



An update on the Global and Regional Lumpy skin disease (LSD) Situation and Control

Karma Rinzin

OIE Sub-Regional-Representation for
South East Asia

Email: k.rinzin@oie.int



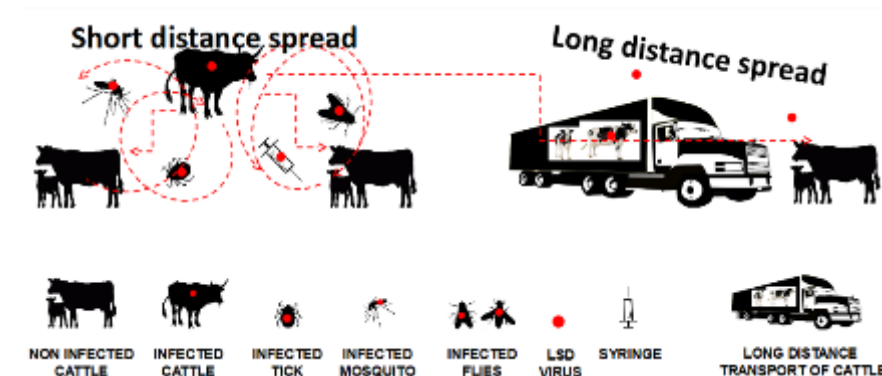
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Introduction

- LSD is vector borne pox disease of domestic cattle and Asian water buffalo
 - Etiology: Capripoxvirus (CaPV) within the family Poxviridae.
 - Spread: mainly by blood-feeding arthropod vectors (mosquitoes, biting flies and ticks), Long distance spread is mainly by movement of animals
 - Incubation period ranges from 4 to 14 days in the experimental settings and up to 5 weeks in field condition.
 - Morbidity: 5 to 45%
 - Mortality: 1 to 5%
- Clinical signs
 - Nasal and ocular discharge, pyrexia, drop in milk production and characteristic skin lesions.
 - Clinical signs vary significantly between animals
 - Silent or subclinical infection can occur



Introduction

■ Diagnosis

- Severely affected cases are easy to recognize
- Early stages of infection and mild cases may be difficult to distinguish
- Samples should be collected from all suspected cases to rule out or confirm LSD by lab diagnosis

■ Prevention and control

- Raising awareness
- Rapid detection and diagnosis
- Reporting an outbreak
- Control of Cattle Movement
- Vaccination
- Stamping out policy

Lumpy skin disease

a new threat to the region

Lumpy skin disease (LSD) is a viral disease of domestic cattle, water buffaloes and certain wild ruminants. Its incubation period is about 28 days but experimentally infected cattle may develop clinical signs as early as 6-8 days. This disease heavily impacts animal health and welfare and can lead to severe economic losses in affected farms.

LSD has recently spread to and within Asia, posing a threat to your country.

How do animals get infected?

- Mainly by blood-feeding arthropod vectors.
- Through bringing in infected cattle from affected regions.

When to suspect LSD?

- Ocular (eye) and nasal discharge – usually observed first.
- Decreased milk yield in lactating cattle.
- High fever that may exceed 41 °C or 106 °F.
- Enlarged subscapular and prefrontal lymph nodes (swelly palpable).
- Appearance of firm cutaneous nodules of 2-5 cm in diameter, particularly on the head, neck, limbs, udder, genitalia and perineum within 48 hours of onset of the fever.
- Number of nodules varies from few in mild cases, to multiple lesions in severely affected animals.

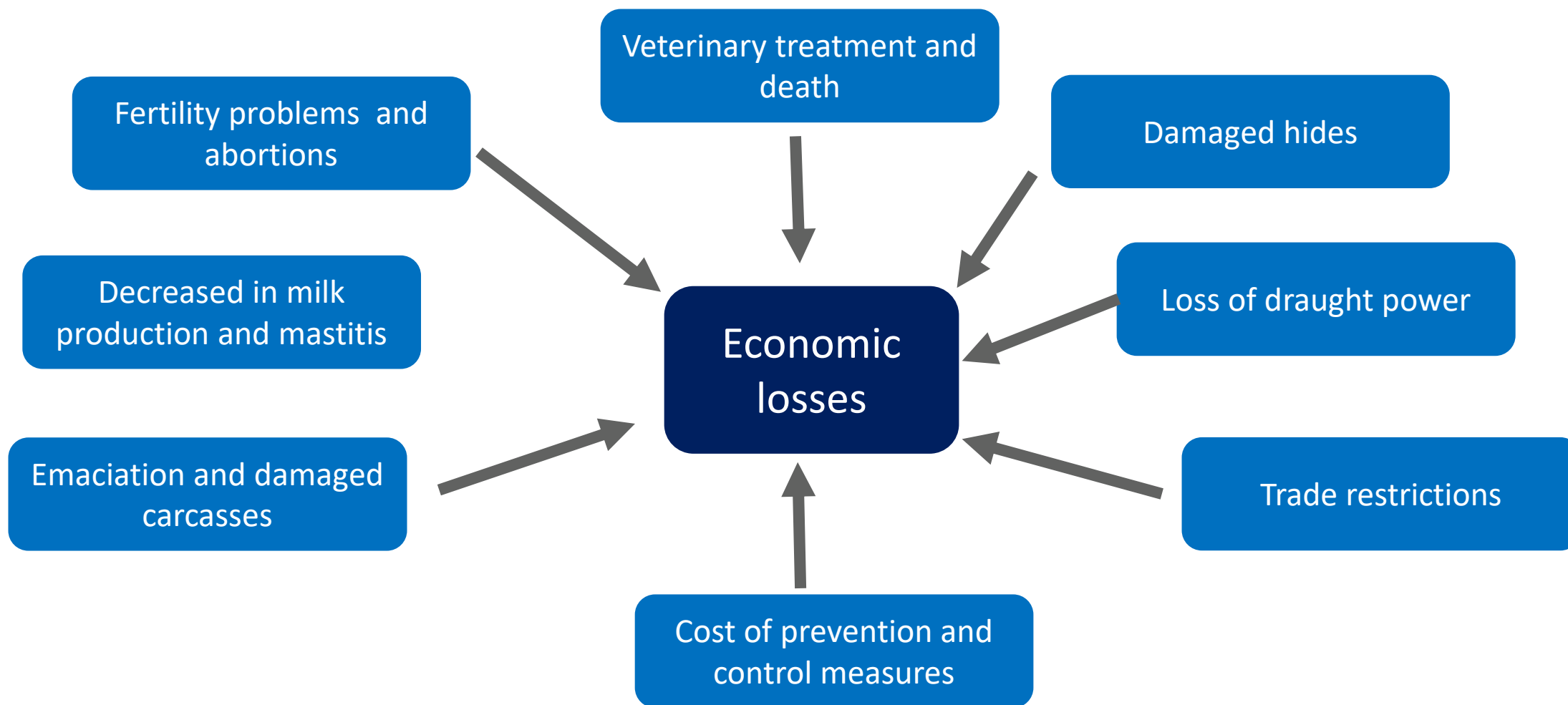
What to do in case of LSD suspicion?

1. Contact the Veterinary Services.
2. Prevent further spread of the disease by asking the animal owners/keepers to:
 - Report to the nearest veterinary service from the rest of the herd.
 - Report to the rest of the animals that may be infected by avoiding communal grazing.
 - Stop cattle movement from the farm.
 - Limit visitors to avoid contact with the animals.
3. Carry out clinical examinations on the rest of the animals, in order to identify the disease at very early stages.
4. Provide supportive treatment to affected animals to reduce the fever, maintain hydration and prevent secondary bacterial infections.
5. A vaccine exists to protect the cattle. Contact the Veterinary Services for more information on the vaccine.

For more information:
OIE regional webpage on LSD: <https://www.oie.int/eng/paris/t/summary/summary.asp?id=1111>

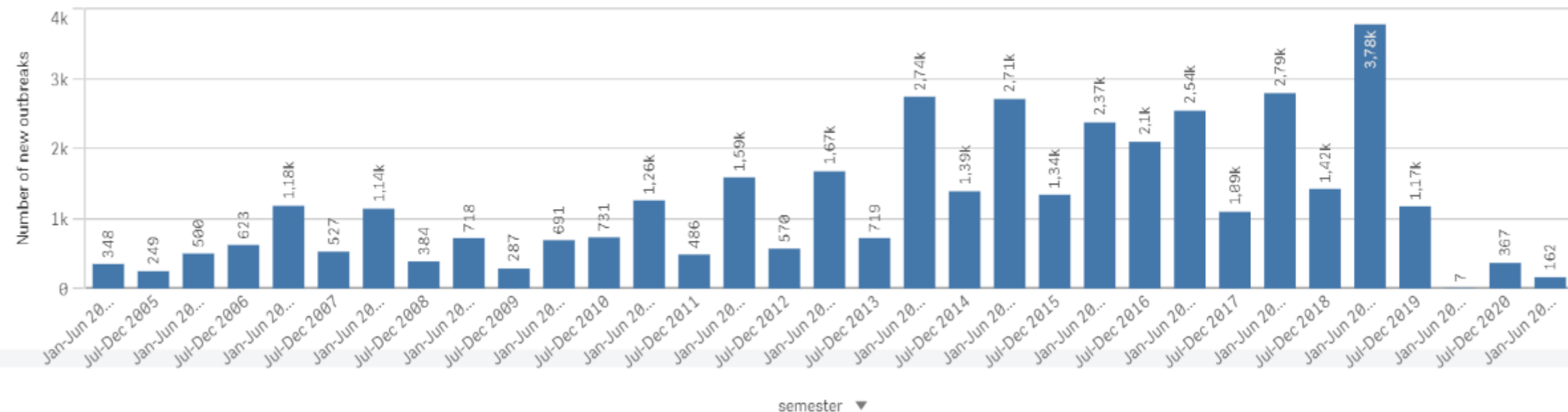
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Impact of LSD

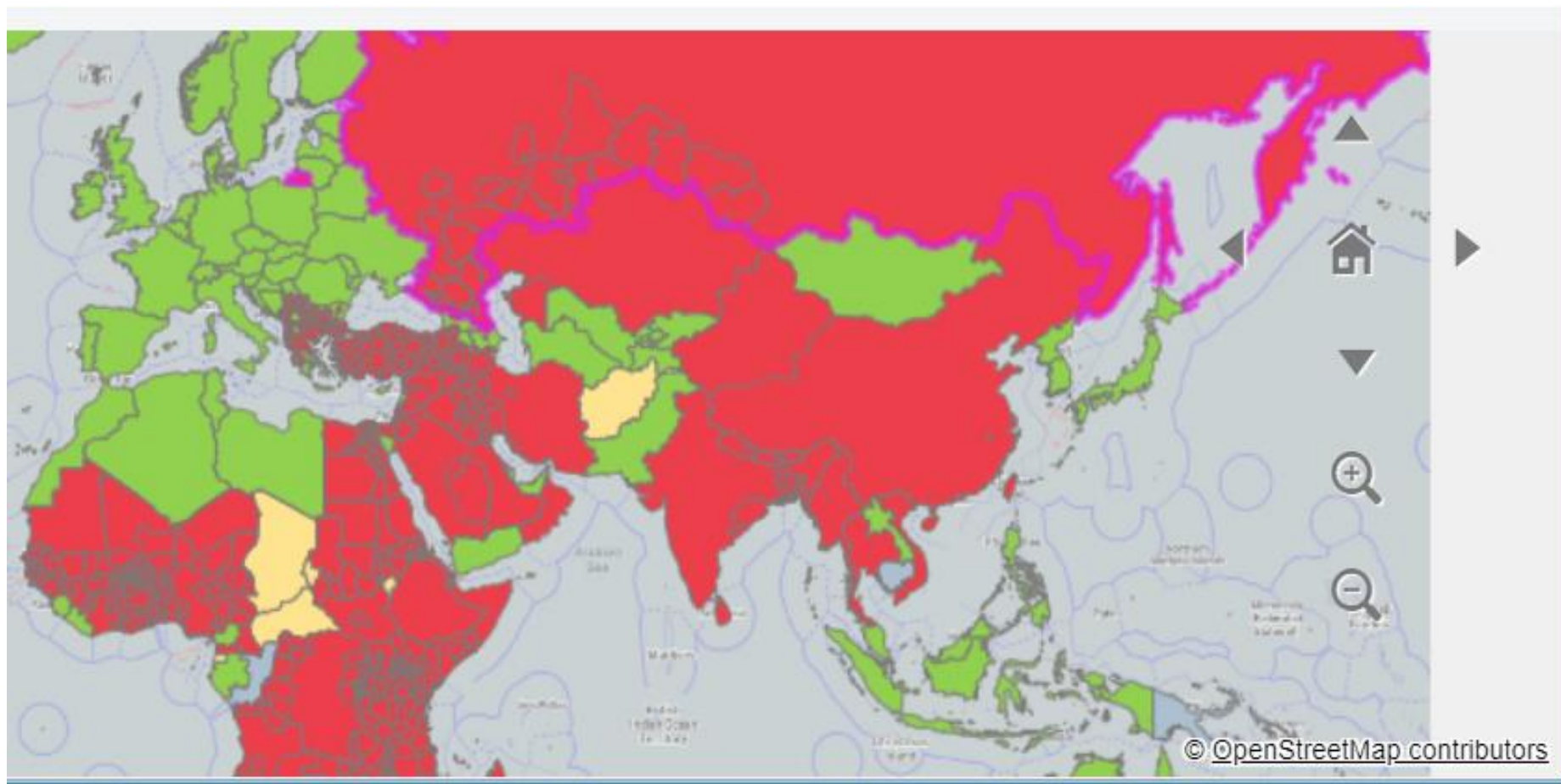


Global Report of LSD from 2005 onwards (based on report by OIE Members)

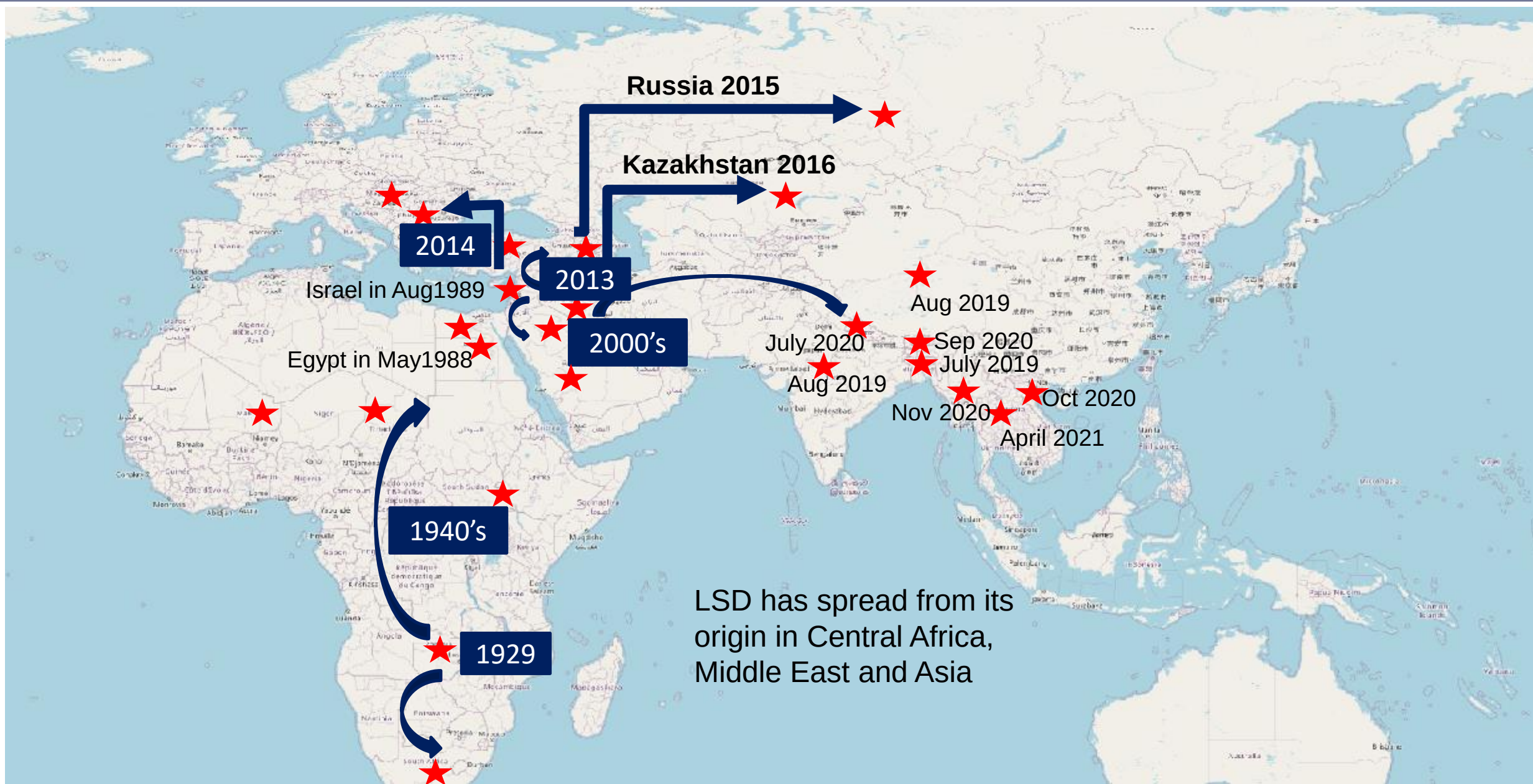
Number of new outbreaks



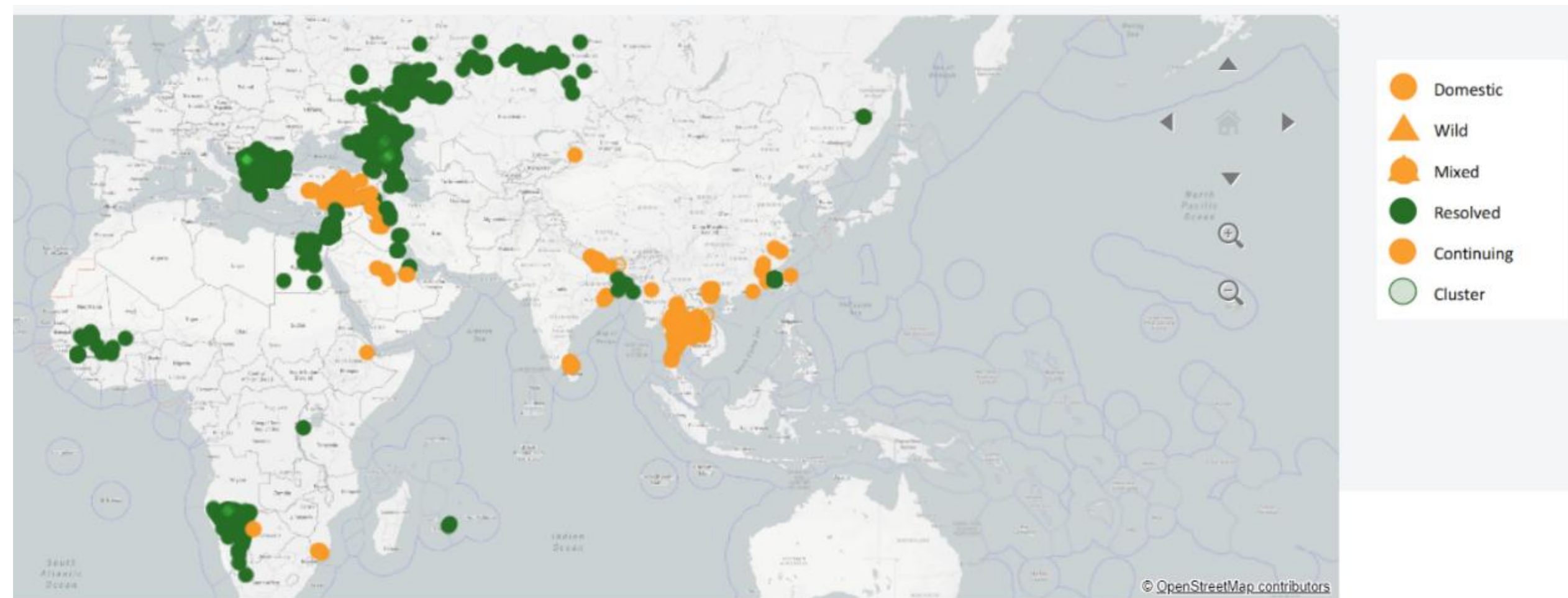
LSD Status (based on country report)



Chronology of reported LSD outbreaks (based on country report)



LSD outbreak situation (based on country report)



Highlights of activities in response to ASF in SEA



Knowledge sharing

Capacity building

Coordination and communication



Knowledge sharing – LSD Webinars



Emergency Response



Laboratory Diagnostics



General Consultation



Regional Situation Update



Training on Lumpy Skin Disease Preparedness for Asia and Pacific

- ✓ Opening Webinar
- ✓ Module 1: Overview
- ✓ Module 2: Clinical and pathological diagnosis
- ✓ Module 3: Sampling and laboratory diagnosis
- ✓ Module 4: Epidemiology and Outbreak Investigation
- ✓ Module 5: Surveillance
- ✓ Module 6: Control and eradication
- ✓ Closing Webinar

Organised by the Virtual Learning Centre for Asia and Pacific and EuFMD under the regional FAO/ OIE GF-TADs umbrella

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Introduction to Lumpy Skin Disease

An introductory module for the Asia-Pacific Region

Lumpy skin disease (LSD) is a newly emerged transboundary animal disease that has spread within just a few years throughout the Middle East, Turkey, the Balkans, the Caucasus and Eastern Europe. Most recently, countries in South, East and South-East Asia have been affected, with LSD having been detected in Viet Nam and Myanmar in October and November 2020.

Introduction of LSD virus into naïve population causes considerable economic losses due to death of cattle, decrease of their productivity, the cost of vaccination campaigns, and effects on trade.



A cow affected by LSD. © E.



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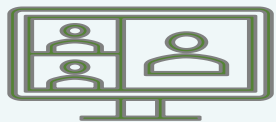
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Support to Members



Advice through emails on Do's and Don'ts and provide source of resources including Ref Labs

- Affected countries
- Neighbouring countries at risk of incursion



Facilitate technical virtual consultation between affected countries and LSD Experts



Other advice and support as and when sought by MCs

LSD Communication Materials

Lumpy skin disease a new threat to the region

Lumpy skin disease (LSD) is a viral disease of domestic cattle, water buffaloes and certain wild ruminants. Its incubation period is about 28 days but experimentally infected cattle may develop clinical signs as early as 6-8 days. This disease heavily impacts animal health and welfare and can lead to severe economic losses in affected farms.

LSD has recently spread to and within Asia, posing a threat to your country.

How do animals get infected?

- Mainly by blood-feeding arthropod vectors.
- Through bringing in infected cattle from affected regions.

When to suspect LSD?

- Ocular (eye) and nasal discharge – usually observed first.
- Decreased milk yield in lactating cattle.
- High fever that may exceed 41 °C or 106 °F.
- Enlarged subcutaneous and prefrontal lymph nodes (swollen, palpable).
- Appearance of firm cutaneous nodules of 2-5 cm in diameter, particularly on the head, neck, limbs, udder, genitalia and perineum within 48 hours of onset of fever.
- Number of nodules varies from few in mild cases, to multiple lesions in severely affected animals.

What to do in case of LSD suspicion?

- Contact the Veterinary Services.
- Prevent further spread of the disease by asking the animal owners/keepers to:
 - Separate the suspected animal from the rest of the herd.
 - Separate the rest of the animals that might develop (NOD) by avoiding communal grazing.
 - Stop cattle movement from/to the farm.
 - Limit visitors to essential services.
- Carry out clinical examinations on the rest of the animals, in order to identify the disease at very early stages.
- Provide supportive treatment to affected animals to reduce the fever, maintain hydration and prevent secondary bacterial infections.
- A vaccine exists to protect the cattle. Contact the Veterinary Services for more information on the vaccine.

For more information:
OIE regional webpage on LSD: <https://www.oie.int/en/press/lumpy-skin-disease-lsd/>

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Lumpy skin disease a threat to the region

Lumpy skin disease (LSD)

- LSD is a viral disease of domestic cattle, water buffaloes and certain wild ruminants.
- Incubation period of LSD is 28 days but experimentally infected cattle may develop clinical signs as early as 6-8 days.
- It heavily impacts animal health and welfare and can lead to severe economic losses in affected farms.
- LSD has recently spread to and within Asia, posing a threat to your country.

How do animals get infected?

- Mainly by blood-feeding arthropod vectors (mosquitoes, biting flies and ticks).
- Through bringing in infected cattle from affected regions.

When to suspect LSD?

- Initial signs:
 - Ocular (eye) and nasal discharge – usually observed first.
 - Decreased milk yield in lactating cattle.
 - High fever that may exceed 41 °C or 106 °F.
 - Enlarged subcutaneous and prefrontal lymph nodes (swollen, palpable).
- Appearance of highly characteristic firm, nodular skin lesions of 2-5 cm in diameter:
 - Cutaneous nodules particularly on the head, neck, limbs, udder, genitalia and perineum within 48 hours of onset of fever.
 - The number of lesions varies from a few in mild cases, to multiple lesions covering the entire body in severely affected animals.

What to do in case of LSD suspicion?

- Contact the Veterinary Services.
- Prevent further spread of the disease by asking the animal owners/keepers to:
 - Separate the suspected animal from the rest of the herd.
 - Separate the rest of the animals that might develop (NOD) by avoiding communal grazing.
 - Stop cattle movement from/to the farm.
 - Limit visitors to essential services.
- Carry out clinical examinations on the rest of the animals, in order to identify the disease at very early stages.
- Provide supportive treatment to affected animals to reduce the fever, maintain hydration and prevent secondary bacterial infections.
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Protecting your animals from Lumpy skin disease

Lumpy skin disease (LSD) affects cattle and water buffalo. It is currently spreading in Asia affecting animal health and welfare, livelihoods, and food security.

LSD poses a threat to your animals.

How your animals can get infected?

- Many by biting insects such as mosquitoes, stable flies and ticks.
- By moving infected cattle from an area where the disease is present.

When to suspect LSD?

- Discharge from eyes and nose.
- High fever.
- Decreased milk yield in lactating cows.
- Appearance of firm round skin nodules, usually noticed first on head and neck.
- Number of nodules varies from few in mild cases to many covering the entire body in severe cases.

What to do in case of LSD suspicion?

- Notify immediately to the local veterinarians or official Veterinary Services.
- Separate suspected case(s) from the rest of the herd.
- Monitor the health of animals everyday in order to identify sick animals.
- Stop cattle movement from/to the farm.
- Seek advice from vets and para-vets to provide supportive treatment.
- Only buy healthy animals from trusted sources.
- Keep farm sheds free from breeding sites for insects such as standing water and dung.
- Only allow visitors to your farm for essential services.
- A vaccine exists to protect your animals. Contact your local veterinarian or official Veterinary Services for information on the vaccine.

For more information:
OIE regional webpage on LSD: <https://www.oie.int/en/press/lumpy-skin-disease-lsd/>

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Process of developing “Frequently asked questions on LSD Vaccination”

LSD Coordination Meetings in South East Asia



Updates on LSD situation in the region; and on LSD Preparedness by those countries at risk.



Practical Prevention and Control of LSD



Updates and FAO/ OIE Tools and resources for prevention and control LSD

What should be focus of our next coordination meeting?

Thank you for your attention



Dr Karma Rinzin
Regional Animal Health Coordinator
k.rinzin@oie.int

OIE Sub-Regional Representation for South-East Asia
c/o Department of Livestock Development
69/1 Phaya Thai Road
Ratchathewi 10400, Bangkok, THAILAND
Tel. +66 2 653 48 64
E-mail: srr.seasia@oie.int
Web site: www.rr-asia.oie.int - www.oie.int

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