



# Third Meeting of the Standing Group of Experts (SGE) on African swine fever (ASF) of the GF-TADs for Africa

Abidjan, Cote d'Ivoire



1 – 3 August 2023

## Regional updates on the current disease situation : RESEPI Central Africa (ECCAS).

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Organisation des Nations Unies  
pour l'alimentation  
et l'agriculture



Organisation mondiale  
de la santé animale  
Fondée en tant qu'OIE





# Plan



Pig in Sao Tomé and Príncipe, 2023

- Introduction
- A brief overview of the disease in ECCAC regions
- Biosecurity along the value chain
- Improving surveillance and diagnostic capabilities
- Perspectives and conclusions



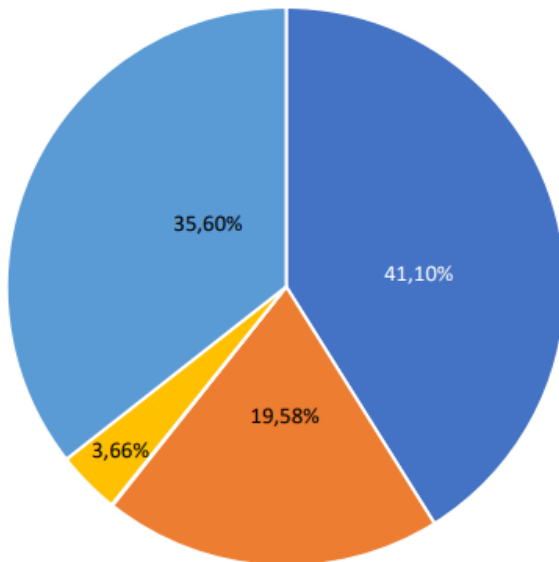
# Introduction

Established on October 18, 1983, by the signing in Libreville of its Constitutive Treaty



1. Republic of Angola,
2. Republic of Burundi,
3. Republic of Cameroon,
4. Central African Republic,
5. Republic of Congo,
6. Democratic Republic of the Congo,
7. Republic of Gabon,
8. Republic of Equatorial Guinea,
9. Republic of Rwanda,
10. Democratic Republic of Sao Tomé & Príncipe,
11. Republic of Chad

Pig stocks per region in Africa



■ Eastern Africa ■ Central Africa ■ Northern Africa ■ Southern Africa ■ Western Africa



# Introduction



- Area of 6.67 million km<sup>2</sup>,
- Estimated population of 200 million in 2020
- Export of hydrocarbons represents 41% of GDP
- Pig : Production system (Extensive livestock farming or grazing, Semi-intensive, Semi-intensive and intensive systems)
- The CRSA-AC is a specialized institution of the Economic Community of Central African States (ECCAS). It was created by decision n°41/CEEAC/XVI/CCEG/15 of May 15, 2015 at the conference of Heads of State and Government ;



# Introduction

Pig farm in Cameroon



Stray pigs in Chad

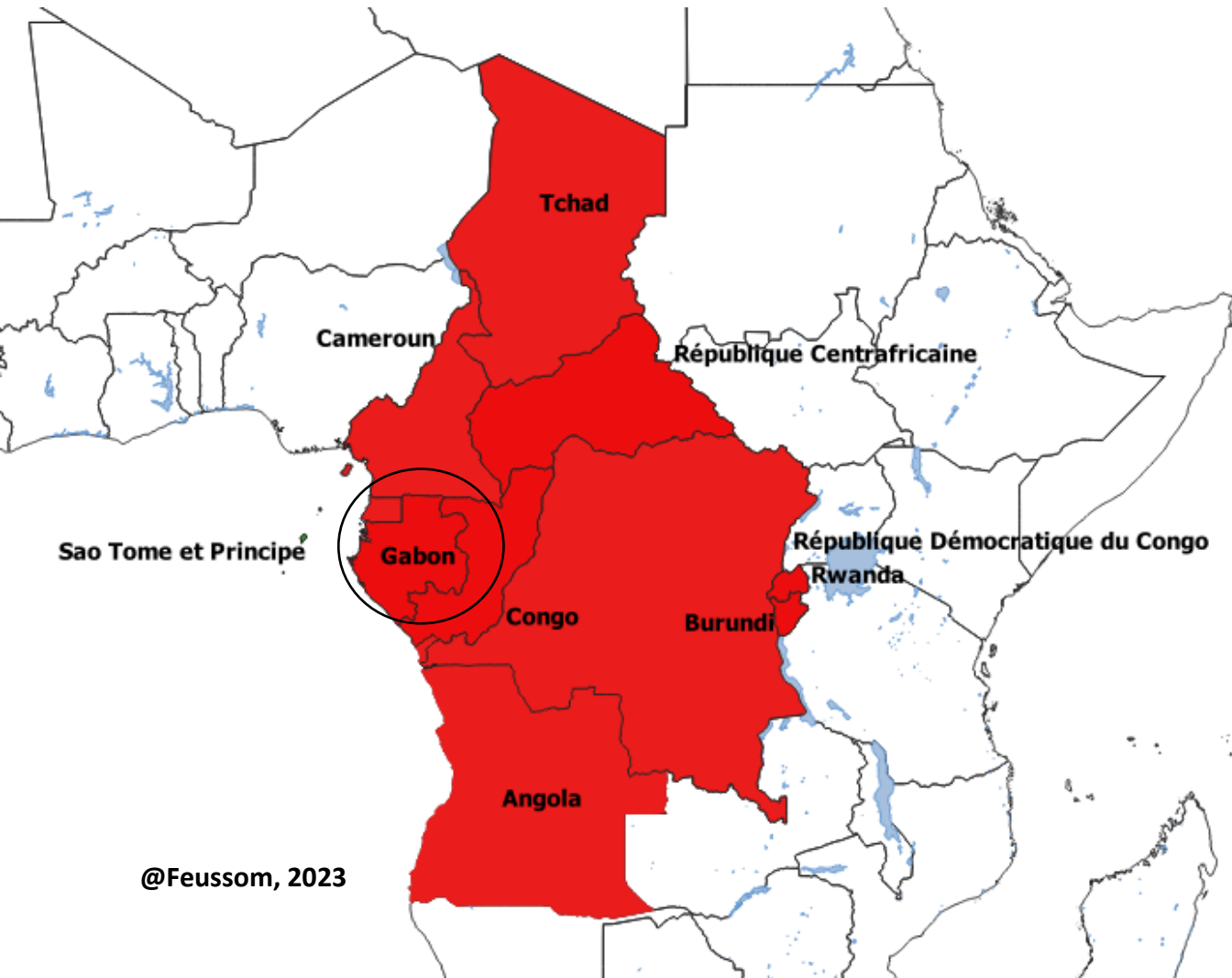


Pig farming in the village of Kaziba (DRC) South Kivu





# A brief overview of the disease in Cameroon



- Present in all countries except Sao Tomé and Príncipe (10/11)
- Enzootic with epizootic waves
- Under-notification, disease present...

## Constraints

- Swine fever, Mvts, Farming system, Sanitary (Biosecurity, ...)



# A brief overview of the disease in Cameroon

## Genotype circulating in ECCAS

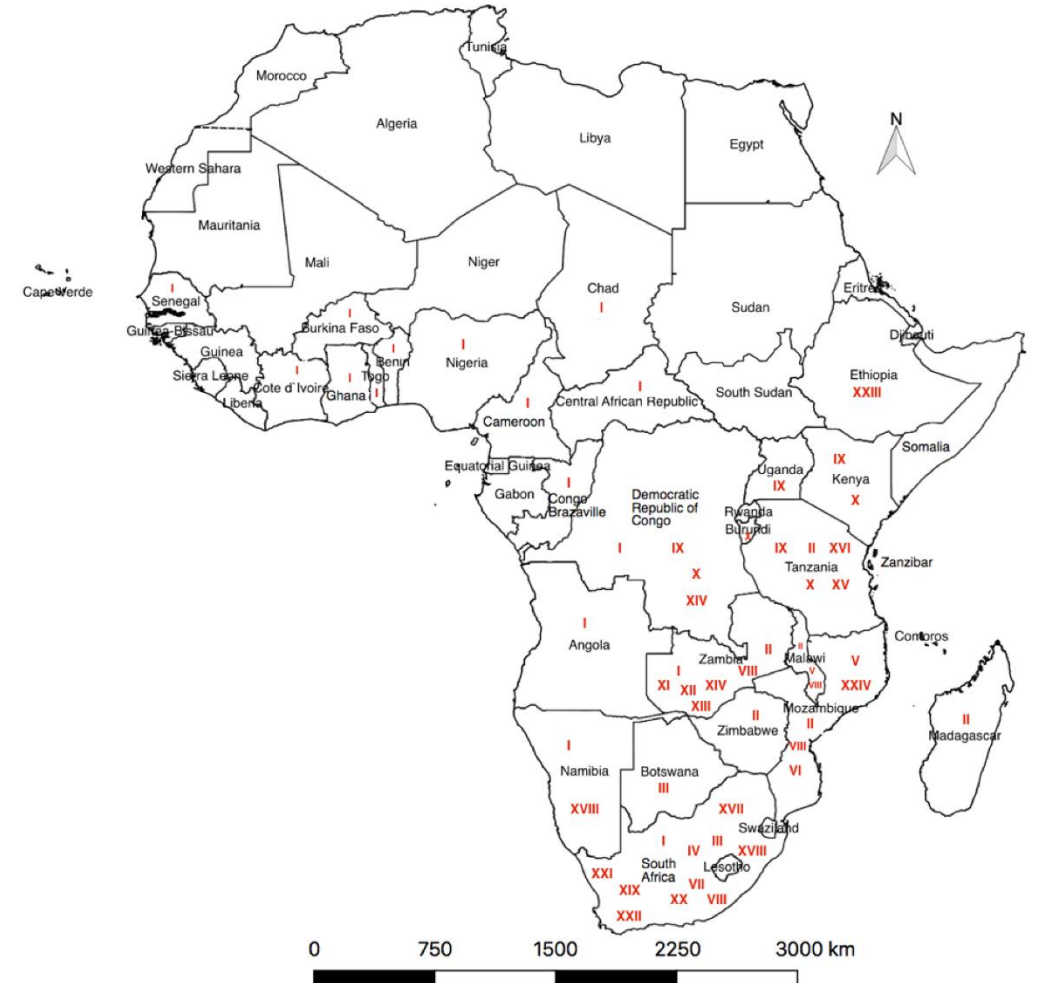
- Cameroon, Chad, CAR : I
- Burundi : II, X
- DRC : I, IX, X, XIV
- Congo : I, IX

Gallardo, Carmina, et al. "African swine fever virus p72 genotype IX in domestic pigs, Congo, 2009." *Emerging infectious diseases* 17.8 (2011): 1556

Wade, Abel, et al. "Genetic characterization of African swine fever virus in Cameroon, 2010–2018." *Journal of Microbiology* 57 (2019): 316-324.

Bisimwa, P. N., Ongus, J. R., Tiambo, C. K., Machuka, E. M., Bisimwa, E. B., Steinaa, L., & Pelle, R. (2020). First detection of African swine fever (ASF) virus genotype X and serogroup 7 in symptomatic pigs in the Democratic Republic of Congo. *Virology Journal*, 17, 1-11.

Hakizimana, J. N., Ntirandekura, J. B., Yona, C., Nyabongo, L., Kamwendo, G., Chulu, J. L., ... & Misinzo, G. (2021). Complete genome analysis of African swine fever virus responsible for outbreaks in domestic pigs in 2018 in Burundi and 2019 in Malawi. *Tropical Animal Health and Production*, 53(4), 438.

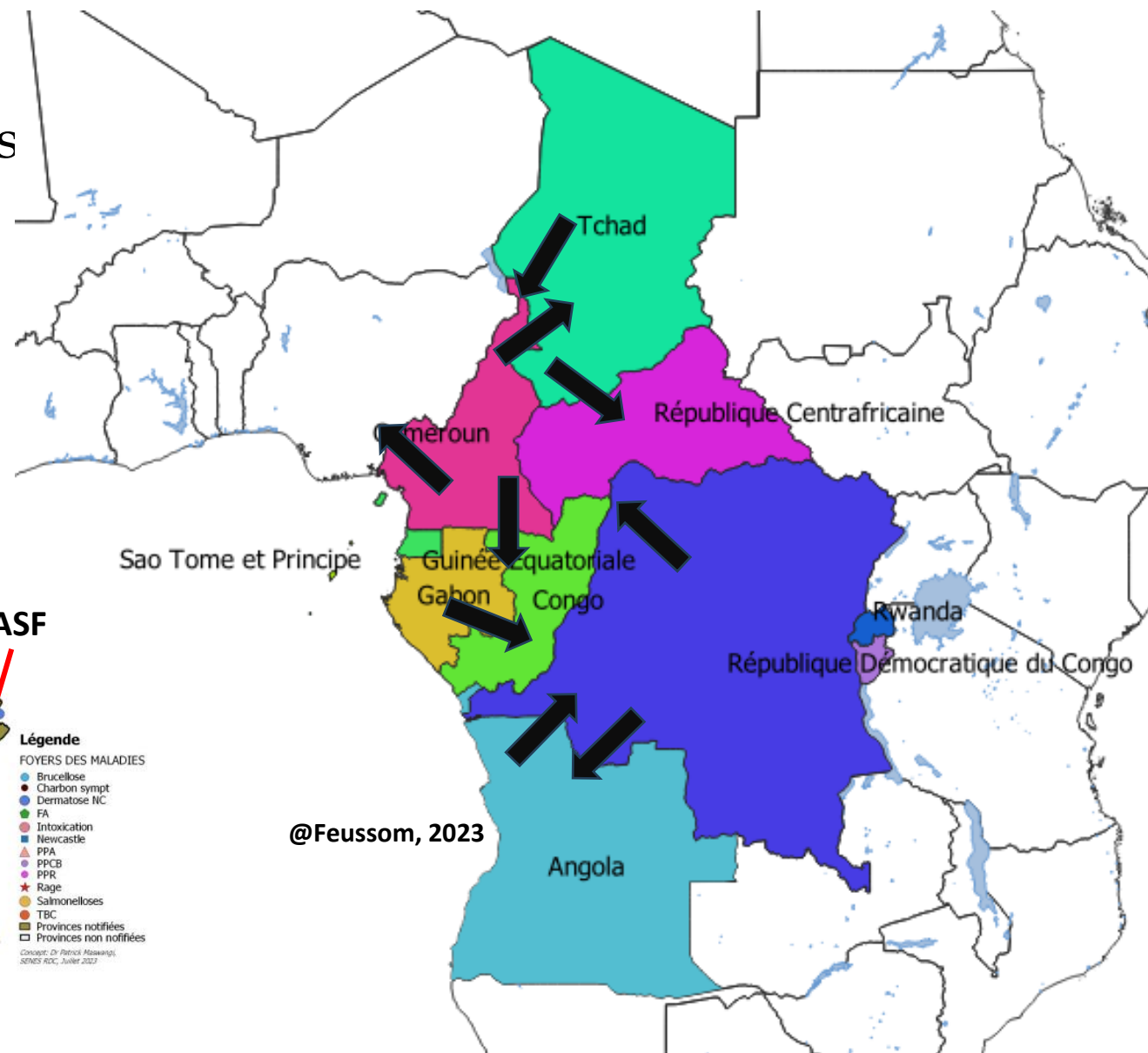
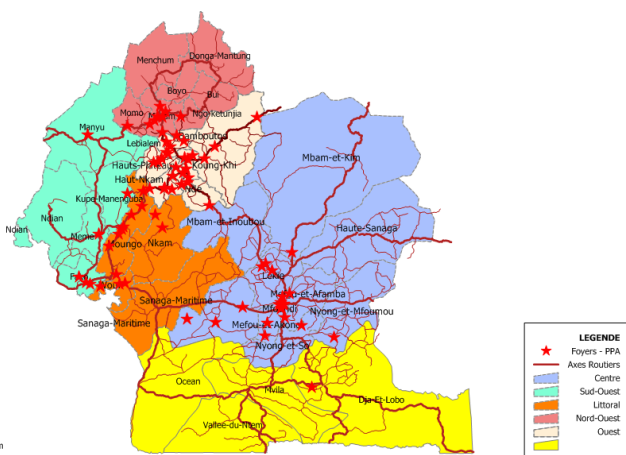


Njau, Emma P., et al. "African swine fever virus (ASFV): Biology, genomics and genotypes circulating in sub-Saharan Africa." *Viruses* 13.11 (2021): 2285.



# Biosecurity along the value chain

- Cameroon : The role of transport in virus circulation (Biosecurity), 2021



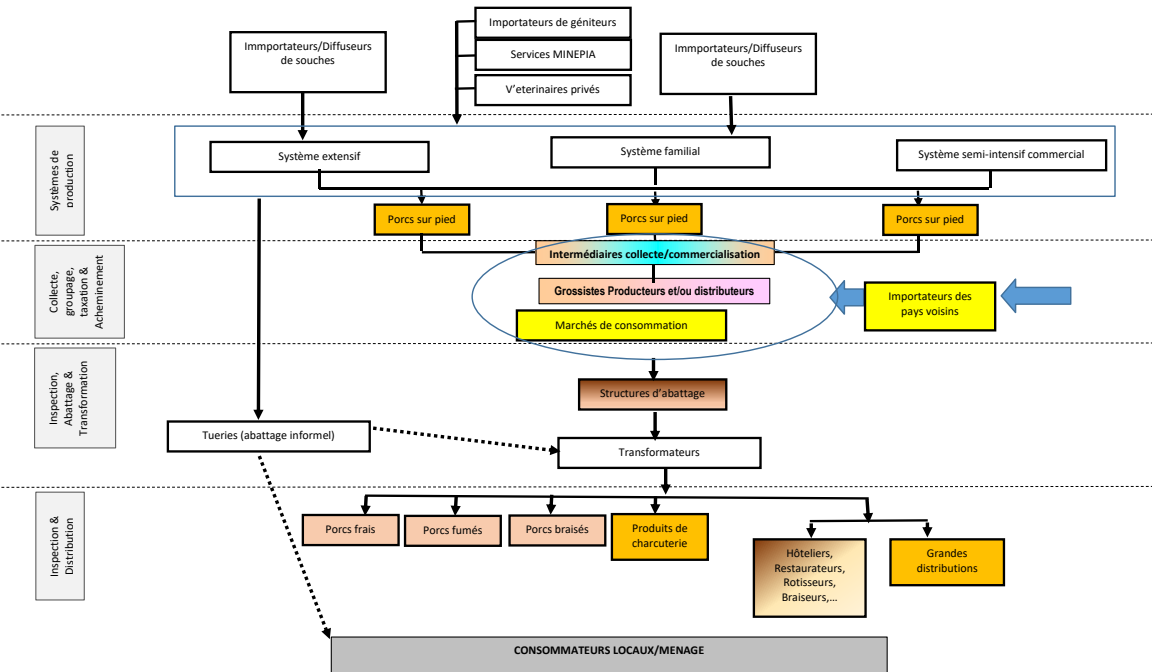
DRC : Spatial distribution of notified animal disease and zoonosis outbreaks/SE 28.



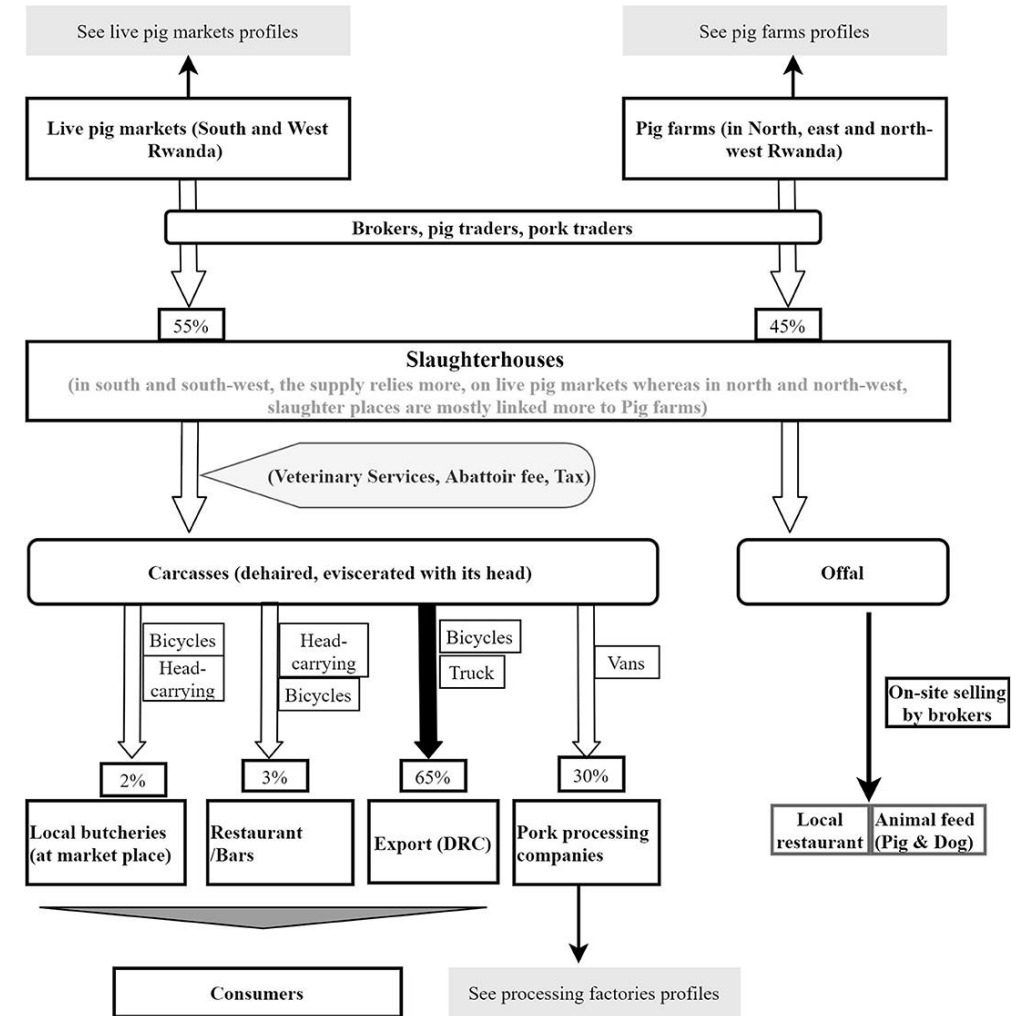


# Biosecurity along the value chain

- Low level of biosecurity at all levels



Cameroon : Functional mapping of the value chain, GT-PRODEL, 2015

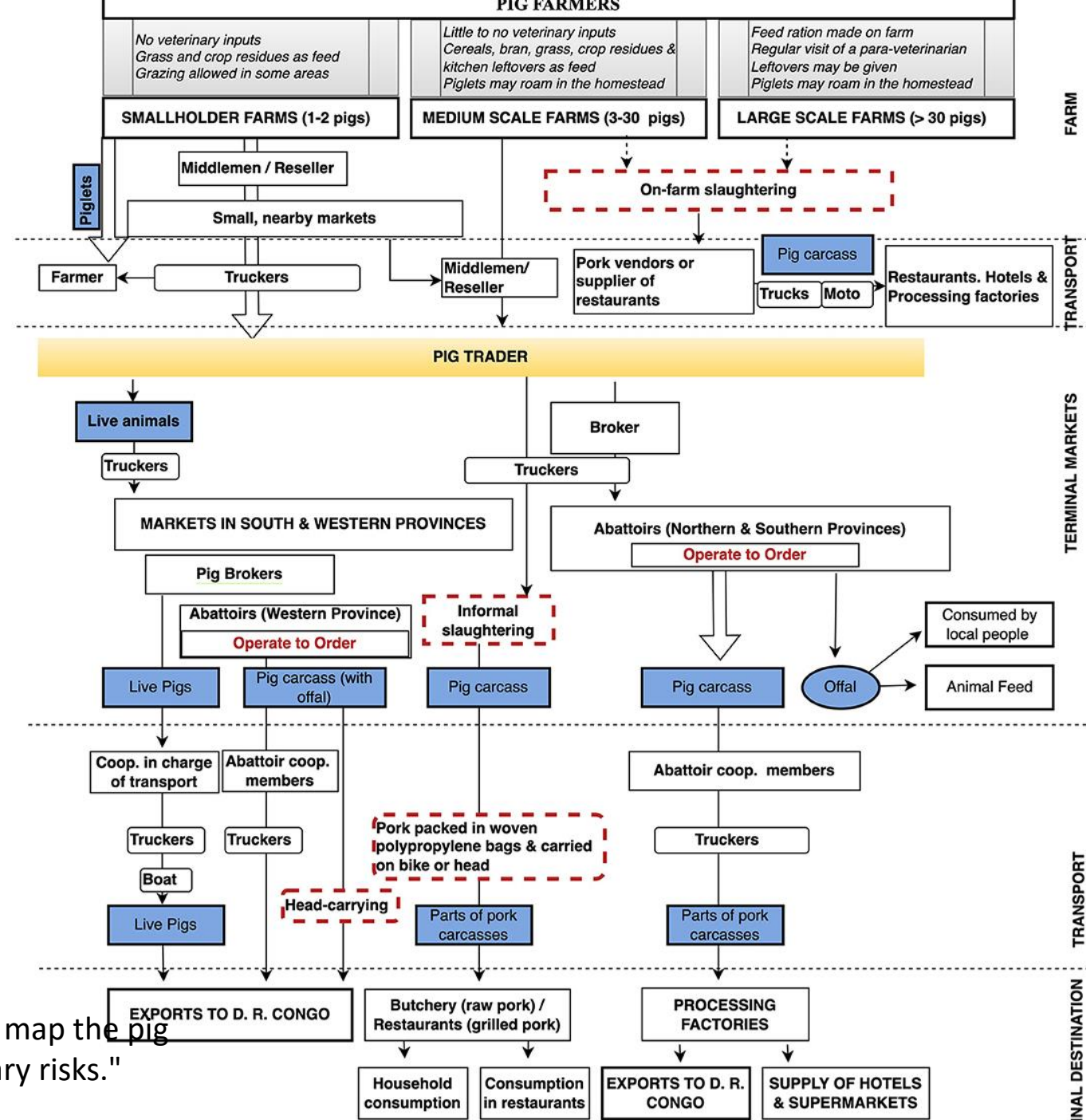


Rwanda : Shyaka, Anselme, et al. "Using a value chain approach to map the pig production system in Rwanda, its governance, and sanitary risks." *Frontiers in Veterinary Science* 8 (2022): 720553.



# Biosecurity along the value chain

- Low level of biosafety at all levels
- Transport of live pigs,
- Traders buying many pigs for sale in Western province and neighbouring DRC use trucks to transport pigs, usually with other species such as goats and sheep in the same truck (Shyaka, 2022)

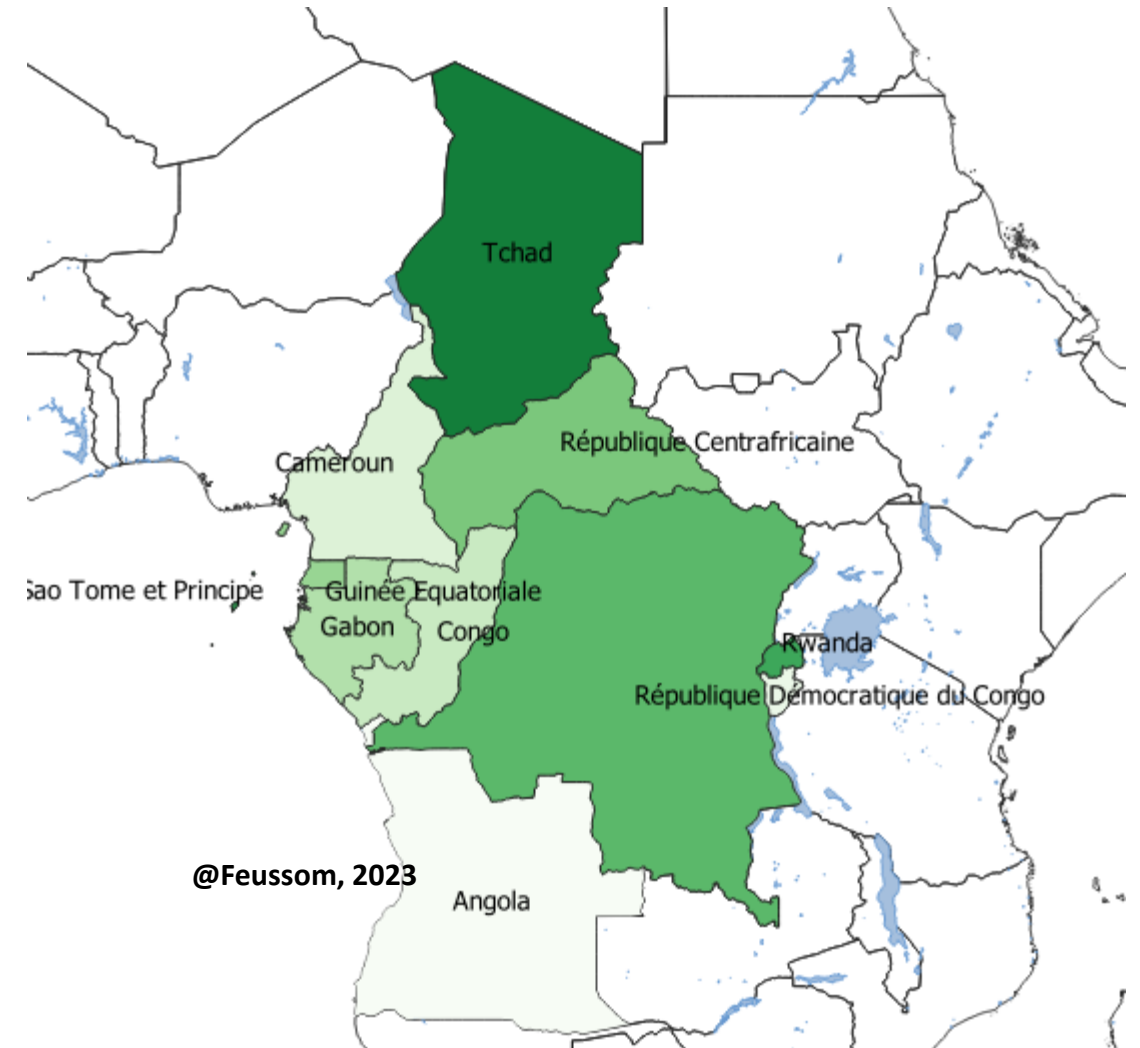


Shyaka, Anselme, et al. "Using a value chain approach to map the pig production system in Rwanda, its governance, and sanitary risks." *Frontiers in Veterinary Science* 8 (2022): 720553.



# Biosecurity along the value chain

- Few resources devoted to hygiene, health and biosecurity.
- Low level of biosecurity along the value chain: introduction and spread of African swine fever on farms (Kouam, 2020)
- Extensive trade between countries (collection, marketing, transport) (Shyaka, 2022)
- Weak industry structure makes health monitoring difficult in most countries.





# Biosecurity along the value chain

## A few applications

- A few advances: Biosafety guide in Cameroon
- Studies on biosecurity practices : Cameroon
- Community-based surveillance

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**CODE DE BIOSECURITE DANS LA  
FILIERE PORCINE AU CAMEROUN**



# Improving surveillance and diagnostic capabilities

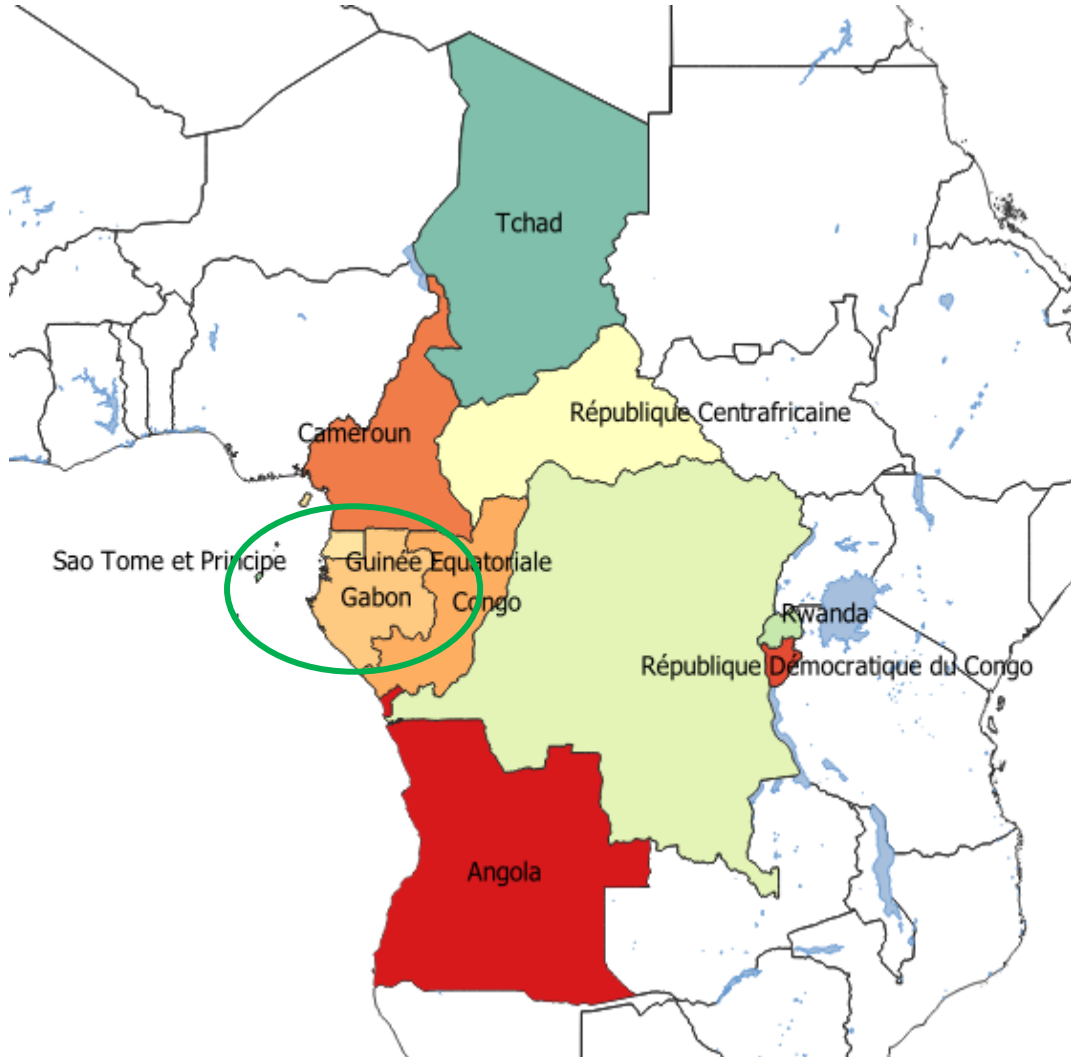
- Existence of an animal disease surveillance network in ECCAS (RESCAM, REPIMAT, SNE,
- Existence of animal health legislation and regulations for the management of animal diseases, including ASF,
- PPA Network priority disease in the region
- Mobile rapid intervention teams,
- Several laboratories in the countries of the region have the capacity to diagnose (LANAVET, LVC Kinshasa, Laboratoire de Farcha, Laboratoire de Kigali,...)



Surveillance for ASF in Cameroon



# Improving surveillance and diagnostic capabilities



1. Angola: Recent cases
2. Burundi: Recent cases, deaths in 2022
3. Cameroon: Recent cases, deaths and confirmed cases in 2023,
4. Central African Republic: Recent cases, deaths in 2022
5. Congo: Recent cases, deaths in 2022
6. DRC: Recent cases, deaths in 2022 and 2023
7. Gabon: No confirmation, Suspicion of disease with recent pig deaths.
8. Equatorial Guinea: No confirmation, Suspicion of disease with recent pig deaths.
9. Rwanda : Recent cases, deaths in 2022
10. Sao Tomé & Príncipe: Never reported
11. Chad: Recent cases, deaths in 2022 and 2023



# Improving surveillance and diagnostic capabilities

Several tools available in the region

- Strategic and operational plan and SOP ( Ex. Cameroon),
- Standard Operating Procedures for ASF surveillance
- Community-based surveillance

**Bulletin d'Information**  
MINISTÈRE DE LA PÊCHE ET ÉLEVAGE  
SERVICE NATIONAL D'ÉPIDÉMIOSURVEILLANCE  
RESEAU NATIONAL D'ÉPIDÉMIOSURVEILLANCE

**FLASH !!** AUGMENTATION DES CAS DE RAGE ET DE MORSURES CANINES DEPUIS LE DÉBUT DE CETTE ANNÉE 2023

Organisation des Nations Unies pour l'alimentation et l'agriculture | LA BANQUE MONDIALE | USAID

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MINISTRY OF LIVESTOCK, FISHERIES AND ANIMAL INDUSTRIES

PROCÉDURES OPERATIONNELLES STANDARD POUR LA SURVEILLANCE DE LA PESTE DES PETITS RUMINANTS, DE LA PESTE PORCINE AFRICAINE, DE L'INFLUENZA AVIAIRE HAUTEMENT PATHOGENE ET L'INVESTIGATION MULTISECTORIELLE

One Health

Jun 2019 (Version n°001)

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Réseau d'Épidémiologie des Maladies Animales du Cameroun

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SYNTHESE HEBDOMADAIRE DES INFORMATIONS ZOOSANITAIRES INTERNATIONALES ET NATIONALES

Semaine épidémiologique n° 27  
du 03 au 09 juillet 2023

SEM-AINE EPIDEMIOLOGIQUE N° 27 DU 03 AU 09 JUILLET 2023

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# Improving surveillance and diagnostic capabilities

- Biosecurity / surveillance

- Poor control of biosecurity ;
- Weak control of the sanitary situation.

- Capacity-building in breeding techniques for pork production stakeholders in the ECCAS region,
- Popularization of the biosecurity guide for pig farms;

- Weak control of farm biosecurity ;
- Poor control of the sanitary situation;
- Poor quality of breeding infrastructures;

- Capacity building on production techniques, biosecurity standards, swine diseases and breeding infrastructures;
- Implementation of control plans;
- Revitalization of the epidemiosurveillance network for swine diseases (Countries and ECCAS);
- Strengthening laboratory diagnostic capacities;
- Reinforcement of African swine fever surveillance in areas where extensive livestock farming is predominant.





# Improving surveillance and diagnostic capabilities

- Biosecurity / surveillance

- Weak processing and marketing circuit ;
- Non-compliance with biosafety requirements

- Promotion of small slaughtering, processing and preservation units;
- Promotion of good hygiene practices in meat processing;
- Advocacy for the establishment of modern pig slaughtering lines in major urban centers of pig consumption.
- Promotion of water autonomy for production, processing and marketing units.

- Weak organization of pork industry players

- Support for better organization of the various players in the pork sector at regional and national level.
- Update legislation in ECCAS



# Perspectives and conclusions

- Update the mapping of circulating genotypes (both sylvatic and domestic cycles),
- Strengthen laboratory capacities (RESOLAB AC),
- Strengthen surveillance capacities at country and regional levels / Share information (biannual bulletin on ASF),
- Risk communication and community involvement in PPA management
- Develop and implement a prevention and control plan and tools in Central Africa.



# Perspectives and conclusions

- Under-notification of disease
- Generating evidence for influenza
- operationalize the Regional Animal Health Center for Central Africa (CRSA-AC)
- Support from partners

Surveillance,  
Biosecurity,

the key...



# Thank you for your attention



## GF-TADs

CADRE MONDIAL POUR  
LE CONTRÔLE PROGRESSIF DES  
MALADIES ANIMALES TRANSFRONTALIÈRES



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