



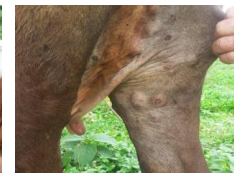
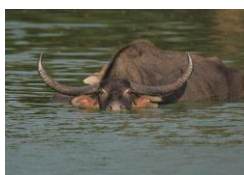
Preparedness by the country at the risk of Lumpy skin disease (LSD) incursion

Country name: **MALAYSIA**

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Position: **Veterinary Officer**

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Livestock Profile

Region	Cattle	Buffalo
P. Malaysia	581,567	47,652
Sabah	60,930	47,485
Sarawak	14,910	6,558
Total	657,407	101,695





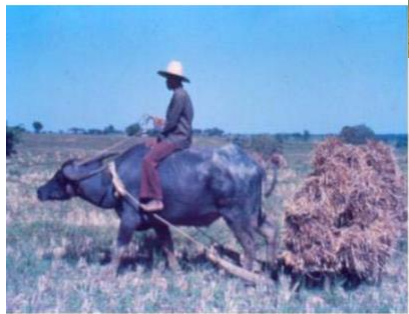
Livestock Production System

2. Semi intensive farming (6%)

1. Extensive systems (integration, traditional and conventional farming (92%))



Plate 2. Integration of crossbred goats with oil palm for meat production in Selangor, Malaysia (C. Devendra).



1. Integration and interaction of swamp buffalo with human labor to provide draught power for land preparation.

3. Intensive system (Feedlot (2%))



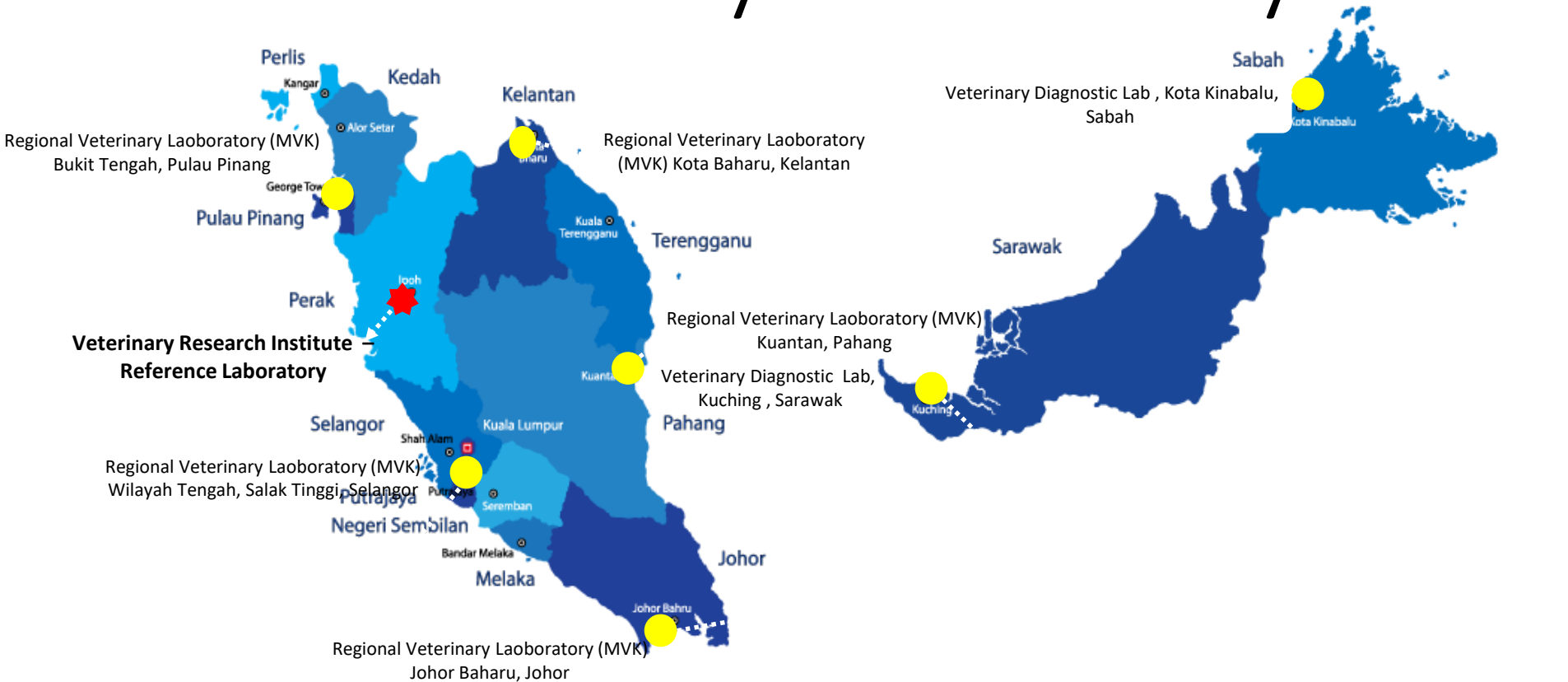


Veterinary Services:

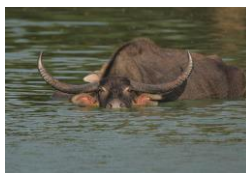
- ✓ to prevent, control and eradicate animal and zoonotic diseases (exotic and domestic)
- ✓ to facilitate the growth and development of a resilient animal industry
- ✓ to ensure that animal products for human consumption are wholesome, clean, safe and suitable to be consumed
- ✓ to facilitate the growth and development of the animal feed industry
- ✓ to ensure the welfare and well-being of all animals.



Veterinary Laboratory



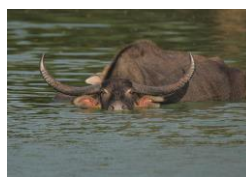
VETERINARY LABORATORIES



Laboratory Capacity

- Provide a quality diagnostic services by using technique and method that meet international standard.
- Provide training on diagnostic technique in diagnosis of animal diseases.
- Report and channel information on animal diseases.
- Provide consultation on animal diseases and diagnostic.





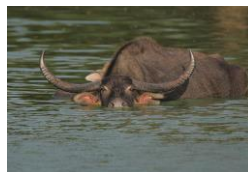
LSD Preparedness

- **Diagnostic capacity**

- 1. Conventional PCR LSD

- The conventional gel-based PCR method
 - References :
 1. OIE Manual of Diagnostic Tests and Vaccine for Terrestrial Animals, 2017 Chapter 3.4.12- Lumpy Skin Disease
 2. Tuppurainen et al (2005)
 3. Ireland & Binopal (1998)
 - PCR product 192 bp
 - Positive control of LSD nucleic acid reference obtained from OIE Reference Lab Pirbright, used for positive conventional PCR LSD
 - Discussion on technical part with expert, Dr. Charles Eulodge Lamien from IAEA Seibersdorf Lab, Austria.
 - No sample send to referral lab.





LSD Preparedness

- Risk Assessment

Import risk analysis –focus on importation of live animal

- Surveillance Strategy

Passive and active surveillance (all states), strategic surveillance at border

- Legislation

- ✓ Animal Act 1954

- ✓ Animal welfare Act 2015

- ✓ MAQIS Act 2011 (entry point and quarantine station)



LSD Preparedness

- Early detection and reporting
 - ✓ Through clinical and passive surveillance
 - ✓ Report of cases submitted through ADIC and monitor by Epidemiology and Surveillance Section at HQ
 - ✓ Crisis Room is activated at central level for action coordination
- Contingency Plan
 - ✓ Generic Rapid Response Plan
 - ✓ Partial compensation (based on partial or total condemnation of carcasses)
 - ✓ Allow vaccination by DVS approval of vaccine type



LSD Preparedness

Communication plan;

- ✓ DVS website, DVS facebook, DVS youtube, state DVS, webinar, FAQ, infographic poster
- Public Private Partnerships
 - ✓ Webinar for knowledge sharing on LSD involving representative from farmers, importers dan pharmaceutical company.
- Collaboration and coordination with partners/
 - ✓ Collaboration and engagement with enforcement agencies (MAQIS, AKSEM, and MAFI)
 - ✓ Donors NA

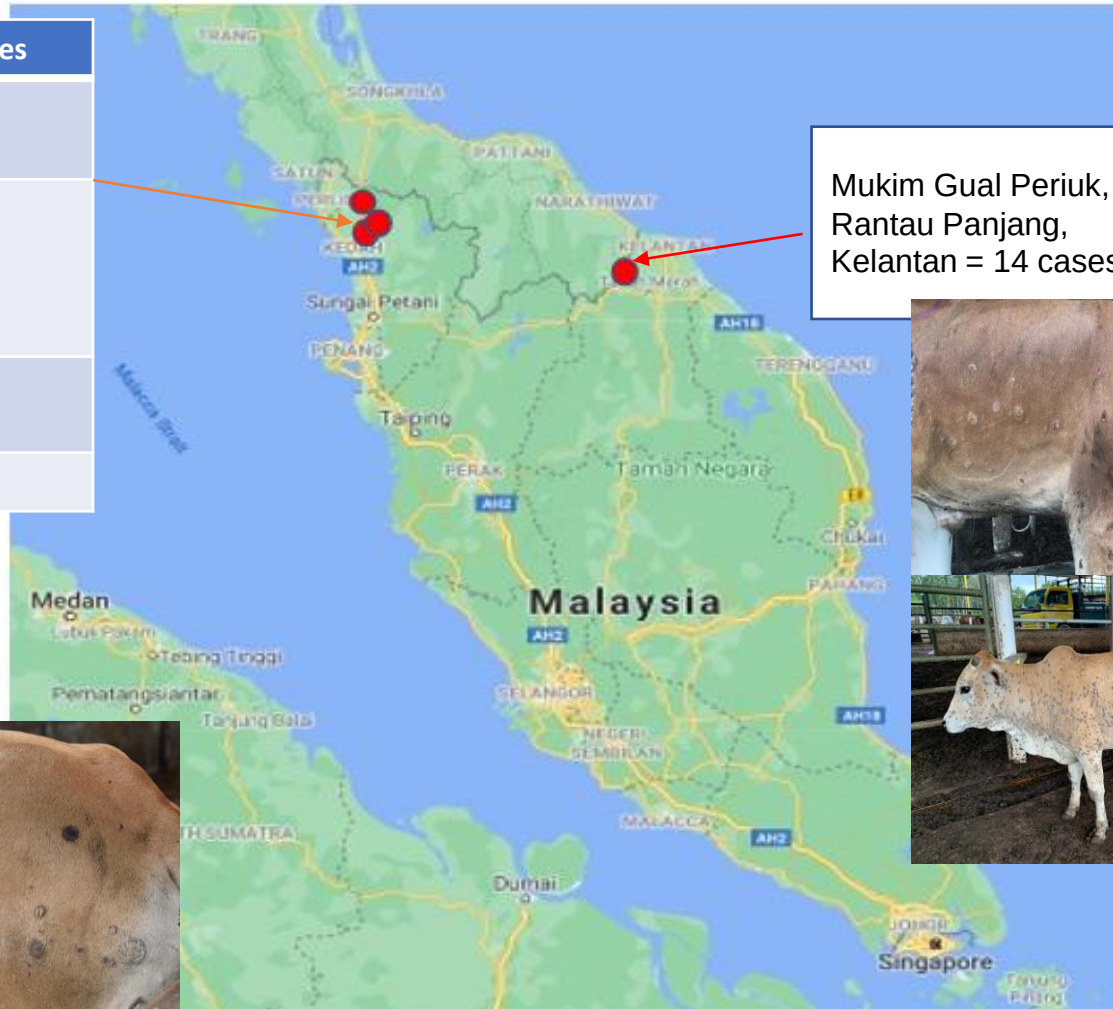


LSD situation in Malaysia

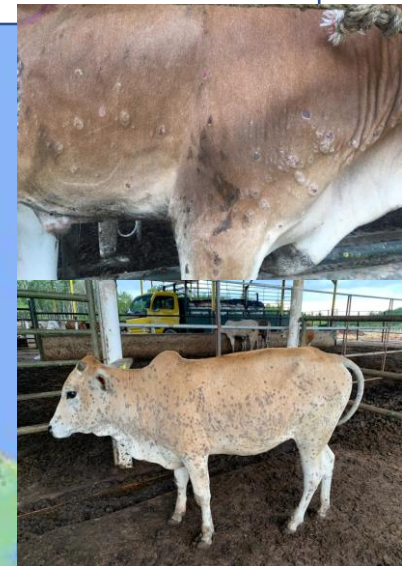


LSD case at Quarantine Station

Station	No. of cases
Bukit Kayu Hitam, Kedah	16
Kg. Padang Satu, KM 25, Lebuh raya Bukit Kayu Hitam, Changloon, Kedah	3
Kampung Langsat, Changlun, Kedah	23
Total	42



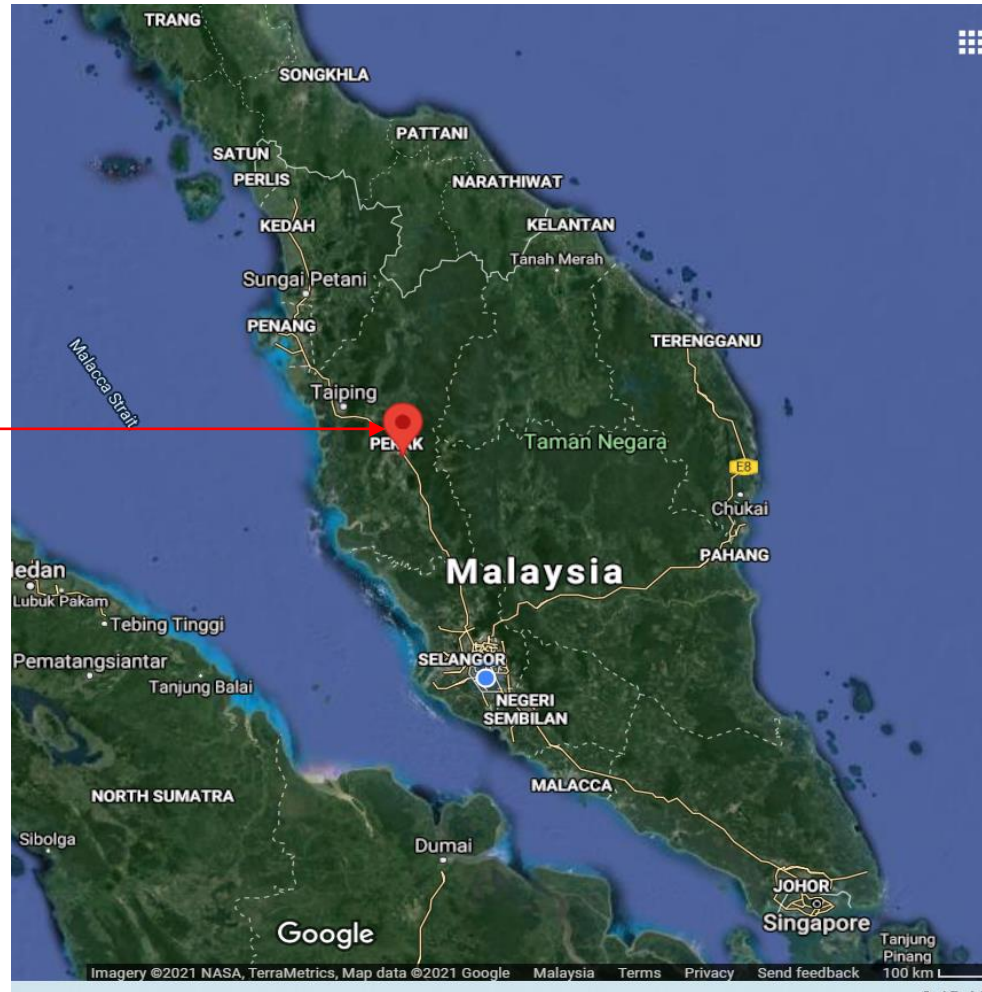
Mukim Gual Periuk,
Rantau Panjang,
Kelantan = 14 cases





Suspected LSD - pending laboratory confirmation

3 dairy cattle at farm
in Simpang Pulai
Perak





Control measures implemented

- *Actions taken or activities implemented to control LSD to minimize impact and to prevent further spread.*

1. *Import control*

- *temporary suspension of live cattle importation from LSD positive country)*
- *strengthen import protocol*
- *import risk analysis*

2. *Surveillance*

3. *Movement control (permit and inspection before movement)*

4. *Public awareness*

5. *Stamping out (with partial compensation for local animal only)*

6. *Vector control (fogging and netting)*

7. *Strengthen laboratory capacity*

8. *Disease reporting*



Vaccination

- ✓ Planned for vaccination as one of the prevention measures.
- ✓ As pre-emptive vaccination, strategic vaccination (dairy and border).
- ✓ Voluntary vaccination by farmers
- ✓ Three types of vaccine being considered:
 - i. Lumpyvax® (MSD Animal Health)
 - ii. LSDV (Onderstepoort Biological Products, OBP)
 - iii. Bovivax LSD-N (M.C.I Sante Animale)



Vaccination

- ✓ Vaccine will only be allowed by permission from DVS Malaysia.
- ✓ Vaccine type to be brought in has to be approved by DVS Malaysia (normal process by submission of vaccine dossier-evaluated by committee before approval). But in emergency situation, procurements is allowed using one off procurement)
- ✓ Vaccine has to be imported as no local vaccine available.



Challenges

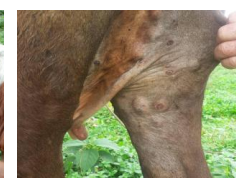
1. Limitation in laboratory testing capacity and capability

- not all types of disease can be diagnosed in certain laboratory and sample need to be outsourced to other laboratory
- No continuation in access to reagents, disposable supplies and kit reagents
- Some labs are old and lack of modern facilities or high-end equipment's
- Shortage of expert, technical personnel



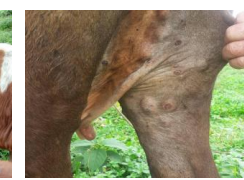
Challenges

2. Illegal trade at the border
3. Extensive farming system (integration of cattle with oil palm plantation)
4. Budget limitation on vaccine procurement



Way Forward and priority actions

- Enhance laboratory capacity and capability
- Strengthen border control to prevent illegal animal trade (enforcement)
- Sufficient budget allocation for vaccine procurement
- Review import protocol for live animal
- Strengthen surveillance program



THANK YOU