

Member's Update on African Swine Fever and Other High-impact Swine Diseases

Chinese Taipei

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Disease situations

➤ ASF

- WOAHA recognized self-declaration as ASF-free on October 31, 2024
- No domestic cases detected and no cases in wild boars

➤ Other Major Swine Diseases:

- Classical Swine Fever (CSF): Recognized as free member in May 2025 by WOAHA
- Foot and Mouth Disease (FMD): Recognized as free without vaccination in Taiwan, Penghu and Matsu since June 2020/ with vaccination in Kinmen since June 2018 by WOAHA
- PRRS, PED and PCVII: Present and under active control programs

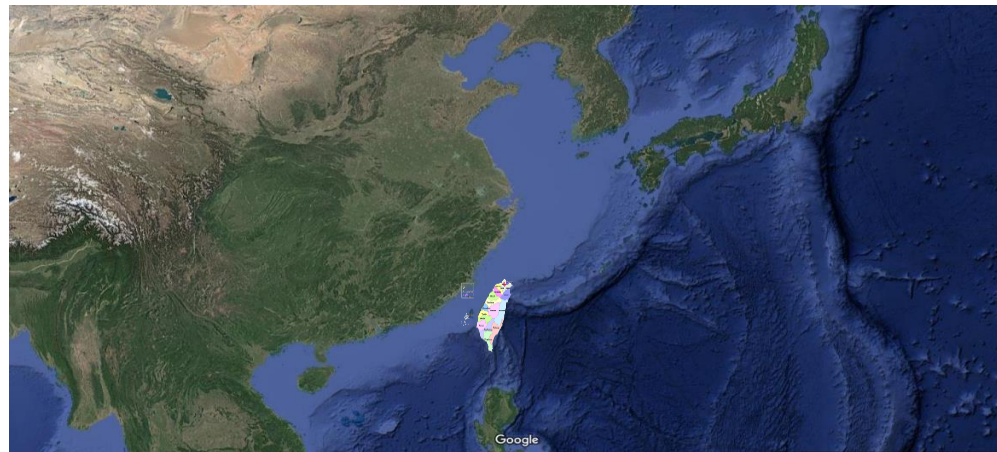
Member	Self-declared freedom from	Category	Publication date	Country/zone/compartment
Chinese Taipei	African swine fever virus (Inf. with)	Terrestrial	2024年10月31日	Country



Disease prevention and control

➤ National strategy

- **Early Warning System-Central Disaster Response Center(CDRC)**
- **Strict border control measures**
 - A. Luggage inspection
 - B. Auditing the destruction of food and catering waste carried by vehicles, ships or aircraft from abroad
 - C. Shipment and international parcel inspection
 - D. Virus nucleic acid detection
 - E. Prevent smuggling and illegal pork imports



Disease prevention and control

Early Warning System-Central Disaster Response Center

- The Executive Yuan set up CDRC on 18 Dec. 2018 after ASF was occurred in Asia.
- The CDRC coordinates ministerial authorities and local government horizontally and vertically to implement enforcement measures.
- This is the first and most successful case that the CDRC established before the disease invasion.





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- Countries with LOW African Swine Fever risk**
- At the inspection point**
- Take the green-coded path.
- Passengers who carry animals, plants or their products must declare them in order not to be fined or penalised.
- Return the card**
- Prohibited items:
- Fresh fruit & vegetable
 - Pet food
 - Soil
 - Meat
 - Propagating material
 - Live animals
 - Meat products



X-ray Inspection by Customs and Aviation Police Office

Strict Border Control Measures

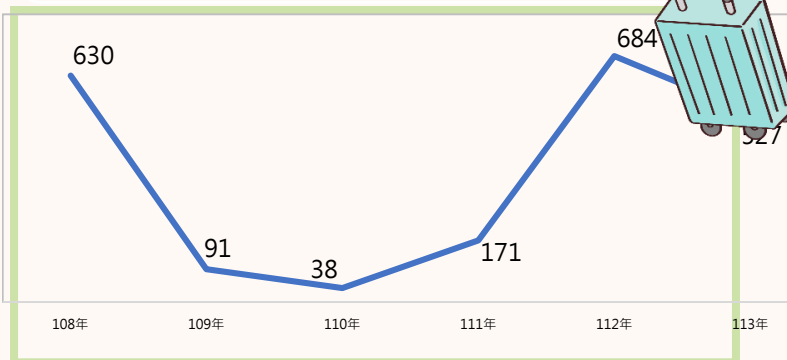
Strict Luggage Inspection- Quarantine Detector Dogs

- Start In 2022, has reached 56 teams, sniff out animal and plant products inside the luggage.
- Deployed in 4 branches to assist in border inspection detection operations for travelers' luggage and international parcels.
- Participate in public awareness aiming to enhance public understanding of quarantine measures.



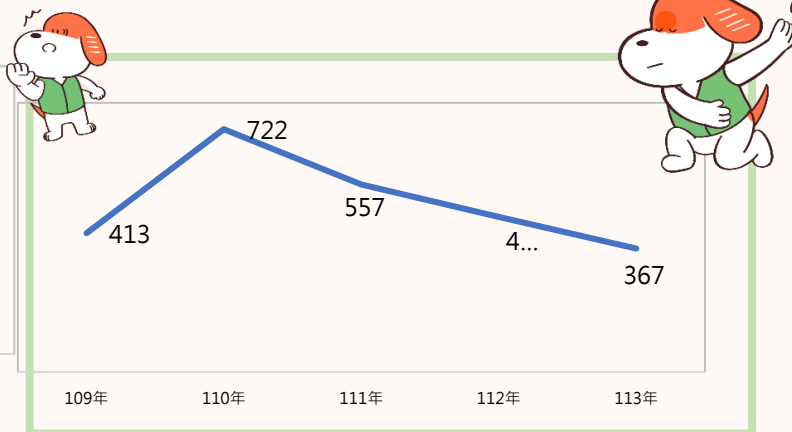
Border control measures and effectiveness - annual border seizure results

Passengers be fined NT\$ 200,000 for carrying pork products



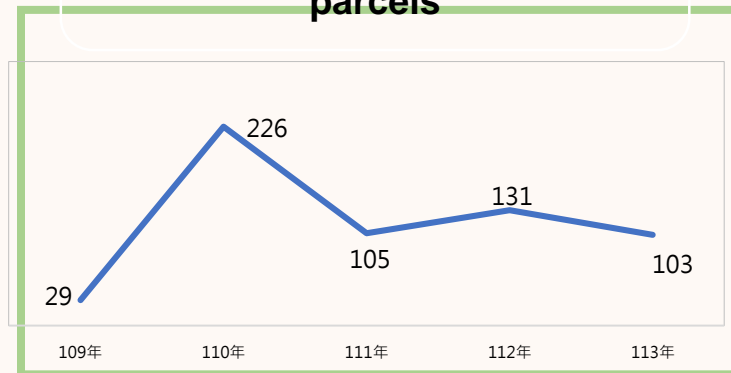
After the epidemic, the border was reopened and the number of inbound tourists increased significantly, indicating that the risk of epidemics has increased significantly

Number of Not Compliant cases



The trend is downward, and we still need to continue to educate the public

illegal pork products transferred by customs through parcels



The number of illegal express delivery cases has not decreased significantly, and border inspections still need to be strengthened.



Strict Border Control Measures

Auditing the destruction of food and catering waste carried by vehicles, ships or aircraft from abroad



Sealed when leaving the airport/seaport



Check the seal record when arrive at catering service



Ensure the catering cart is closed, sealed and clean



Separate the washable table ware and food waste



Deliver to MOENV incinerator in closed condition



Food waste is pouring into garbage truck



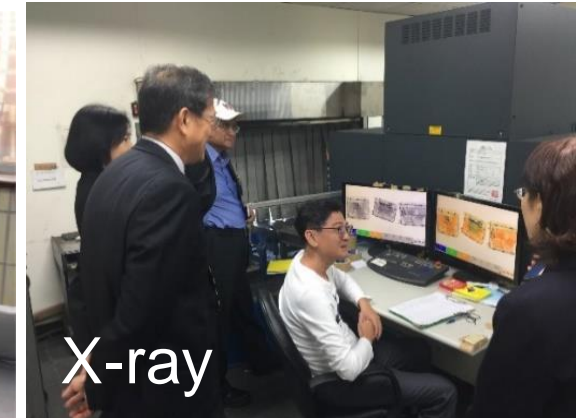
The tin boxes are sent to designated company to destroy



Food waste is sealed in container waiting for remove

Strict Border Control Measures

Shipment and International Parcel Inspection



- **Cargo:** Conduct on-site inspections at the Customs warehouse.
- **International express and postal parcel:** All parcels undergo X-ray screening by Customs and spot inspected by quarantine detector dogs. If animal or plant products are detected, the recipient will be Penalized.

Strict Border Control Measures:

➤ Virus Nucleic Acid Detection

- Since Sep. 2018, APHIA has been collecting pork samples from
 - illegally carried pork by inbound passengers
 - abandon bins in the air/seaports
 - illegal imported pork via cargo/express/parcel/smuggling route.
- From August 27, 2018 to July 9, 2025 , 8,800 pork products seized were tested, and **917** out of them **were ASF positive, with** an average positive rate of **10.4 %**.
- To **monitor** the ASF situation of the **neighboring** or **trading** partners to **evaluate the risk at the border**.



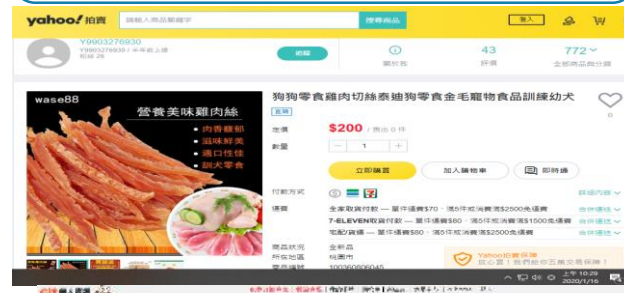
Strict Border Control Measures

Strictly prevent smuggling and illegal pork imports

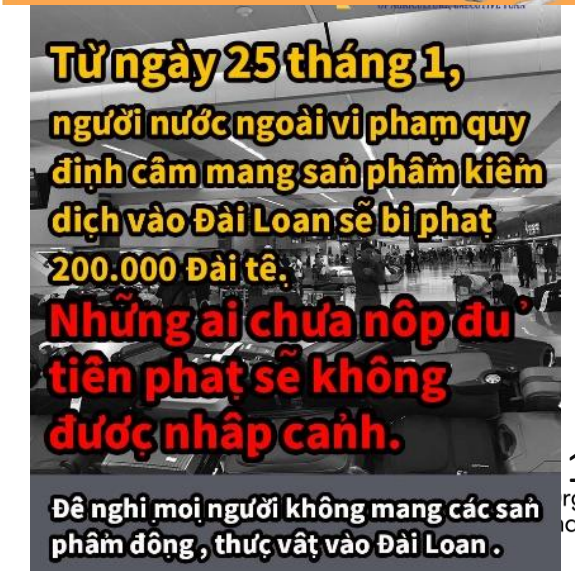
Coast and Territorial Waters Patrol



Ensure the Safety of Online Business



Awareness and Strict Punishment



Disease prevention and control

➤ Surveillance, disinfection & response:

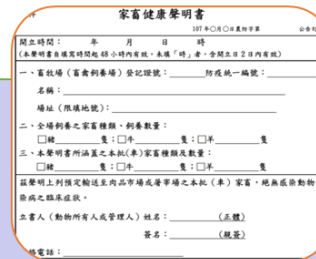
- Real-time outbreak reporting system
- Systemic Surveillance : Routine testing in slaughterhouses and pig farms
- Reinforcing disinfection in auction markets and slaughterhouses
 - ✓ Enhance cleaning and disinfection of environment and vehicles in auction markets and slaughterhouses

Disease Reporting System

Three steps to monitor animal disease



On-farm clinical investigation
by LADIAs (Local Animal Disease Inspection Authorities)



Livestock Health Declaration
provided by owner before
transporting to auction
markets or slaughter houses



Ante- and post-mortem inspection
by meat inspector

Surveillance, Disinfection & Response:

➤ Systemic Surveillance

➤ Active surveillance

- Slaughterhouses: 253 meat inspectors in 56 slaughterhouses. Ante- and post-mortem inspection for every pig. Samples will be taken to diagnose if suspicious as an case.
- Rendering plant: Samples are regularly taken to detect diseases. The amount of rendering is monitored to find any abnormal or unusual.

➤ Passive surveillance

- Drifting/Garbage pig body, suspicious cases reporting, farm visit
- Health declaration issued by veterinarian while pigs are transported.

➤ Compensation: The principle of compensation is established. Price is evaluated by commission. No report, No compensation.



Surveillance, Disinfection & Response:

➤ Reinforcing disinfection in auction markets and slaughterhouses

- Disinfection of vehicles
- Daily cleaning and disinfection of environment and facilities
- Extended disinfection on closed days
- Aforementioned actions are performed under supervision of local authorities and veterinary inspectors



Enhancing Biosecurity on Farm

- LADIA (Local Animal Disease Inspection Agency) play an important role in disease prevention and control practice.
- LADIA visit every pig farm to assist in enhancing farm biosecurity. 5,772 farms were visited in 2023.
- APHIA branches inspect and promote the cleaning and disinfection of the pig transport vehicles in the auction market.
- Distributing biosecurity leaflets and brochures to the stakeholders.
- Enhancing the cleaning and disinfection control of the auction market and slaughterhouses.



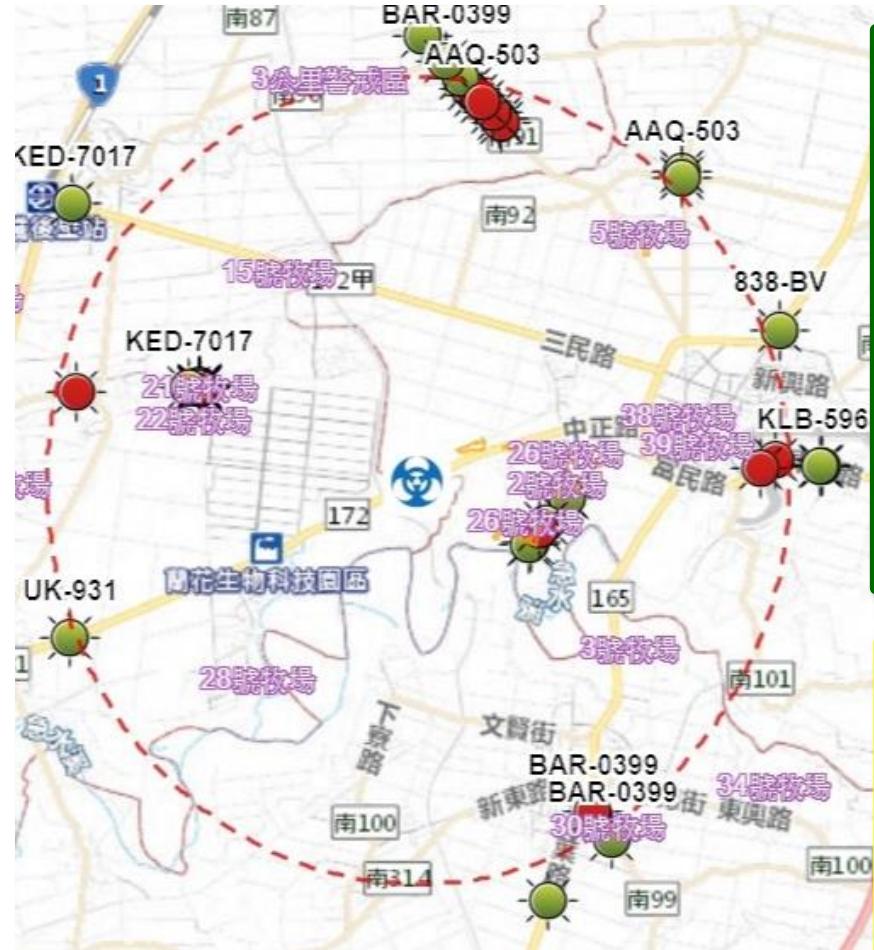
Administrative Control of Swill Feeding Pig Farm

- WOAHA reminds members that the uncooked swill feed with pigs may spread ASF.
- There were over 1,500 swill-feeding pig farms in 2018 that pose a biosecurity risk even the heating facilities were approved by MOENV. **MOENV** regulates facilities to heat swill for at least 1 hour over 90°C before feeding.
- Several transformation measures were conducted for the farms that wish to **abandon swill feeding**, including subsidies for change to commercial feed, technical consultation for feeding problems, and closing of the farm operation voluntarily.
- Farm scale under 199 pigs can not feed with swill anymore since 1 Oct. 2021.
- As of now, only 430 swill-feeding farms are approved by MOENV.



Installation of GPS on Vehicles

- Vehicles for feed, pig, meat, and rendering transport play a role in spreading disease. It's important to trace the movement route to investigate if there is any suspected epidemics.
- To date, there are over 3,400 transport vehicles have been installed with GPS. **Regular inspections** for those vehicles have been conducted.



General Public Awareness and Communication

- **At the border:** airports/seaports, onboard broadcasting, airline check-in counter, etc.
- **Target audience(TA):** Each ministry has its own promotional targets, such as the general public, foreign spouses, foreign workers, students and their parents, tourism, travel agencies, etc.
- **Traditional and social media:** TV, radio broadcasting, Facebook, IG, LINE, TWITTER. Inviting popular influencers to co-promote the importance of ASF prevention.
- **APHIA website:** Global situation, achievement of measures, test results, what's new, press release.



Post-Entry Monitoring at Market

- Taiwan Food and Drug Administration(TFDA) is responsible for food safety affairs.
- According to the Act Governing Food Safety and Sanitation, regular and programming audits for food items on the market are the responsibility of the Bureau of Health of local government. The inspection items include labeling, packaging, and tracing source.
- For preventing ASF from occurrence, APHIA branches, TFDA and local health bureau have been jointly conducting market auditing since 2019.
- Also focus on shops selling Southeast Asia and mainland China specialties, investigating if any illegal foreign pork products are sold.



Emergency Preparedness

- Simulation exercise
- Outbreak zoning
 - 5 kilometers radius zoning measures
 - Establishing the road checkpoints
- Massive culling
 - Bury and incineration
 - Heavy load truck
 - Resources (Manpower and materials)
- Keep pork trading



Check Point

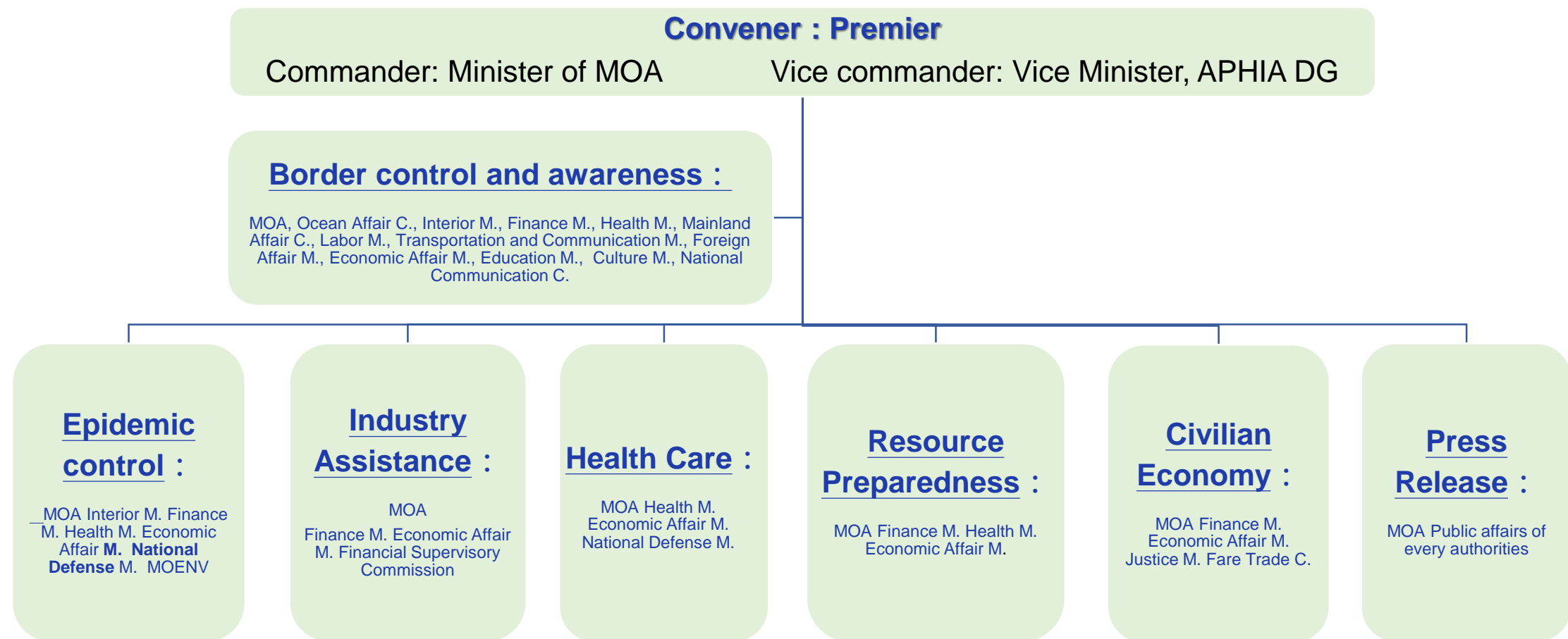


Simulation exercise

Disease prevention and control

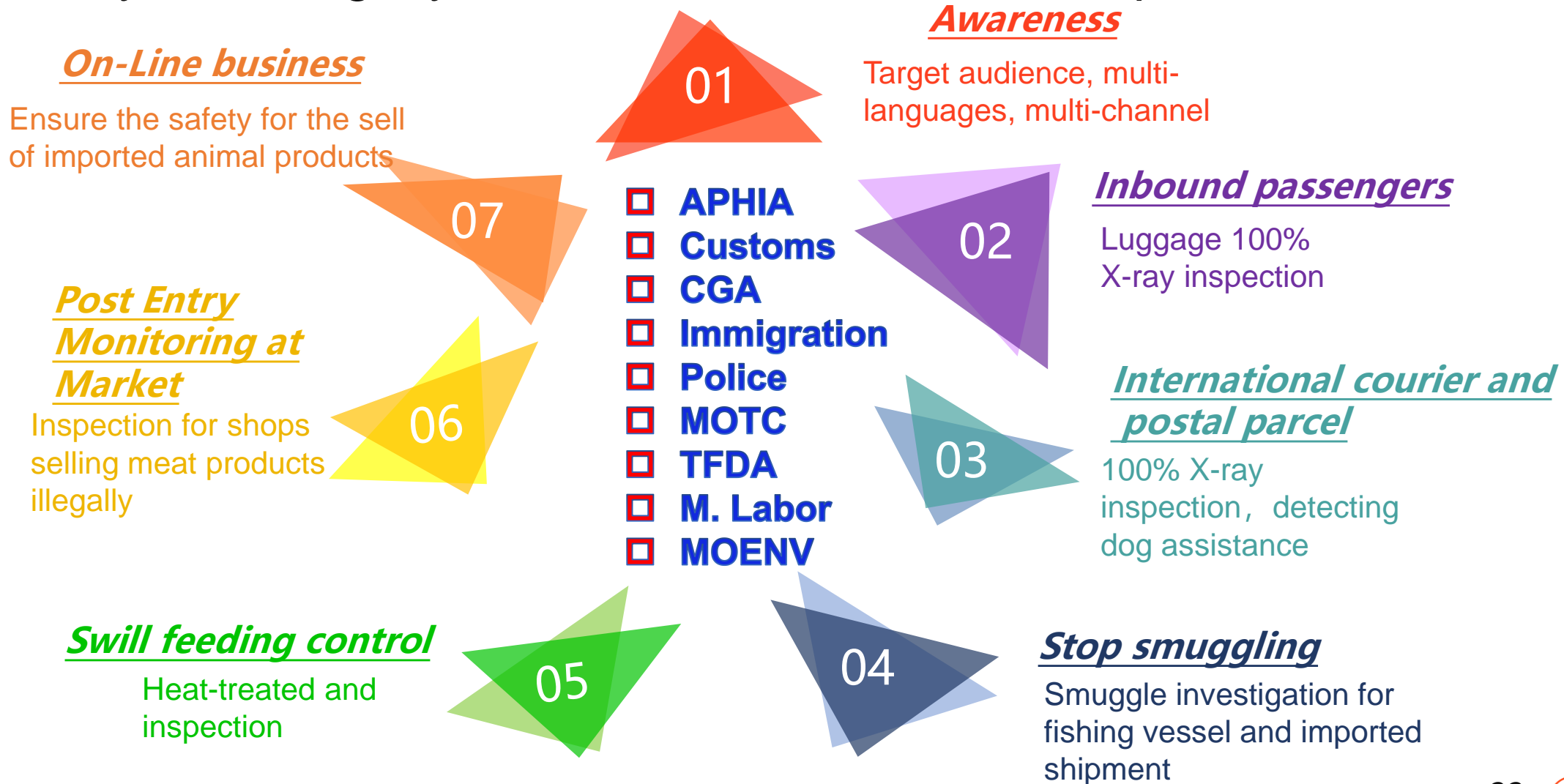
➤ Stakeholder collaboration:

- **Early Warning System-Central Disaster Response Center**
- Integration with Customs, Coast Guard, and local governments
- Public-private partnerships with industry associations



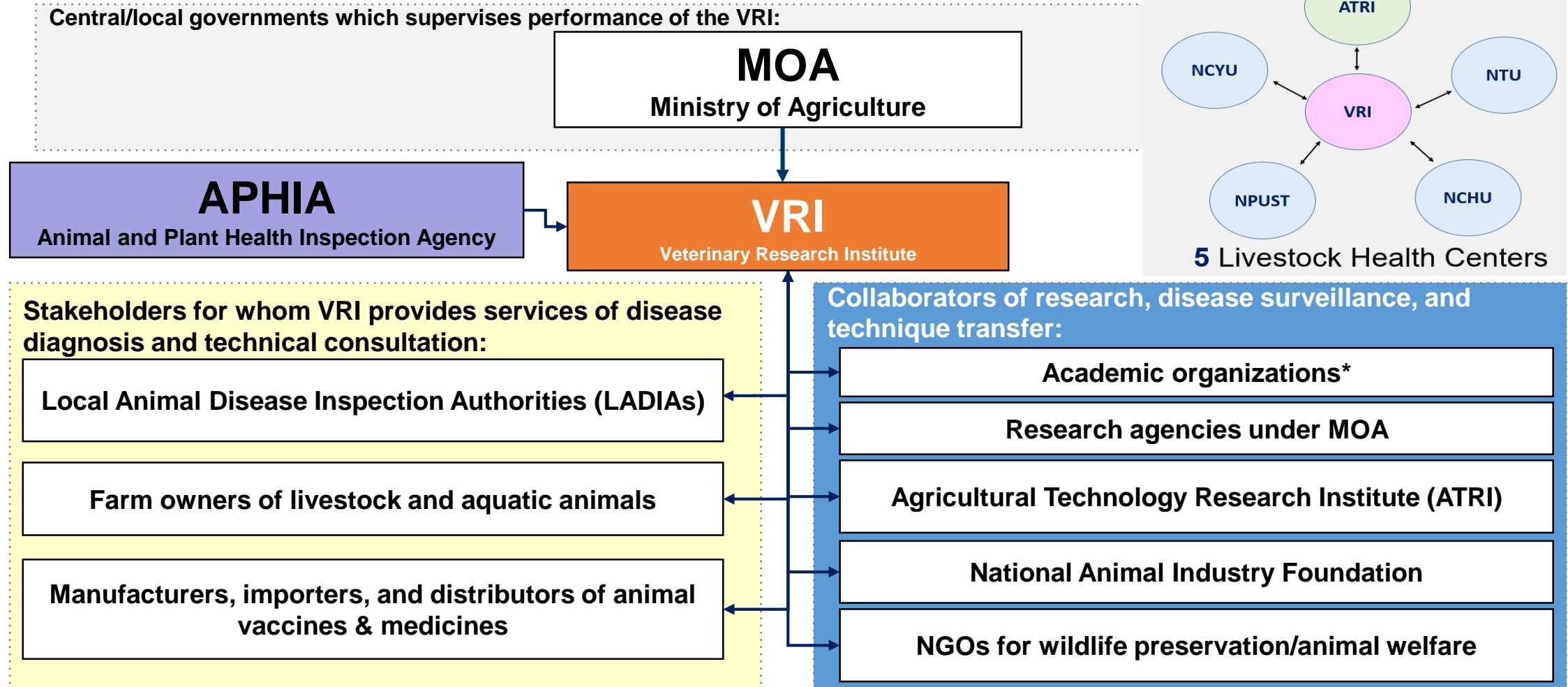
Stakeholder collaboration

Early Warning System-Central Disaster Response Center



Laboratory capacity

➤ Diagnostic system



*Academic organizations : National Taiwan University (**NTU**), National Chung Hsing University (**NCHU**), National Chiayi University (**NCYU**), National Pingtung University of Science and Technology (**NPUST**) and National Cheng Kung University (**NCKU**).

Laboratory capacity



May, 2017

➤ Diagnostic Tests Available:

- Real-time PCR and virus Isolation for **ASF**
- Anti-FMDV neutralizing Ab test, Real-time RT-PCR, Virus Isolation, Anti-NSP Ab ELISA for **FMD**
- Fluorescent antibody virus neutralization test, anti-CSFV Ab ELISA, Real-time RT-PCR, Virus Isolation for **CSF**
- Real-time PCR, Virus Isolation, ELISA, and IHC for other field detection
 - ✓ Real-time RT-PCR, Virus Isolation, ELISA for **PRRS**
 - ✓ Real-time RT-PCR, Virus Isolation, IHC for **PED**
 - ✓ Real-time PCR, Virus Isolation, ELISA, IHC for **PCV**
 - ✓ Bacterial culture and identification, PCR , ELISA for **bacterial diseases**
- Strengthen lab capacity through inter-lab comparisons and exchanges
 - ✓ Use Standardized Protocols, adopting and adhering to common standard operating procedures (SOPs) ensures consistency across labs. This reduces variability in test results and increases trust in data comparability
- VRI has **WOAH reference Lab for CSF** / passed **ISO/IEC 17025** Taiwan Accreditation Foundation (TAF) certification

Challenge and possible solutions

➤ Challenges:

- Illegal pork product smuggling (passenger luggage, postal parcels)
- High-risk of being invasion due to close contacts with neighboring ASF-affected countries
- Public awareness and behavioral change
 - Biosecurity awareness in small-scale pig farms still needs to be strengthened



➤ Solutions:

- Strengthened airport and port inspections with detector dogs and X-ray
 - Passengers' baggage from ASF high-risk flights will be screened by X-ray machines 100%, supplemented by active detection by detector dogs.
- Public campaigns on penalties and risks
 - Increase fines for illegal imports by passengers, effectively reducing the risk of pathogens being imported through illegal meat products.
- Continuously communicate concepts with livestock farmers through farm visits, various industry briefing sessions, and training sessions
- Targeted publicity for target groups



Proposal for future activities

- Enhance real-time data searching on ASF outbreaks in overseas
- Explore development of ASF vaccine
 - Understand ASF pathogenesis, genomics and vaccine select strategy. begin with a deep analysis of ASF virus biology, especially the virulence genes and immune evasion mechanisms
- Organize regional training courses and continuously raising public awareness
 - Collaboration with other agencies aims to prevent the illegal movement of live animals and associated animal products, and raise public awareness. The CIQS agencies.
 - Collaborate closely with stakeholders to ensure coordinated operations. Joint training sessions with the Coast Guard, and coordinated response protocols with Immigration and Customs for handling alerts.
- Periodic proficiency testing with international reference labs
 - Participate in Inter-Laboratory Comparisons (ILCs), regular participation in ILCs helps identify discrepancies, improve measurement techniques, and enhance overall data accuracy
- Establish a Livestock Health Center (composed of the VRI, ATRI, NTU, NCHU, NCYU and NPUST) to provide guidance to farmers in strengthening their biosecurity measures.

Proposal for future activities

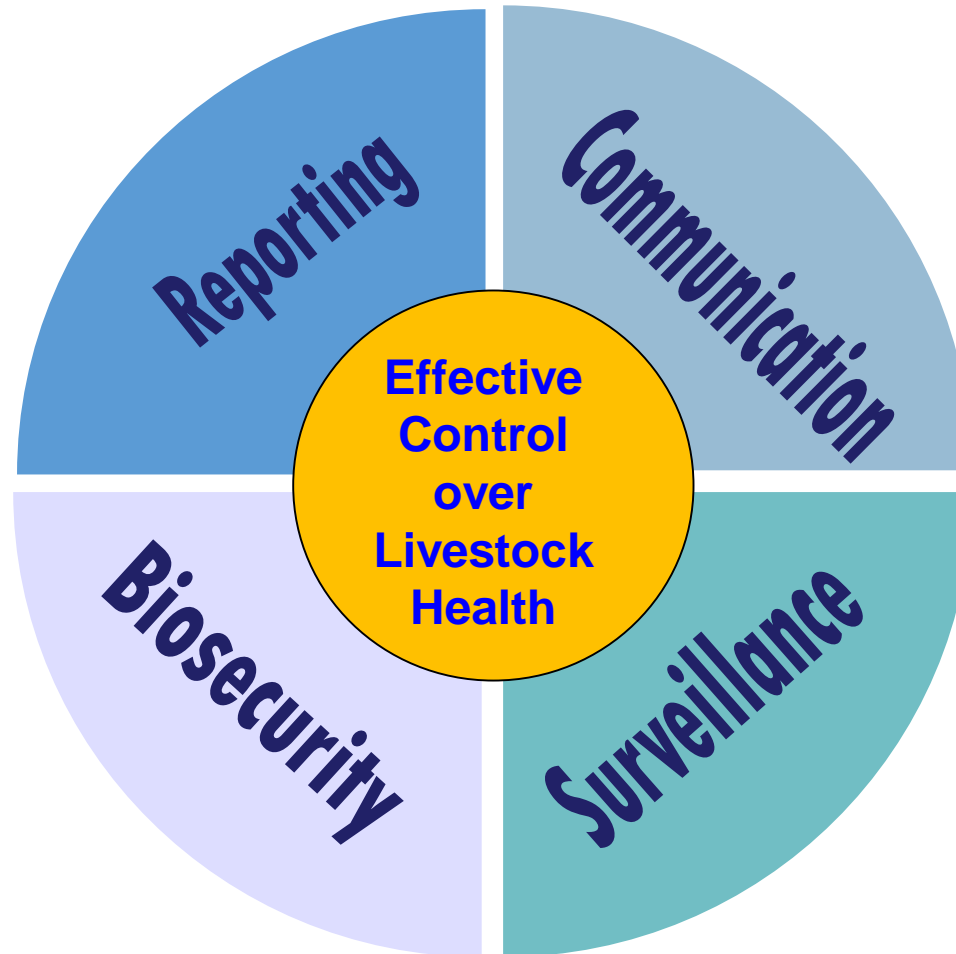
➤ Enhance effective control over livestock health

- **Enhance disease reporting system**

- Encourage disease reporting
- Reduce risk of spreading animal disease

- **Improve farm biosecurity**

- Reduce risk of introducing transmissible animal diseases
- Increase production efficiency



- **Public communication with aid of academic sectors**

- Stakeholders
- Common society

- **Continuous Surveillance Program**

- Monitor effects after stopping vaccination (SN titer)
- Detection of suspected cases
 - Clinical signs
 - rRT-PCR
 - NSP Ab for FMD

Thank you

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