# 1. Project title

The project for strengthening antimicrobial resistance (AMR) surveillance and antimicrobial stewardship (AMS) in Myanmar

### 2. Country name

Republic of the Union of Myanmar

# 3. Background

Antimicrobial resistance (AMR) is being one of the biggest public health challenges in recent years. According to estimates in 2013, the number of deaths caused by AMR exceeds 700,000 in the world. A researcher in the United Kingdom has reported that if no action is taken on AMR, 10 million deaths worldwide are expected in 2050, which is more than cancer deaths.

The National Center for Global Health and Medicine (NCGM), Tokyo, Japan, has been working closely with the Ministry of Health and Sports (MoHS), Myanmar, for many years. Since 2015, the NCGM has dispatched a technical advisor for infectious disease control and laboratory services through the Japanese International Cooperation Agency (JICA). The current advisor has been providing technical support to strengthen the national AMR program as a member of the Technical Working Groups (TWGs) on "Awareness" and "Surveillance." Especially for the surveillance, it is crucial to assist MoHS in establishing the standardized national surveillance system, and setting up the national external quality control system (NEQAS) for microbiological exams in the laboratories.

#### 4. Objective

1) To improve the national quality control system for bacteriological exams in Myanmar

2) To strengthen the national AMR surveillance in Myanmar

3) To facilitate the proper use of antimicrobial agents based on the data obtained from the surveillance.

#### 5. Program outline

[Japanese training]

Training on the national AMR surveillance system and the laboratory quality control system will be provided to the staff members of the MoHS, Myanmar, in charge of the national AMR program, the national AMR surveillance, and the national laboratory quality control program for bacteriological exams.

[Local seminar]

Japan specialists will hold a seminar on quality control of bacteriological exams, utilization of surveillance data, and proper use of antimicrobial agents. The participants will be clinicians who treat infectious diseases at core hospitals, and laboratory technicians who perform bacteriological exams and run the surveillance system.

# 6. Implementation structure

6-1. Japanese side

1) Implementing agency: The Bureau of International Medical Cooperation Bureau, NCGM

2) Cooperation agencies: i) AMR Clinical Reference Center, NCGM, ii) Japan Association for Clinical Laboratory Science (JCLS), iii) Private companies in laboratory areas (e.g., SRL. Inc.)

6-2. Counterpart country side

1) Focal point (coordinator/advisor): JICA Technical advisor for infectious disease control and laboratory services

2) Counterparts: i) the national AMR coordinating center (the National Health Laboratory (NHL)),
ii) AMR surveillance sites, iii) other relevant organizations (e.g., the national universities, the Myanmar Medical Association (MMA))

A memorandum of cooperation has been signed between the MoHS, Myanmar and the NCGM, Japan.

7. Indicator		
7-1. Out	put	1) the number of senior government officials (policy makers) who participate in the training in Japan
		2) the number of participants who attend the symposium/seminar in Myanmar
7-2. Outcome		1) the number of facilities that have introduced AMR surveillance system and reported surveillance data to the AMR coordinating center (NHL)
		2) the number of facilities that have participated in the external quality control program for bacteriological exams and reported the results to the AMR coordinating center (NHL)
7-3. Impact		1) the national guidelines/SOPs for quality control of bacteriological exams are introduced in Myanmar
		2) the national AMR surveillance report is published in Myanmar
8. Main activities		
8-1. Training in 2020		
1)	Training in Japan (Six trainees from Myanmar in November 2020)	
2)	Symposium/seminar in Myanmar (Two Japanese experts in February 2021)	