHO guidelines on task sharing[9].
Basic equipment maintenance and repair	Uninterrupted testing requires functional equipment to ensure reliability of results.	Leverage biomedical engineering units and calibration centres (established under PEPFAR program) for equipment service, calibration and maintenance.	• Consider establishment of rental agreements/contracts for all equipment with local agents and the use of national equipment repair, maintenance and calibration centres. • Consider training staff and ensure implementation of preventive. maintenance on all major equipment • Can the established national calibration centres also outsource services to like non-government institutions to raise funds for self-sustenance.

Prioritization and contingency planning to maintain laboratory services

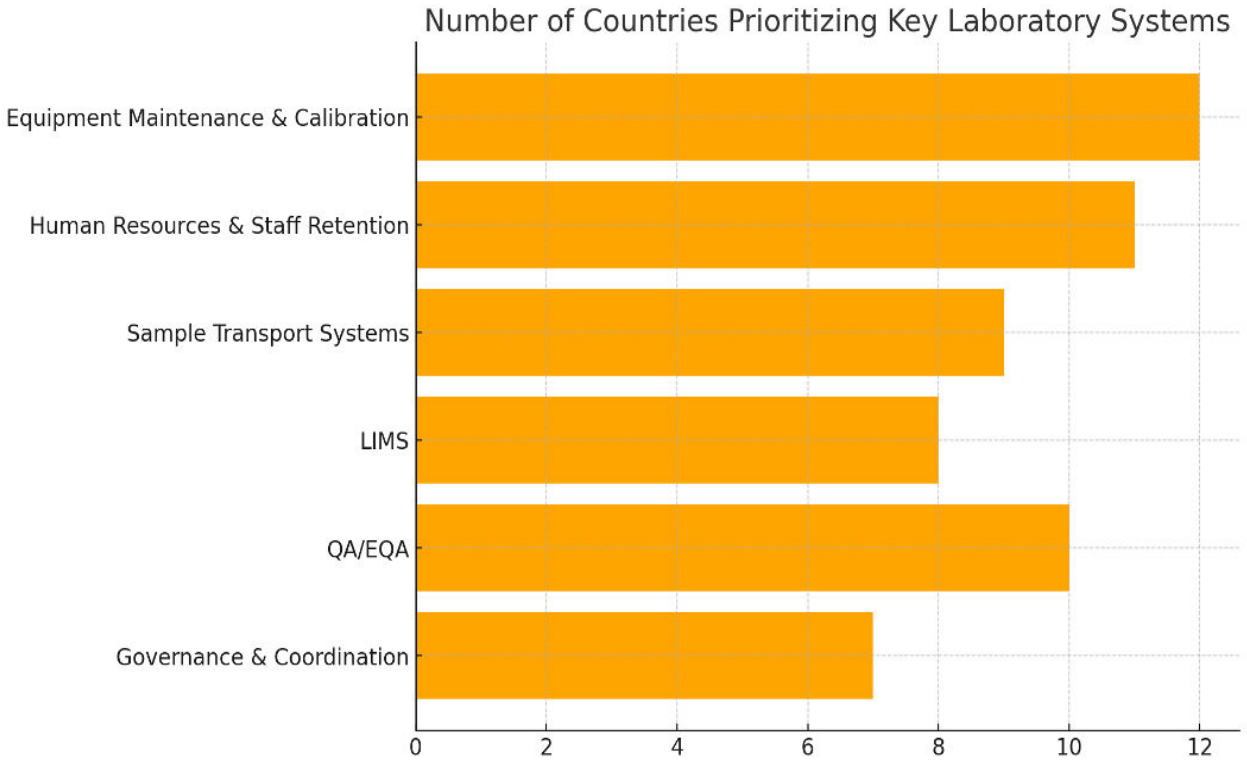
1. Priority Area

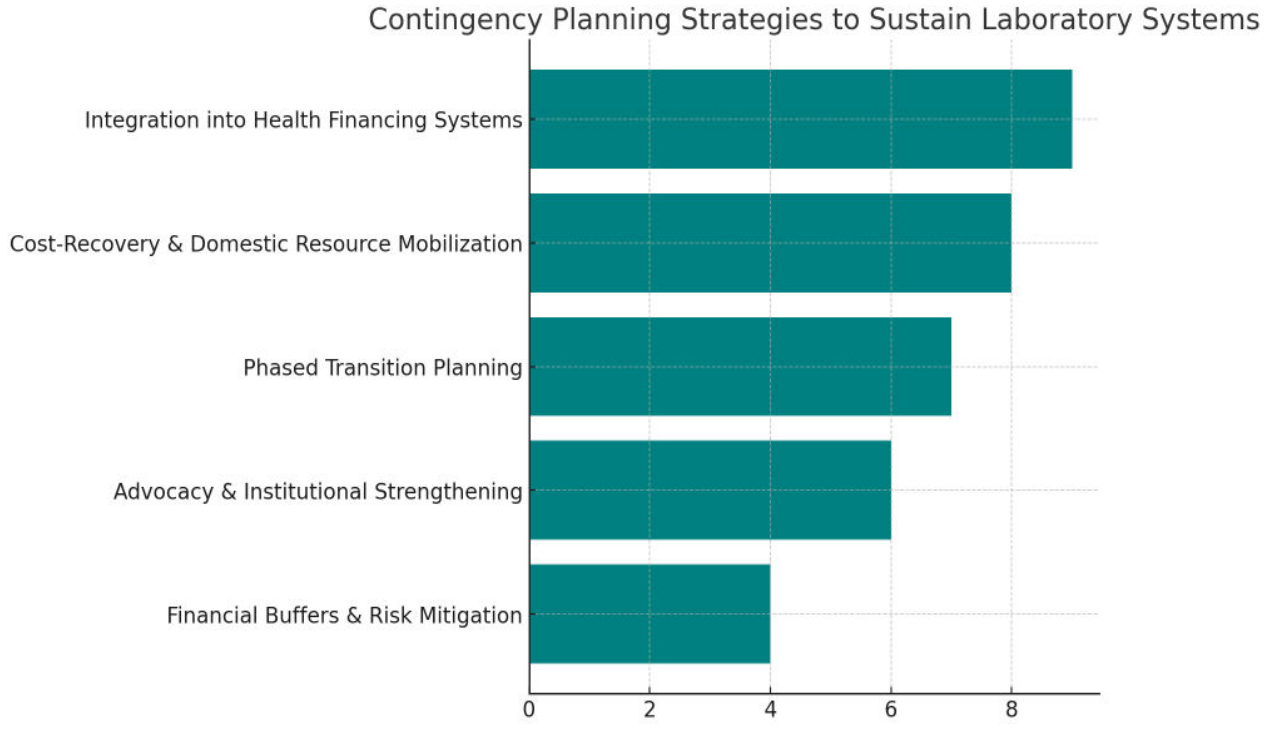
Priority Area	Budgeted? (Y/N)	Cost (USD)	% Funded by donors	% reduction of donor funding	Sustainability plan (Y/N)	Notes / Gaps
Basic equipment maintenance	Y	1,200,000	65.5	35.5	Y	HIV, TB and Chemistry platforms have SLAs, whose service cost is included in the reagent cost
Retention of core staff	N	3,500,000	100%	50%	Y	The national level laboratory positions still funded but the Ministry is working on a transition plan to move them to the Government payroll.

2. Contingency Planning

Area	What components will be prioritized within each of the areas?	Describe your sustainability plan (e.g. other funding mechanisms, integration, etc.)	Rationale/Notes
Basic equipment maintenance	Maintenance of the major equipment includes calibration, repair and replacement	The SLAs volume based and minimum package reduction in volumes has not affected the volume tiers of the SLAs.	Volume based SLA tiers are the sustainability way for the country
Retention of core staff	Transition towards integration of functions where feasible	Integration of functions from the gaps left by the donor supported staff	The Ministry is in the process of completing and implementing the HRH transition plan for donor supported staff.

Prioritization and contingency planning across 14 Countries





Conclusion

To protect these gains in laboratory systems strengthening and improved access to diagnostics, we need urgent investment, stronger national leadership, and commitment to sustainable laboratory systems!

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Thank You!