

Building Tanzania's laboratory capacity through public-private partnership



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State of many health laboratories in Tanzania



Regional laboratory modernised by Abbott Fund in 2007



Objective:

- To enhance capacity and quality of Tanzania's regional laboratories, which support 77 district laboratories and provide services to more than 200 care and treatment centres that are scaling up ART nationwide.

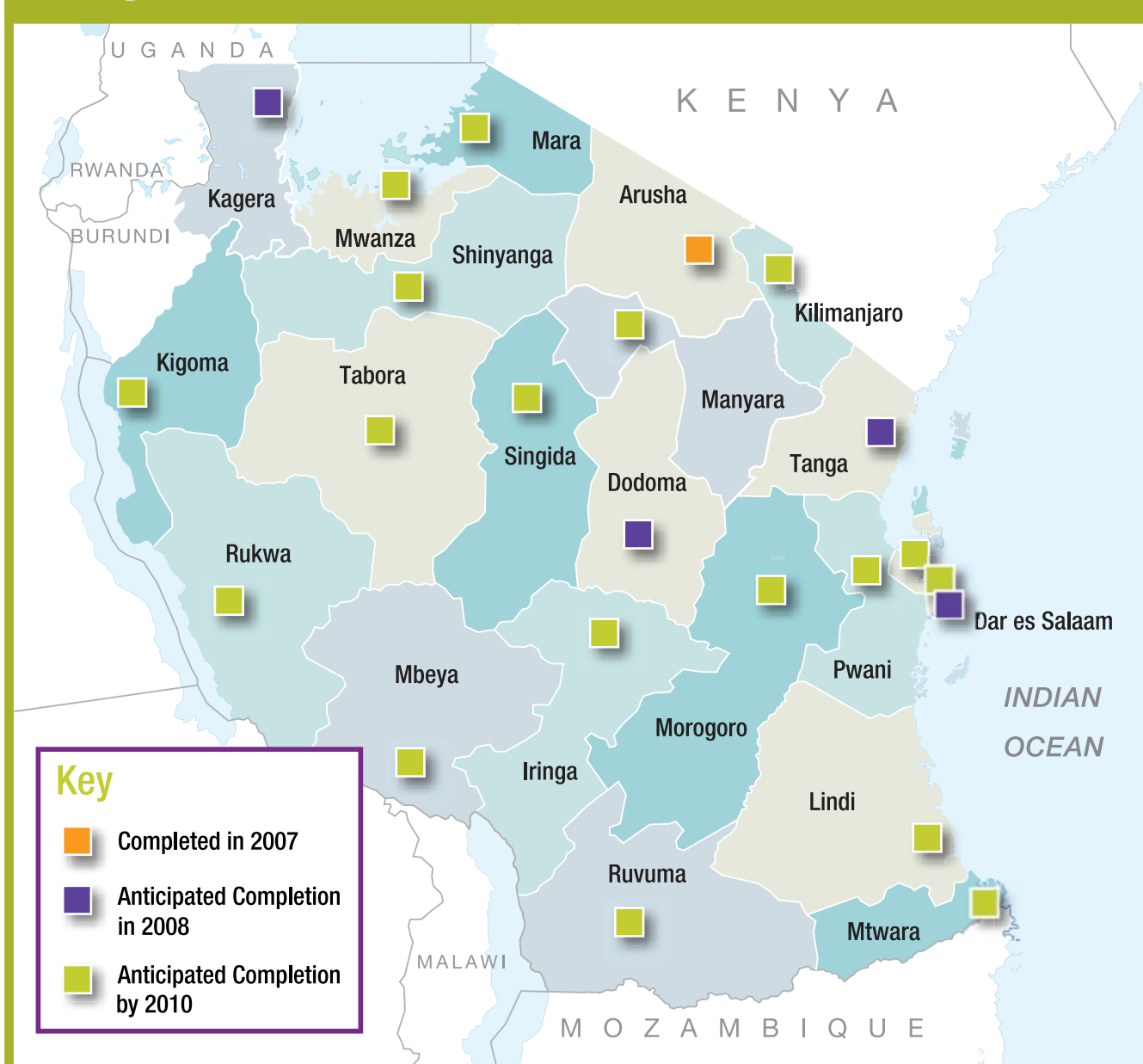
Challenges to Implementation:

- A 2002 public health laboratory assessment found most were inefficiently designed and in poor condition, concluding that laboratory services were the weakest link to the provision of quality HIV/AIDS services. (Photos 1A,1B,1C,1D).
- Through PEPFAR funding, the Ministry of Health and Social Welfare (MOHSW) in collaboration with CDC and other partners, developed an operational plan to improve laboratory services but faced challenges in execution due to a burdensome procurement process, inadequate human resources and weak coordination of multiple parties and funding sources.
- After two years, only 35 (35%) of 99 laboratories needing urgent attention were renovated.

Response:

- Recognizing that public private partnerships can implement rapid changes, Abbott Fund and the MOHSW collaborated to modernise Mt. Meru Hospital's regional laboratory in 2007. This resulted in tripling capacity, a dramatic reduction in turnaround time and increased health worker productivity—demonstrating proof of concept for a cost-effective nationwide laboratory improvement project. (Photos 2A,2B,2C)
- To expedite the nationwide laboratory improvements, a partnership was developed between MOHSW, CDC-Tanzania, Abbott Fund Tanzania, Association of Public Health Laboratories (APHL), and Design 4 Others (D4O), a U.S.-based not-for-profit initiative of CUH2A providing design expertise.
- The partners provide the following:
 - MOHSW and CDC: coordination of partners' contributions and liaison between partners, leadership and laboratory medicine expertise

Nationwide Modernisation of 23 Regional Laboratories in Tanzania



- Abbott Fund Tanzania: laboratory renovation experience, project management resources and funding for the modernisation of 23 laboratories
- APHL: technical assistance in harmonization of design and planning approaches
- D4O: extensive laboratory design expertise, planning and implementation
- The first four laboratories will be completed in 2008, and plans are to complete the work on the remaining regional laboratories by 2010.

- Design optimises laboratory safety and efficiency
- Standardised architectural design and construction simplifies construction documentation and material procurement
- Training and mentoring ensures sustainable improvements (Photo 2B)
- Preventative maintenance improves instrument and facility up-time
- The joint implementation team prioritises sites, develops standard design and equipment requirements, uses a secure website for shared access to project documents and ensures long-term sustainability through on-site mentoring and training

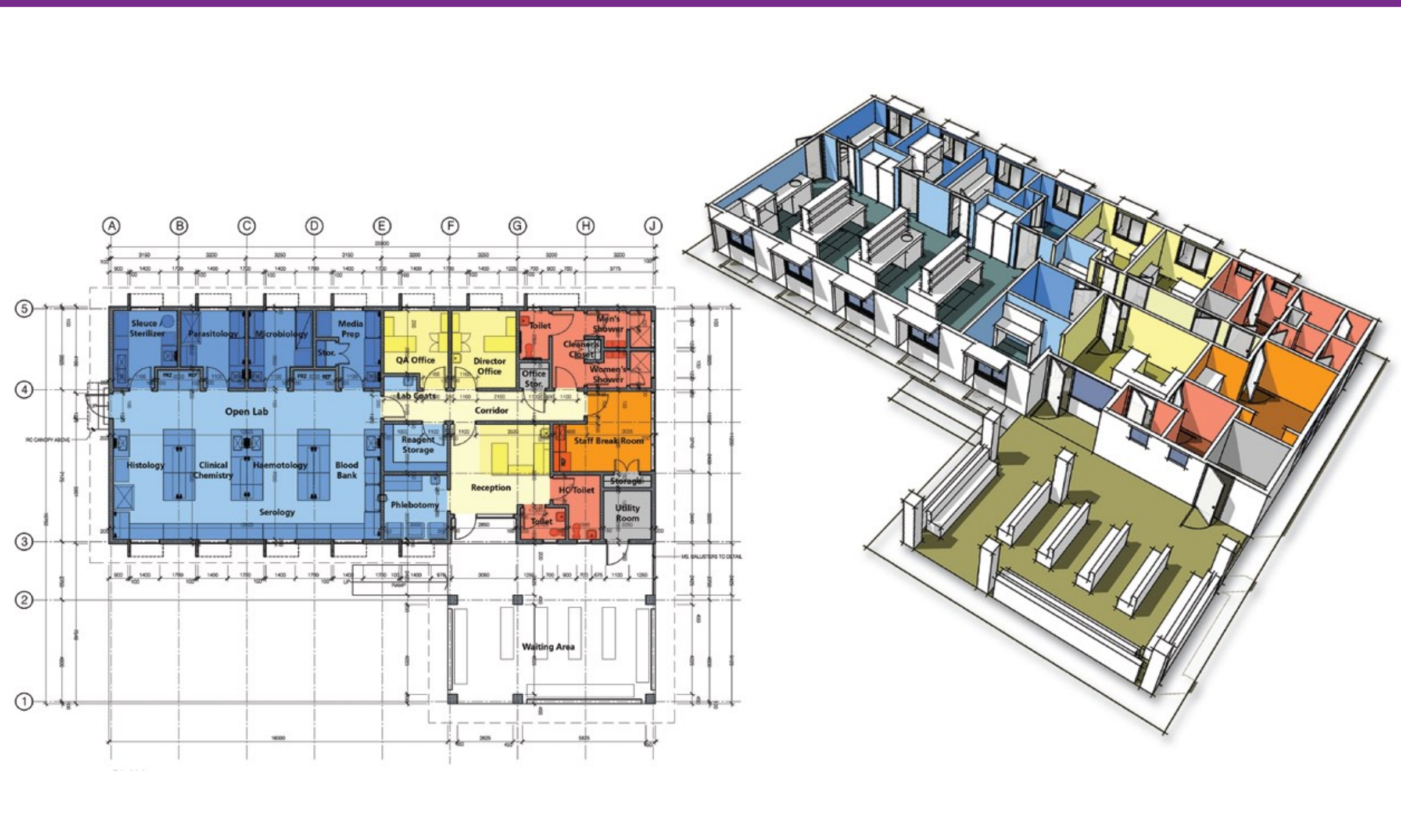
Results and Lessons Learned:

- In five months, reviewed existing lab plans, achieved consensus on overall design, prioritised renovations, adapted model design to first four laboratories, engaged architectural and engineering firms, and announced tenders.
- Time spent in building a capable team to form the partnership and using proven project management procedures has been critical for successful implementation.
- Inclusion of a private partner provides flexibility in adapting plans as requirements change and evolve.

Recommendations:

- Well-coordinated partnerships, with clearly defined participant roles are essential for successful implementation of complex laboratory renovation projects.
- Including private partners in the planning brings in additional resources and helps to assure a more rapid roll-out and greater flexibility in procurement and planning.

Floor Plan and 3D Rendering of Model Regional Laboratory Design



Implementing Partners

MOHSW

- Leadership, coordination and oversight of project
- Commitment to scaling-up HIV/AIDS response in Tanzania
- Nationwide laboratory needs assessment
- Existing partnerships with CDC and Abbott Fund

Abbott Fund Tanzania

- Funding for National Laboratory Modernisation Project
- Experience in project management
- Experience in laboratory improvements in Tanzania
- Commitment to support MOHSW in Tanzania

CDC-Tanzania

- Scientific expertise
- Coordination of partners' contributions and liaison between partners, Tanzania PEPFAR team and USG headquarters offices

APHL

- Collaborative partnership
- Expertise in public health laboratory management and operations
- Experience in Tanzania laboratory system

D4O

- Expertise in laboratory design
- Experience in project planning and implementation