

# Systematic monitoring and evaluation of laboratory system capacity strengthening for neglected tropical diseases: experiences and recommendations from sub-Saharan Africa and South Asia

I. Bates, S. Gregorius, C. Mulamba, & R. Dacombe

Capacity Research Unit, Liverpool School of Tropical Medicine, Pembroke Place, Liverpool, L3 5QA, UK

## Introduction

- Systematic approaches to laboratory capacity strengthening (CS) are scarce and little is known about how to monitor and measure CS impact in real-time.
- The Capacity Research Unit (CRU) assisted the Centre for Neglected Tropical Diseases to design, monitor and evaluate (M&E) the capacity development of selected NTD laboratories in Ghana, Kenya, Malawi and Sri Lanka, using Bates et al.'s (2014) 5-step approach to CS. This was a participatory process, involving each laboratory in all steps of the approach.
- Based on laboratory capacity baseline assessments each laboratory developed an individual CS action plan.
- The fifth step of the CS approach is about regular monitoring and refining individual CS action plans and indicators.
- Based on CRU's experiences, recommendations are given that can inform future M&E of laboratory CS projects.

## Methods

- **Annual on-site visits and quarterly remote communication** (email & Skype).
- **Tools for visits:** Interviews, focus group discussions, observations, checklists and questionnaires.
- Each on-site visit included a **participatory feedback workshop**, where all stakeholders assessed progress, reprogrammed action plans and revised indicators.
- Stakeholders included: directors; laboratory staff; heads of department; programme managers; and researchers.



## M&E experiences

### Benefits of systematic M&E of laboratory CS

- Regular engagement with all relevant stakeholders provides in-depth understanding of CS progress in real-time.
- Flexibility of the data collection tools captured contextual factors and facilitated cross-country comparisons.
- Feedback workshops ensured that reprogramming of action plans took into consideration the perspectives of relevant stakeholders.
- Systematic involvement of CRU in monitoring and evaluation enabled the laboratories to get assistance and to receive recommendations on certain activities in real-time.



### M&E challenges

- High staff turnover with different levels of M&E understanding.
- Difficulty to ensure that all relevant stakeholders are involved in monitoring and evaluation activities.
- Changes in prioritisations of capacity strengthening activities.



## Recommendations

- Ensure monitoring and evaluation processes are as participatory as possible.
- Training in monitoring and evaluation of local stakeholder and ensure cascading learning effect.
- Ensure that all relevant stakeholders are involved in reprogramming of laboratory CS action plans.
- Link stakeholders from different countries to facilitate cross-contextual learning.



## Selected CS achievements

### **Individual level**

- Improved technical skills and understanding of quality management systems.

### **Institutional level**

- Enhanced collaboration and support for national NTD programmes.
- Improved laboratory infrastructure.

### **National level**

- Development of marketing strategies for laboratory services.
- Securing of additional funding.

### **International level**

- Increased South-South collaboration.

## Conclusion

- Monitoring and evaluation of laboratory CS should be **systematic** and **participatory** to achieve **sustainable outcomes** at different levels.

## Key References

- I. Bates, A. Boyd, H. Smith and D.C. Cole. 2014. A practical and systematic approach to organisational capacity strengthening for research in the health sector in Africa. *Health research Policy and Systems*, 12(11).
- J. Njelesani, R. Dacombe, T. Palmer, H. Smith, B. Koudou, M. Bockarie and I. Bates 2014. A Systematic Approach to Capacity Strengthening of Laboratory Systems for Control of Neglected Tropical Diseases in Ghana, Kenya, Malawi and Sri Lanka. *PLOS Neglected Tropical Diseases*, 8.

## Acknowledgements

The authors thank the Centre for Neglected Tropical Diseases and all participating laboratories for their collaboration.