



World Organisation  
for Animal Health



中国动物疫病预防控制中心  
China Animal Disease Control Center

Nepal



## Updates on the main diseases in domestic swine population – African Swine Fever (ASF) and Classical Swine Fever (CSF)

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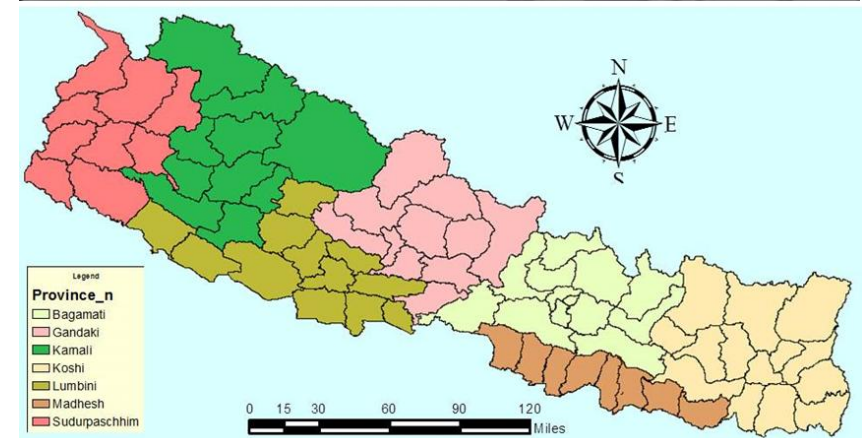
The Sixth WOAHP Regional Training on Swine Disease  
Control in Asia and the Pacific  
Beijing, People's Republic of China  
13-16 October 2026



# Nepal: A Brief Introduction

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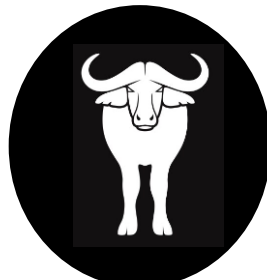
- Nepal: a land-locked/linked country between India and China
- Politically, 3 Tiers of Government: 7 provinces, 77 districts and 753 municipalities.
- Geographically, divided into 3 eco-zones: Mountains, Hills and Terai (low land).
- Livestock is a major component of Nepal Agriculture contributes 11-13% GDP



## Population (2024/025)



5.20 M



3.30 M



15.30 M



0.60 M



1.50 M

Source: MOAFE



**Agriculture  
GDP**



**24.12%**



**29.16 M**

**Total Population**



**50.4%**

**Engaged in Agri**



**3.4 M**

**Livestock farm  
families**

Source: NSO, 2022



**Livestock**

**AGDP**

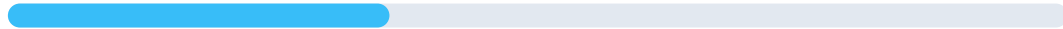
**24.01%**

## Swine Population Density by Agro-Ecological Belt

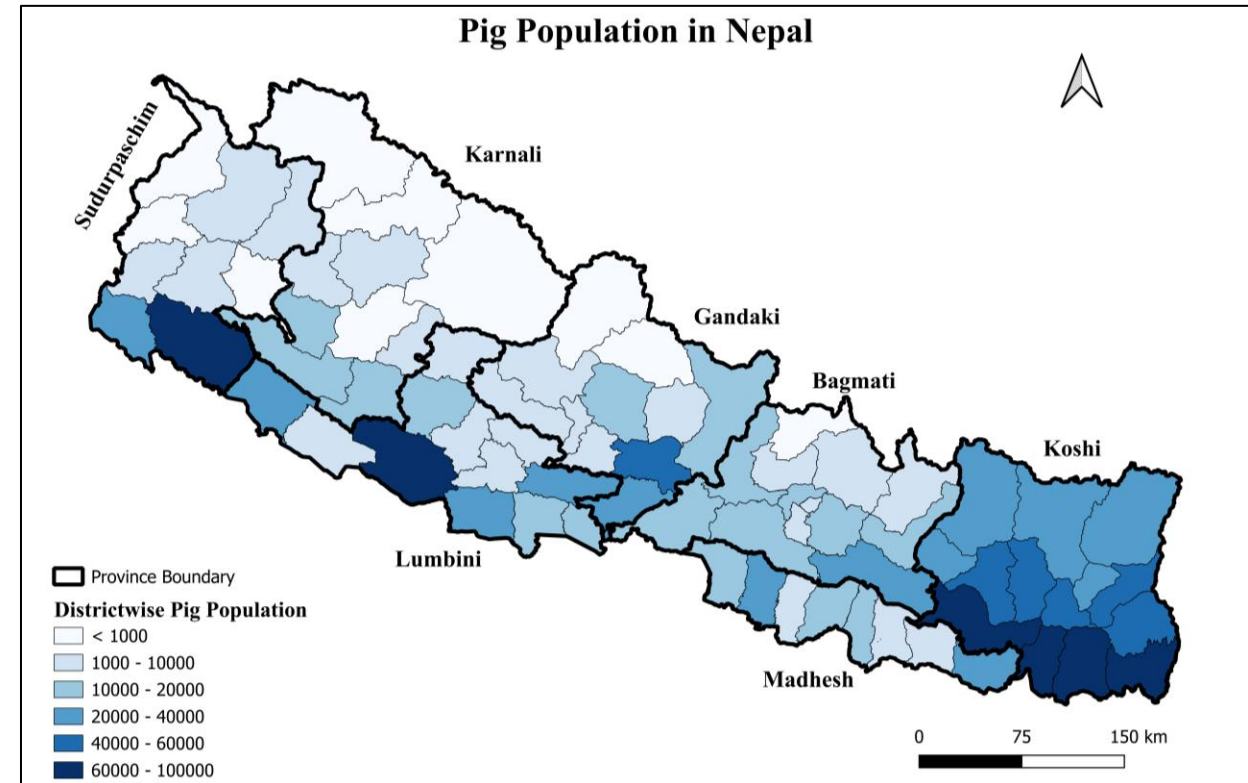
Hill Region (Mid-Hills) 53%



Terai Belt 36%



Mountain Zone 11%



### Primary Production Hub

Koshi Province  
(Eastern Region)



### Major Consumption Hubs

Kathmandu Valley,  
Pokhara & Dharan

58% local (Hurra/chawache)/42% exotic



- ❖ Cross border illegal animal trade between India and Nepal.
- ❖ Transportation of swine without health checkup in trucks that collect pigs from many farms
- ❖ Swill and slaughter house scraps feeding.



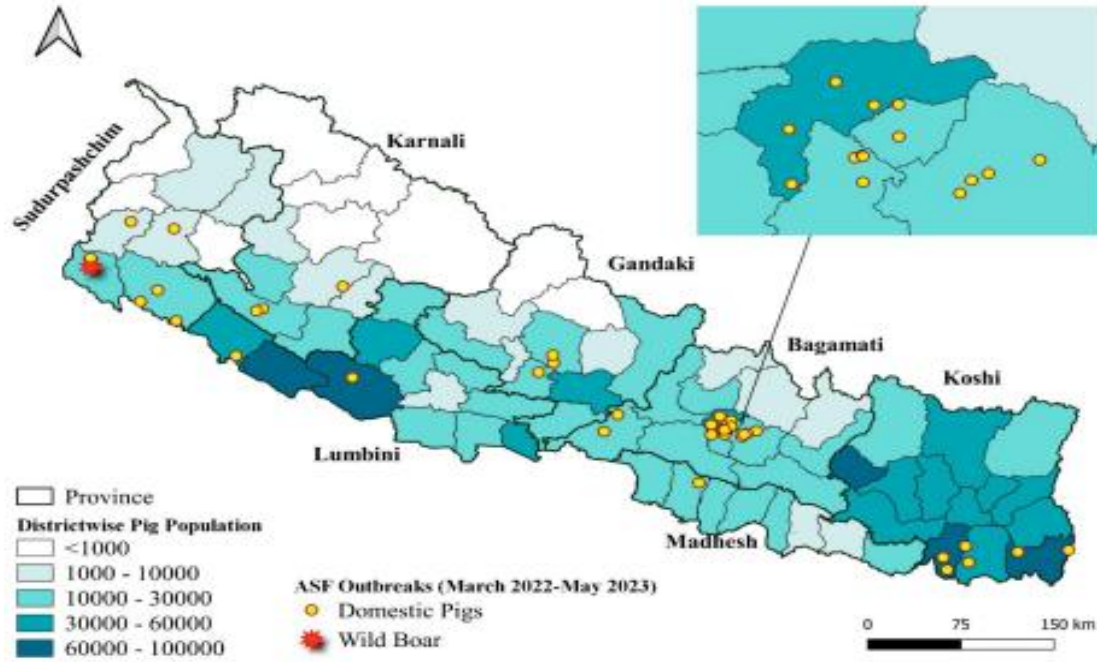
- ❖ Poor sanitation and housing
- ❖ Inadequate vaccine and vaccination
- ❖ Poor Biosecurity
- ❖ Slaughter of swine in open yard.



# Disease situation: African Swine Fever (ASF)

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- First Outbreak of ASF in Nepal: **March 2022**

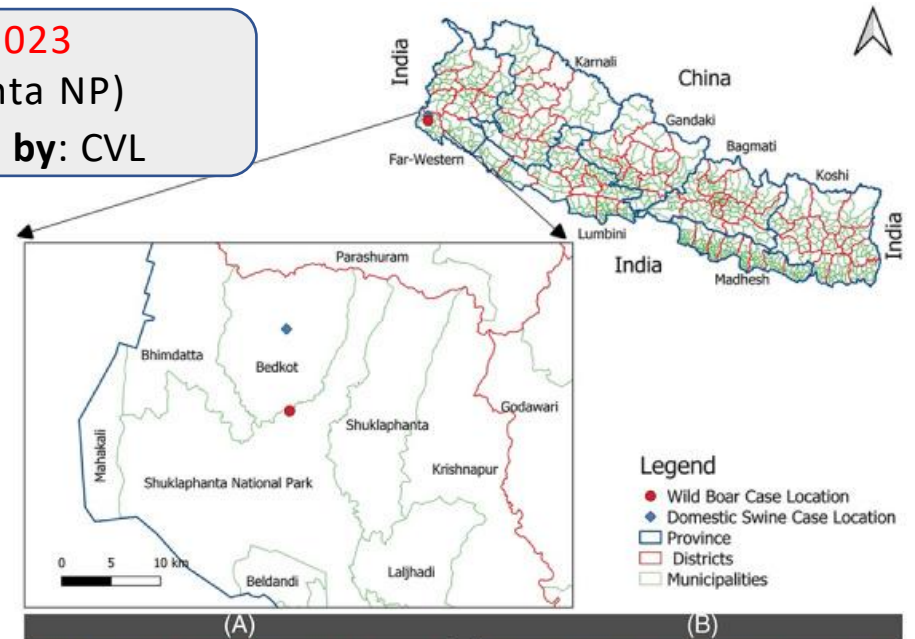


Peak Epidemic Phase 2022-2023

**ASF Genotype II virus.**

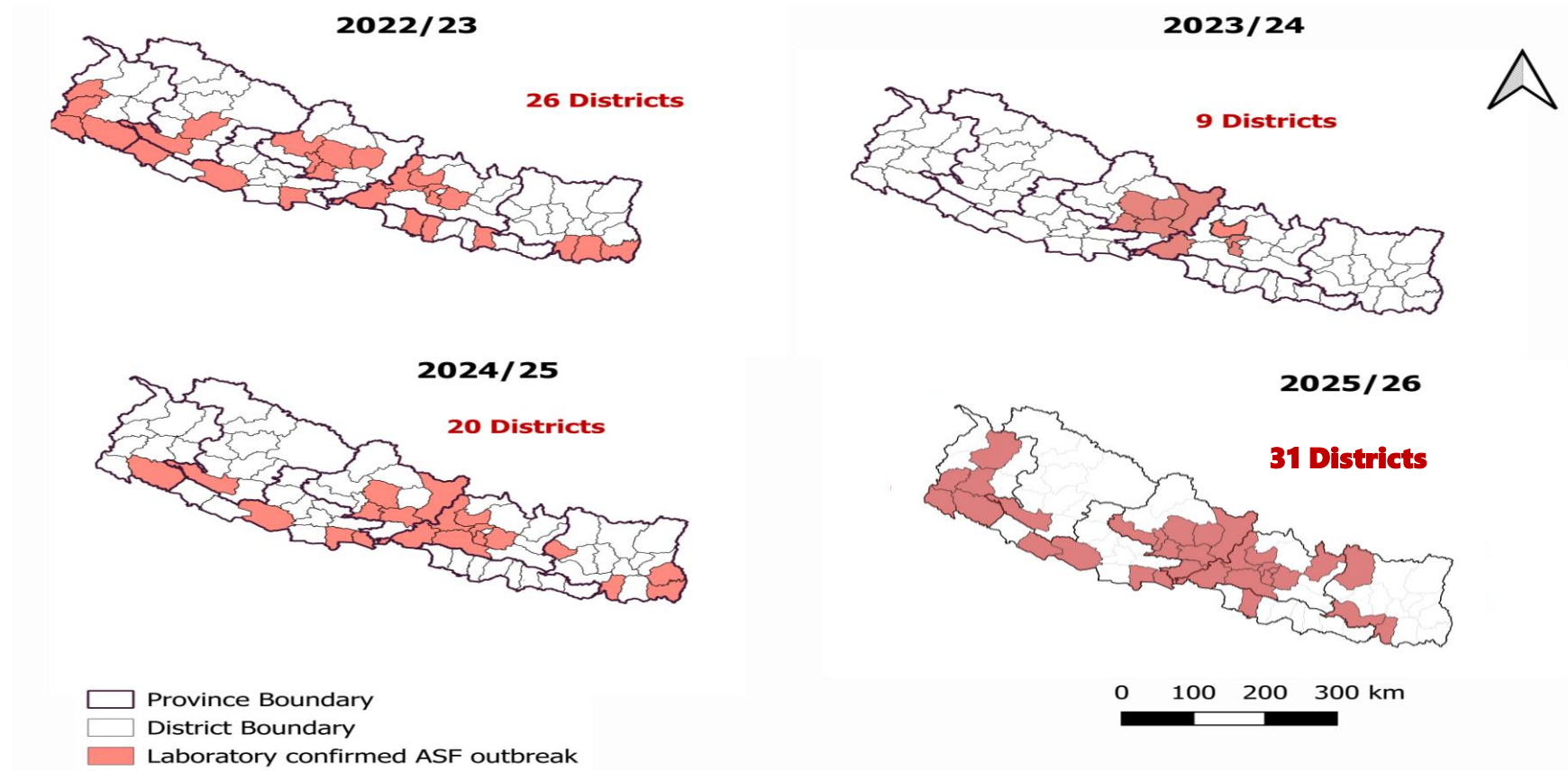
## First Outbreak of African Swine Fever in **Wild Boar** in Nepal

**February 2023**  
(Suklaphanta NP)  
**Confirmed by: CVL**



Three **wild boars** died due to ASF at the Central Zoo in **July 2026**

## Spatiotemporal Distribution of ASF



## Status of African Swine Fever 2022-2026

**764**

Tested

**398**

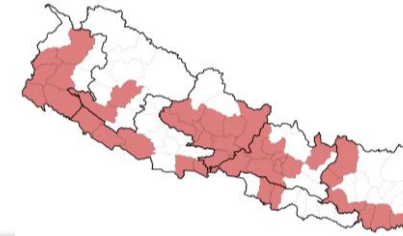
Positive

**40.89%**

Positivity

**39/77**

Districts affected



## Epidemiological Impact

**48**OUTBREAKS  
(2022–25)**17,005**

SWINE FATALITIES

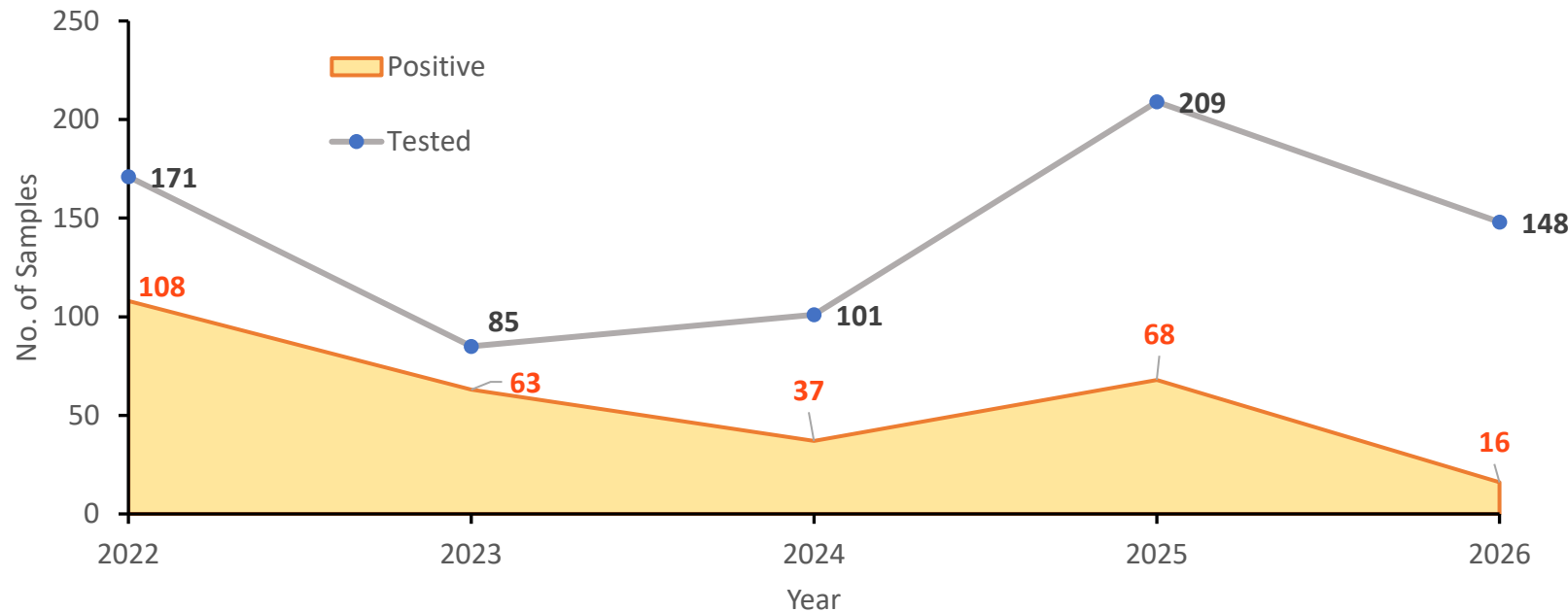
**92.9%**

CASE FATALITY RATE

**14.5%**

NATIONAL SWINE DROP

### Yearly ASF Testing Trend 2022-2026

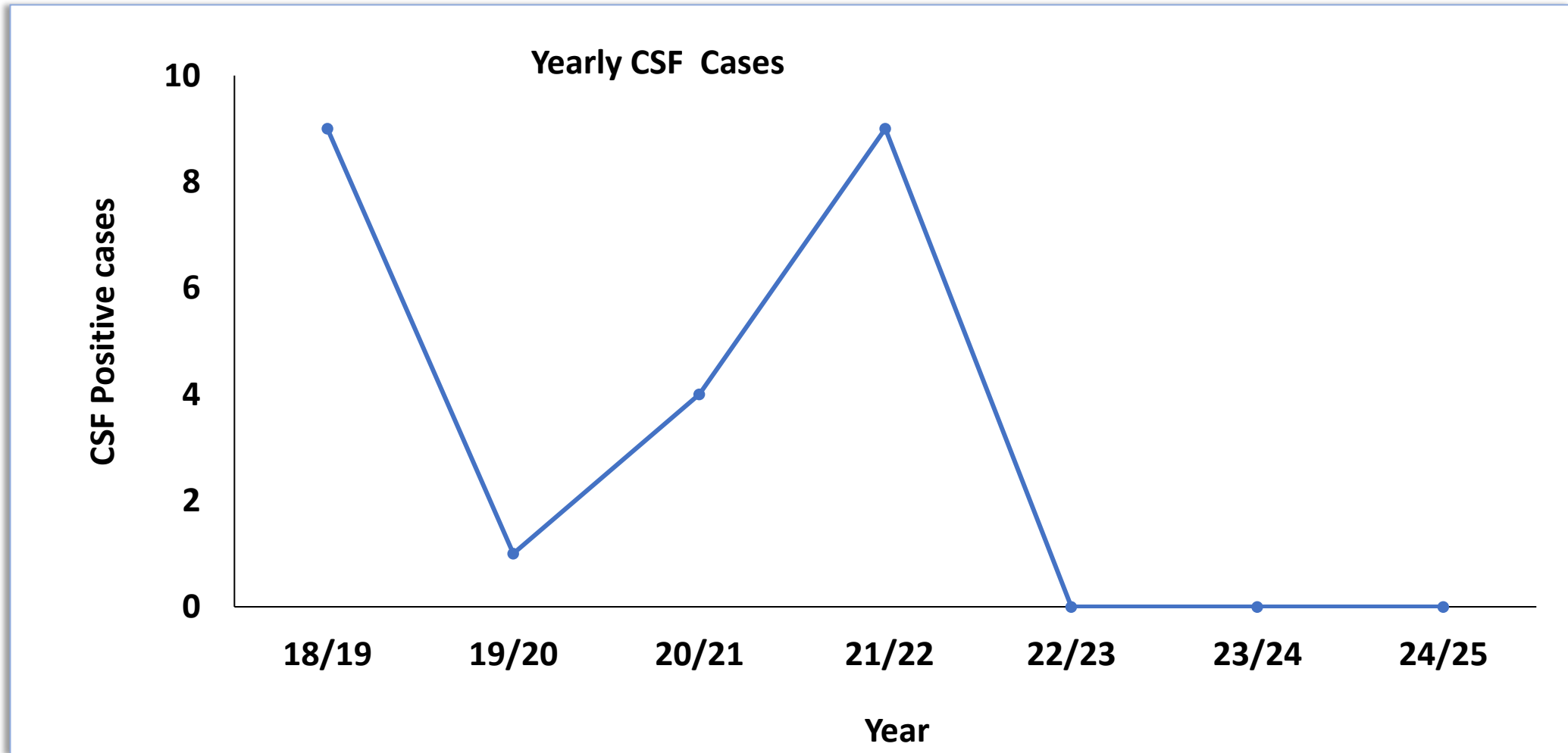




## Disease situation : Classical Swine Fever (CSF)

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- No CSF outbreak has been reported since from 2023





## ☐ Surveillance

**Active Surveillance:** conducted regularly by National and subordinate Laboratories, provincial and local veterinary services offices

### **Passive Surveillance:**

- Outbreak informed by local veterinarian
- VL collects samples like whole blood or tissue samples for rapid test or PCR.
- Lateral flow assay : Veterinary labs
- PCR: is conducted by National Lab.





- Biosecurity measures
- Awareness campaign
- Rapid response teams investigate and sample suspected cases
- Culling, burial / disposal, disinfection of affected premises
- Movement restrictions, tracing, and nearby-farm surveillance



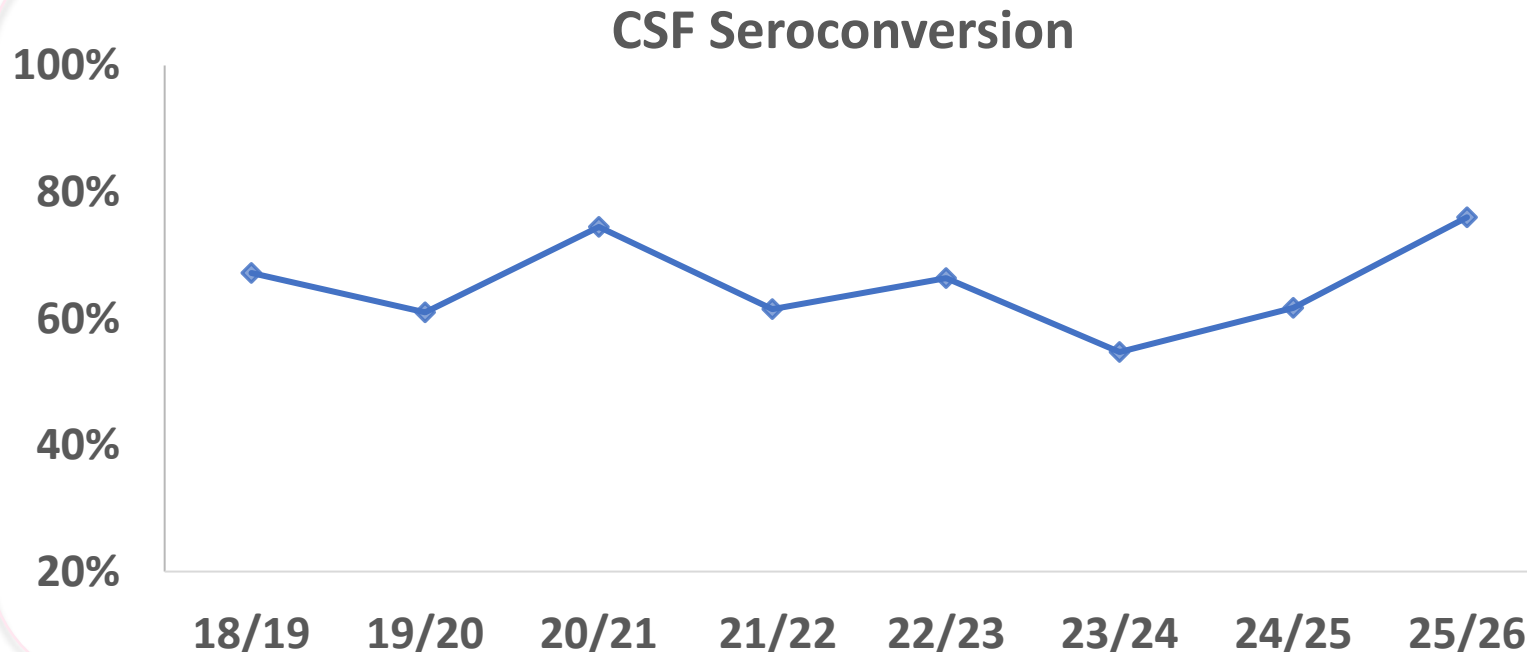
Rapid response Team: Outbreak investigation and sample collection



## Response to CSF : Vaccination

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- National level Classical Swine Fever control prog
- Mass vaccination program
- **Live attenuated CSF Vaccine**
- National Vaccine Production Laboratory (NVPL)
- Total vaccine production F/Y (2025/26): **1.4 M Dose**



| Province      | Total doses (distributed) |
|---------------|---------------------------|
| Koshi         | 463000                    |
| Madhesh       | 56300                     |
| Bagmati       | 113000                    |
| Gandaki       | 100000                    |
| Lumbini       | 50000                     |
| Karnali       | 36900                     |
| Sudur-paschim | 68000                     |
| Total         | 887200<br>(0.88 M doses)  |

National Vaccine Production Laboratory



## Diagnostic capability

- **Molecular Test (RT-qPCR and conventional PCR)**

Real time PCR multiplex : PRRS- NA/EU, ASF, CSF, Salmonella, Erysipelas, Nipah, JE, FMD, Influenza, Brucella

- **Serological Test**

PRRS, Brucella, Atropic Rhinitis, Aujeszky's Disease, Cysticercosis, NSP ELISA, Flavi virus

- **Post Vaccination Sero-monitoring**

FMD, CSF.

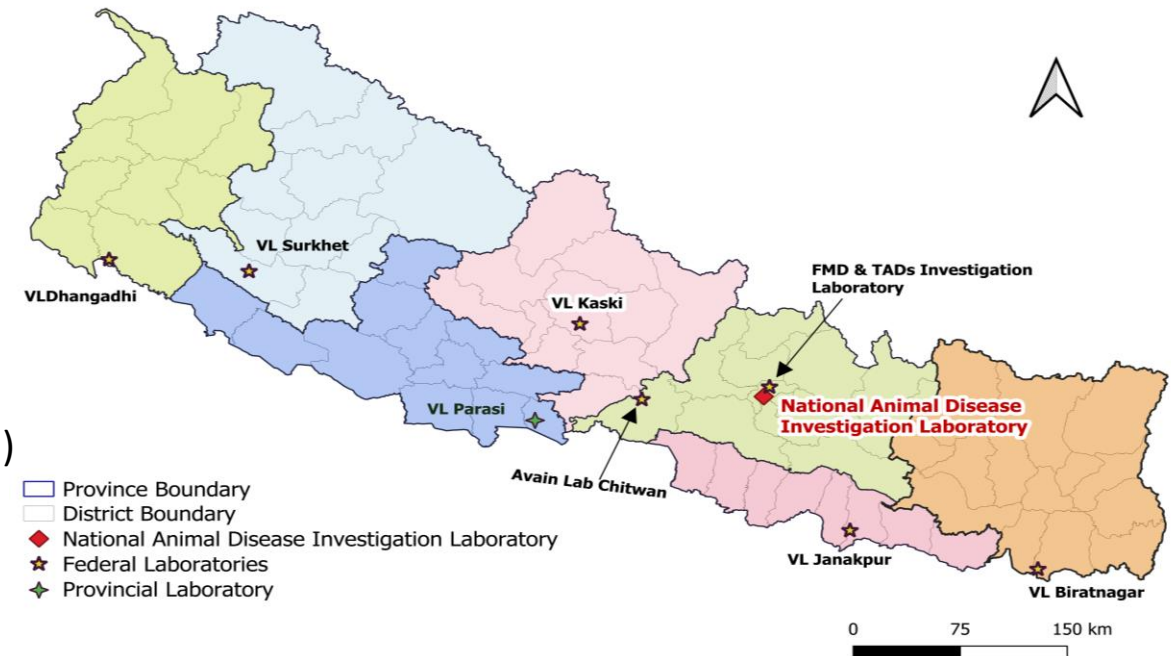
- **Screening Test**

LFA





1. **National Animal Disease Investigation Laboratory: Kathmandu**
2. FMD & TADs Investigation Laboratory : Kathmandu
3. Animal Disease Investigation Laboratory: Dhangadi (Far west)
4. Animal Disease Investigation Laboratory: Surkhet (Mid west)
5. Animal Disease Investigation Laboratory: Pokhara (West)
6. Animal Disease Investigation Laboratory: Janakpur (Central Terai)
7. Animal Disease Investigation Laboratory: Biratnagar (Far east)





## Inter-Government

Three tiers of government

| Federal                                                                                                                                                                                          | Provincial                                                                                                                                                                                                                | Local level                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Quarantine</li><li>• Disease control</li><li>• Regulation</li><li>• Vaccine Production</li><li>• Trade Facilitation</li><li>• Genetic Resource</li></ul> | <ul style="list-style-type: none"><li>• Service delivery</li><li>• Disease control</li><li>• Guidance to local level</li><li>• Entrepreneur Development</li><li>• Market Development</li><li>• Genetic resource</li></ul> | <ul style="list-style-type: none"><li>• Animal Health Service</li><li>• Extension</li><li>• Vaccination</li><li>• Disease reporting</li><li>• Livestock Production</li><li>• Marketing</li></ul> |



## International Organization

- WOA: WAHIS reporting, training, PVS
- FAO / ECTAD: surveillance and lab support
- SAARC / regional networks; India and China cross-border contacts



## Industry & Farmer

- Pig producers' associations, private vets, traders, cooperatives



## Challenges

- Mostly backyard pigs, hard to reach and low biosecurity
- Under-reporting; no compensation reduces farmer cooperation
- Porous border; informal pig and pork trade
- No ASF vaccine
- Limited funds and trained staff
- Collaboration of three tiers of government for disease reporting, outbreak investigation and disease control.

## Possible Solutions

- Awareness and biosecurity training for farmers
- Compensation scheme and incentive for early reporting
- Strengthen check-posts and cross-border coordination
- Expand lab capacity and train rapid response teams
- Ring and mass vaccination
- Research on vaccine development and its proper uses.



## Collaboration and Coordination

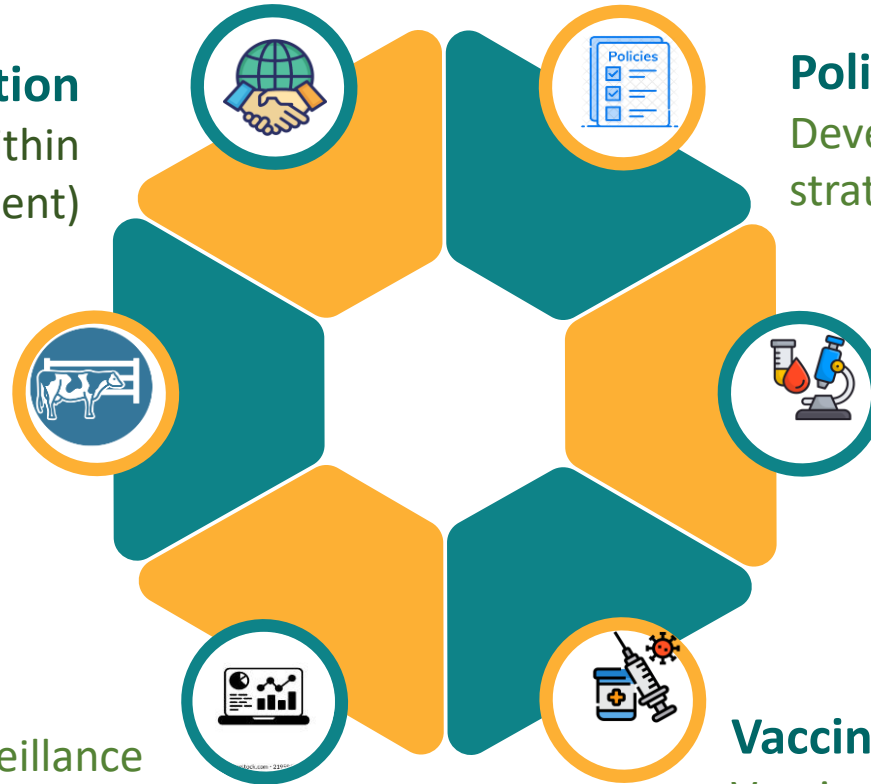
International and national (within different tiers of government)

## Quarantine

Cross border harmonization  
Porous border

## Surveillance & Reporting:

Scale up risk-based active surveillance and WAHIS reporting



## Policy & Preparedness:

Develop national ASF and CSF control strategy and contingency plan

## Diagnostic capability

Upgrade diagnostic tools (Genomic sequencing), quality assurance, regional lab network

## Vaccine and vaccination coverage

Vaccination coverage CSF



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# Thank you!

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