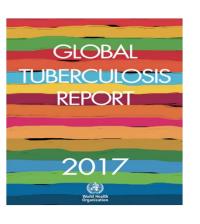
# 64th Myanmar Medical Conference 20th January, 2018

# TB Situation



# Overview of NTP

Dr. Tin Mi Mi Khaing Sr. NTO, WHO (TB Unit)



# The global TB situation

Estimated incidence, 2016

Estimated number of deaths, 2016

All forms of TB

10.4 million

1.3 million

**HIV-associated TB** 

1.4 million

374,000

MDR/RR-TB

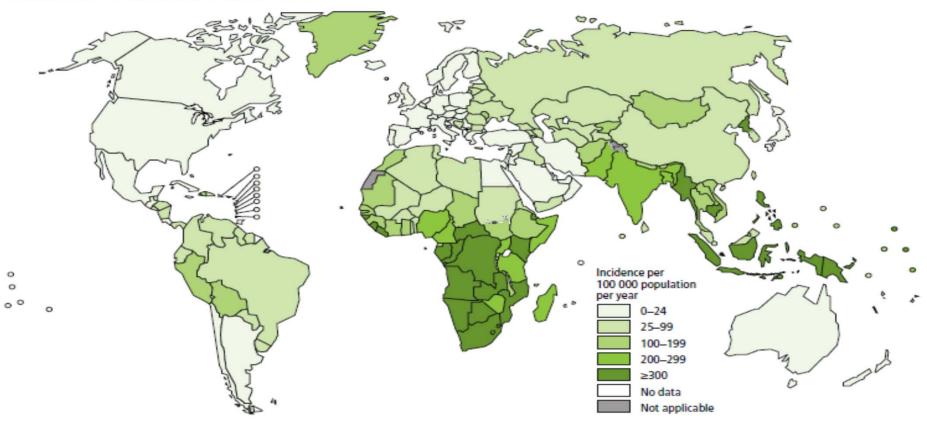
600,000

240,000

Source: WHO Global Tuberculosis Report 2017

## Estimated TB incidence rates,2016

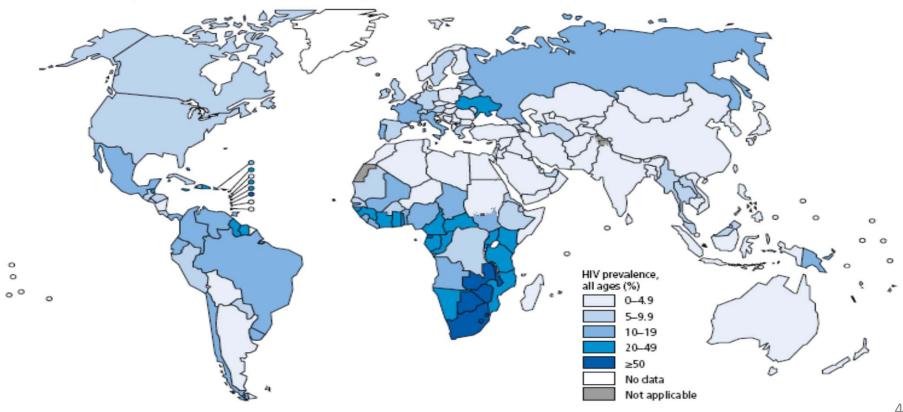
#### Estimated TB incidence rates, 2016



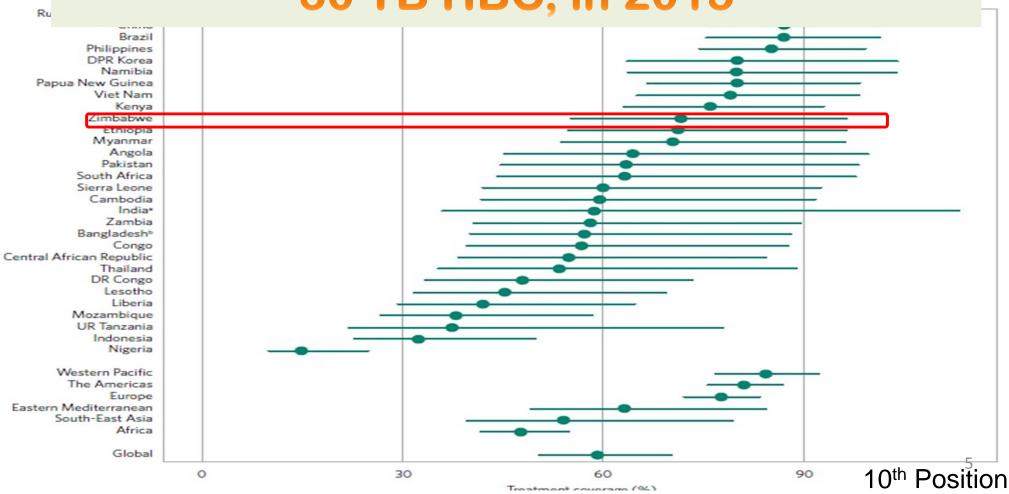
Source: Global TB Report 2017

## **Estimated HIV prevalence** in new and relapse TB cases, 2016

Estimated HIV prevalence in new and relapse TB cases, 2016



Treatment coverage (new and relapse), 30 TB HBC, in 2015



## TB

Cambodta\* Sierra Leone\*

Azerbaljan
Belarus
Kazakhstan
Kyrgyzstan
Peru
Republic of Moldova
Somalia
Tajikistan
Ukraine
Uzbekistan

Bangladesh DPR Korea Pakistan Philippines Russian Federation Viet Nam

Angola
China
DR Congo
Ethiopia
India
Indonesia
Kenya
Mozambique
Myanmar
Nigeria
Papua New Guinea\*
South Africa
Thailand
Zimbabwe\*

Brazii
Central African Republic\*
Congo\*
Lesotho\*
Liberia\*
Namibla\*
UR Tanzania
Zambia\*

Botswana Cameroon Chad Ghana Guinea-Bissau Malawi Swaziland Uganda

**MDR-TB** 

TB/HIV

# TB situation in Myanmar

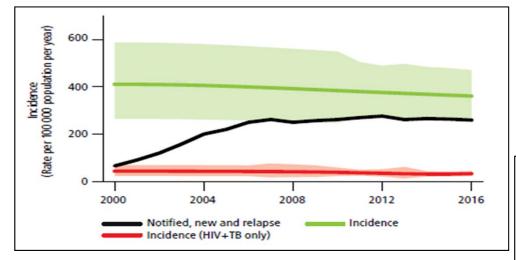
- TB is a major public health problem
- One of the world's
- ■30 high TB burden countries
- ■30 high MDR-TB burden countries
- 30 high TB/HIV burden

Population	53 million		
Estimated incidence all forms	361		
Estimated TB Mortality	47		
Gap in overall case detection (53 Millions Pop.)	27%		
MDR-TB among new TB patients (3 <sup>rd</sup> DRS, 2012-2013)	5.0%		

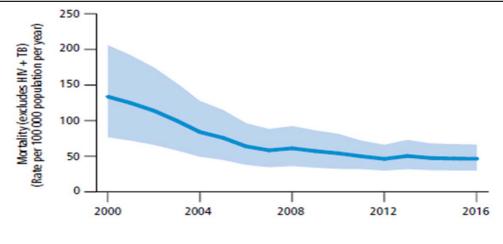
COUNTINESes of the TB burden, 2016 (source: Global TB Report 2017)

### TB Epidemiology, Myanmar (2016)

#### **Incidence & Notification trend**

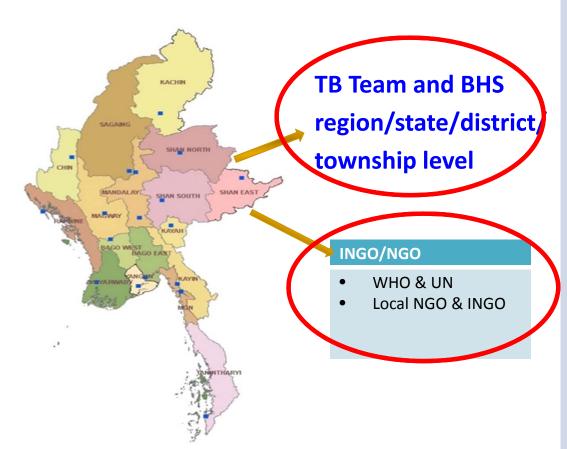


#### **Mortality trend**



Data source: Global TB Report (2017)

#### **NTP** Activities



#### **Activities**

- 1. Advocacy
- 2. Awareness raising (Health Education)
- 3. DOTS implementation
- 4. Capacity building (training) at all levels
- 5. Contact screening
- 6. Programmatic Management of DR-TB
- 7. Collaborative TB/HIV activities
- 8. Public- public mix and public-private mix DOTS
- 9. Coordination between INGOs and NGO
- 10. Intra and inter Departmental coordination
- 11. Coordination between other Ministries
- 12. Accelerated TB Case finding activities
- 13. Community based TB Care
- 14. Supervision, monitoring ,evaluation and research

#### **Activities and achievement**

- TB services are standardized nationwide, except for a few targeted interventions in selected townships or population groups
- Basic TB care and prevention services cover all 330 townships.
- First-line anti-TB drugs, laboratory reagents and supplies are available all over the time to 330 townships.

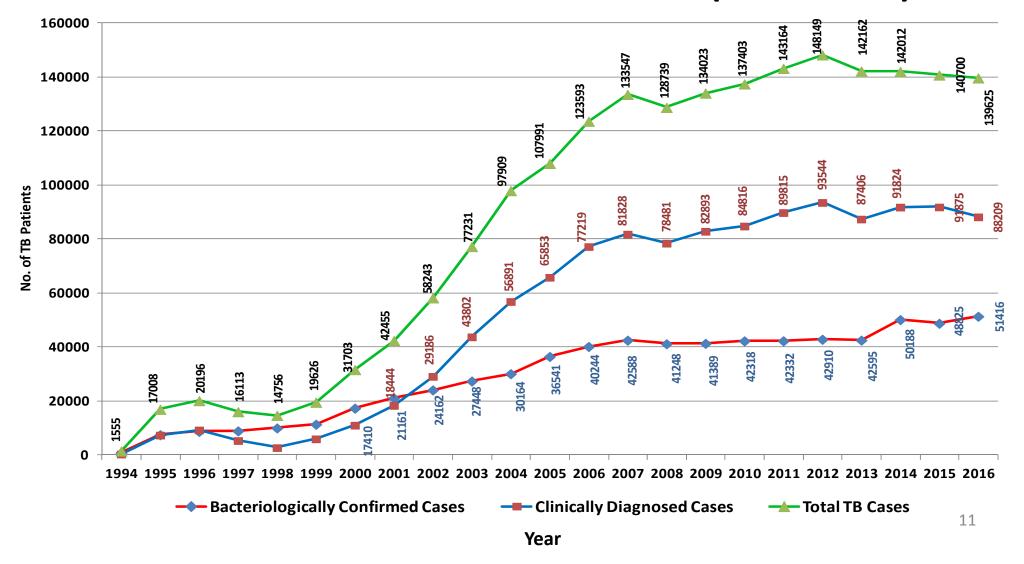
# Trend of Presumptive TB examination rate & sputum positivity rate (2003-2016)



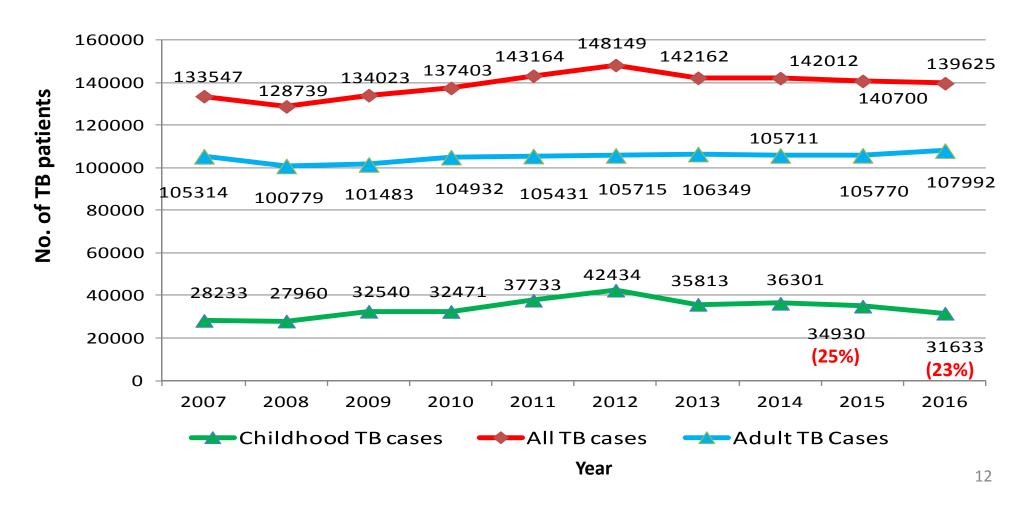
Positivity rate

Presumptive TB examination rate

#### **Trend of Total TB Case Notification (1994-2016)**



### Trend of Childhood TB (2007-2016)



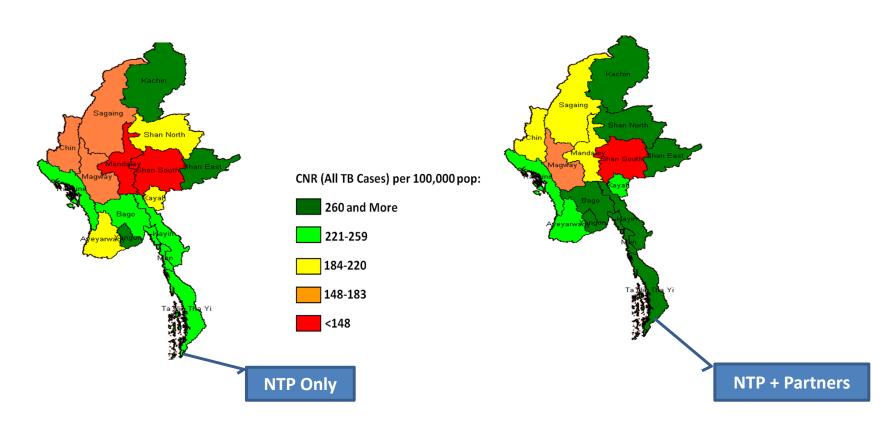
#### Partners' coordination and collaboration

- Coordination through TB-TSG including non-GF supports such as 3MDG and USAID
- Public Private Partnership (with GP and hospitals) is very essential part of TB service

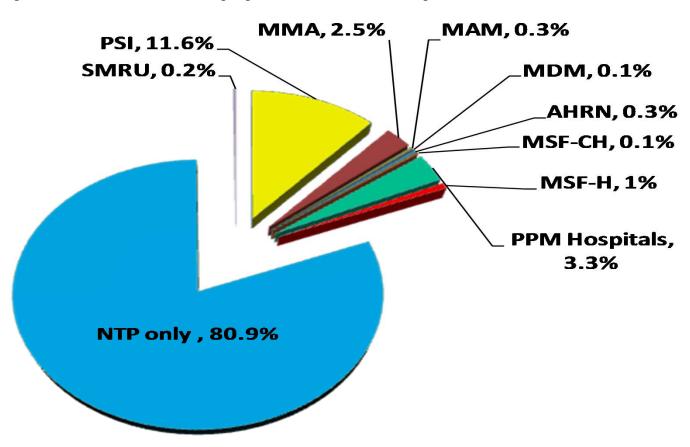
Local NGO	International NGO		
Myanmar Women's Affairs Federation	Asia Harm Reduction Network		
Myanmar Maternal & Child Welfare Asso	Burnet Institute		
Myanmar Medical Association	Clinton Health Access Initiative		
Myanmar Health Assistants Association	CESVI		
Myanmar Red Cross Society	Family Health International		
	International Organization for Migration		
Bilateral agency	International Union Against Tuberculosis and Lung Disease		
Japan International Cooperation Agency	Medecins du Monde		
Partners of NTP	Malteser International		
	Medecins sans Frontieres (Holland)		
vvoliu licalul Olganization	Medecins sans Frontieres (Switzerland)		
UN Office for Project Services	Medical Action Myanmar		
WFP World Food Programme	PACT Myanmar		
	Population Services International		
	World Vision International		
	SMRU		
	Health Poverty Action		
	Progetto 14		

2015 TB Annual Evaluation Meeting Presentation, NTP

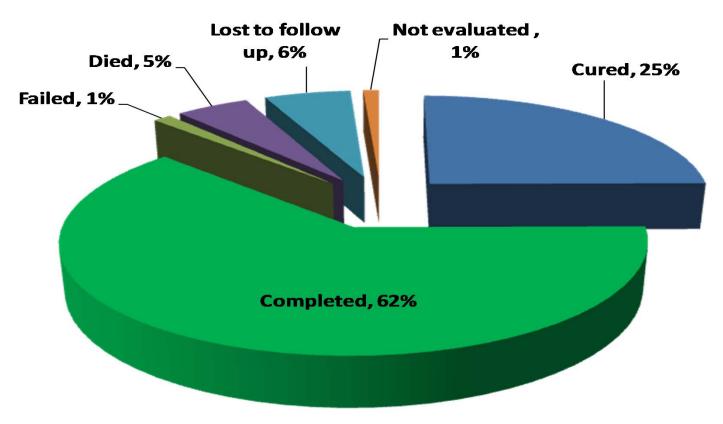
# Case Notification Rate (CNR) (All TB Cases) per 100,000 pop. according to Region & State (2016)



# Proportion of Total TB cases contributed by NTP & Other units (Annual 2016) (N=139,625)



# Treatment Outcomes of All form TB Cases (2015 Cohort) (N=138423) (TSR 87%)



## **TB/HIV Collaborative Activities**



Guidelines for the Programmatic Management of TB/HIV in Myanmar

National Tuberculosis Programme
National AIDS Programme

December 2015

### 2012: 12 points policy package: What's new?

#### A. Establish the mechanisms for integrated TB & HIV services

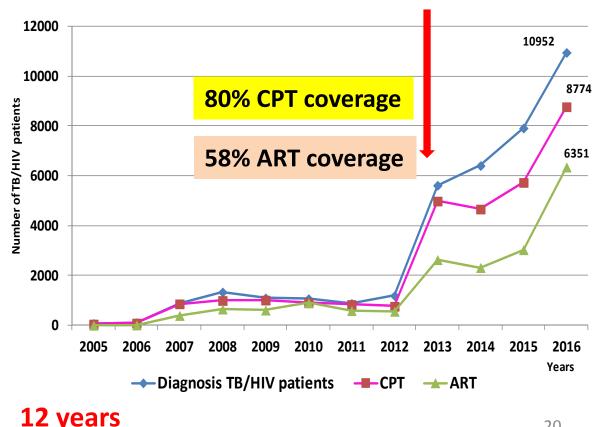
- 1. Set up or strengthen a TB/HIV coordinating body effective at all levels
- 2. Conduct HIV and TB surveillance among TB and HIV patients respectively
- 3. Carry out joint TB/HIV planning
- 4. Conduct monitoring and evaluation
- 5. Intensity IB case finding and ensure quality IB treatment
- 6. Introduce TB pre 6. Introduce TB prevention with IPT and ART 7. Infection control

#### C. Decrease the burden of HIV in patients with presumptive and diagnosed TB

- 8. Provide HIV testing & counselling to patients with presumptive and diagnosed TB
- 9. Introduce HIV preventive methods patients with presumptive and diagnosed TB
- 10. Provide CPT for TB patients living with HIV
- 11. Ensure HIV prevention, treatment & care for TB patients living with HIV
- 12. Provide Antiretroviral therapy to TB patients living with HIV

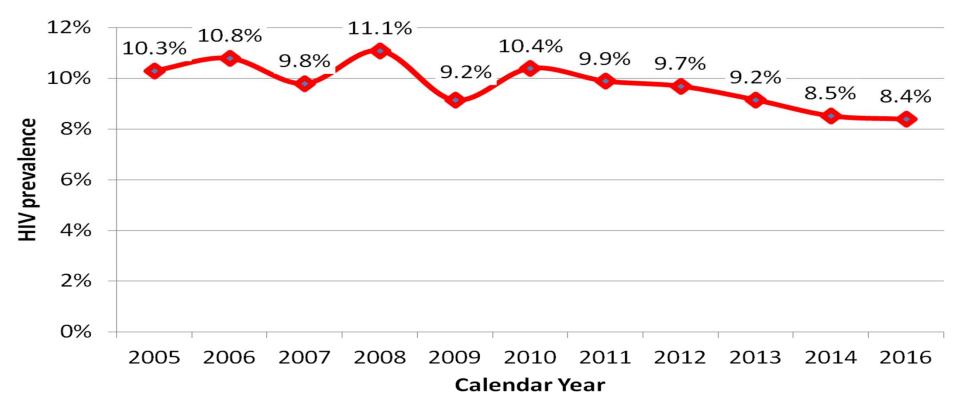
# **Expansion of TB/HIV** collaborative activities (2005-2016)

- ❖initiated in 7 townships since 2005
- **❖** expand to 28 townships gradually up to 2013
- \* scale up 108 townships in **2014**; total--- **136** townships
- \* scale up 100 townships in **2015**; total--- **236** townships



12 years

# Trends of HIV prevalence among new TB patients, HSS 2005-2016



Source: HSS 2006-2016

## Strengthen early TB diagnosis among PLH

#### **HCWs** need to think of TB!

WHO/HTM/TB/2015.25,

2015



Point-of-care urine TB-LAM in severely immunosuppressed PLH

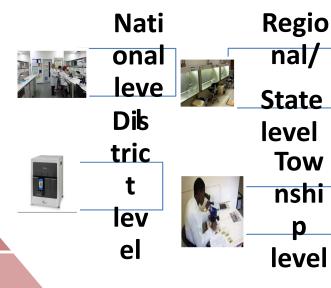
# **Laboratory Service Expansion** from Smear to Molecular Technologies

for second line **LPA** 

3 Culture and DST Lab

71 Gene X pert Sites

516 sputum smear microscopy centers under EQA system (including 158 iLED Fluorescent microscope)



nal/

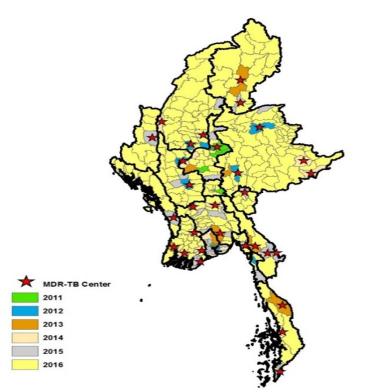
Tow

nshi

level

# Geographical coverage

for MDR-TB Management



Year	townships
2009	10
2011	22
2012	38
2013	53
2014	68
2015	108
2016	330

Entire Yangon Region is covered by MDR-TB management in 2015

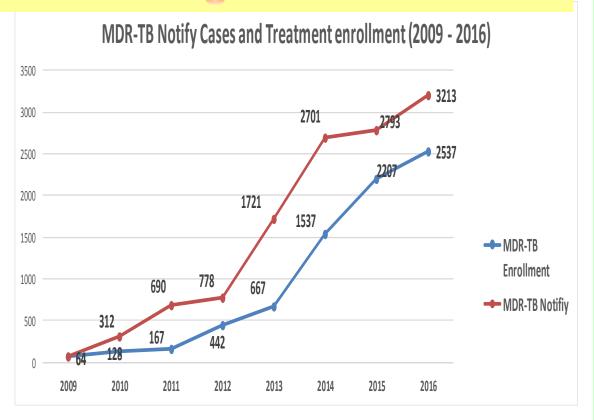
All 330 townships became MDR-TB townships since Q1, 2016.

8 years

# Rifampicin resistant TB cases detected by Gene X pert (2012-2016)

	2012 (5) machines	2013 (11) machines	2014 (22) machines	2015 (48) machines	2016 (66) Machines
Total cases done	3136	14246	26240	41957	69558
Total MTB detected	833	5351	10210	17692	29169
TB with Rif-resistant	259	1689	2631	2719	3095
Proportion "Rifampicin resistant TB cases"	9%	12%	10%	6%	5%

# Programmatic Management of Drug Resistant TB



Treatment coverage 79%

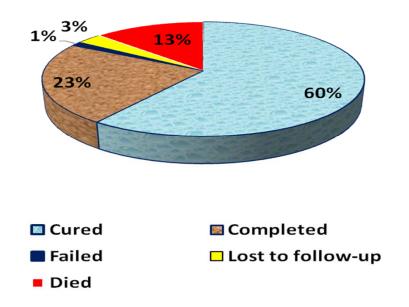
#### **Activities**

- **■DR-TB** case finding
- ■20 month standardized treatment regimen
- •Model of care (Ambulatory, clinic based and hospital based care)
- Counseling and Health education
- Provision of Directly ObservedTreatment
- Patient support (FOC baseline investigations, ATM card and nutrition support)
- DOT provider support

# cohort cohort

(N= 666 evaluated)

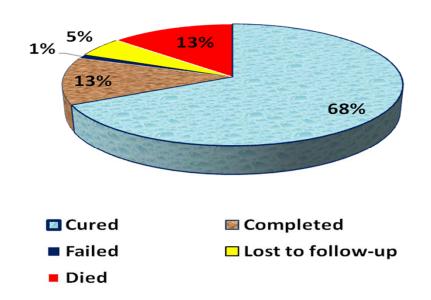
**Treatment Success Rate = 83%** 



# MDR-TB Treatment outcomes of 2014 cohort

(N= 1495 evaluated)

**Treatment Success Rate = 81%** 



# **Update on Shorter Regimen**

Approved from National Expert DR-TB Committee

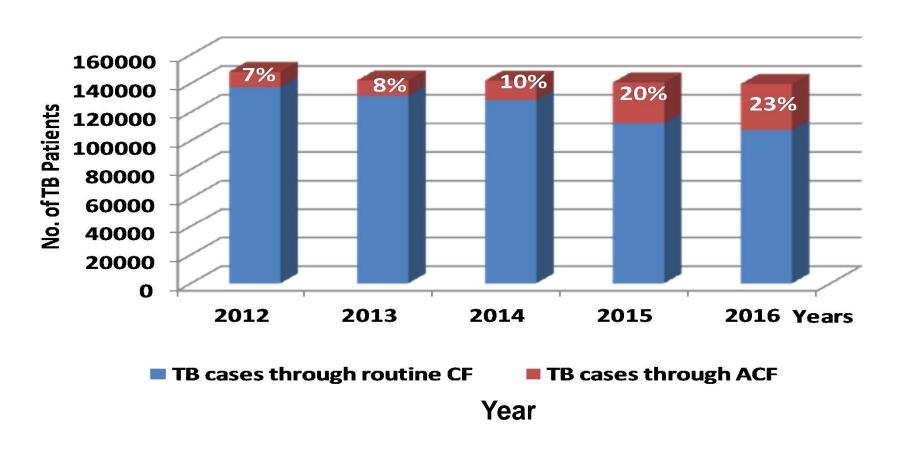
Pilot programme started in June 2017 (200 patients)

 Second line LPA and first line DST for Ethambutol and Pyrazinamide

Regimen

### **Accelerated Case Finding**

**Contribution of ACF to total Case Notification (2012-2016)** 



## Contribution of ACF (2016)

Activities	Number of TB Patients	
СВТВС	19769	
Initial home visit & contact tracing	890	
Sputum Collection Centre	180	
Mobile Team	5004	
TB screening in PPM hospital (OPD)	756	
TB screening in Pregnant and lactating mother	985	
TB screening in under 5 children	4585	
Total	32169	

**National contribution --- 23%** (32169/139625)



TB mobile team activity at hard-to-reach area



Launching Ceremony on "End TB strategy & National TB Strategic Plan (2016-2020)" 13<sup>th</sup> October 2016

#### Vision, Goal and Objectives on Ending TB in Myanmar

Vision: Myanmar free of TB

Zero deaths, disease and suffering due to TB by 2050

Goal: End TB epidemic in Myanmar

Fewerthan 10 cases per 100,000 population by 2935

accelerate the decline in the prevalence of drug-sensitive and drug-resistant TB

Objective 2:
fully integrate TB
prevention and care
in Universal Health
Coverage

enhance the prevention of TB, particularly for high-risk populations

# Strategic Directions and Key Interventions of National Strategic Plan (2016-2020)

### **Strategic Direction I: Integrated, Patient-centred Care and Prevention**

- 1.1. Accelerate the appropriate diagnosis of TB
- 1.2. Identify and treat all forms of TB, among all ages and including drugresistant and drug-sensitive
- 1.3. Prevent transmission and the emergence of active TB
- 1.4. Intensify targeted action(s) to reach marginalized and at-risk populations
- 1.5. Implement a robust communication strategy, extending from policy makers to patient education
- 1.6. Engage all care providers, including NGOs and the private sector, in appropriate TB diagnosis and care
- 1.7. Promote and strengthen community engagement
- 1.8. Joint TB and HIV programming to enable decentralized and integrated services for TB and HIV

### **Strategic Direction II: Bold Policies and Supportive Systems**

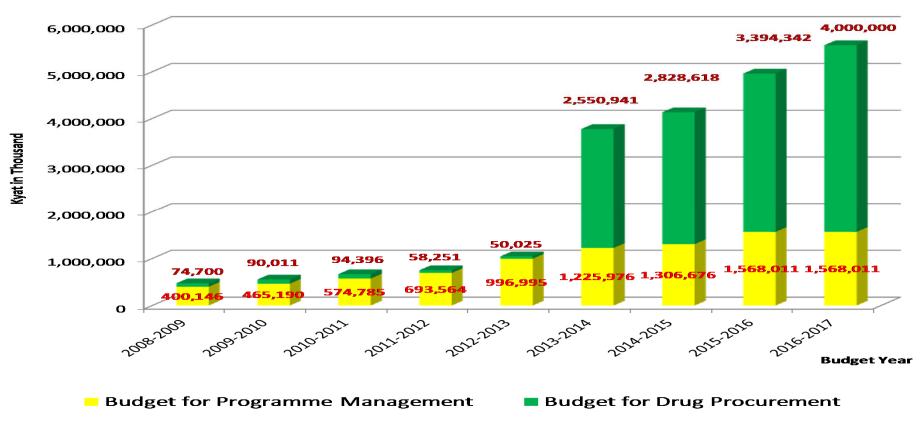
- 2.1. Secure human and financial resources for implementation of the NSP
- 2.2. Promote a coordinated and multi-sectoral response and policy development
- 2.3. Ensure inclusion of TB in UHC and wider economic development plans and activities (social protection)
- 2.4. Ensure a stable and quality-assured supply of drugs, diagnostic tests and commodities
- 2.5. Human resources for health

### **Strategic Direction III: Intensified Research and Innovation**

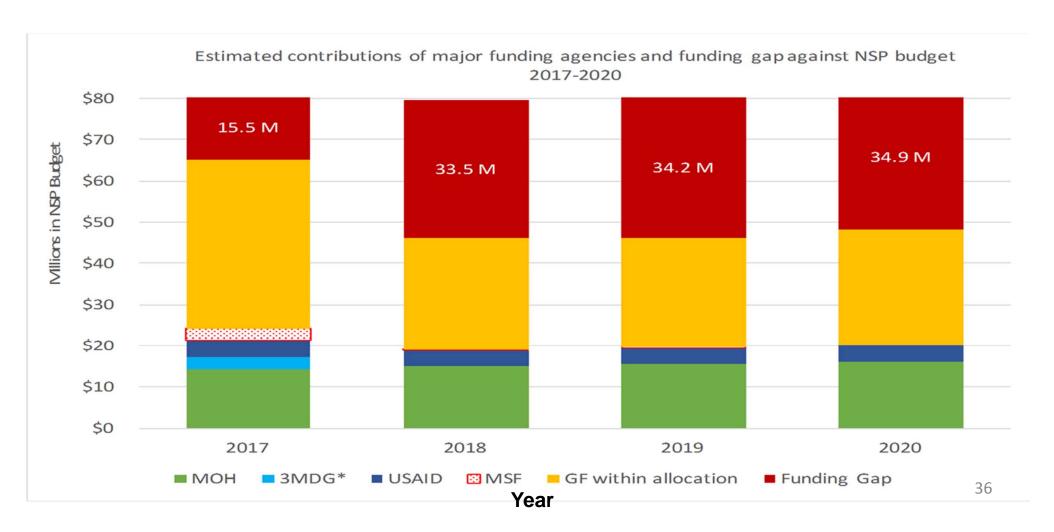
- 3.1. Implement the prioritized research agenda
- 3.2. Enhance evidence-based programme monitoring and implementation

34

# National Response: Government Budget for NTP (2008-2009 to 2016-2017)



## Funding Gap (2017-2020)



## Challenges

- Funding sustainability beyond 2020
- > HR necessity and staff motivation
- ➤ Gap in overall case detection for Drug Sensitive TB (26%)
- ➤ Gap between notified and enrollment of MDR-TB (21%)
- ➤ Lab Capacity & additional infrastructure/maintenance
- > Infection control measures
- > Reaching to the un-reached Accessibility (UHC)

#### **Future Plan**

- Strengthening existing activities including ACF, TB/HIV & PMDT
- Strengthening TB laboratory capacity & Infection control measures
- > Implementation of e-based R & R system for both DSTB & DRTB
- ➤ Epidemiological surveys (National TB Prevalence Survey & 4<sup>th</sup> Nationwide DRS)
- > Implementation research after identifying prioritized research



