

# MINDANAO HOG CHOLERA ERADICATION PROGRAM UPDATES

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- **Classical Swine Fever (CSF) or Hog Cholera** is a contagious, often fatal, economically important swine disease.
- It remains a problem in the country affecting both **backyard and commercial farmers.**



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# DISEASE AGENT

- Caused by Pestivirus
- Incubation period: **2-14 days**
- Survives in **moist** and **cold** conditions
- Can persist in **fresh meat products**
- Causes **intestinal** and **respiratory problems**



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## Acute Form

Fever (41°C)  
 Anorexia  
 Lethargy  
 Multifocal hyperemia  
 Conjunctivitis  
 Transient constipation followed by diarrhea  
 Occasional vomiting  
 Dyspnea  
 Coughing  
 Ataxia  
 Paresis  
 Convulsion  
 Huddling  
 100% mortality in young pigs  
 Death 5-15 days after onset

## Chronic Form

Dullness  
 Capricious appetite  
 Pyrexia  
 Diarrhea for up to 1 month  
 Apparent recovery with apparent relapse and death

## Congenital Form

Congenital tremor  
 Weakness  
 Runting  
 Death

## Mild Form

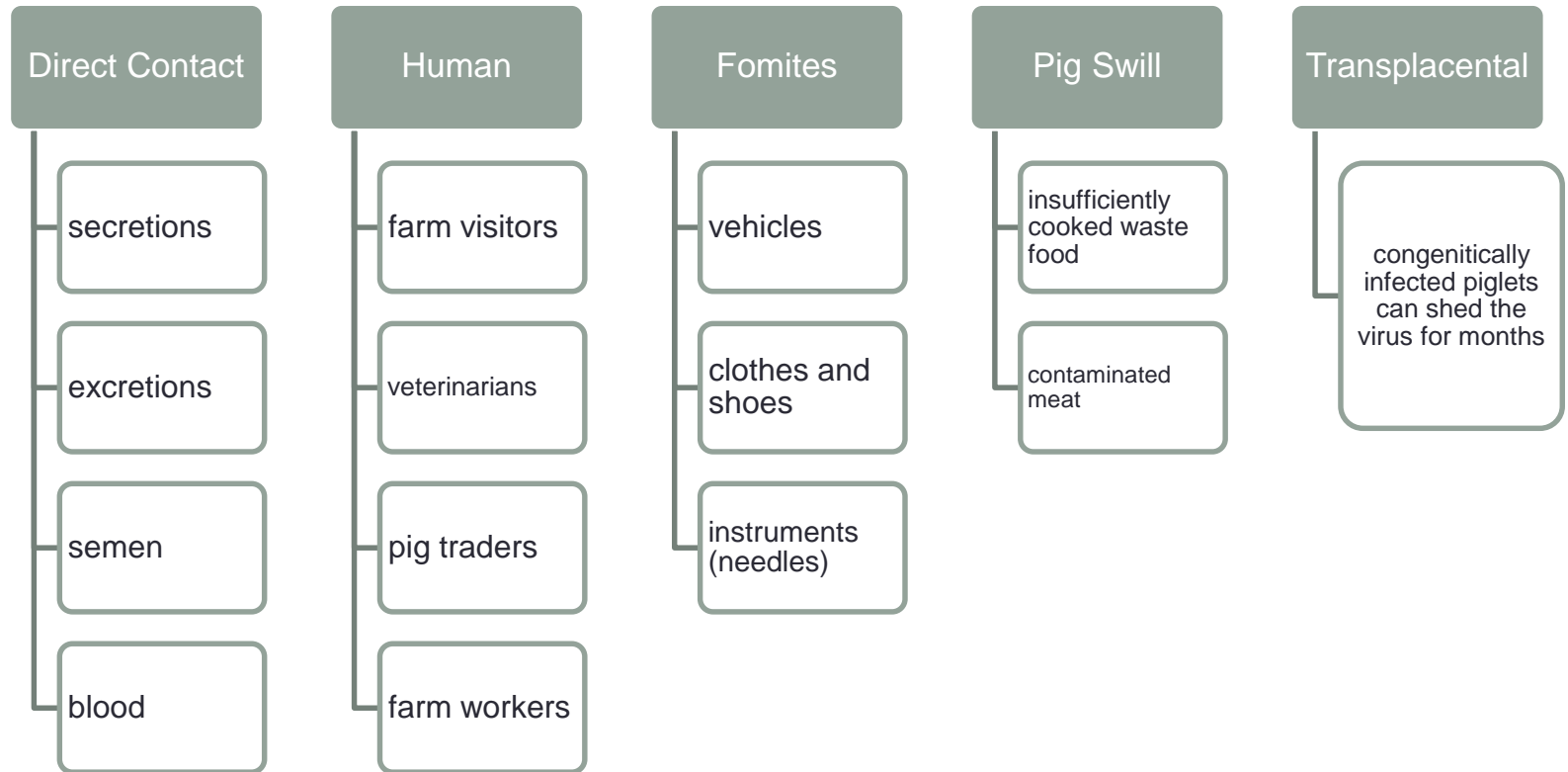
Transient pyrexia  
 Inappetence  
 Fetal death  
 Resorption  
 Mummification  
 Stillbirth  
 Birth of live, congenitally infected pigs  
 Abortion



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# TRANSMISSION



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# THE MINDANAO CSF ERADICATION PROGRAM

Formally launched in 2017 in coordination with the

- Regional Animal Disease Diagnosis Laboratory (**RADDL**),
- Department of Agriculture **Regulatory Division**,
- National Meat Inspection Service (**NMIS**),
- Central Mindanao University (**CMU**),
- Local Government Units (**LGUs**) and
- **Commercial Pig Farm Associations.**



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# GOAL

- To **eradicate CSF** without vaccination by **2025**



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# OBJECTIVES

- To **establish CSF free zones** for international trade
- To improve **animal health** situation
- To increase **income and** enhance **livelihood** of swine farmers
- To maintain a **sustainable and friendly** environment for the **agricultural system**
- To establish **cooperation among stakeholders** through capability building, research and information and education campaign



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# PHASES

## Phase 1 Preparation Phase

Development of regional and national plans including all basic infrastructure, mechanisms and required capacities to run an animal health program.



## Phase 2 Control Phase

Implementation of measures stated in the national plan with regular assessments conducted to monitor the status of the country situation.



## Phase 3 Eradication Phase

Assessment of program activities and regional disease status in preparation for the steps needed for eradication.



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# STRATEGIES

- Maintain **negative or zero occurrence** of CSF
- **Regular disease reporting** and emergency preparedness plan
- Update **animal movement policies**
- Expand local declaration of CSF-Free status through **compartmentalization** progressive control pathway stepwise approach to achieve CSF disease freedom

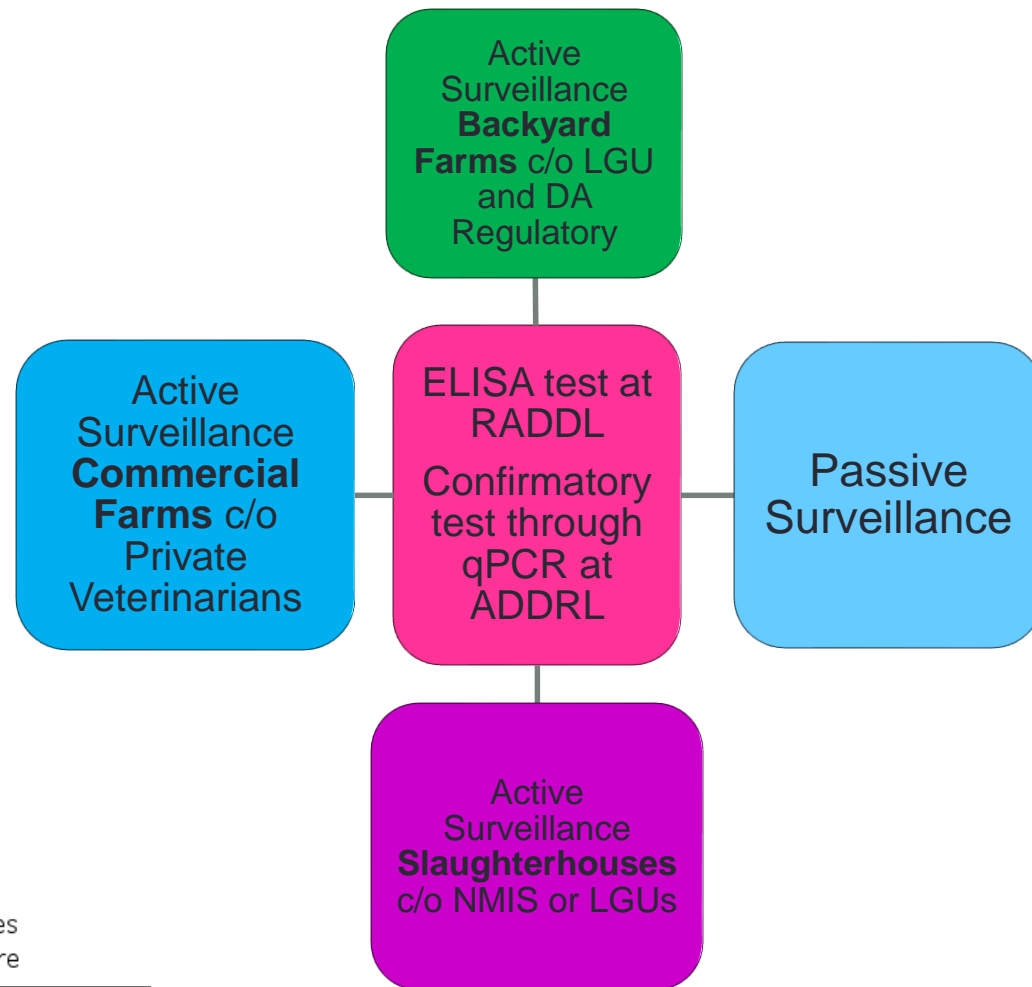


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# TECHNICAL COMPONENTS



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# SAMPLE DESIGNS

- **Slaughter-check method** – at least 100 serum samples will be collected from slaughter houses.
- **Random sampling** – at least 90 samples will be collected from backyard farms per province.
- **Commercial farms** – at least 10% of the breeder pig population or not more than 30 samples will be collected from every commercial farm.



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# LABORATORY DIAGNOSIS

- Laboratory diagnosis (**ELISA Antibody and Antigen**) will be conducted in RADDLs
- ADDRL will serve as a reference laboratory where confirmatory testing (qPCR) will be performed.

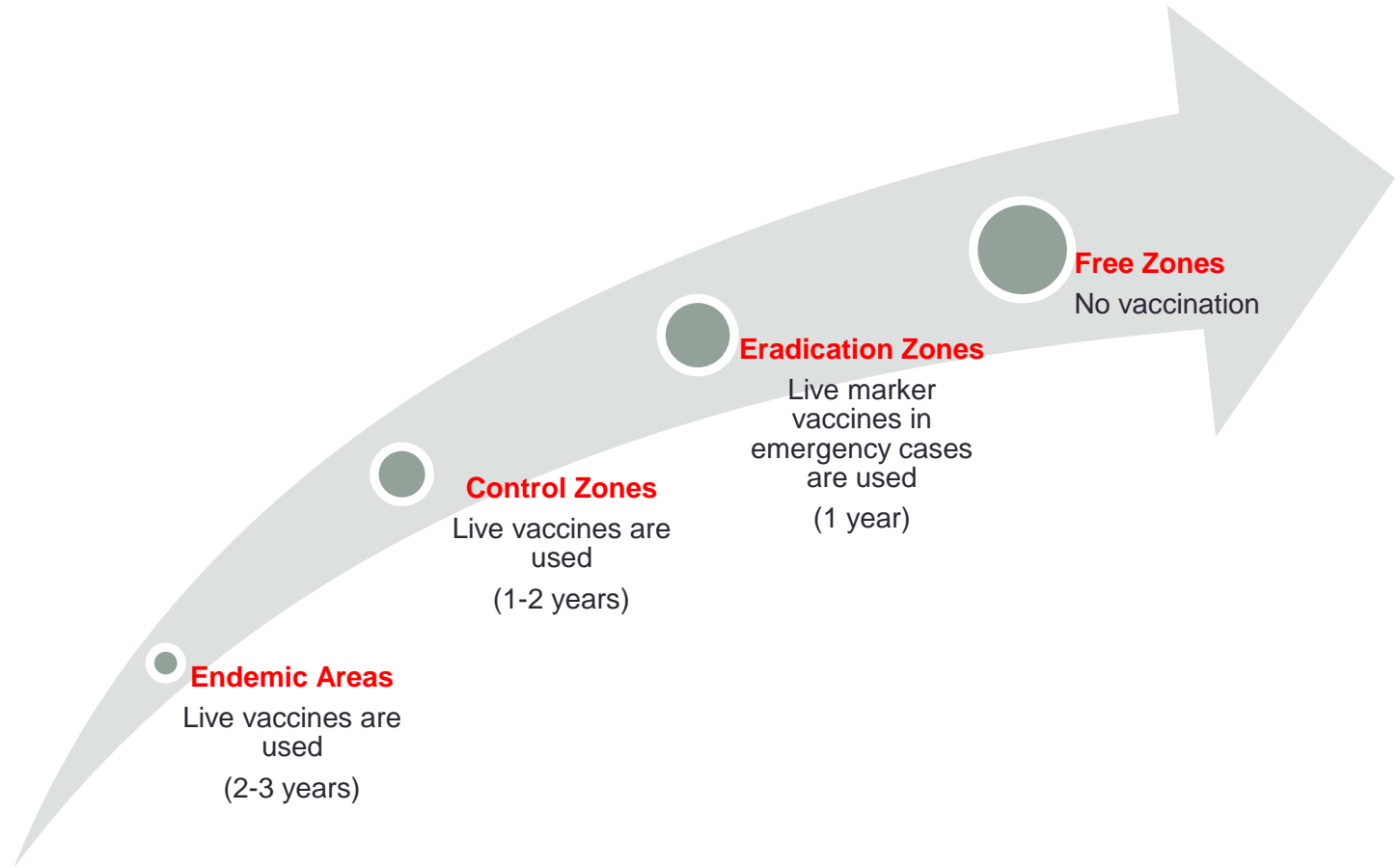


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# VACCINATION



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# UPDATES AND WAY FORWARD



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**MAY 23-25, 2017**

## **Strategic Planning Workshop for Mindanao Hog Cholera Eradication Program**

- Aspect/feature and strategies on the final implementation of the program



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**OCTOBER 3-4, 2017**

## **Preparation for the Standardized CSF testing protocol**

- Creation of a testing protocol for CSF, identifying IDEXX ELISA as the preferred test kit due to specificity and sensitivity considerations



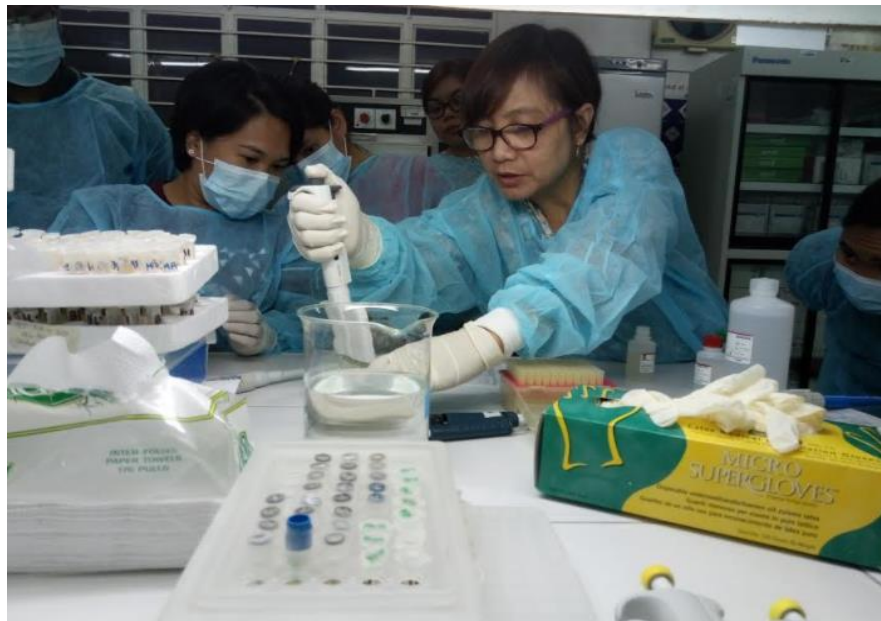
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**NOVEMBER 27-29, 2017**

## **Refresher Training Course for CSF Antibody and Antigen Detection**

- Training of 15 participants from RADDL and CMU on the usage of IDEXX ELISA test and software trouble shooting



**December 13-14, 2017**

## **Year End Meeting and Workshop**

- Updates on the surveillance and laboratory activities conducted by involved government units and the academe
- Identification of gaps in the conduct of surveillance activities



**February 1, 2018**

## **Consultative Meeting with LGUs, NMIS, RADDL, NVQS and DA-RFO**

- Orientation of LGUs on their role in sample collection in backyard swine farms and slaughter houses; NMIS in sample collection in NMIS-accredited slaughterhouses; CMU in conducting research works for baseline data collection; stakeholders in the alignment of their current activities with the Mindanao CSF eradication program





**May 8-9, 2018**

## **Hands on Training of LGUs on Blood Collection in Support for Hog Cholera Eradication Program**

- Training of Region 12 LGUs on field surveillance, including orientation about Mindanao CSF eradication program, actual blood collection, disease diagnosis and management.



**June 20-22, 2018**

## **Training of Veterinarians and Animal Technicians in the Conduct of Animal Handling, Restraint and Sample Collection for Surveillance for Mindanao CSF Eradication Program**

- Training of Region 11 LGUs on field surveillance, including orientation about Mindanao CSF eradication program, actual blood collection, disease diagnosis and management.



**July 5, 2018**

## **Training on Notifiable Animal Diseases (AI and CSF)**

- Training of Region 10 LGUs on field surveillance, including orientation about Mindanao CSF eradication program, actual blood collection, disease diagnosis and management.



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**AUGUST 14-17, 2018**

## **Training on Field Laboratory Sample Collection**

- Training of Region 9 LGUs on field surveillance, including orientation about Mindanao CSF eradication program, actual blood collection, disease diagnosis and management.



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# GEOMAPPING & GEOTAGGING

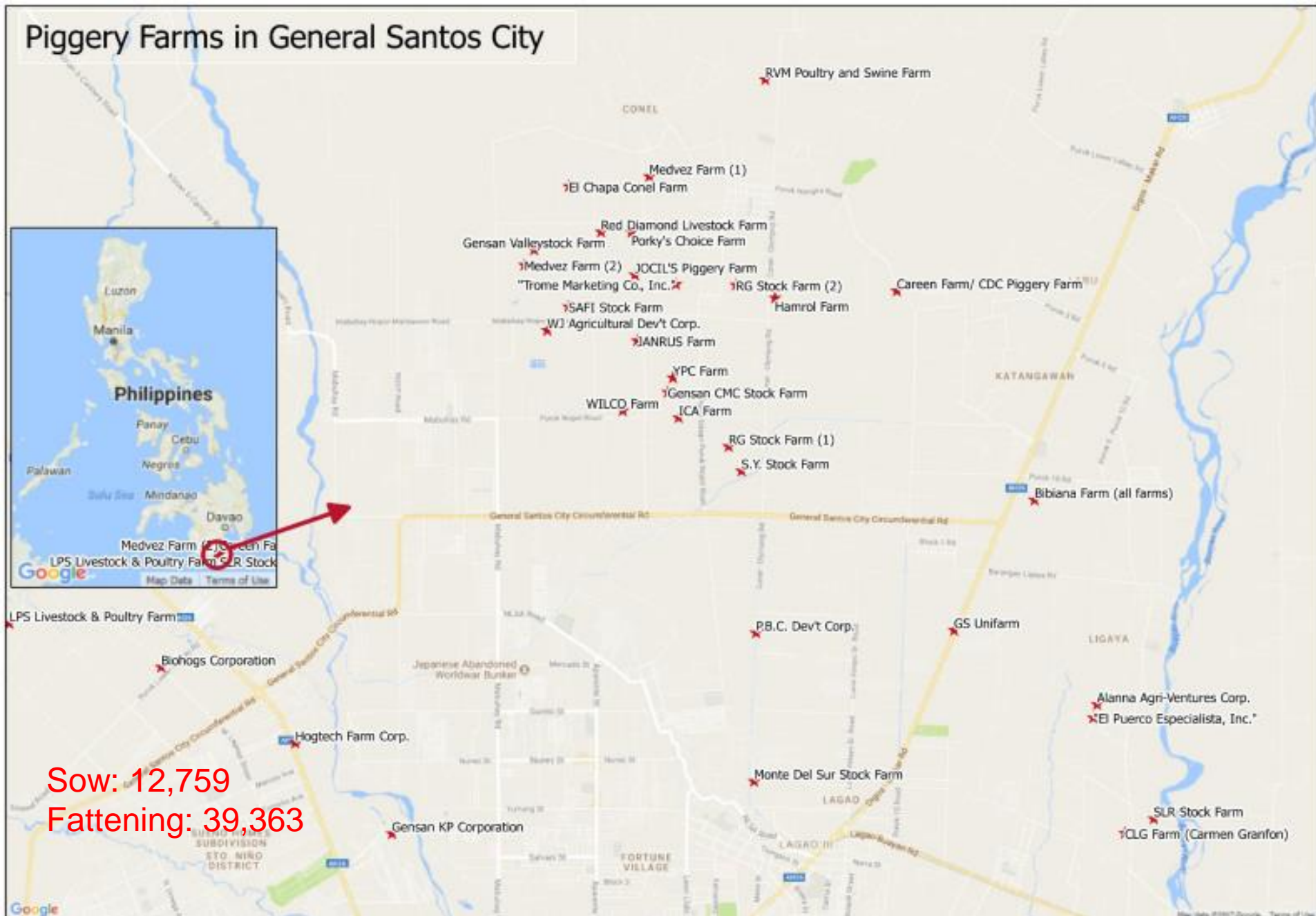


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## Piggery Farms in General Santos City



# UPDATES FROM CMU

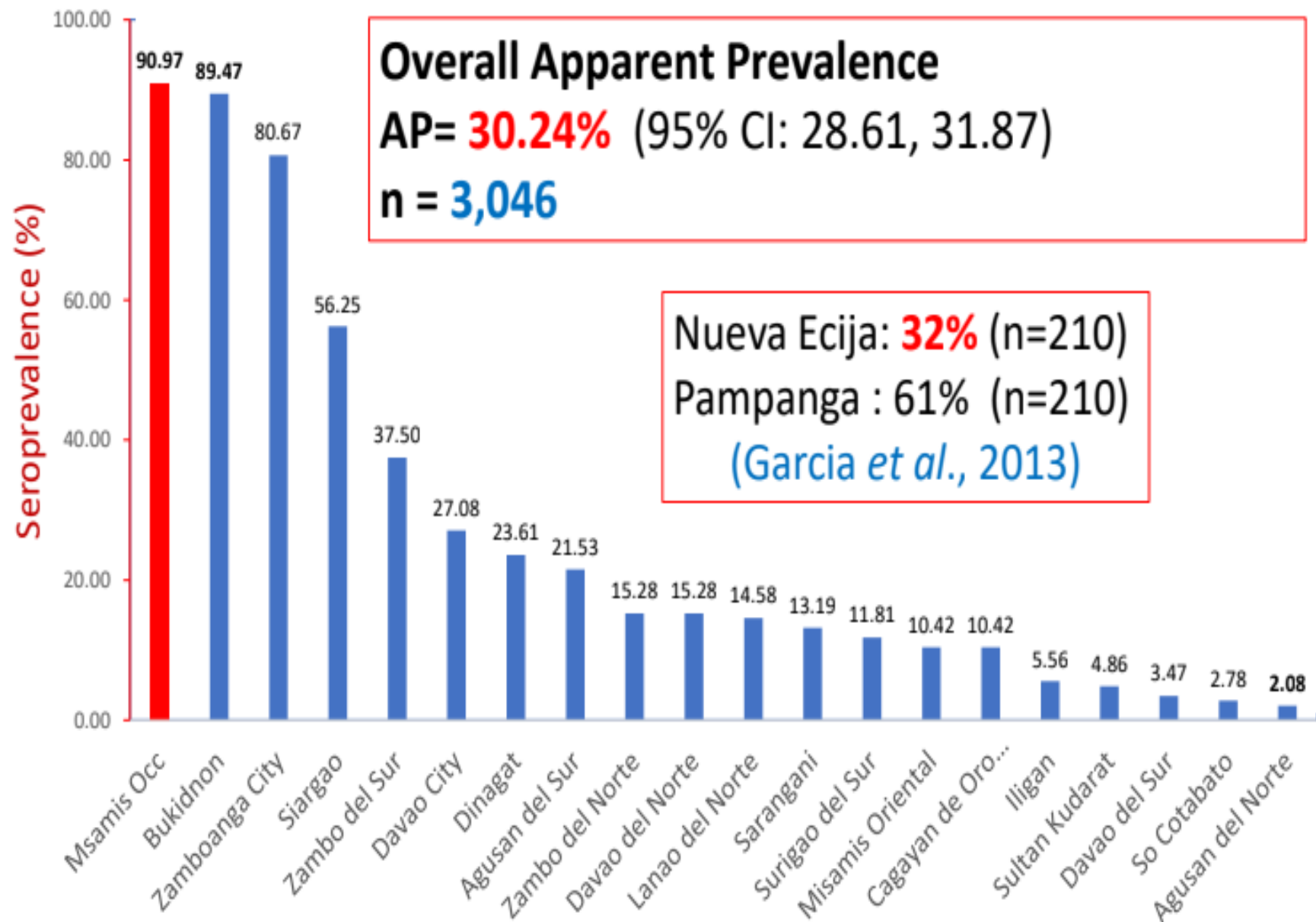
- Determination of sero-prevalence with KAP survey
- 5 regions except ARMM, 80-90% of the 23 provinces and 5 independent cities, 3,000-4,000 pigs
- Covered 80% of the targets, 16 provinces and 4 independent cities, 3,046 pigs



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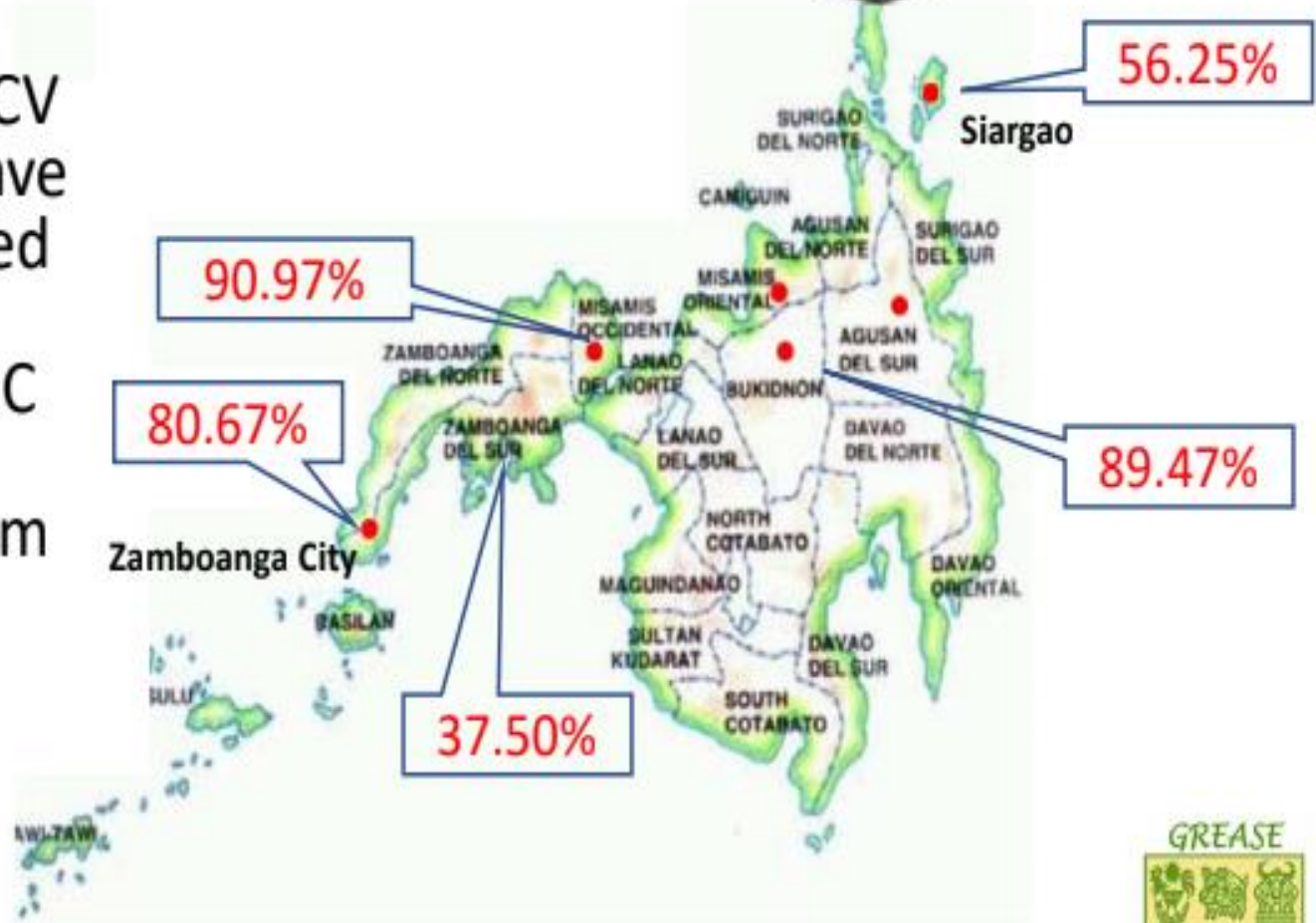




## Top 5 Areas



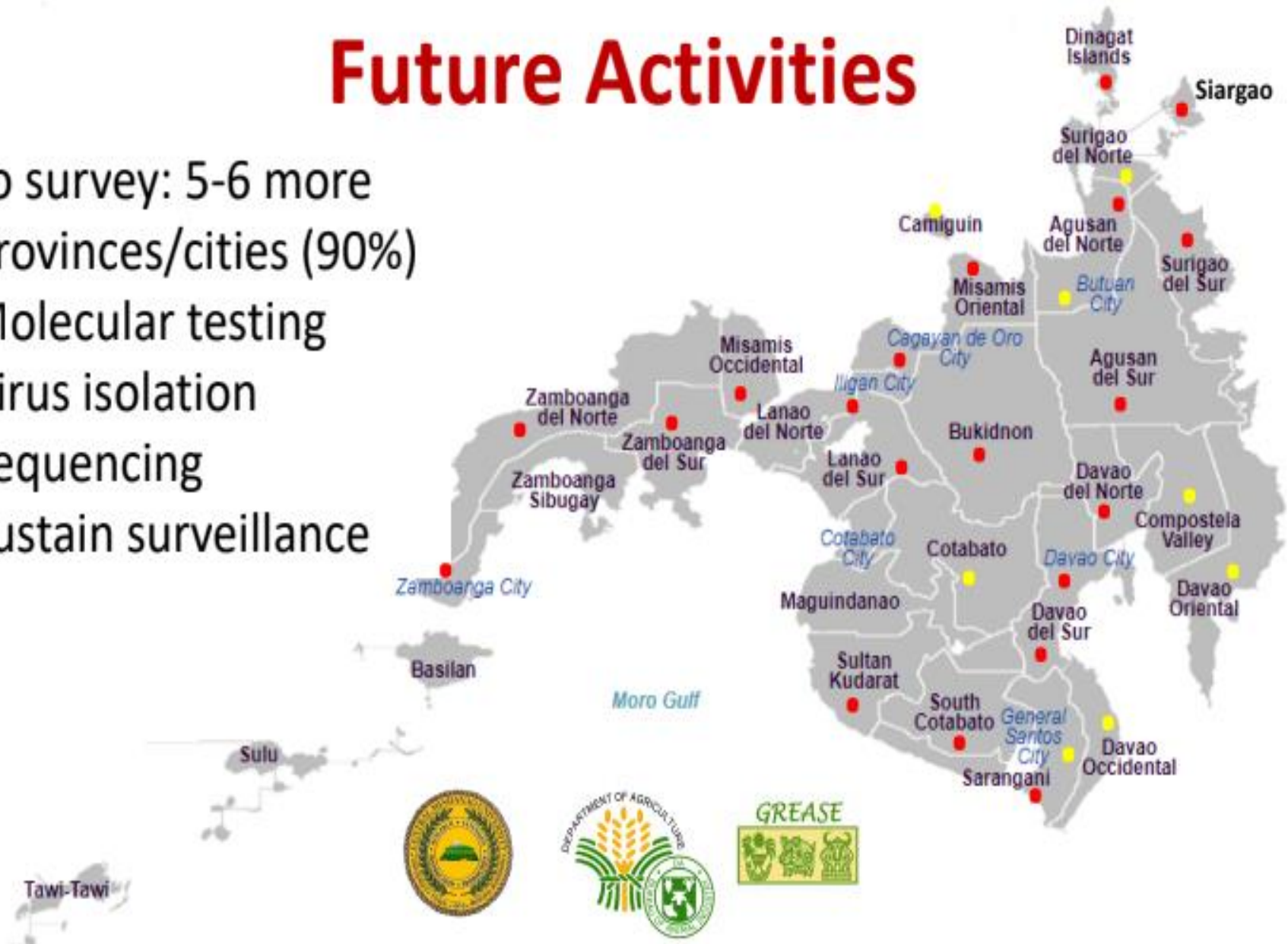
- Exposure to HCV
- Some could have been vaccinated for HC
- Low virulent HC virus
- Need to confirm





# Future Activities

- To survey: 5-6 more provinces/cities (90%)
- Molecular testing
- Virus isolation
- Sequencing
- Sustain surveillance



# IEC MATERIALS

# CLASSICAL SWINE FEVER

Control & Eradication Program  
for a CSF free Philippines

*"Pangalagaan Ang Inyong Alagang  
Baboy Laban sa Hog Cholera"*



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## **Wastong Kaalaman at Tamang Pangangalaga ang Sandata Laban sa HOG CHOLERA**

*Working Together Towards a CSF-Free Mindanao*

- 1 ALAGAAN.**  
Siguraduhing malinis ang mga kulungan at pagkain ng alagang baboy.
- 2 PABAKUNAHAN.**  
Kumonsulta sa beterinaryo para sa tamang paraan ng pagbabakuna.
- 3 IPA-TEST.**  
Sumangguni sa regional laboratory para sa pagpapa-test ng alagang baboy.

Para sa karagdagang impormasyon, makipag-ugnayan  
sa BAI-Animal Health and Welfare Division  
(02) 9282836  
da.bai\_ahwd@gmail.com



## MGA DAPAT TANDAAN

- Walang lunas para sa mga baboy na tinamaan ng Hog Cholera
- Lahat ng may sakit ay dapat patayin at ilibing ng tama

## MGA PARAAN NG PAG-IWAS SA SAKIT

- *Huwag maging API ng Hog Cholera!*
- **A - LAGAAN**
- Iwasang magpakain ng kaning-baboy o kung hindi maiwasan, lutuin muna ito sa loob ng 30 minuto. Panatiliing malinis ang kulungan ng alagang baboy.
- **P - ABAKUNAHAN**
- Pabakunahan ang mga alagang baboy. Ugaliing kumonsulta sa lisensyadong beterinaryo.
- **I - PATEST**
- Makipag-ugnayan sa beterinaryo at Regional Laboratories ng Department of Agriculture para sa pag-papatest ng alagang baboy.



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# Accomplishments

- Training of LGUs on field surveillance – collection and sample submission
- Identification of stakeholders' roles in the implementation of the eradication program
- Training of laboratory diagnosticians in the conduct of IDEXX ELISA test and creation of standard protocol for testing
- Drafted a memo waiving fees for CSF testing in ADDRL and RADDL



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# Accomplishments

- CMU seroprevalence and KAP study in 5 regions of Mindanao
- Field screening test for CSF using LAMP under research development of CLSU and PCARRD-DOST cooperation, results will be presented on November 2018
- On-going geomapping and geotagging of farms in Region 12 conducted by the NVQSD

# Plans

- Stakeholders agreed that once test kits in all regions become available, testing for CSF will be conducted simultaneously with FMD (April and October)
- LGUs and regions will create their own task forces (regional to barangay level)
- Proposal to include blood collection in NMIS Basic Meat Inspection Course
- Creation of Hog Cholera Awareness Month every June
- Translation of IEC materials to other dialects
- Implementation of geomapping and geotagging in other regions, if necessary, training of field workers on geotagging will be provided by the PHILAHIS (Philippine Animal Health Information System)



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# Problems Identified

- Need for funding support for CSF eradication program
- Lack of funds (BAI and LGUs) to provide vaccines to all Control Zones to conduct mass vaccination
- ELISA test kit not procured yet, due to supplier problem. Region 13 (CARAGA) purchased an IDEXX ELISA test kit



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# Conclusions

- Attainment of CSF free status by 2025 is possible with continuous coordination and partnership between the public and private sectors
- With sufficient provision of resources and manpower, the activities needed for the eradication program can be properly executed.



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Thanks for listening!

