World Organisation for Animal Health

Food and Agriculture Organization of the United Nations

Ongoing and Future Support for FMD Laboratory Capacity Building

Role of Pakchong Asean Reference Laboratory

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The Regional Reference Laboratory for Foot-and-Mouth Disease in Southeast Asia (RRLFMD-Pakchong), under the Department of Livestock Development (DLD), Thailand, ***plays a key role in strengthening laboratory diagnostic capacity, technical expertise, quality assurance, and regional collaboration among ASEAN Member States.***



1. Strengthen RRLFMD–Pak Chong as a regional capacity-development
2. Coordinate regional quality assurance and proficiency testing Program
3. Establish a regional surveillance and research by the region network

Diagnostic Capacity Strengthening

- **Provide technical assistance** to national FMD laboratories in ASEAN Member States.
- **Support the implementation and improvement of FMD diagnostic techniques**, including antigen detection ELISA, real-time RT-PCR, serological assays (LPBE and NSP ELISA), and molecular characterization.
- **Develop and prepare the technical guidance on diagnostic troubleshooting,** result interpretation, and laboratory testing procedures.
- **Support the harmonization of diagnostic methods** and standard operating procedures (SOPs)
- **Distribute the reference reagent**

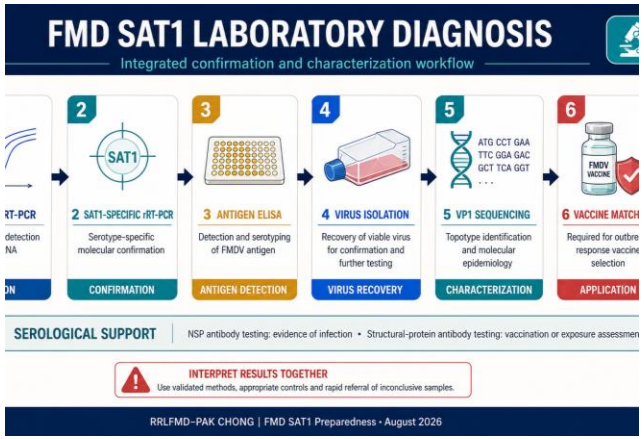




Training Activities











- **Proficiency Testing and Quality Assurance**
  - Participating with WRL Annually
  - PT Provider
  - Validation for In house reagent
  - ISO 17025:2017
    - ELISA Typing
    - NSP Test
    - LPB ELISA
    - RT PCR
  - ISO 17043 : 2027 (Implement)
  - Biosafety and Biosecurity system (Certify Activity







Training and Knowledge Transfer

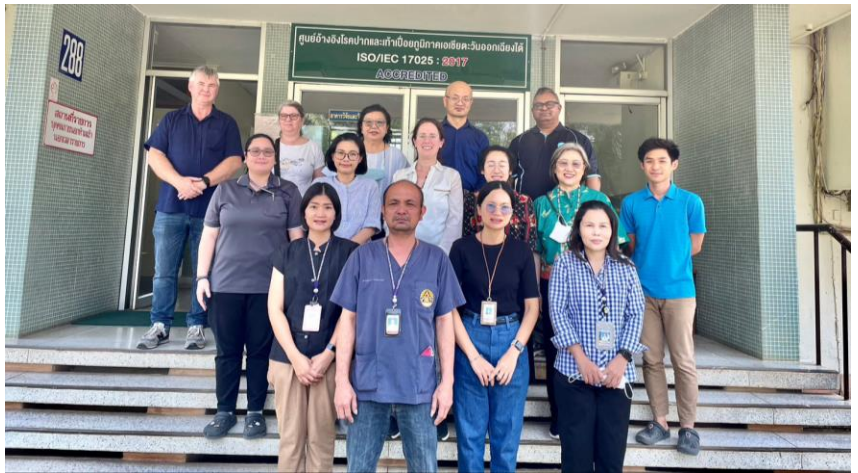
- **Organize practical laboratory training**, technical workshops, and knowledge-sharing activities.
- **Facilitate technical exchanges among ASEAN laboratories** and international reference laboratories.
- **Distribute the reagent** that collaborate with WOAH/FAO and continued technical mentoring.











- **Sustainable Regional Collaboration**
  - Establish regular technical consultations and laboratory network meetings. (**WRL/FAO-RRL-Pakchong, ACDP, MOPH; Thailand, Asean Members)**
  - Promote joint research projects, collaborative studies, and scientific publications. (**Thailand University, Japan University, NIAH Thailand, NIAH Japan,..)**
- **Support for the develop a regional mechanism** for identifying laboratory capacity gaps and prioritizing technical assistance.
- **Strengthen cooperation with international reference laboratories and development partners** to mobilize technical expertise and resources.
- **Reagent distribution** (Collaborated with WOAH/FAO, WRL, Members
- **Plan to organize WORKSHOP** in the region.

Reference Materials and Diagnostic Reagents

- Strengthen collaboration among WOAH, FAO, WRLFMD, and ASEAN Member States.
- Conduct regional proficiency testing (PT).
- Support diagnostic reagent distribution.
- Promote technical discussions, information sharing, and laboratory networking.





Future Support and Strategic Priorities

- **Advanced Molecular Diagnostic Capacity**
- **Preparedness for Emerging and Exotic FMDV Serotypes**
- **Strengthening Laboratory Quality and Biosafety Systems**
- **Vaccine Matching and Serological Surveillance**
- **Sustainable Regional Collaboration**

