

Member's update FMD, PPR and LSD

[Mongolia]

GERELMAA ULZIIBAT

DIRECTOR OF STATE CENTRAL VETERINARY LABORATORY, GAVS

22 – 23 July 2025

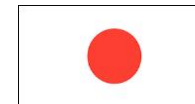
Tokyo, Japan



World Organisation
for Animal Health

中华人民共和国农业农村部

Ministry of Agriculture and Rural Affairs of the People's Republic of China



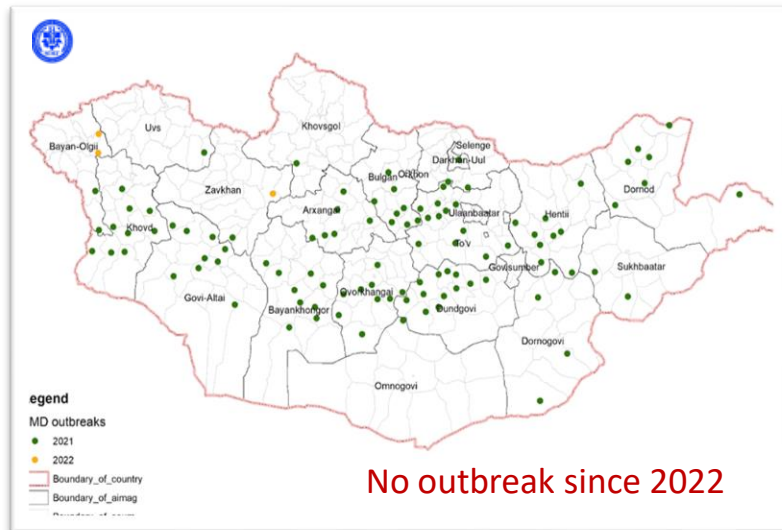
Ministry of Agriculture,
Food and Rural Affairs

FMD, PPR and LSD situations: In Mongolia

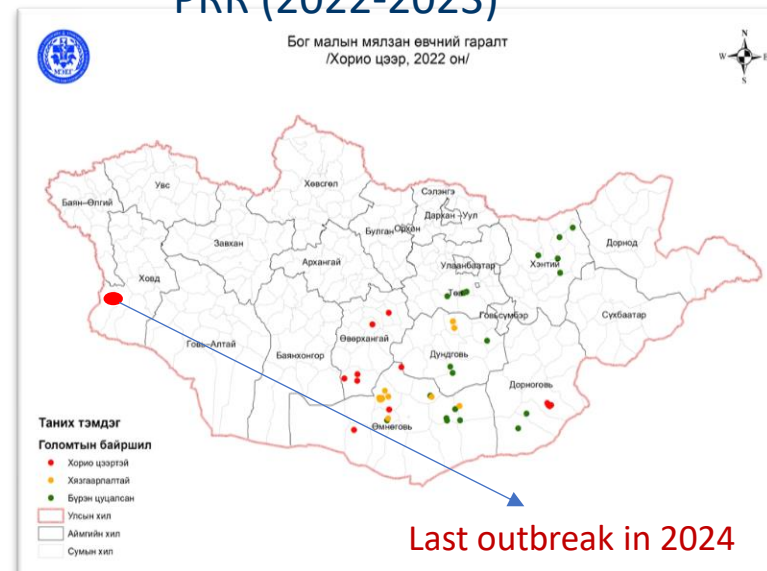
- ❖ **FMD:** Last outbreak was in March, 2022
- ❖ **PPR:** Last outbreak was in December, 2024
- ❖ **LSD:** Last outbreak was in July, 2022

Geographical distribution:

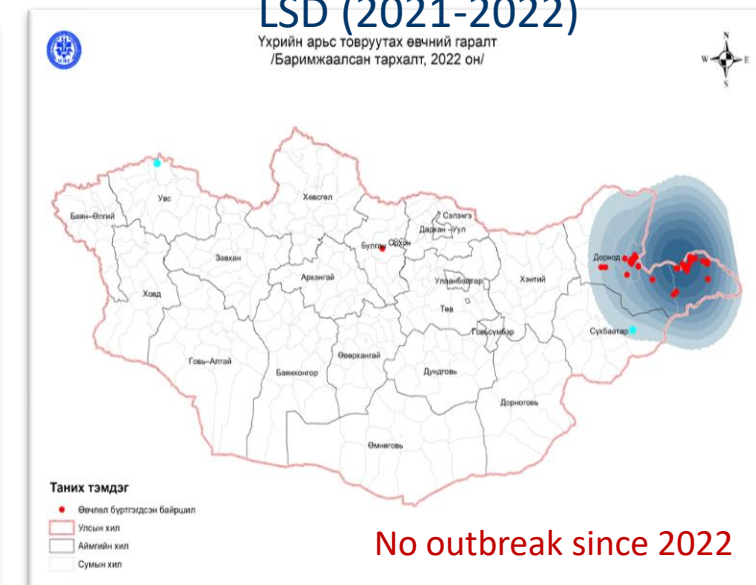
FMD (2021-2022)



PPR (2022-2023)



LSD (2021-2022)



Key strains of TADs:

❖ FMDV: Type O: Pool -2 Middle East South Asia

Epidemiology: Endemic

- O/ME-SA/Ind2001d: 2015-2017
- O/ME-SA/Ind2001e: 2018-2022 Most Prevalent
- O/ME-SA/PanAsia: 2015-2019
- O/SEA/Mya-98: 2014-2019

FMD affected animals: Domestic and Wild animals
(Gazelle and Saiga)

❖ PPR: Asian

“IV lineage”

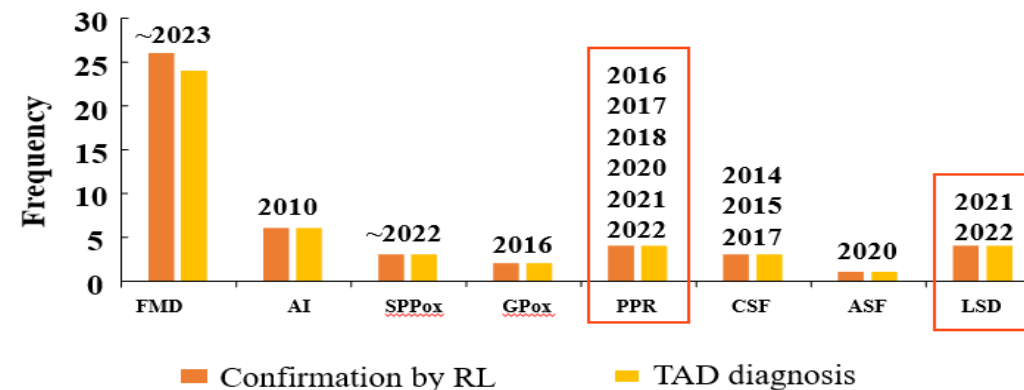
PPR affected animals: Small Ruminants and Saiga (2016)

❖ LSD: Cluster 1.1/ Vaccine type

“Needling vaccine strain”

LSD affected animals: Domestic

Conformity of TADs diagnosis



Confirmation activity by WOA reference laboratory:

- ❖ RUSSIA - Vladimir
- ❖ ENGLAND - Pirbright
- ❖ JAPAN - Hokkaido University
- ❖ CHINA - Harbin institute
- ❖ AUSTRIA - Seibersdorf



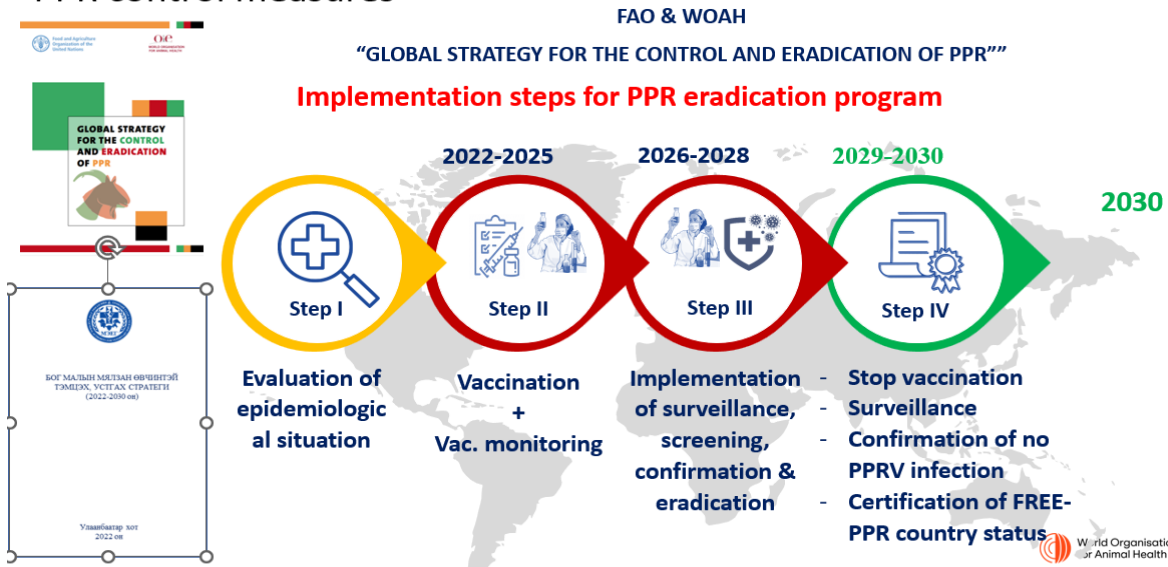
TADs control measures: In Mongolia

- There are five technical elements for TADs (FMD, PPR and LSD)
 1. Legal framework
 2. Surveillance,
 3. Diagnostic
 4. Prevention and Control
 5. Stakeholder involvement

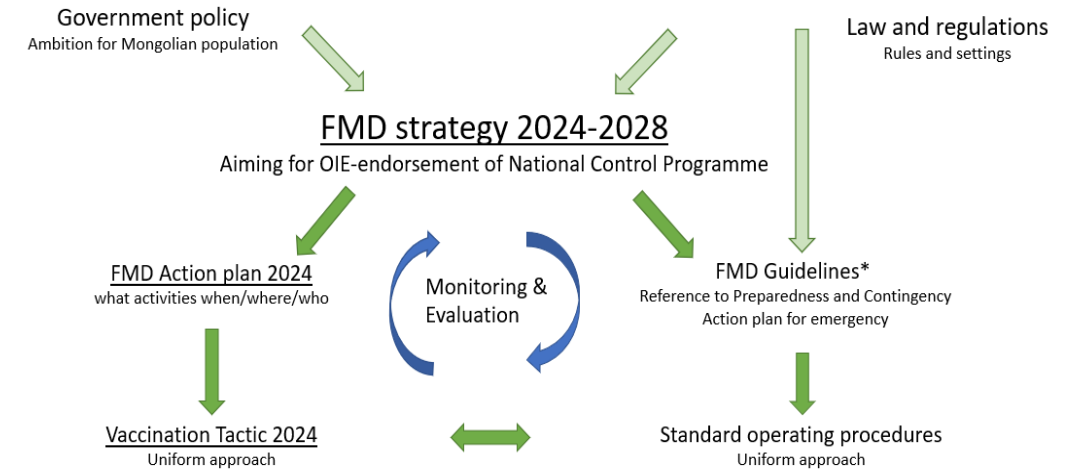
1. Legal framework for TADs

1. FMD National Strategy Plan
2. PPR National Strategy Plan
3. LSD National Strategy Plan
4. National preparedness plan for TADs
5. National contingency plan for control of TADs
 - 5.1 SOP for FMD
 - 5.2 SOP for PPR
 - 5.3 SOP for LSD

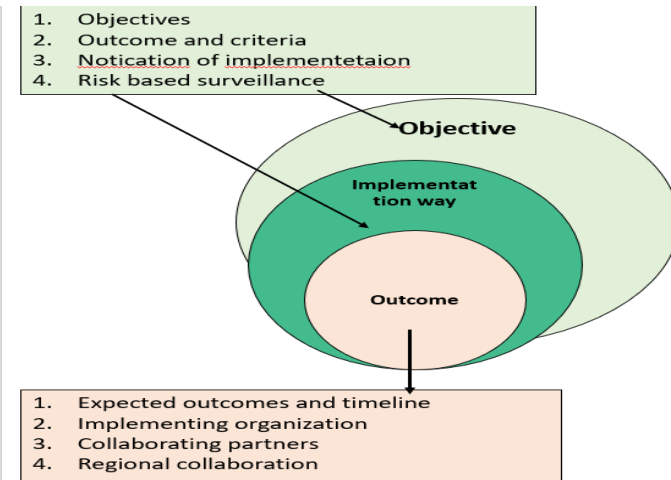
PPR control measures



FMD control measures



Under the OCP-FMD, seven objectives were defined to support the long-term national strategic goals to eliminate FMDV circulation in the domestic animal population in Mongolia and to achieve the WOA status of FMD-free without vaccination by 2030. For the next 5 years, the following seven strategic objectives form the basis of defining the annual workplan:



LSD Control measures

TADs control measures:

➤ Strategy

- Comprehensive prevention and control measures that focus on prevention, and combine vaccination with culling

➤ Key measures:

- Vaccination
- Enhancing Biosecurity
- Surveillance
- Epidemiological investigation
- Movement control
- Culling and safety disposal
- Zoning and Compartmentalization

Vaccination



TADs control measures:

➤ Disease Notification and Confirmation

- Any suspected FMD outbreak should be immediately reported to the local veterinary authority, animal health, animal disease prevention and control department in GAVS
- At Upon receiving a report, if the local animal disease prevention and control agency identifies a clinically suspected outbreak:
 - Report to the provincial-level animal disease prevention and control agency within 2 hours through official channels;
 - Simultaneously notify the veterinary administrative department of the local government;

TADs control measures:

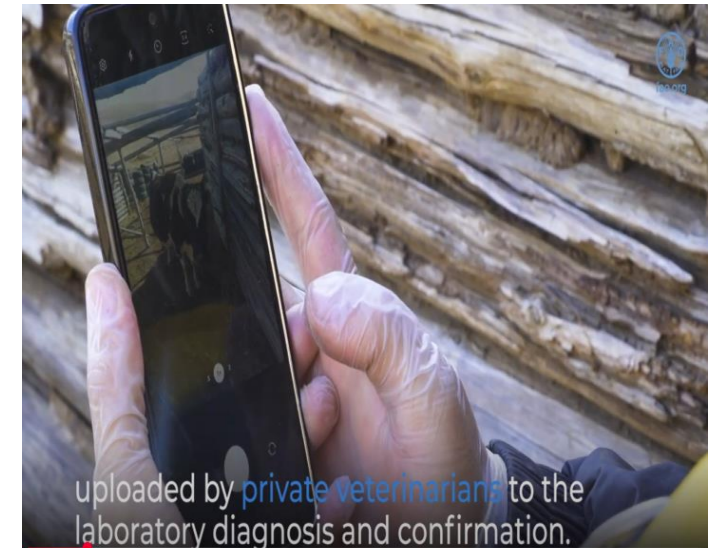
➤ Emergency response

- Suspected epidemic reports, quarantine and monitoring measures will be implemented
 - Prohibiting the movement of livestock, livestock products, feed, and related item
 - Implementing temporary disposal measures
- Immediate tracking and investigation shall be carried out on possible sources of infection
- Disinfected and safety disposal
 - Contaminated or suspected contaminated items

TADs control measures:

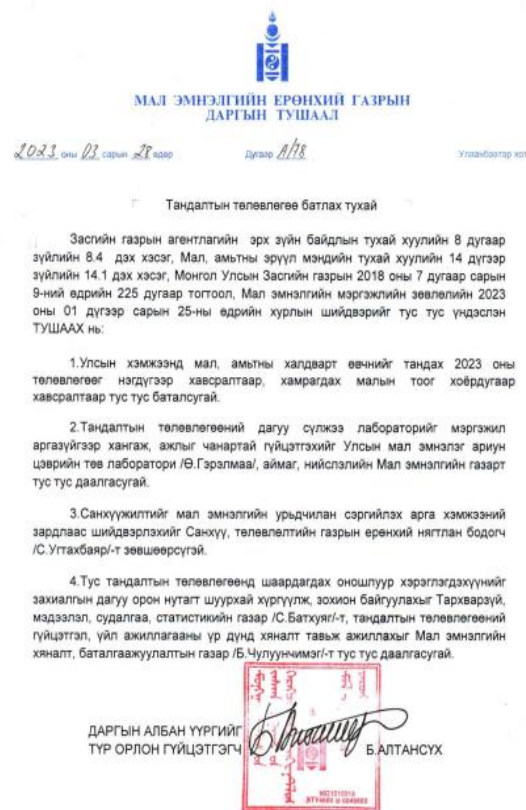
➤ Movement Control

- For accepted quarantine declarations and for confirmed cases, the place of origin will be identified on-site using the MAHIS system and subjected to quarantine control.
- A total of 336 soums and districts within the 21 provinces and the capital city have implemented the electronic certificate system



2. Surveillance for TADs

TADs active and passive surveillance was approved by GAVS in every year under “National strategy for the control and eradication of TADs”

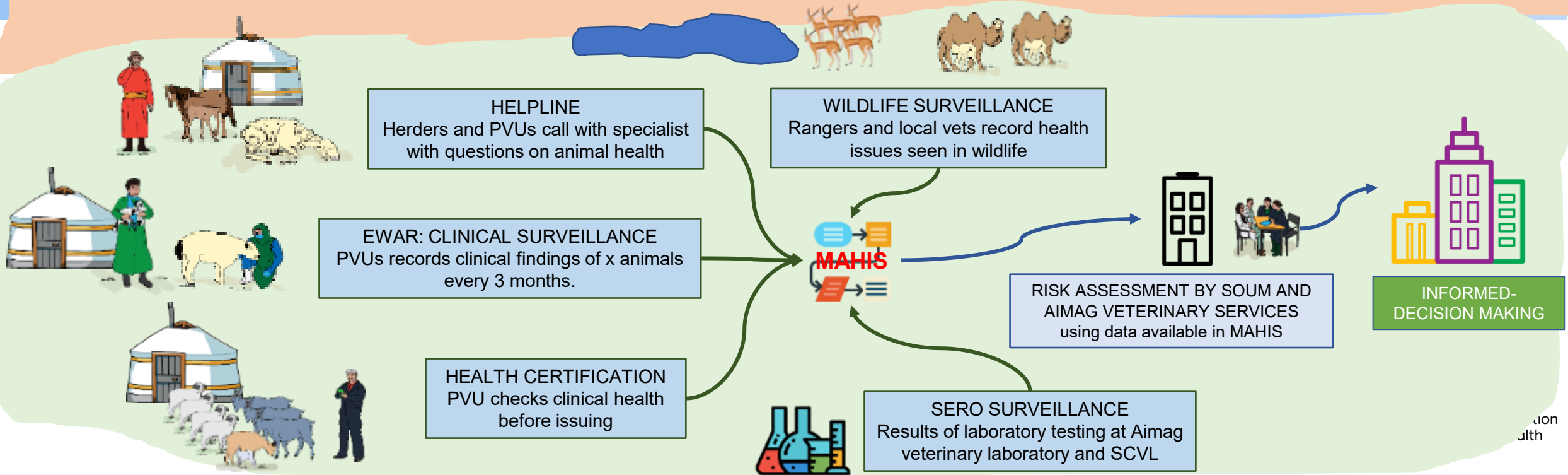


PLAN OF INFECTIOUS AND VACCINE MONITORNG-2024																	
Д/Д	Name of diseases	I cap	II cap	III cap	IV cap	V cap	VI cap	VII cap	VIII cap	IX cap	X cap	XI cap	XII cap				
SERO-SURVEILLANCE																	
1	FMD		(1,2)	1	3	1	3	1	3	(2) Ийлдсийн тандалт							
		Эрт илрүүлгийн үзлэг тандалт (E'WAR)															
2	PPR		(1,2)	1	3	1	3	1	3	(2) Ийлдсийн тандалт							
		Эрт илрүүлгийн үзлэг тандалт (E'WAR)															
3	SGP						Өвчин гарсан үед яаралтай хийнэ (2)										
		Эрт илрүүлгийн үзлэг тандалт (E'WAR)															
4	LSD						Өвчин гарсан үед яаралтай хийнэ (2)										
		Эрт илрүүлгийн үзлэг тандалт (E'WAR)															
5	TAD's for wildlifes									(1,2,5)	1	3	1	3	1	3	(2)ИТ
VACCINE MONITORING																	
6	FMD vaccine monitoring (PVM)					1	(1,2)	(3) сорьц	(2)ИТ								
7	PPR vaccine monitoring (PVM)							1	(1,2)	(3) сорьц	(2)ИТ						
8	Brucellosis vaccine monitorng								(1,2)	1	(1,2)	(3) сорьц	(2)ИТ				

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Use of Epidemiological tools-Surveillances for TADs

- 1) **Healthy Herd Certificates**
- 2) **Early Warning and Response through regular clinical surveillance by PVUs**
- 3) **Sero-surveys including post-vaccination monitoring**
- 4) **Wildlife surveillance: linking SMART with MAHIS**
- 5) **Records on location, time and number of animals vaccinated**



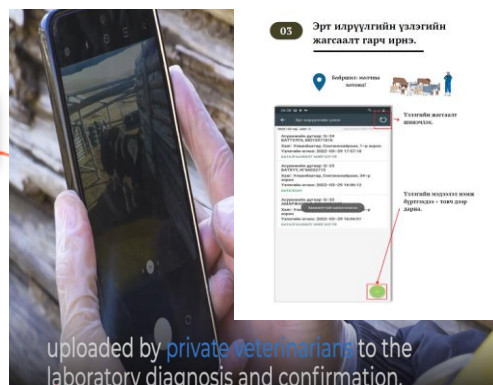
Use of Epidemiological tools-Surveillances

HELPLINE



A Herder Helpline option was elaborated as an additional surveillance component. Its objective was to offer herders and veterinary practitioners the option to place a call to a free number (7505 6655) on any subject related to animal health. (<https://youtu.be/HbPUEwAUJ9Y>; <https://youtu.be/N87Af7UkfLc>),

EWAR



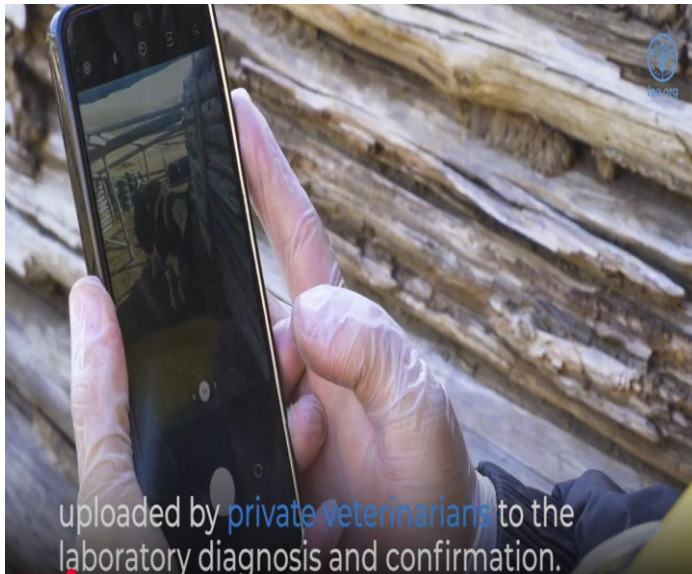
This pilot was conducted between July and October 2021 in three aimags (Sukhbaatar in Eastern, Uvurkhangai in Central and Khovd in Western region), involving 151 private vets. Over a period of 5 months, almost 6,500 herds and 165,000 heads of livestock were examined. As result of this pilot, the CVO issued a new regulation that was named Early Warning and Response (EWAR) in August 2022. More than 1,100 soum inspectors, soum epidemiologists and private veterinarians were trained across Mongolia based on three manuals that had been developed.

WILDLIFE SURVEILLANCE



The study estimated that the saiga population was 6,664, a decrease of 33.1% compared to the same assessment in October 2021 and tested seven out of 50 tissue samples from 5 saiga carcasses positive in the RT-PCR for FMD virus. One blood sample tested positive to NSP-Ab for FMD. This was the first time that FMD virus was confirmed in Saiga.

EWAR: Clinical surveillance (Passive surveillance)



Динамик платформ

МЭНС-2.0 Хянах самбар

МЭНС-2.0 Эрт илрүүлгийн үз

МЭНС-2.0 Эрсдэлийн үнэлгээ

certificate.mahis.gov.mn/detections?CurrentPageNumber=1&approveState=1

Эрт илрүүлгийн үзлэг

Б.Болдбаатар

Мэдээлэл

Хянах самбар

МЭ-ийн гэрчилгээ

МЭ-ийн үйлчилгээ

Эрт илрүүлэг

Эрт илрүүлгийн үзлэг

Эрсдэлийн үнэлгээ

Газарзүйн зураглал

Оролцооны эпидемиологи

Амьтны бүртгэл мэдээлэл

Мал эмнэлгийн нэгж

Хэрэглэгчийн сан

Өвчний лавлагаа

#	Үзлэгийн дугаар	Үзлэгийн төрөл	Малчин	Регистр	Үзлэгийн огноо	Хаяг	Мал бүрийн тоо	Үзлэгт орсон нийт мал	Илэрсэн шинж тэмдэгийн тоо	Бүртгэсэн хүн	Баталгаажилт
1	Q-34732	Мал, амьтны үзлэг	ЧУЛУУНБАТ.Б	ДЖ82011111	2025-05-12 10:06	Говь-Алтай, Жаргалант, 1-р баг, Бүрэн	Ямаа-10, Үхэр-5	15	0	Б.Юра / Бүрэн-Энэрэл	БАТАЛСАН
2	Q-34701	Мал, амьтны үзлэг	БАЯРМАА.Д	ЙГ77073115	2025-05-11 23:35	Өвөрхангай, Баян-Өндөр, 3-р баг, Өвөр зүлэгт	Хонь-120	120	1	Г.Гантүрээ / Тэрмийн буян	БАТАЛСАН
3	Q-34700	Мал, амьтны үзлэг	ДОРЖ.Д	ЙГ76082917	2025-05-11 23:35	Өвөрхангай, Баян-Өндөр, 3-р баг, Өвөр зүлэгт	Хонь-160, Ямаа-10, Үхэр-5	175	0	Г.Гантүрээ / Тэрмийн буян	БАТАЛСАН
4	Q-34699	Мал, амьтны үзлэг	БАЯРСАЙХАН.Д	ЙГ84051511	2025-05-11 23:35	Өвөрхангай, Баян-Өндөр, 3-р баг, Өвөр зүлэгт	Үхэр-25, Хонь-90, Ямаа-10	125	1	Г.Гантүрээ / Тэрмийн буян	БАТАЛСАН
5	Q-34698	Мал, амьтны үзлэг	УЛААНХҮҮ.Л	ЙГ95110219	2025-05-11 23:35	Өвөрхангай, Баян-Өндөр, 3-р баг, Өвөр зүлэгт	Хонь-111	111	0	Г.Гантүрээ / Тэрмийн буян	БАТАЛСАН
		Мал,			2025-05-	Өвөрхангай, Баян-Өндөр, 3-р баг, Өвөр зүлэгт	Хонь-142, Ямаа-236	383	0	Г.Гантүрээ / Тэрмийн буян	БАТАЛСАН

PVUs records clinical findings of x animals every routine works

None of these notifications led to confirmation of presence of clinical FMD in the herds.

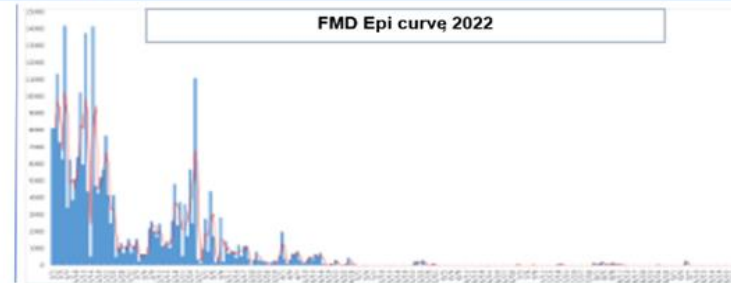
Daily, weekly, monthly report based on EWAR system



DAILY REPORT OF THE GENERAL AUTHORITY FOR VETERINARY SERVICE

As of 11 October 2022

FMD OUTBREAK (by provinces and soum)



QUARANTINE SITUATION (BY SOUM AND INFECTED ANIMAL NUMBERS)

Provinces

Soums

Infected animal

20

204

359,854

Number of outbreak -462

Number of household -7,718

FMD STATUS

TOTAL INFECTED ANIMALS
359.836

QUARANTINED ANIMALS 0

INFECTED ANIMALS
(species and number)



0

DAILY INCREASED NUMBER



СУМ

0



ГОЛОМТ

0



ӨРХ

0

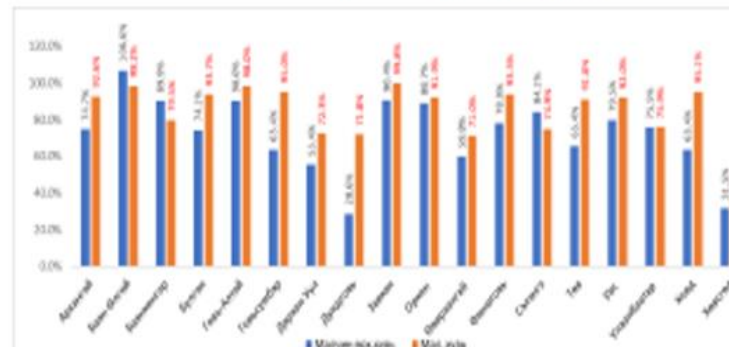


МАЛ

0

PROGRESS OF FALL VACCINATION AGAINST FMD (PERCENTAGE OF PERFORMANCE)

The percentage of herders of FMD vaccinations 73.9,
The percentage of vaccinated animals 88.5



ANIMAL MOVEMENT CONTROL

Registered animals

Horse	Cattle	Sheep	Goat	Camel	Pigs
327	316	2473	2724	99	0

PRODUCTS DELIVERED TO THE CAPITAL CITY FOR FOOD

TRADE	MEAT /TN/		MILK /TN/
	IN RESERVE	FOR PERSONAL USE	
167.0	0	0	56

Cautions



Ask your veterinarian about animal diseases before moving or transporting animals.



Avoid herding or transporting animals through areas with animal diseases, and avoid putting your precious herds and local brethren at risk.



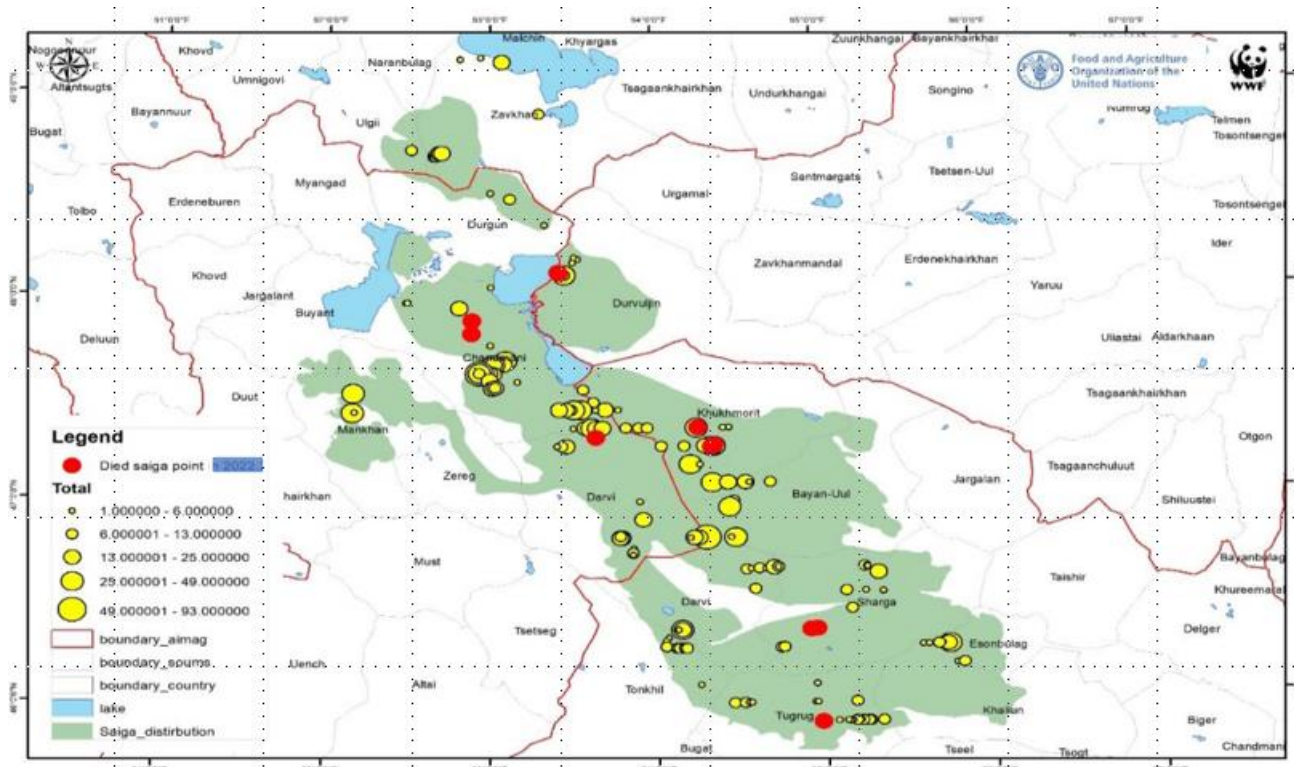
If you see a sick or dead animal, call a veterinarian immediately to protect your herd.

Make sure your cattle are vaccinated against foot-and-mouth disease.

Social media search of herder and private veterinarian groups

Example of daily update on FMD situation shown publicly

Wildlife surveillance for FMD and PPR in 2022 and 2023

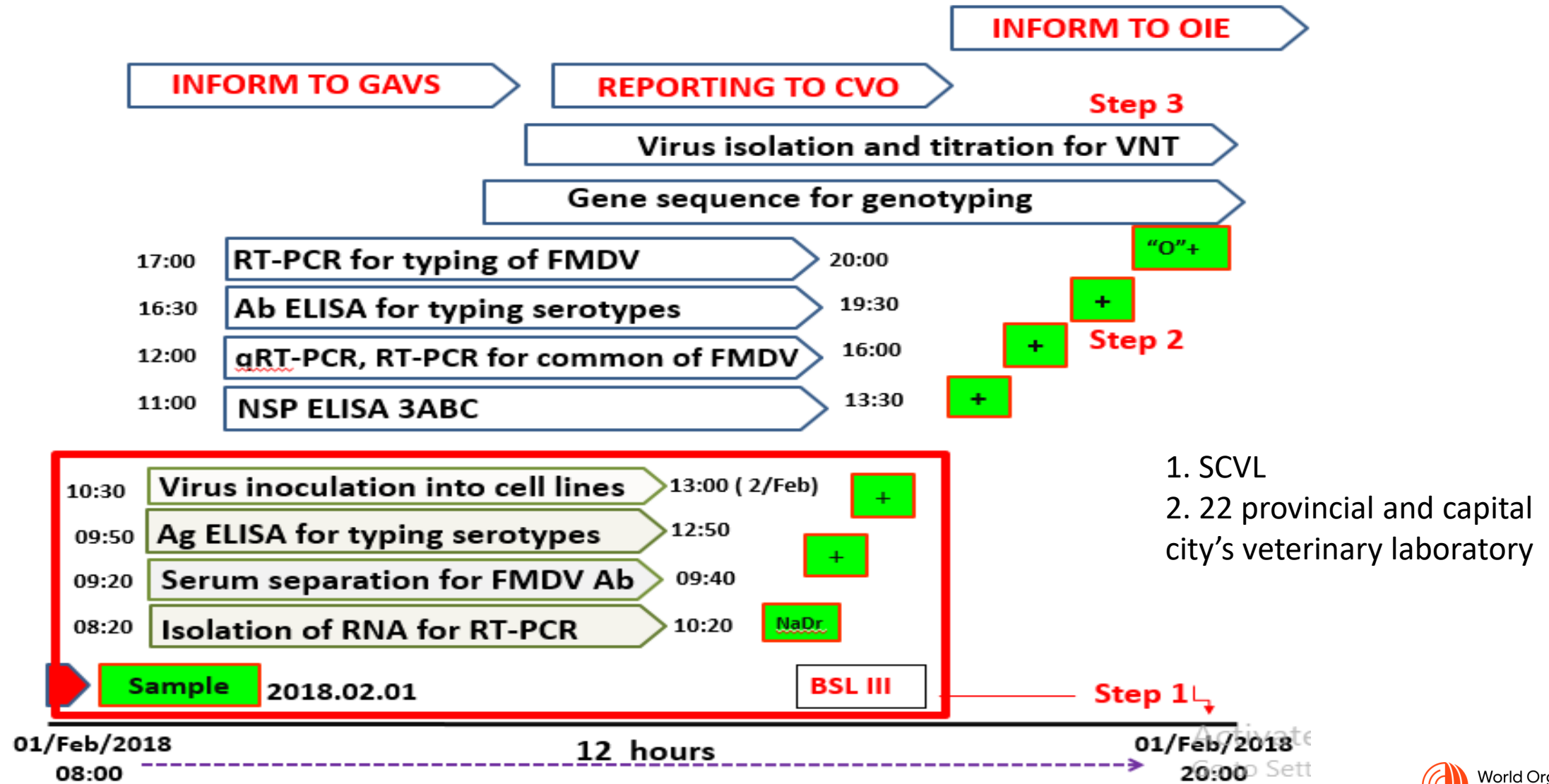


Died saiga location with FMDV natural infection in Mongolian saiga, 2016

Laboratory test results, information and natural infection surveillance in Mongolian gazelle, August 2022

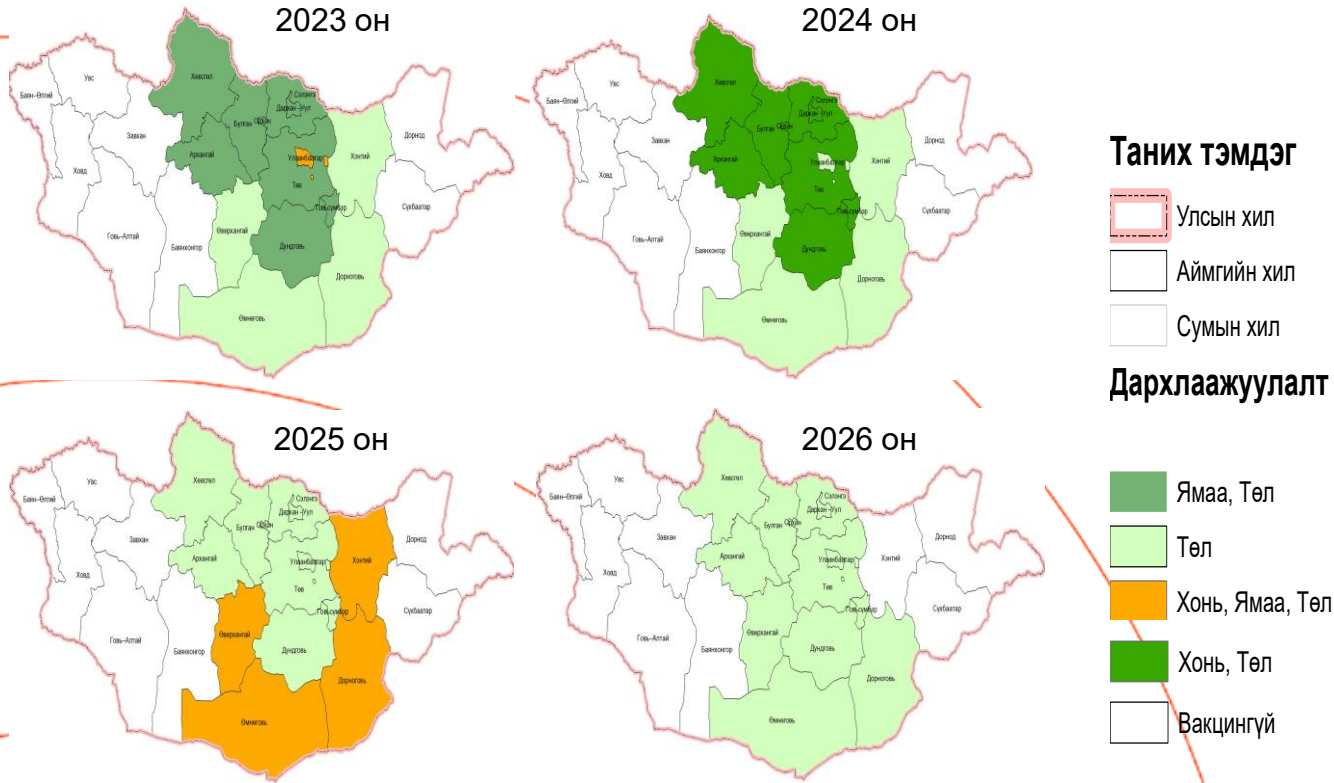
@ Will publish it

3. Laboratory capacity – TADs diagnosis – Quick responses

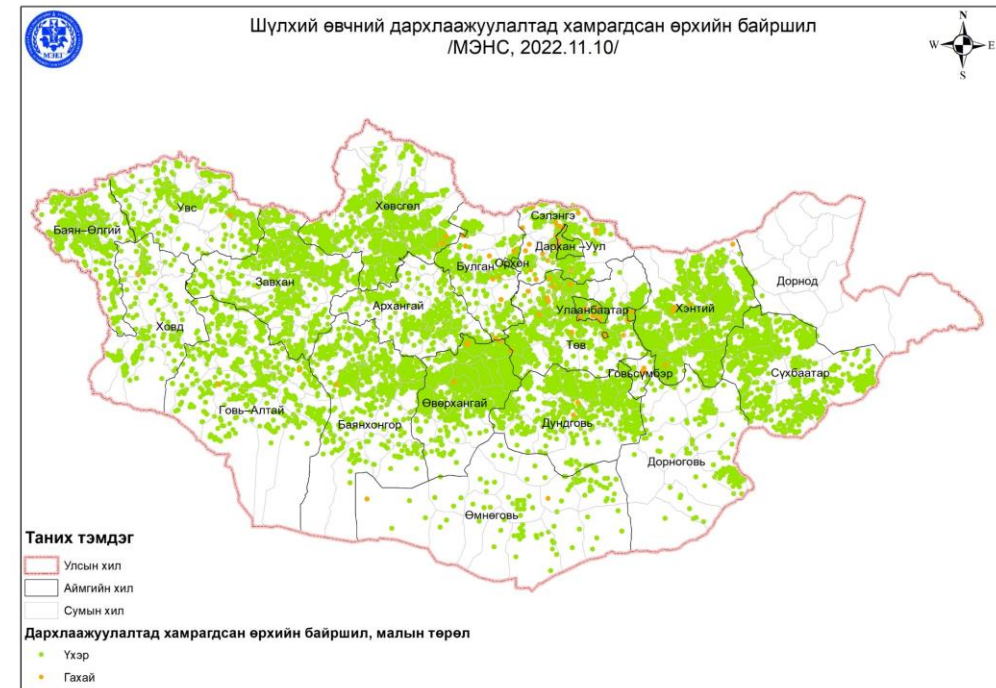


4. Prevention and Control for TADs

PPR vaccination strategy, 2023-2026

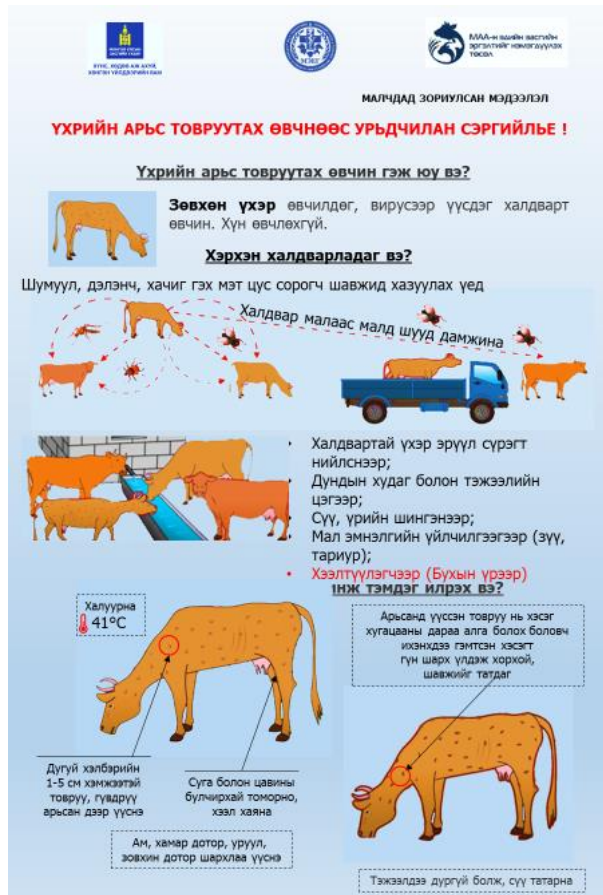


FMD vaccination strategy, 2022-2026



LSD Prevention and Control activities

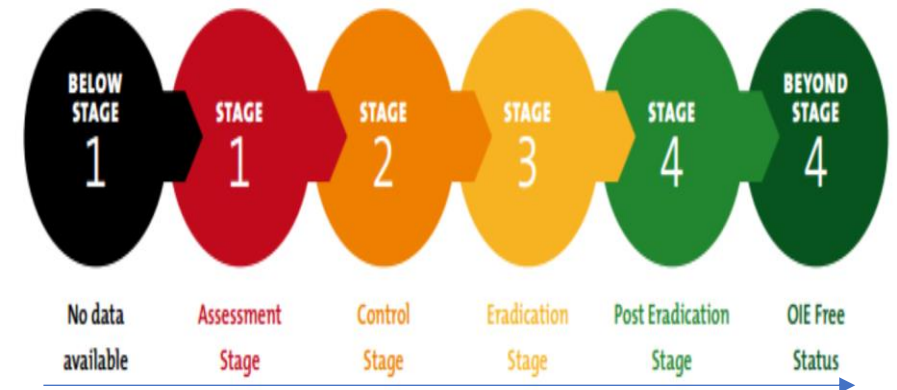
Promotion for herders & public



- Sera-surveillance
- Clinical survey questionnaire within the country
- Vector study for LSD
- Seasonal study of vector distribution
- Control of livestock trade
- Preparedness for laboratory diagnosis
- In-person & online training for local vets

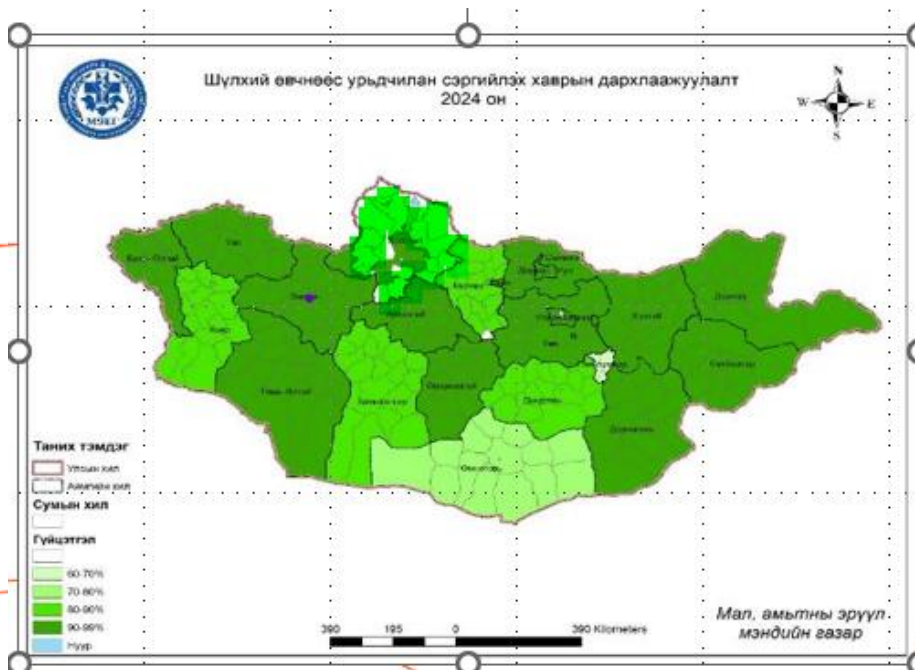
LSD – info sharing & awareness

Info sharing & awareness

[illegible]

To eradicate PPR by 2030

FMD vaccination in 2024 and 2025



- The vaccination tactic for 2024-2029 is nationwide vaccination of all large ruminants, deer and pigs, every six months (Spring and Autumn). This is a continuation of the successful application of FMD vaccine to contain the FMD outbreaks in 2021 and 2022
- For the vaccination of livestock, preventive and in case of emergencies, ARRIAH oil-emulsion vaccines with serotypes O and A are used. This vaccine is registered in 2018 under the provision of registering of imported vaccines

FMD vaccination plan: twice a year apart six month only for cattle until 2029



5. Stakeholder involvement

Simulation exercise for TADs

Emergency & field practice



5. Stakeholder involvement

Planning, field investigation, survey



Outbreak investigation



Multi-sectoral collaboration & Surveillance



Ministry of Health

- NCCD
- NCZD

National emergency management agency

Constraints and possible solution

➤ Constraints

- FMD, PPR and LSD situation in neighboring areas remains complex, with diverse TADS strains circulating.
- The FMD virus continues to circulate domestically, and small ruminants remain infected.
- Herders lack awareness of disease prevention and control
- Live animals' long-distance movement

➤ Possible solutions

- ☐ Enhance the knowledge and awareness of herders and veterinarians
- ☐ Further strengthen the control of the movement of live objects
- ☐ Strengthen the construction of FMD free zones and Compartmentalization



Priorities and Future Plans

- Reduce FMD virus circulation through implementation of the Official Control Program for FMD 2024-2028 (OCP-FMD 2024);
- Establishing FMD and PPR-free livestock compartments
- Compulsory vaccination
- Surveillance and PVM, early warning
- Routine Epidemiological Review and Feedback
- Capacity Building and Continuous Training



Thank you

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