



## TB Lab Logistics Assessment Support for SCM Human Resource Development



### I. Background

Indonesia is among the 22 countries in the world with the highest tuberculosis (TB) burden. The estimated prevalence of all forms of TB was 289 per 100,000 people in 2010, with 9,000 suspected cases of multidrug resistance (MDR) TB. The limited number of quality assured labs and PMDT treatment sites makes diagnosis and treatment challenging.

To accommodate the roll out of GeneXpert and the expanding number of quality assured culture and DST labs, quality instruments and reagents are required. Recently, stockouts and the presence of substandard supplies have threatened laboratory performance.

Indonesia needs—

- a procedure for forecasting TB lab supplies
- a plan for procurement, distribution, and stock management, especially at the central level.

In addition, sputum specimens and cultures need to be transported to labs using ambient temperate and safely packed containers. The current transport system is ineffective and poorly linked with the GeneXpert sites. NTP has recently developed standard operating procedures (SOPs) for the sample transport system, but implementation continues to be challenging.

To better understand the current situation and create a baseline for measuring progress, the MOH and USAID | DELIVER PROJECT undertook a standardized national assessment of TB lab logistics practices.



### II. Objectives

The study assessed—

- logistics-related challenges in providing the expected laboratory services to the National TB Control Program
- forecasting methods at different levels of TB labs
- lab supplies available and required at different levels of TB labs
- challenges faced by TB labs in procuring quality and appropriate lab equipment and supplies
- the maintenance system being used for key TB lab equipment
- specimen/culture cold chain transportation mechanisms and TB lab linkage between facilities submitting specimens for GeneXpert, culture, and DST tests, including PMDT treatment sites
- need for TB lab human resource capacity building in supply chain management

### III. Key Outcomes

- Trained staff in SOPs for TB specimen transport
- Developed SOPs for GeneXpert cartridge supply chain management
- Prepared and rolled out lab logistics manuals
- Piloted TB specimen transport system at district level

### IV. Lessons Learned for Human Resource Development

- Lab and field staff need to maintain skills and good practices
- Lab staff need to properly maintain lab equipment
- Cold chain system needs to be properly followed
- There is inadequate budget and supervision time
- Lab staff and leadership are very supportive of SCM training
- Lab staff, with proper training, can and will follow proper SCM practices



Acknowledgements: Collaboration with the MOH and local governments is gratefully acknowledged. This work was done in partnership with the national TB Program and TB Care. USAID provided funding for this work.