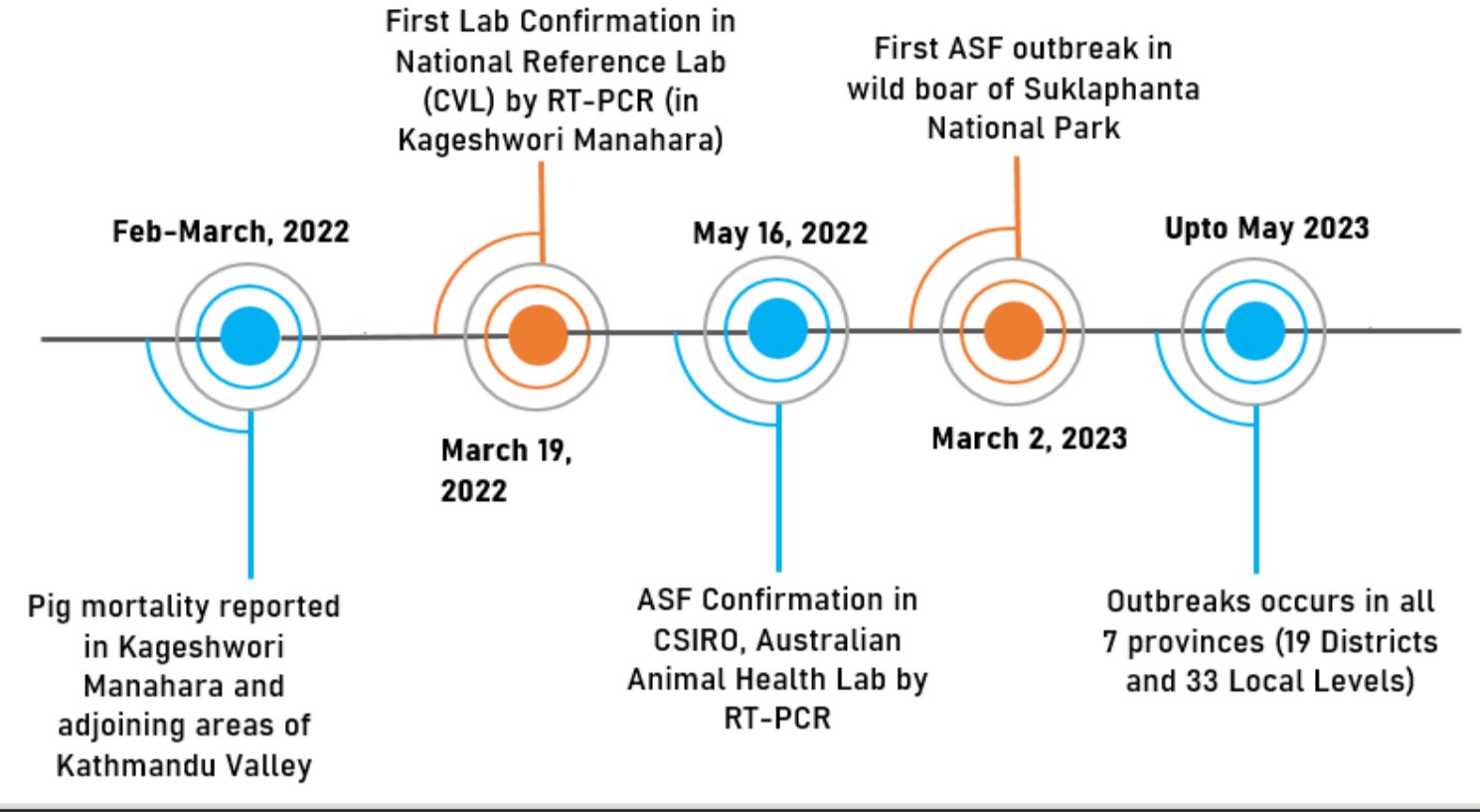
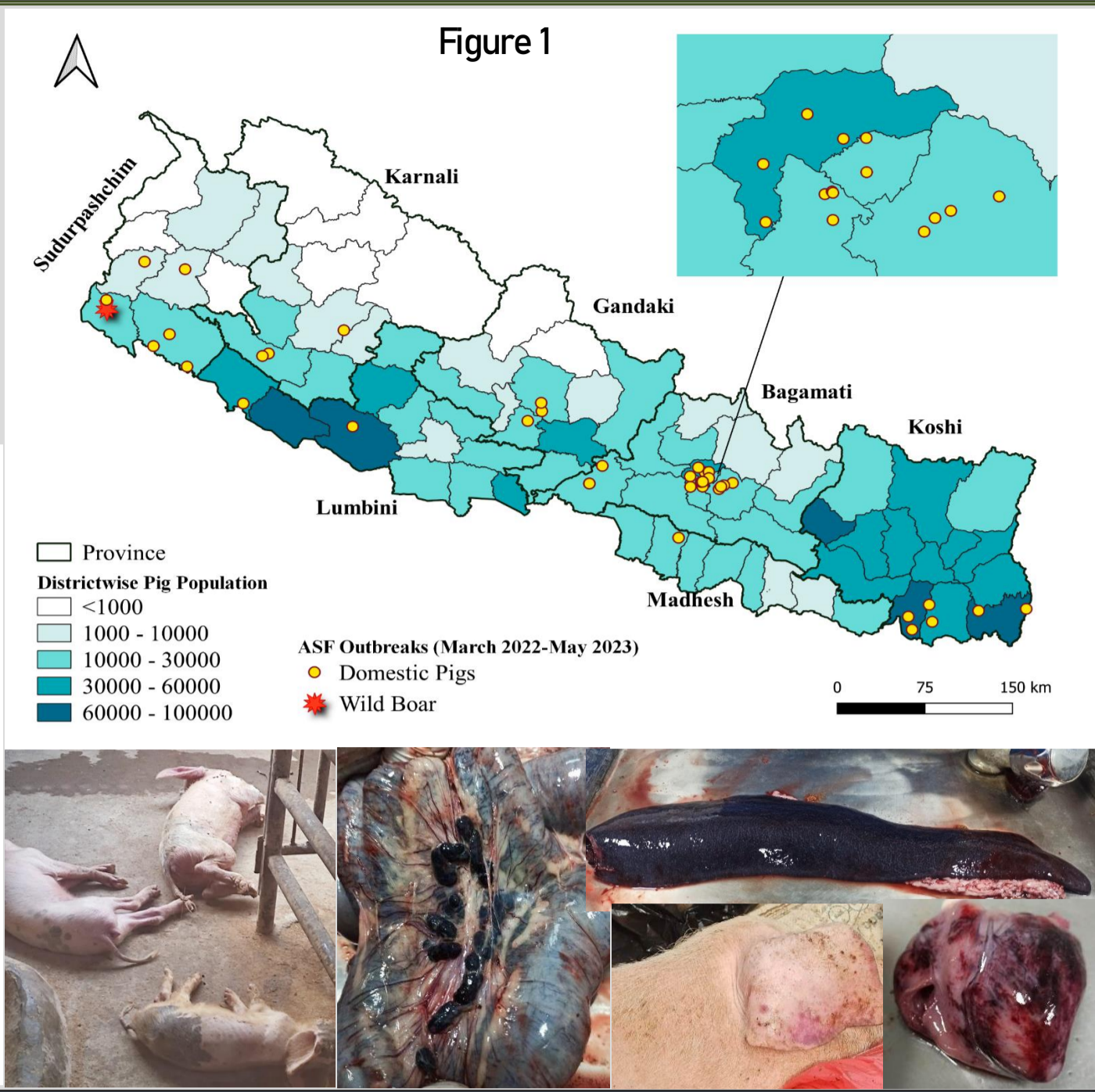


African Swine Fever in Nepal: Biosecurity Approach

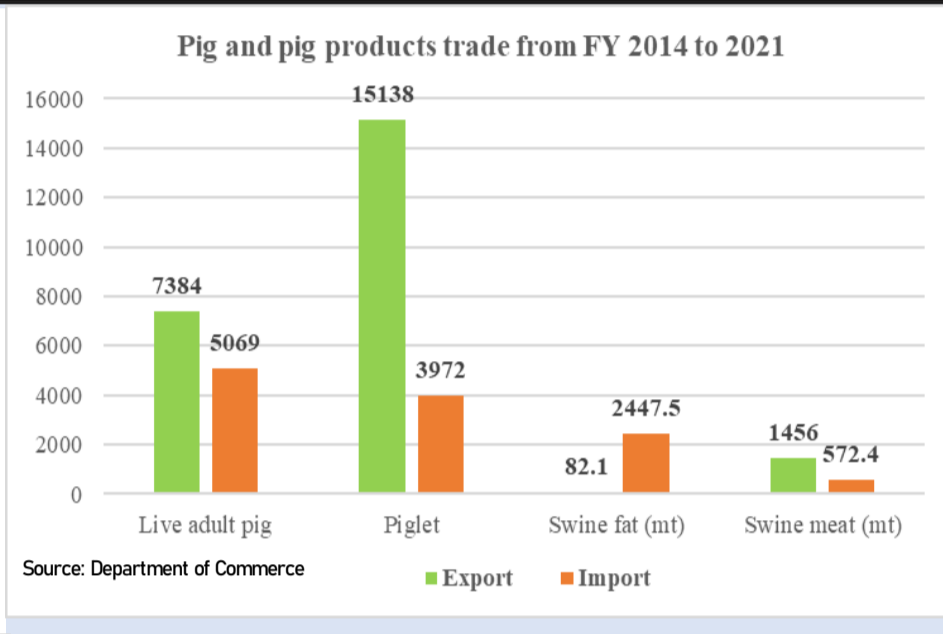
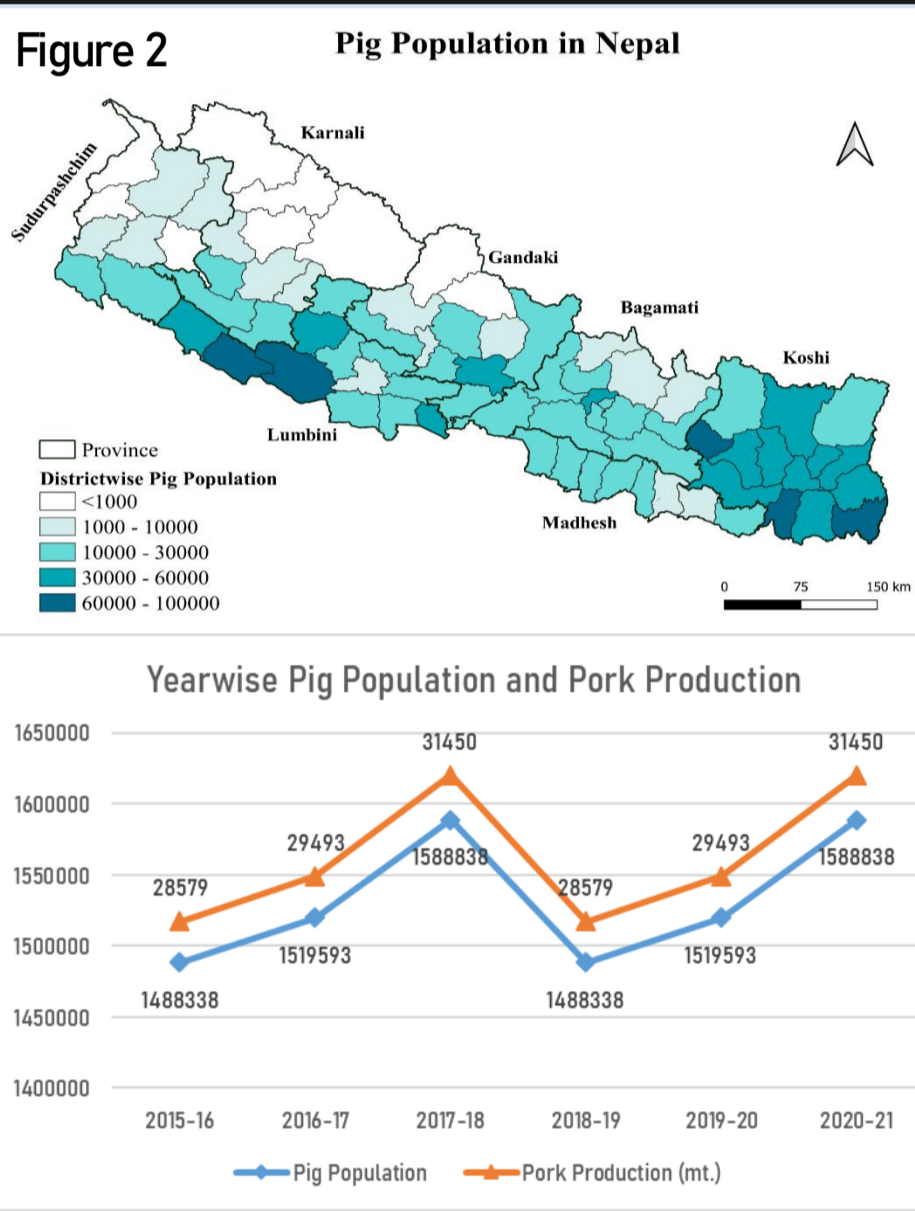
Current ASF Situation

- Outbreaks confirmed in domestic pigs of various age-groups in March 2022: Both indigenous and exotic pigs affected (Figure 1) in 19 out of 77 districts.
- Outbreaks detected in wild boars in 1 National Parks
- Major clinical features observed: Fever, nausea, diarrhea, red patches on skin, high mortality
- Reported death: 23 thousands pigs
- Estimated 5.3% decline in pig population due to ASF (Economic Survey 2079/80)



Overview of swine production

- Pig population:** 1.58 million, concentration in Koshi, Lumbini and Gandaki Provinces (MOALD, 2021) (Figure 2).
- Indigenous breeds:** Chwanche (58%), Hurrah (23%) followed by Bampudke and Bandel
- Hybrid Breed developed in Nepal:** Pakhribas Black and Dharane Kalo Bangur
- Introduced exotic breeds:** Yorkshire, Landrace, Hampshire, Duroc etc.
- Annual pork production** is 31,450 mt. and total number of pig holding is 477,984.
- Pork constitutes 6.03%** (4th position) of total meat production (MOALD 2021) with an annual increase in demand by 10%.



- Farming System and Challenges**
- Scavenging/free ranging system with swill feeding is common
 - Intensive/commercial and integrated farming system is increasing
 - Socio-economic barrier in pig farming and low productivity of native breeds
 - Disease: ASF, CSF, PRRS, FMD, Parasitic
 - 1 million doses of CSF vaccine produced within the country annually

National regulations on biosecurity

Animal Health and Livestock Services Act, 2055 (1999)

Chapter 1: Preliminary

1. Short Title and Commencement: (1) This Act may be called "Animal Health and Livestock Services Act, 2055 (1999)". (2) This Act shall come into force at the prescribed area as prescribed by Government of Nepal in a Notification published in prescribed date as notified by Nepal Government in the Nepal Gazette.

quarantine spot.

(3) While keeping any animal in quarantine pursuant to Sub-rule (2), it shall be kept for the following duration for the following diseases, for the purpose of this Act:

(a) Rinderpest	-21 days
(b) Foot and Mouth Disease	-21 days
(c) Pestes des petits Ruminants	-21 days
(d) Lamby Skin Disease	-21 days
(e) Sheep pox and Goat pox	-21 days
(f) Blue Tongue	-40 days
(g) African Swine Fever	-40 days
(h) Classical Swine Fever	-40 days
(i) African Horse sickness	-40 days

(Relating to sub-rule (2) of Rule 10)

Procedure to be Followed on Finding of any Disease Other than Tuberculosis

a) In the following conditions the whole carcass or organ or portion or blood shall be declared as condemned for consumption and be confiscated:-

- If found generalized condition of Actinomyces and Actinobacillus, provided that if is not in generalised condition, a mark of fit for consumption may be given after removing only the concerned organ or portion.
- Multiple tumor in muscle
- Emaciation along with anemia
- Anthrax
- Black quarter
- Cysticercus bovis in generalised condition
- Measly pork in generalised condition
- General Dropsy

- Animal Health and Livestock Services Act, 1999 and Rules, 2000:**
 - Provision of quarantine period (40 days for ASF),
 - Immediate notification in case of suspected disease events,
 - Movement control
 - Provision of disinfection and sanitary certificate
 - Order issued not to import pig product from ASF infected countries
- Slaughter House and Meat Inspection Act, 1999 and Rule, 2001:**
 - Provisions of separate place for swine (animal) slaughtering,
 - Confiscation of whole carcass or portion etc. if any suspicion
- National Animal Health Policy, 2078**
- Guidelines for Good Husbandry Practices in Pig**
- Zoning and Compartmentalization Guideline, 2021**
- Animal Transport Standard, 2008**

Ongoing activities to improve biosecurity

- Movement control and disinfection in infected areas
- Surveillance within and outside the risk zone
- Disposal of carcass, by-products and waste
- Biosecurity trainings and distribution of biosecurity kit to the farmers in collaboration with FAO ECTAD, Nepal
- Communication and awareness materials in Nepali language (print and video)
- Ban on import of pig and its products from ASF infected countries
- Communication and coordination with national parks to prevent/control ASF in wild boars

अफ्रिकन स्वाइन फिभर रोगबारे जानकारी

अफ्रिकन स्वाइन फिभर (ASF) रोगको निवारण गर्न सकिने छ। यस रोगको निवारण गर्न सकिने छ। यस रोगको निवारण गर्न सकिने छ।

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Achievements and Lessons learned

- Achievements**
- Capacity developed for field veterinarians/paravets on sample collection and disease reporting
 - Awareness among the commercial pig farmers and meat suppliers on biosecurity
 - Improved diagnostic and surveillance capacity in reference and sub-national laboratories
 - Strengthened coordination among all three tiers of governments for timely reporting and containment
 - Close collaboration with wildlife sectors and farmers (Pig Entrepreneur Association)

- Lessons learned**
- Need of national policy for ASF control and containment
 - Strict biosecurity guidelines and its implementation across pig production chain
 - Swill feeding need to be discouraged
 - Provision to compensate ASF affected farmers
 - Border control as a shared responsibility
 - Need research to produce effective vaccines
 - Need improved surveillance (especially in buffer zones)