





#### **FAO Reference Center for Antimicrobial resistance**

Faculty of Veterinary Science, Chulalongkorn University Bangkok, Thailand

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#### Faculty of Veterinary Sciences, Chulalongkorn University

- 133 Instructors
- 747 DVM
- 18 Graduate diploma program
- 74 MS program
- 139 PhD program

#### **Department**

- Departments of Veterinary Anatomy
- Departments of Veterinary Physiology
- Departments of Animal Husbandry
- Departments of Veterinary Pharmacology
- Departments of Veterinary Pathology
- Departments of Veterinary Surgery
- Departments of Veterinary Medicine
- Departments of Veterinary Obstetrics, Gynaecology and Reproduction
- Departments of Veterinary Public Health
- Departments of Veterinary Microbiology



#### Center of Excellence (CE)

 Center of Excellence Emerging and Re-emerging Infectious Diseases in Animals

#### Research Unit (RU)

- Obstetrics and Reproduction in Animals Research Unit
- Ornamental Aquatic Animals and Aquatic Animal for Conservation Research Unit
- Avian Health Research Unit
- Reproductive Biotechnological Science Research Unit
- · Companion Animal Cancer Research Unit
- Research Unit in Microbial Food Safety and Antimicrobial Resistance
- Swine reproduction research unit
- Wildlife, Exotic and Aquatic Pathology
- · Diagnosis and monitoring of animal pathogens
- Fish Infectious Diseases (FIDs)
- Feline Health and Infectious Disease Research Unit for Excellence
- Food Risk Hub Research Group



#### Special Task Force for Activating Research (STAR)

- Animal Vector-Borne Disease Research Group
- Epidemiology and Animal Health Economics Research Group
- Research Study and Testing of Drug's Effect Related to Cardiovascular System in Laboratory Animal
- Swine Viral Evolution and Vaccine Research Group
- Biology of Embryo and Stem Cell Research in Veterinary Science
- Increasing Milk Production in Daily Goat Fed under Hot and Humid Environmental Condition in Thailand
- Veterinary Parasitology Research Group



### Chulalongkorn University AMR Cluster (CU VET AMR) Department of Veterinary Public Health



- 1. Center for Antimicrobial Resistance
  Monitoring in Foodborne Pathogen (in cooperation with WHO) (CUARM)
- 2. Research Unit in Food Safety and Antimicrobial Resistance (CUFSAR)
- 3. WHO Global Foodborne Infections Network: SE Asia & Western Pacific
- 4. FAO Reference Center for Antimicrobial Resistance



#### Chulalongkorn University AMR Cluster (CU VET AMR) Department of Veterinary Public Health



**ARM-Asia** was established.

Accepted to be WHO-Sal Suv.

**ARM-Asia** was changed to CUARM.

**CUFSAR** was established.

Combined to be **CU VET AMR** 

Designated as **FAO REF Center** for AMR

1999

2000

2009

Renamed to

be WHO-GFN

2014

2016

2018







# FAO Reference Center for Antimicrobial Resistance

Designated in November 2018



#### Collaborations with FAO since 2013

#### Southeast Asia



The Global State of Antimicrobial Resistance in Food and Agriculture: Impact, trends and recommendations

The Global State of Antimicrobial Resistance in Food and Agriculture: Impact, trends and recommendations

The Global State of Food and Agriculture: Impact, trends and recommendations

The Global State of Food and Agriculture: Impact, trends and recommendations

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The Global State of Food and Agriculture: Impact, trends and recommendations

The Global State of Food and Food and

REVIEW of

Microbial Contamination

of Animal Source Food in

East, South and Southeast

REVIEW of the Literature on Antimicrobial Resistance in Zoonotic Bacteria from Livestock in East, South and Southeast Asia

2013



2016



#### South Asia & Pacific



2019





#### ASSESSMENT TOOL for LABORATORIES and AMR SURVEILLANCE SYSTEMS (ATLASS)

- Cambodia, June 2016
- Thailand, March 2017
- Indonesia, March 2017
- Vietnam, April 2017
- Lao PDR, May 2017
- Myanmar, March 2017
- Philippines, December 2017
- Cambodia, December 2017

- Singapore, May 2018
- Vietnam, July 2018
- Indonesia, November 2018
- Maldives, March 2019
- Papua New Guiniea2019
- Sri Lanka 2019
- Bhutan 2019
- Malaysia 2019

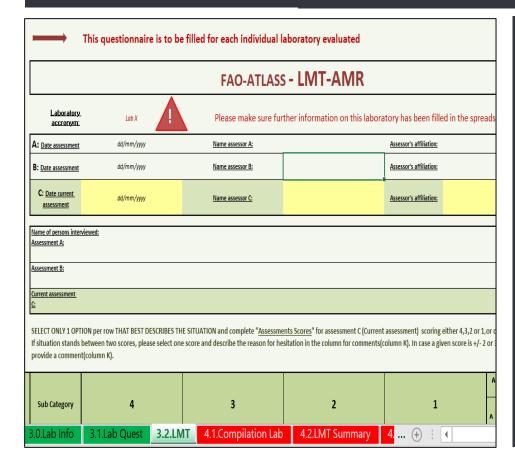


2021

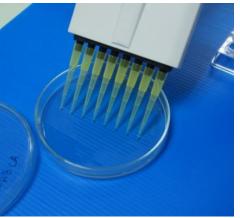


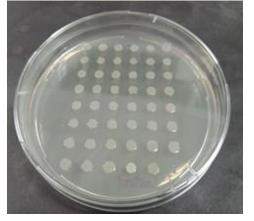
# AMR laboratory capacity building in animal sector in South East and South Asia













AMR laboratory assessment













### AMR laboratory assessment































FAO-APHCA-DLD ASEAN Regional Training Workshop on "Antimicrobial Susceptibility Testing of Bacteria Isolated from Farm Animals"

CU VET, Thailand 7-8 October 2014



























National Consultation Meeting on ATLASS Mission Findings and Training on Sample Collection and Handling for Bacterial Isolation in AMR Monitoring in Lao PDR Video conference, 10 April 2020



### Regional Antimicrobial Resistance Monitoring and Surveillance Guidelines

Monitoring and surveillance of antimicrobial resistance in bacteria from healthy food animals intended for consumption









## Network of Regional Reference and Collaborating Centers on AMR in Asia and the Pacific



### **CUFET** Impact on CUVET

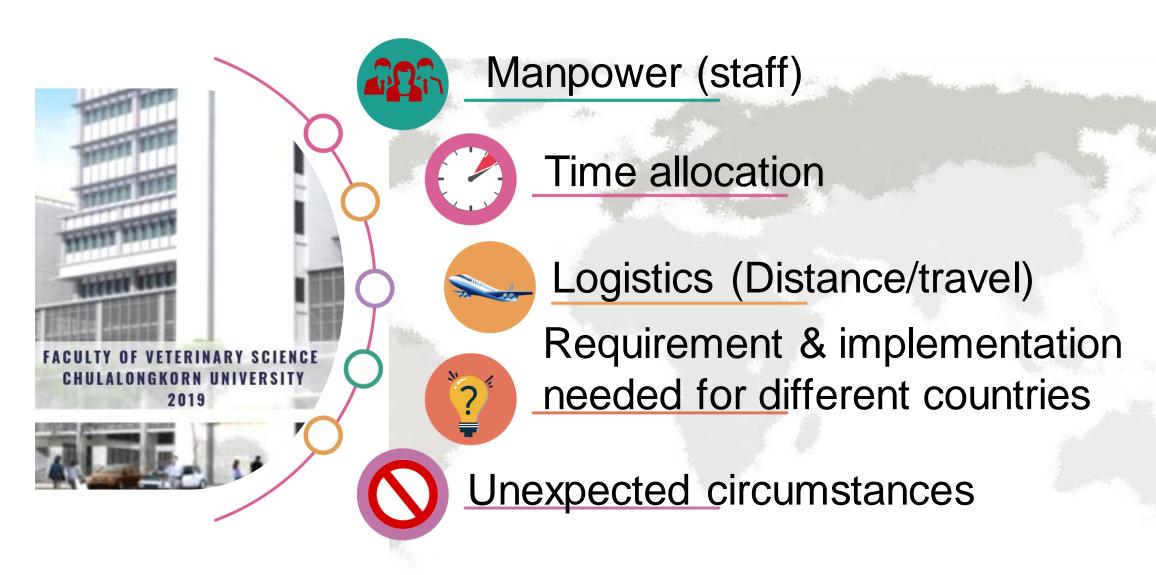


Knowledge application at regional and global level

- 2 Stages for outside classroom learning and experience for faculty and students at international level.
- Extensive scientific and technical networks, broaden partnerships and collaborations with other national, regional and international organizations
- Regional and international acknowledgement and a well-known reputation at international level.

etc





# Thank you







































