BACKGROUND

Strengthening national laboratory capacities, collaboration as well as information sharing among the laboratories within the region through the “Regional Laboratory Network (RLN)” is essential for the effective surveillance and control program against transboundary animal diseases (TADs) and emerging infectious diseases (EIDs) in Southeast Asia (SEA). The South-East Asia Foot and Mouth Disease Campaign (SEACFMD) LabNet, a sub-regional laboratory network focussing on FMD activities, was established in 2004 to support SEACFMD. The Regional Animal Health Laboratory Technical Advisory Group (Lab-TAG) was established in 2009 to provide technical advice to the member countries on strategic planning and laboratory capacity building activities related to emerging, re-emerging and priority animal diseases of the region.

Serological assessments are vital in supporting official programmes aimed at assessing the prevalence of foot-and-mouth disease virus (FMDV) or post-vaccination immunity at individual or herd level. Liquid-phase blocking ELISA (LPBE) for measuring antibodies against FMDV has been widely used in the region, in spite of its limitation such as non-availability of suitable reagents, variable stability of reagents, etc. In addition, cross-reaction between different serotypes is commonly noted in LPBE, which makes the interpretation of results difficult. Although used less frequently in the region, virus-neutralisation tests (VNT) and solid-phase competition ELISA (SPCE) are sensitive as but more specific than LPBE. The OIE SEACFMD LabNet meeting in 2017 recommends countries to apply alternative serological assays to complement LPBE. A similar recommendation was made at the 10th ASEAN Lab-TAG meeting in 2018.

To follow up with the recommendations and ensure the strengthening of national laboratory capacities on FMD serology, the 2nd Regional Expert Group (REG) meeting on FMD will be jointly organised by the World Organisation for Animal Health (OIE) Sub-Regional Representation for South East Asia (SRR) and the Food and agriculture Organisation of the United Nations (FAO) Regional Office for Asia and the Pacific (RAP) in Bangkok, Thailand on 31 October – 1 November 2019.

OBJECTIVES OF THE MEETING

The meeting aims to:

1. Review the capacities and limitations on FMD serology in the SEACFMD region;
2. Discuss the key technical factors for each serological assay;
3. Recommend serological assays for different objectives, including
   - Seroprevalence for different FMDV serotypes in endemic countries
   - Post-vaccination monitoring at individual animal or herd level
4. Recommend approaches to assess sensitivity and specificity of serological assays;
5. Recommend approaches to improve verification of reagents quality/assay performance.

DATES AND VENUE

- 31 October (afternoon) – 1 November, 2019
- Berkeley hotel, Bangkok, Thailand