

Department of Animal Health and Production

Peste des petits ruminants Situation in Vietnam

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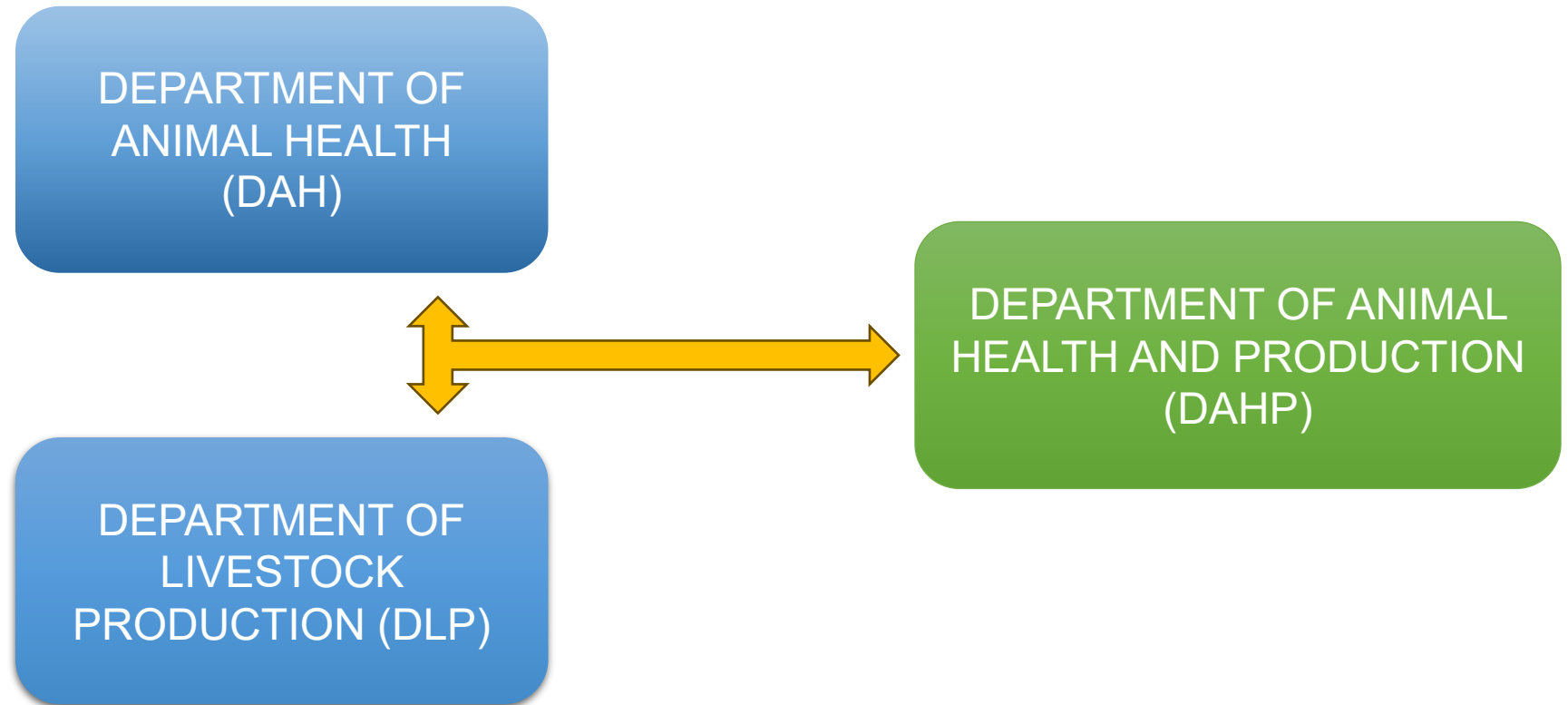
Head of Laboratory, Diagnostic and Testing Station No.II – National Center for Veterinary Diagnosis No.II



Disease prevention and control system(s)

- A structured veterinary system from the central level (Department of Animal Health and Production - DAHP) down to local authorities (provincial sub-departments, district and communal veterinary stations).

On 1 March 2025





Member's profile (Current Organizational Structure)

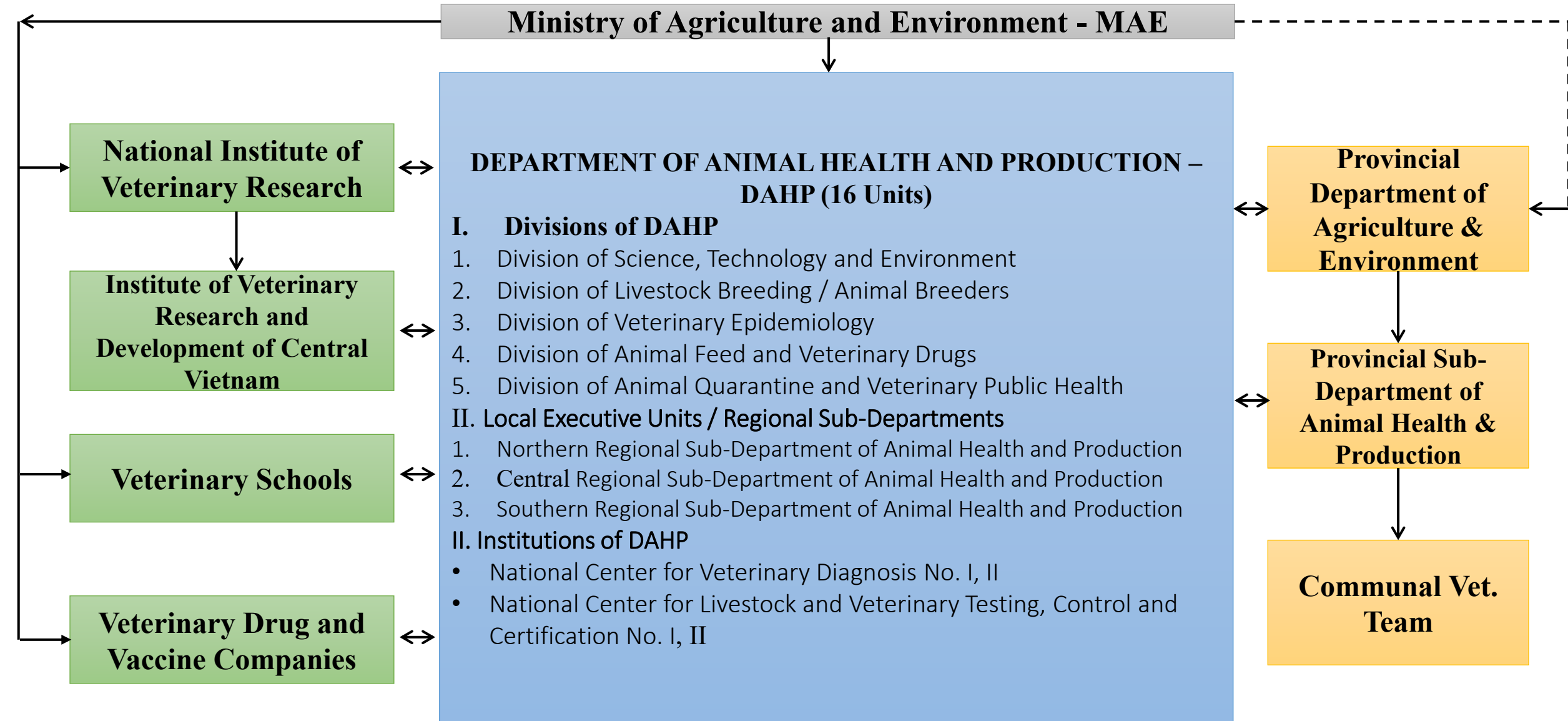
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Member's profile (Organizational structure post-October 1, 2026)

4





- *Susceptible population size:*
 - Primarily focuses on the total population of goats and sheep nationwide (concentrated mainly in the Central region, Central Highlands, and smallholder or semi-intensive farming households).
- *Production system overview*
 - Dominated by small-scale, backyard, or semi-intensive farming systems (combining grazing on pastures with supplemental feeding).
 - Frequent movement and live animal trade between different localities and provinces.



- Key measures applied: Active and clinical surveillance, quarantine/movement restriction, culling of infected animals, cleaning and disinfection (C&D), and ring vaccination using attenuated vaccines when international support or approval is available.

Major risks for PPRV introduction

- Uncontrolled movement, trading, and introduction of goats and sheep of unknown origin across borders or between provinces.
- Lack of herd immunity since the goat and sheep population has not been previously vaccinated against PPR.
- Shared grazing areas and live animal collection/trading hubs posing high risks of pathogen transmission.



- *Disease status*

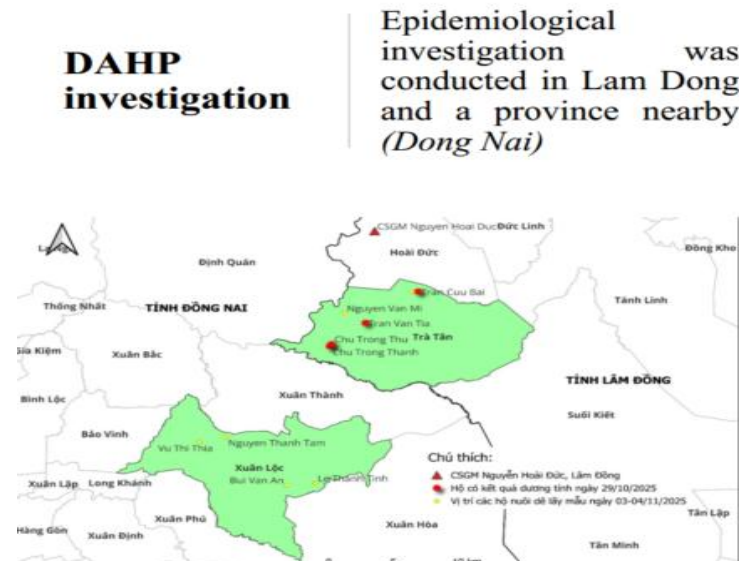
First PPRV Lineage IV confirmed in Vietnam, with reported outbreaks in multiple provinces.

- *Geographic distribution*

Outbreaks detected in Lam Dong, Dong Nai, Nghe An, and Khanh Hoa provinces.

- *Disease trend*

Emerging transboundary animal disease following the initial detection in October 2025, spreading across multiple regions





- *Disease impact*

Caused clinical illness and mortality in farms (e.g., 303 goats affected/culled in Lam Dong, 5 in Dong Nai, 24 in Nghe An, and 125 animals including goats and sheep in Khanh Hoa), triggering strict containment and stamping-out measures.

- *Key Strains/variants circulating*

PPRV Lineage IV (confirmed via N-gene and F-gene sequencing, matching strains from neighboring countries like China and Mongolia).

- *Animal species affected*

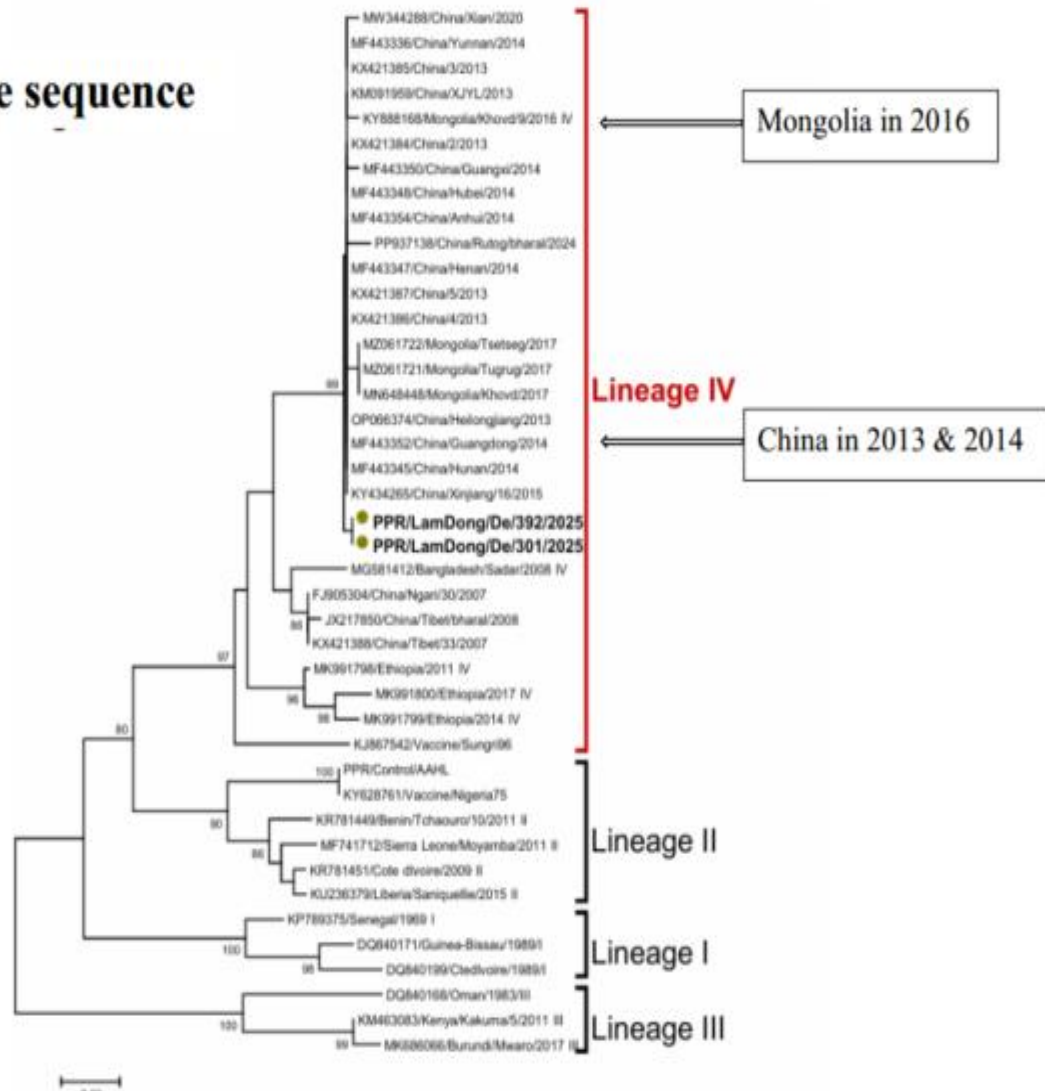
Goats and sheep.



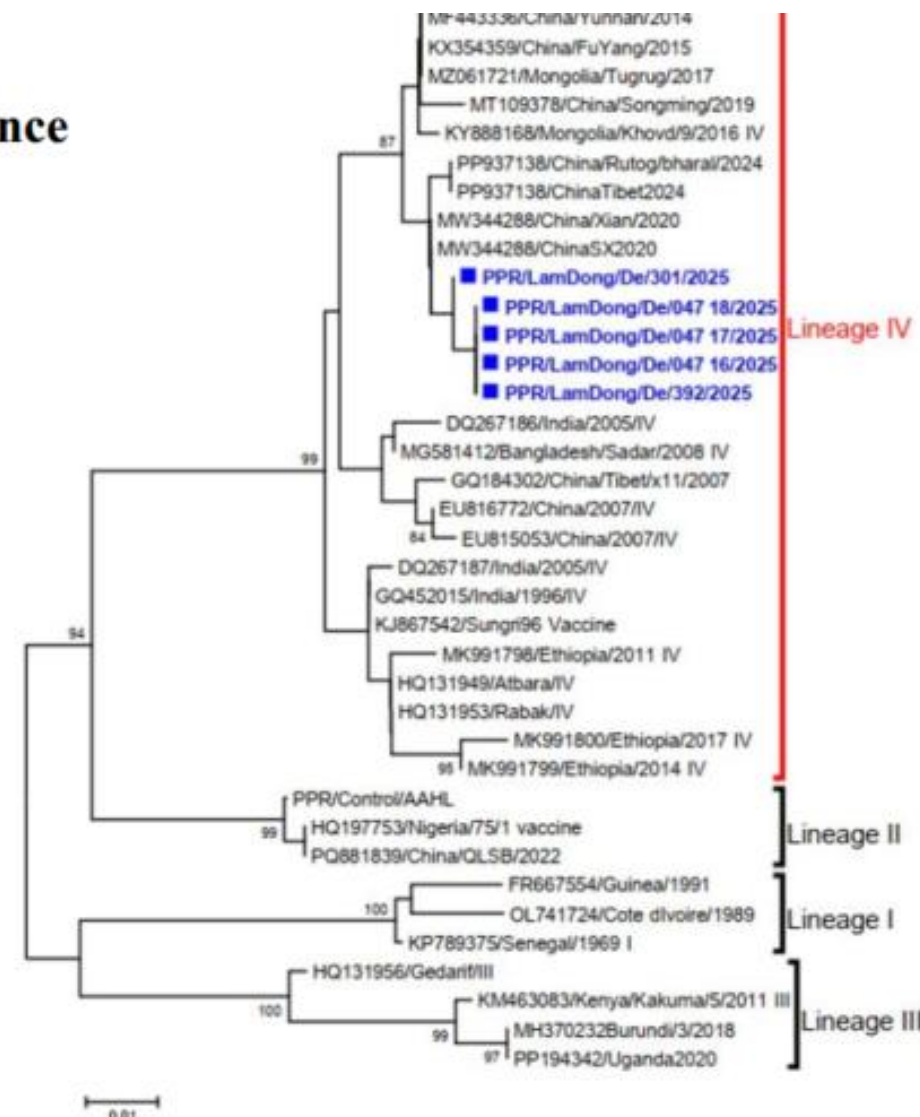


Disease situation (next)

N-gene sequence



F-gene sequence





- *Surveillance activities (passive, active)*

Conducting epidemiological investigations in Lam Dong and neighboring provinces (like Dong Nai).

Tracking animal movements and associated contacts linked to infected farms to trace infection sources.

Implementing active sample collection and clinical surveillance in high-risk surrounding areas

- *Prevention and rapid response measures against disease incursion*

Strict containment by culling infected animals and restricting animal movement within a 3 km radius around infected farms.



- *Control measures*

Daily Cleaning & Disinfection (C&D) during the first week and 3 times in the subsequent two weeks

- *Vaccination programs (if applicable)*

Implementing ring vaccination using attenuated vaccines (Nigeria 75/1 or Sungri96 strains) when vaccines are available.

Utilizing 6,000 doses of PPR vaccines provided by FAO for emergency response, alongside commercial import applications submitted by Navetco.



- *Key laboratory diagnostic tests conducted*
 - Real-time RT-PCR testing targeting the N-gene (using forward primer at position 483–508, TaqMan probe at position 551–576, and reverse primer at position 603–624).
 - N-gene and F-gene sequencing for phylogenetic analysis (identifying Lineage IV).
- *National/sub-national Laboratory networks/system*
 - Testing and diagnostic confirmation conducted through national reference laboratories, such as the National Center for Veterinary Diagnostics No. 2 (NCVD 2) in Ho Chi Minh City.
- *Proficiency Testing and human resource capacity*

Conducting epidemiological investigations, active sample collection, and genetic characterization to track infection sources and monitor high-risk areas.



- *Collaboration mechanism (national and international if available)*

Receiving emergency support and vaccine assistance from international organizations like FAO (providing 6,000 doses of PPR vaccine).

Submitting commercial import applications by local enterprises (such as Navetco) to expand vaccine coverage.

Coordinating epidemiological investigations, sample collection, and diagnostic confirmation between local authorities and national reference laboratories (such as NCVD 2).

- *Stakeholders*

- Department of Animal Health and Production (DAHP) and local veterinary authorities.
- National Center for Veterinary Diagnostics No. 2 (NCVD 2).
- International organizations (FAO).
- Domestic vaccine manufacturers/commercial companies and livestock farmers/farm owners.



- *Key issues in collaboration*
 - Emergency response coordination and mobilization of international resources to manage initial outbreaks.
 - Securing commercial vaccine supplies and regulatory approval for import to implement wider vaccination coverage.



- **Challenges in prevention and control of PPR:**

- Emerging transboundary animal disease with initial outbreaks detected across multiple provinces (Lam Dong, Dong Nai, Nghe An, and Khanh Hoa).
- Limited initial vaccine availability, requiring reliance on emergency international support (such as 6,000 doses provided by FAO) and pending commercial import applications (submitted by Navetco).
- Managing movement restrictions and containment across recently restructured local administrative boundaries.

- **Actions to overcome those challenges:**

- Implementing strict containment measures including culling infected animals and restricting animal movement within a 3 km radius.
- Executing frequent cleaning and disinfection (C&D) protocols daily during the first week and 3 times in the subsequent two weeks.
- Conducting active and clinical surveillance alongside ring vaccination using attenuated vaccines (Nigeria 75/1 or Sungri96 strains) as supplies become available.



- **Future plans on prevention and control of PPR:**

- Expanding vaccine coverage through commercial import applications submitted by local enterprises (such as Navetco).
- Continuing ring vaccination using attenuated vaccines (Nigeria 75/1 or Sungri96 strains) as vaccine supplies become available.
- Maintaining active sample collection, clinical surveillance, and tracing of animal movements in high-risk surrounding areas.

Thank you!

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