Regional Capacity Development and Networking Programme to Improve TADs Surveillance and Control
Current ECTAD Programme in Asia

- Various sources of funding for country and regional projects
  - USAID, ROK, USAID-DFAT, Skoll
  - South-South Cooperation (China and neighboring countries)
- Emergency Trust funds, TCP and GCP

Regional component

- BGLDS
- Myanmar
- INDIA
- Nepal
- CHINA
- Viet Nam
- Laos
- CAM

Potential zoonotic EIDs
- AMR
- Zoonotic influenzas
- FMD
- Other highly pathogenic emerging transboundary animal diseases
- PRRS and other swine diseases
FAO-ECTAD’s Programmatic Approach at All Levels by Themes

Aim to promote multidisciplinary evidence-based planning, decision-making and application at all levels

- Laboratory diagnosis
- Epidemiology, surveillance and response
- Risk determination and mitigation
- Capacity building
- Information generation and dissemination
- Support national efforts to manage animal health problems/diseases/syndromes
- Global, regional, national networking and coordination
- Multi-sectoral coordination and collaboration
4 levels of capacity development
[FAO corporate strategy]
5-step capacity development program

**Needs assessment**
- Identify:
  - Targets/aims, Current capacities, Gaps
  - At 4 levels with participatory process

**Design the program**
- Training curriculum based on needs
- Expertise, equipment and supplies needed

**Implementation**
- Provide training/program
- Troubleshooting and explore corrective measures
- Development/Review/Establishment of systems and mechanisms

**Reports and advocacy**
- For support from all levels

**Evaluation and adjust the program**
Laboratory Component
Technical Scope

- Workshops/Trainings
- Provision of reference books, software, sample referral, equipment, reagents and supplies
- Laboratory assessment
- Proficiency testing program
- Biosafety risk assessment
- Biosafety cabinet testing and calibration
- National and Regional laboratory network meetings (LDF, Lab-TAG)
- Laboratory partnerships
- National and Regional laboratory network meetings (LDF, Lab-TAG)
- Laboratory partnerships
- Facilitate laboratory networking at national and regional level
- Increase knowledge and skill
- Assure the quality of laboratory services
- Improve laboratory biosafety
- Improve structures, mechanism, procedures
- Coherent sectors’ Policies & strategies With coordination
- Laboratory assessment
- Proficiency testing program
Regional QA program

Regional trainings on disease Dx & QA
- Identify target diseases
- Regional Trainings on Diagnosis / QA

2010 – Influenza (Flu A, H5)
2011 – Influenza (Flu A, H5), PRRS, CSF
2012- 2014 Influenza (Flu A, H5), ND, PRRS, CSF, ASF, Rabies
2015-2018 – Influenza (Flu A, H&N typing), ND, PRRS, CSF, ASF, Swine influenza

2018 PT program
- ASEAN 10 Countries, 15 laboratories
- SAARC 6 Countries, 7 laboratories

Regional trainings on disease Dx & QA
- Identify target diseases
- Regional Trainings on Diagnosis / QA

Proficiency testing activities
- Provision of PT panel and Laboratory supplies
- Laboratory perform the panel test

Backstopping mission
- Result evaluation
- Troubleshooting and corrective measures

Reports and advocacy
Lab Authorities
Anonymous report at Meetings
Regional Biosafety Program

- BSC testing
- Training on Biosafety/Biosecurity
- Training BSC II testing
- LMT and BLMT: Identify Gaps
- Biosafety Manual
FAO Laboratory Mapping Tool

• To assess the functionality of veterinary laboratories
  • Questionnaire
  • Data into digital application – “snapshot” view
• Understanding gaps
• Baseline prior to intervention
• Mapping exercise annually
• Validation for laboratory
• Self assessment tool
Regional Bioinformatics Training Program

Four bioinformatics training modules (2017)

Module 1
The Setup
Sanger, NGS, etc

Module 2
The Basics
Dataset design
Multiple sequence alignments
Primer and probe design
Phylogenetic tree building, etc

Module 3
The Advanced
Analysis of recombination and reassortment events; Temporal phylogenies, etc

Module 4
For decision Makers

Strengthen Linkage and Communication Pathway across Network of Laboratories

Partners engagement

Technical Advisory Group (TAG) Meeting
Donors, Implementing partners, including the Director of the Regional Reference labs and RRL
Technical Meeting and training
Joint Animal Health and Public Health Laboratory Meeting

Policy advocacy

Laboratory Directors’ Forum Meeting
Directors of the RLN members, RRL, RLDL

Regional Strategic Framework for Animal Health Laboratory Capacity Building
Epidemiology Component
Regional Epidemiology Training Programme

- Regional Inventory of EPI Training
- One Health Approach for Country Needs Assessments
- University, Country and International Partnerships
- FETPV, AVET Curriculum Development
- Program Development and Adaptation
  - Regional FETPV
  - Country FETPV
    - China
    - Indonesia
    - AVET
    - Viet Nam
# Building Epidemiology at Organizational, Society and Higher Level

|-----------------------|-------------------------------|------------------------------------------|
| Needs for epidemiology capacity recognized
  - Epidemic of trainings | 1st Epi Consortium meeting
  ASEAN Epi Framework developed
  AVEG established | 1st AVEG - FETN Meeting
  EMT revised and piloted in Bhutan |

- R-FETPV established
- C-FETPV established
- 1st Regional Epi Meeting (CVO)
- Epi Mapping Tool initiated and piloted
- 2nd Regional Epi Meeting (CVO)
- 2nd AVEG-FETN Meeting

![Image of people in meeting room](image_url)
Consolidation and Application of Capacities for TADs Surveillance and Control

- **Risk assessment**
  - Baseline information – animal population/census
  - Value chain
  - Social network analysis
  - Ecological studies – dog and wildlife

- **Risk-based surveillance**

- **Planning for risk management**
  - Field, national, cross-border levels
Impacts

- **Capacity** on laboratory and epidemiology of **human resources** in the region has been improved with quality demonstrated to some level;
- Better understanding of risks
  - Capacity built to be able to update risk information
- **Ability to apply** both lab and epi capacity to **other emerging diseases** as well as high impact endemic diseases: H7N9, FMD, ND, Rabies, PRRS, Anthrax, etc.
- **Better coordination** with Partners – Collaborative Framework for Program implementation
Expectations for sustainability of activities related to EIDs surveillance and response

• **Challenges**
  • Human resources
  • Institutional base
  • Network
  • Political commitment

• **FAO’s effort to address the challenges**
  • Concurrently building institutional capacity – strategic planning and system development at national and regional levels
  • Continue to advocate to the decision makers at the member countries on the challenges that require their commitment and actions
Thank you