In 2009, UNITAID provided US$ 87 million in funding for a project to accelerate access to rapid diagnostics for patients at risk of multidrug-resistant tuberculosis (MDR-TB) in 27 countries. These countries carry around 40% of the estimated global burden of MDR-TB.

The EXPAND-TB (Expanding Access to New Diagnostics for TB) Project is a collaboration between the World Health Organization (WHO), the Global Laboratory Initiative (GLI), the Foundation for Innovative New Diagnostics (FIND) and the Stop TB Partnership Global Drug Facility (GDF).

The aim of the project is to diagnose more than 100,000 patients with MDR-TB through:

- **Improved control of MDR-TB**
  - by introducing rapid, quality-assured WHO-endorsed tests

- **Improved market dynamics**
  - by increasing market size and decreasing test price

- **Integrated tools in TB control programmes**
  - by supporting 103 TB laboratories in 27 countries
RESULTS

INCREASED MDR-TB DIAGNOSIS

Globally, the number of people diagnosed with MDR-TB tripled between 2009 and 2013, and reached 136 000. This includes 94 107 patients with laboratory-confirmed resistance to rifampicin and isoniazid (MDR-TB) and 42 305 patients diagnosed with rifampicin resistance (RR-TB, eligible for MDR-TB treatment).

The increase in MDR-TB case detection has been greatly facilitated by 97 new/refurbished reference laboratories established in the 27 low-and middle-income countries with EXPAND-TB and other donor support, and the roll-out of the Xpert MTB/RIF assay (by several stakeholders). Xpert roll-out has been scaled up following a significant cost reduction (to USD 9.98) achieved through an innovative financial agreement reached in 2012 between a consortium of lead partners (UNITAID, USAID, BMGF, PEPFAR) and the manufacturer.

With direct EXPAND-TB support, 35 711 patients eligible for MDR-TB treatment were detected in 2013.

Scale-up of diagnostic testing has been particularly impressive in India: In 2013, 21 739 people with MDR-TB were detected in 39 EXPAND-TB supported laboratories. This represents 61% of the cases eligible for MDR-TB treatment notified in 2013 by the country.

Since the start of EXPAND-TB in 2009, 89 261 people with MDR-TB were detected with the support of the EXPAND-TB project in the 27 low- and middle-income countries. The projected target of 115 213 patients is expected to be exceeded at the close of the project by the end of 2015.

In 2008, prior to the start of the project, the 27 countries reported 9 861 MDR-TB cases. In 2013, the number of MDR-TB and RR-TB cases being notified had increased to 65 195 cases in the same countries, over 50% with EXPAND-TB support.

LABORATORY CAPACITY STRENGTHENED

By the end of June 2014, 97 of the 103 targeted laboratories were fully operational and reporting cases using quality-assured new and rapid TB diagnostics. Many of them did not have the capacity to diagnose MDR-TB before the project.

Since the project’s inception, over 2400 laboratory staff, managers and other medical personnel have been trained on new diagnostic methods by the EXPAND-TB implementation team and manufacturers. In addition, as part of technology transfer, expertise and tools were shared to assist with the introduction of new diagnostics and facilitate their proper use.

SHAPING THE MARKET

New diagnostics

The project has increased the market for new and rapid TB diagnostics through 97 newly established or upgraded laboratories and 47 decentralized GeneXpert sites. This has contributed to achieving decreases in prices for laboratory commodities and creating potential for competition.

Improved diagnostic capacity has also increased the information available on people diagnosed with MDR-TB. This has helped countries better plan for procurement of quality-assured drugs for people ill with MDR-TB, and ensure they are provided with quality treatment and care.

Second-line drugs

The EXPAND-TB project has enabled more patients to be treated with quality-assured second-line drugs, and therefore contributed to increased demand for drugs provided by the Global Drug Facility. There has been an increase in procurement of second-line drugs with the greatest demand from India, Ethiopia, Uganda.

The project has contributed to stabilizing the market for second-line drugs through increased demand and helped the Global Drug Facility further secure significant drops in price of individual medicines and MDR-TB treatment regimens (up to 32% reduction).

ALIGNING RESOURCES

The EXPAND-TB project synergistically aligned its resources with both local and international partners beyond the project, including from The Global Fund, The World Bank, the US Government, and others. The EXPAND-TB project financed the purchase of diagnostic equipment and commodities, training of laboratory staff and technology transfer. International and local partners funded the building of laboratory infrastructure and additional commodities in many countries. Staff in laboratories are paid with domestic resources.

For more information, please access: http://www.who.int/tb/laboratory/en/