



Photo: UNFPA Tanzania



Portable Mobile Learning System

A Rural Training Solution for Health Workers

Critical Challenge

- Quality of care is often poor because of lack of trained, and skilled healthcare providers
- Shortage of skilled providers particularly acute in remote and rural areas

A Rural Training Solution



UNFPA launched a portable **Mobile Learning System (MLS)** in 2016 to train midwives and health workers in key skills to combat most prevalent causes of maternal and newborn mortality.

- Made possible by - Innovation Award in 2015 (SRHB, MIS, UNFPA Ethiopia and Tanzania)- as part of a generous grant by Govt of Denmark to UNFPA for innovative ideas and solutions to address SRH issues.

What is the Mobile Learning System (MLS)?

- **Technology Kit:** a palm sized WiFi battery-operated portable projector, portable speakers, and a solar-charger kit.
- Projector – built-in android tablet, speaker, USB, Micro SD card + SIM card ports
- Pre-loaded with various world-class **interactive multi-media training modules** on key midwifery life-saving skills and obstetric emergencies (PE/E, PPH, sepsis, PAC etc) that account for more than 90% of all maternal deaths.
- Modules on family planning, essential newborn care, and female genital mutilation are also included.
- Solar charger kit comes with a powerful battery that provides extra 8 hrs of life



What makes MLS so innovative?

- Simple, ease of use, mobile, cost effective
- Suitability for remote rural settings with challenges of infrastructure, electricity, poor internet connectivity and lack of trained tutors.
- MLS allows for any blank white wall in any setting (remote or urban) to become a classroom, so multi-media training solutions can be used.
- Solar charger kit - alternative to vagaries of electricity
- Pre-loaded world class training materials - make internet access unnecessary.
- Micro SD card/USB ports - additional data storage, presentations
- The built in android tablet makes it vertically and horizontally scalable - any kind of training can be seamlessly adapted. New courses & updates can be introduced through internet whenever available
- Sim card port
- Preloaded modules - rural health workers can get world class quality training, even without trained instructors.
- The MLS platform – can be used for any kind of trainings

Scope of MLS Pilot

- 22 health centres and midwifery training sites (mostly rural) of **Ethiopia** and **Tanzania** identified to pilot test MLS in collaboration with the Govts of Ethiopia and Tanzania & resp. midwifery associations.
- Ethiopia & Tanzania have exceptionally high rates of maternal mortality at 353 and 398 deaths per 100,000 live births respectively (WHO 2015 report).
- Basis of Selection- Strong Interest of Govt and COs
- Initial Target about 80 healthworkers

Pilot Project Launch- March 2016



Photo: UNFPA/Ethiopia; Launch picture in Ethiopia 16 March 2016

Ethiopia





Ethiopia

- Total **52** training sessions (April and September 2016)
 - 30 sessions - midwifery e-learning modules
 - 22 other trainings on different topics - basic emergency obstetric care, antenatal care, acute watery diarrhea, food preparation, etc.
- Total Beneficiaries – **1013**
 - 484 midwives and midwifery students, 283 other healthcare workers, and 246 non-healthcare workers

My favorite!



Tanzania





Photo: UNFPA/Tanzania

- Total of **64** training sessions conducted using the MLS between April and December 2016
- **2,024 beneficiaries** of trainings (119, midwives, 589 other healthcare workers, and 266 non-healthcare workers).

Overall Impact!



Photo: Geeta Lal/UNFPA

Overall– In Ethiopia and Tanzania

116 pre, in-service and other trainings

Over 3,000 Beneficiaries

2525 Health-workers; 500 non-healthworkers

Tanzania- Funding generated for >74,000 from J&J and DFATD for RMNCH project

High level of Govt interest in MLS, engagement, importance of continuous innovation to improve, access and quality of care

Improvements in Quality of Care and Access!

Evaluation from Countries

- MLS - easy to handle, operate, understand, highly portable
- Cost effective and Inexpensive - suitable for developing countries
- Useful for flexible group sizes; can effectively teach up to 40 students
- Lasts up to 8 hours without the need to interrupt class due to electricity outage.
- Can be easily operated without complex ICT skills.
- Instrumental in improving the quality of education using a rich variety of teaching-learning methods.
- High-quality -- No breakage or mishandling was reported.
- Easily adapted to impart other trainings apart from those intended for midwives.
- Younger generation of midwives grasped operation of the projector

External Formative Evaluation – project rated among top 7 most promising innovations done by UNFPA worthy of scale up.

Challenges

- Remote sites without in-house ICT persons had challenges navigating through courses as they were not familiar with android technology.
- One kit per site proved limiting-- increased demand from sites for additional MLS kits.
- Delay in receiving reports and feedback from rural training sites contributed to communication challenges.
- Few training centers had difficulty operating the technology kit due to language barriers.

Sustainability/Scalability

- **Scalability comes from:**
- Usefulness + being appropriate for the intended low resource setting –MLS proved itself in all these areas
- Cost effective – total cost of kit under \$600; a typical training of 40 healthworkers can cost 25-50K to cover travel/facilitation/accommodation expenses; bigger cost is of keeping the health workers away from their work place
- Engagement of partners and government and all relevant stakeholders from the start. National ownership is key
- Critical mass to demonstrate results – we chose 22 sites and the work continues in all

Looking ahead...

- This pilot has proven that MLS is an effective and low-cost solution for low resource areas
- Generated additional funding of 75K (J&J and DFATD) within 6 months- original award was 100K
- Interest from S Sudan, Nepal, Equitorial Guinea, Nepal, Mozambique
- Raise further awareness – more demonstrations
- Garner support from various stakeholders, Government and partners - ensure success, scale up
- Additional funding and resources

Thank You

