

Integrated Program to Control and Eradicate FMD

Cabinet Report

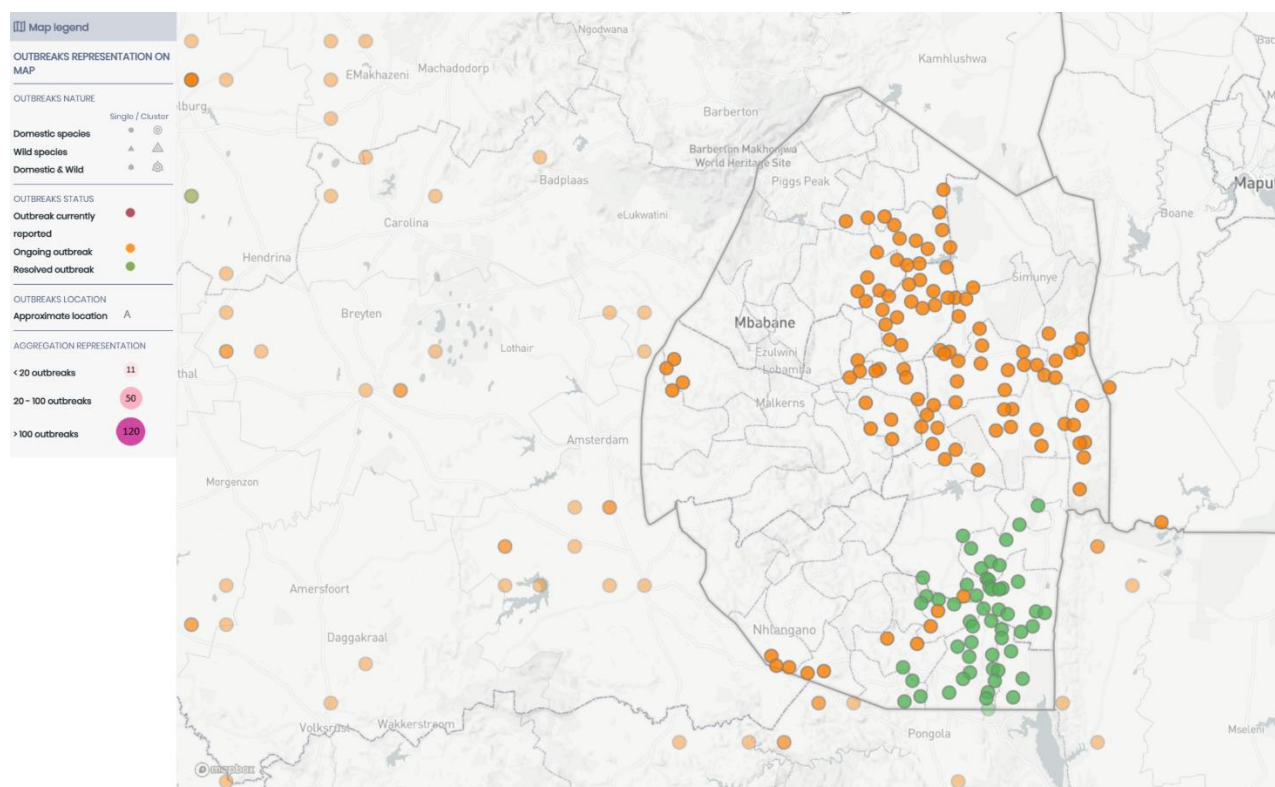
05 March 2026

Introduction

Since its last occurrence in 2000/2001—which was eradicated via a modified stamping out strategy involving both vaccination and culling—the country enjoyed a decade of FMD-free status (without vaccination) starting in 2010. However, this status was lost in May 2025 following an introduction in Mkhwakhweni area from KwaZulu-Natal (KZN). To date, the country has faced five distinct incursions from South Africa and potentially Mozambique, entering through the following points:

- South (KZN): Sikhwebezi (Hluti), Nkonjane (Mambane), and Zombodze/Maphumzane (Nhlangano).
- West/North (Mpumalanga): Ntsakane (Lundzi).
- Northeast: Ntsinini (Zinyane).

Laboratory analysis confirmed the KZN introduction as SAT 2 virus, while the eastern incursion was identified as SAT 1. Although the clinical disease is identical, these causative viruses are serologically distinct; typing for the northern incursions is currently pending. Post-introduction, the virus has spread via both legal and illegal movements of susceptible livestock, animal products, and contaminated fomites to other areas in the country.



Outbreak locations have been provided by the relevant Veterinary Services and may not represent the exact location of an outbreak. OIE assumes no liability for the data displayed.

Prints use map
To learn more, visit <https://www.mapbo>

Figure 1: Map showing outbreaks in Eswatini and outbreak areas in South Africa and Mozambique

Since the outbreak began in May 2025, the Ministry implemented a Control Strategy centered on a vaccinate-to-live approach. This method utilizes a trivalent vaccine to establish herd immunity while avoiding mass culling. The strategy is supported by movement restrictions, including quarantines and a network of strategic checkpoints.

Vaccination Program

The Ministry sourced a trivalent vaccine from the Botswana Vaccine Institute (BVI), covering all three SAT serotypes. While a two-dose regimen (administered 30 days apart) is required for optimal protection, supply constraints have impacted the rollout. The following has been achieved to date;

- Hluti/Lavumisa area: 96% coverage achieved and no more cases observed except for few diptanks on edge of the vaccinated area.
- Lubuli/Mambane: 94% coverage achieved and no more cases seen.
- Malindza, Siteki 1, Mliba and Ngculwini: 85% coverage achieved and most diptanks did not get the second dose.

Movement Control & Checkpoints

The number and location of checkpoints have shifted dynamically to track the spread of the disease:

Phase	Checkpoint Count	Locations
Initial Outbreak	4	Initial infection zones
Peak Expansion	16	12 in Hluti/Lavumisa/Lubuli; 1 in Tikhuba; 3 in Malindza/Lonhlupheko
Current Re-deployment	Adjusted	4 moved from Lubuli to Buhleni; 2 from Hluti to Nhlangano; 2 from Malindza to Manzini

Integrated Control Program

In response to the nationwide spread of the disease, the Ministry has adopted a comprehensive, Integrated Control and Eradication Strategy. This multi-pronged approach is designed to suppress viral circulation and restore the country’s FMD-free status through the following strategic pillars:

- **Mass National Vaccination:** Implementing a systematic, vaccination program for all susceptible cattle populations to establish herd immunity.

- **Movement Control, Surveillance, & Biosecurity:** Enforcing strict quarantine protocols, establishing strategic checkpoints, and maintaining intensive clinical and serological surveillance to identify and contain new infections rapidly.
- **Infrastructure Strengthening:** Reinforcing sanitary cordon fences and physical barriers along high-risk borders to prevent the transboundary introduction of the virus.
- **Awareness & Stakeholder Communication:** Executing community-level sensitization campaigns to educate farmers on disease transmission, the importance of biosecurity, and the necessity of timely disease reporting.
- **Regional Collaboration:** Strengthening trilateral technical cooperation with neighboring veterinary services to harmonize disease control policies and unify cross-border defense efforts.

Mass Vaccination

The objective is to implement a systematic mass vaccination campaign for all susceptible cattle in the country in order to;

- eliminate the circulation of FMD virus (FMDV)
- reduce clinical disease incidence
- establish a high-level of population immunity (minimum 80% coverage) as a prerequisite for regaining official WOAHP-recognized FMD-free status.

The vaccination will utilize a trivalent vaccine containing SAT 1-3 strains that are antigenically matched to circulating field strains, as prescribed in the WOAHP Terrestrial Manual.

The vaccination will be implemented in a 3-phase approach;

Phase 1 – Outbreak Containment

Priority will be given to areas with active outbreak zones. Targeted ring vaccination will be done to halt the spread of the virus and create protective buffers. The following foci have been identified for immediate intervention:

- **Shiselweni Region:** Ntimakati and Zombodze/Maphumzane
- **Lubombo Region:** Siphofaneni and Nhlanguano
- **Hhohho Region:** Nsakane (Lundzi), Zinyane, Mphameni, and Nyonyane
- **Manzini Region:** Mliba, Luve, Ngculwini, and Sidvokodvo

The map below shows the rings around the affected areas, and a barrier line in which all dip tanks along that corridor will be vaccinated

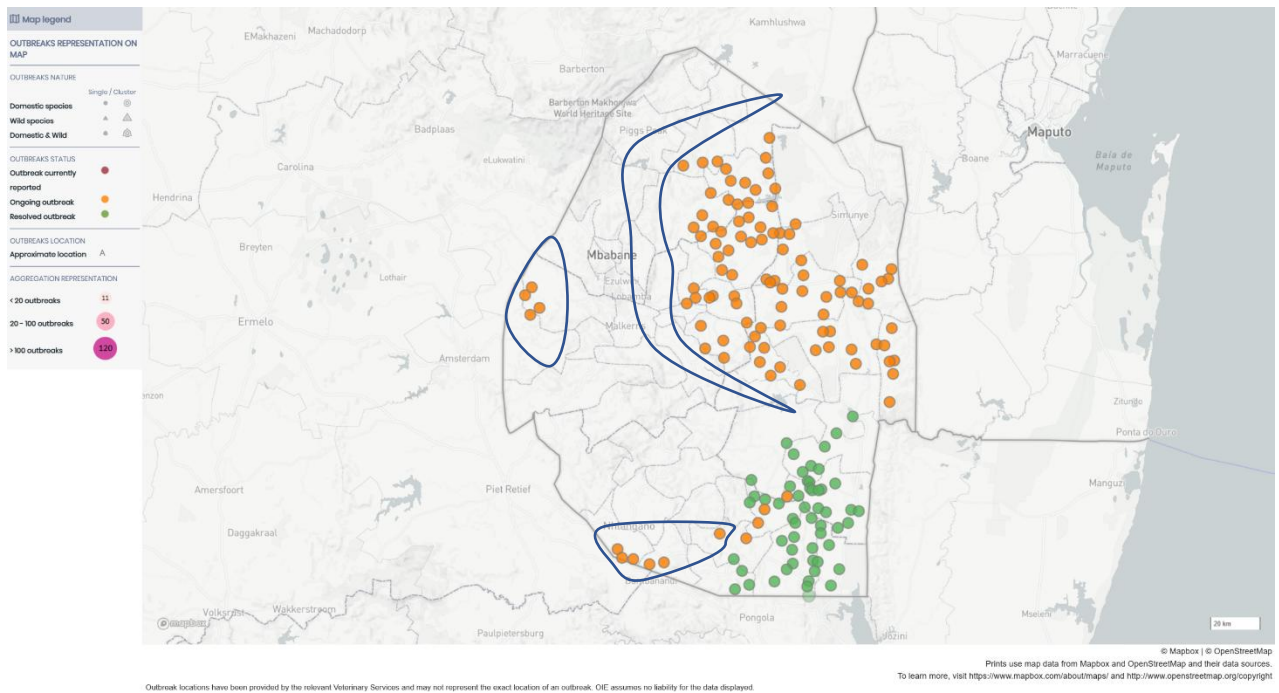


Figure 2. Map of demarcated rings for phase 1 vaccinations

The table below shows a summary of the dip tanks around the current focus which will be targeted for ring vaccination in order to stop the spread of the FMDV. However, it is worth noting the disease is currently progressing with speed in some areas and as such there may be need to shift the barrier line further west and north, as the disease progresses.

Most of the dip tanks will be receiving their first dose vaccination, hence must be revaccinated 28 days later, and a few will be receiving their 2nd booster dose.

Table 1. Summary dip tanks and cattle population targeted for ring vaccinations

Area	Population	Diptank
Lundzi	18792	31
Luve	29489	34
Sidvokodvo	21485	41
Malndzela/Mayiwane	43599	50
Shiselweni	30136	44
Zinyane	12519	14
Total	156020	214

Phase II – Blanket and Barrier vaccination

The second phase of vaccinations will constitute of all dip tanks east of the barrier line on Figure 2 above towards the frontier with Mozambique and RSA. Considerations will also be given to cattle > 6 months post vaccination and dip tanks along the frontier nationwide. Vaccination strategies to be employed are:

- Blanket vaccination of all cattle in these areas.

- Booster vaccination of cattle vaccinated ≥ 6 months previously within outbreak and buffer zones.
- Barrier vaccination of cattle in high-risk zones along international borders

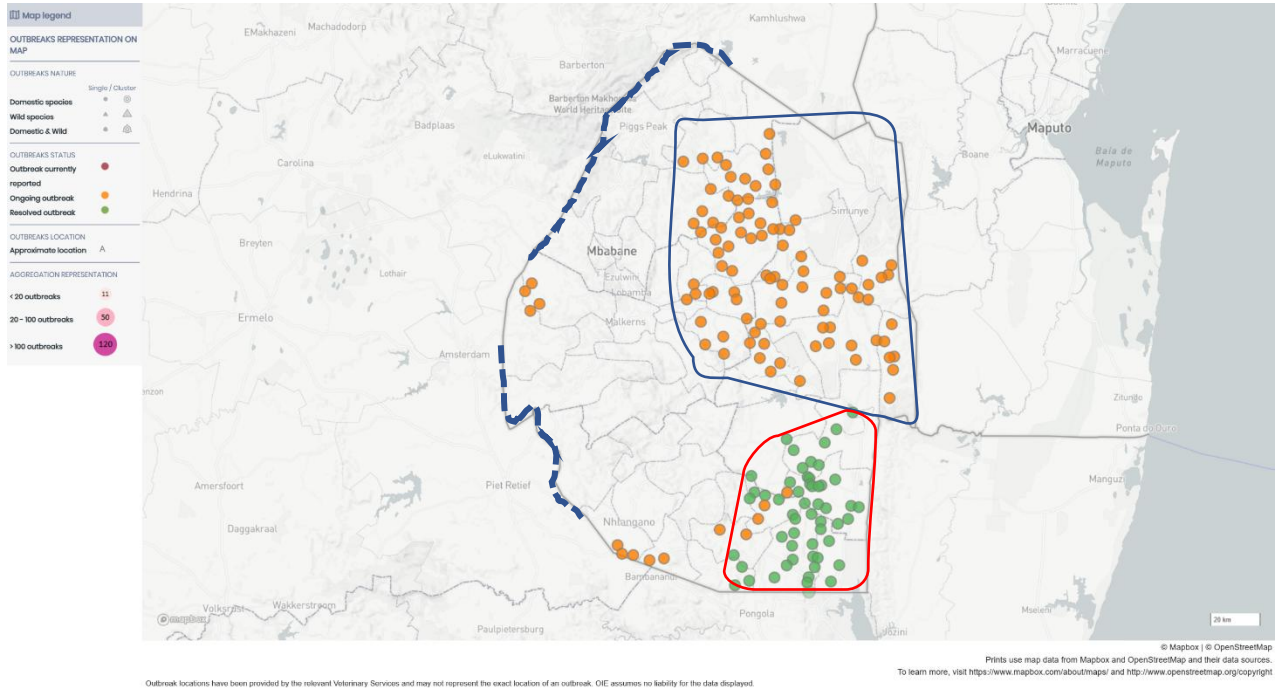


Figure 3 – Map of demarcated area for phase two vaccinations

The mass vaccination in the blue ring will cover all dip tanks under the following subregions:

- **Manzini:** Mliba, Luve, Manzini, Ngculwini, Sidvokodvo. This targeted area has a combined total of **197 dip tanks**, and estimated total of **125 000 cattle**.
- **Lubombo:** Malidza, Siteki -1, Siteki -2, Siphofaneni, Lomahasha, Tikhuba. This targeted area has a combined total of **153 dip tanks**, and an estimated total of **112 000 cattle**.

The red ring is the **Shiselweini and Lubombo** regions: Hluthi-Lavumisa-Lubuli corridor, where some dip tanks are now on the 4-6 months period and need to be given a booster shot to maintain immunity until the disease is in control. There is an estimate of **100 000 cattle** in this corridor.

The dotted lines are diptanks at high risk of disease introduction from South Africa based on the prevailing epidemiological situation. This targeted area has a total of 24 diptanks and an estimate of **20 000 cattle**.

Table 2. summary populations for phase 2 vaccinations

Area	Populations/ Doses	Doses
Manzini region	125 000 * 2	1 st + Booster
Lubombo region	112 000 * 2	1 st + Bosster

Hluthi – Lavumisa -lubuli	100 000	Booster
High risk diptanks in frontier line	20 000 * 2	1 st + Booster
Total	614 000	

Phase III – Reactive Ring vaccination

Phase III transitions from a proactive, blanket approach to a reactive, intelligence-led deployment. A protective ring will be established around any new, isolated detections to eliminate the virus before it spreads.

Implementation

Vaccination Targets & Timeline

To ensure high-level population immunity and eliminate virus circulation, the following metrics are non-negotiable:

- **Total Vaccine Doses:** 910,000 units.
- **Weekly Throughput:** 58,000 animals.
- **Duration:** 4 months (to cover primary and booster phases).
- **Work Schedule:** 5 days per week.
- **Teams:** 16 to 20 teams.

Human Resources & Team Structure

16–20 teams to be deployed using a blended workforce to address the scale of the outbreak:

- **Core Staff:** Current Veterinary Officers (VOs) and Veterinary Assistants (VAs).
- **Surge Capacity:** Recruitment of retirees and currently unemployed VAs, VOs and other personnel.
- **Team Composition:** Each team consist of a team leader (VO), supervisor (Animal Health Inspector) and 8 (vaccinators, recorders, branders) other members.

Logistics & NDMA Collaboration

National Disaster Management Agency (NDMA) will provide vaccination logistics under the following categories :

Category	Requirements
Camping & Subsistence	Camping/lodging sites for teams and daily meal provisions.
Cold Chain & Supplies	Vaccination guns, needles, and specialized coolers to maintain vaccine integrity.

Category	Requirements
Transport	vehicles for each team + fuel allocation for 4 months.
Biosecurity	Full PPE (overalls, boots) and disinfectants

Action Item: Communicate these requirements to NDMA in writing immediately. Specific challenges (e.g., vehicle shortages or cold chain gaps) must be documented and escalated to the Honorable Minister if not resolved within 7 days.

Vaccine Procurement & Alternative Sourcing

Given previous shortages, the vaccine supply chain will be diversified to ensure the 910,000-dose target is met:

1. **Botswana Vaccine Institute (BVI):** will be maintained as the primary supplier. Weekly demand updates to be provided to ensure there are no stock-outs
2. **Saudi Arabia:** Follow up on the pending response regarding potential emergency donations or subsidized procurement
3. **Argentina (Biogenesis Bagó):** Evaluate as a high-priority alternative.
 - **Criteria:** Must be PANVAC certified and WOAHA compliant.
 - **Verification:** Confirm cost-effectiveness, delivery lead times, and antigenic matching with local SAT 1 and SAT 2 strains.

Movement Control, Surveillance, & Biosecurity

Vaccination will be implemented in conjunction with movement controls and disinfections, including:

- Declaration and enforcement of Guard Areas and Scheduled Areas
- Checkpoints, permits, and enforcement by veterinary services and security agencies
- Quarantine and movement restrictions for all susceptible livestock, with the sole exception of animals designated for direct-to-slaughter purposes. These animals must be transported under veterinary escort, following established biosecurity protocols, to minimize the risk of viral spread during transit.

Infrastructure Strengthening

1. Rehabilitation of Sanitary Cordon Fences
 - a. Fencing material
 - b. Personnel
 - i. PPE
 - ii. Camping
 - iii. Food
2. **Regional Transboundary Coordination**
3. Community Sensitization (Behavioral Change)

Target: Livestock farmers, herd managers, and border communities in high-risk zones (e.g., Hluti, Tikhuba, Nhlangano).

Core Messaging: * Transmission Routes: Clarifying the role of animal-to-animal contact, contaminated products, and fomites (clothing/equipment) in spreading the virus.

On-Farm Biosecurity: Implementing simple, actionable hygiene measures, such as limiting unauthorized entry to kraals and cleaning footwear/tools

Surveillance and Rapid Notification (Data Integrity)

- **Goal:** Reduce the "time-to-detection" for new outbreaks.
 - **The Reporting Loop:** Implementing a tiered notification system:
 - **Farmer/Herder Level:** Immediate reporting of suspect cases (salivation, lameness, vesicles) to the local Veterinary Assistant (VA).
 - **VA Level:** Mandatory field inspection within 24 hours of report.
 - **Regional/Central Level:** Real-time data entry into the national disease surveillance database.
4.
 - a. Community sensitization (transmission, biosecurity)
 - b. Surveillance and notification
 5. Capacity Building Diagnostics-Lab (equipment)
 - a. Realignment of parastatal to cater for research in Livestock
 - b. Establish facility to produce veterinary and medicinal products
 6. Harness technology in Livestock Management e.g. Livestock Tracking
 7. Update Legislation on FMD control (penalties)
 8. Commerce, transition to normal trade
 9. Increasing national herd through ELVIS, AI

Activity	Details	Progress achieved	Outstanding	Responsible	Delivery time
Mass Vaccination					
Vaccination Plan	Vaccine Procurement	120 000 doses	790 000 doses	PS	April 2026
	Vaccination Teams Formation	11 teams	9 teams	DVLS	March 2026
Vaccination Logistics	Camping facilities	4 currently used (Mpsi VFTC, Manyonyaneni, Gesawu, Nhlanguano Farmer Training Centre)	CODEC, Caritas, Mphophoma, Tjaneni Country Club, Simunye Country Club, Magadzavane Lodge, More will be needed depending on area to be vaccinated	PS/ DVLS	March 2026
	Food	Groceries are bought for Nhlanguano, Mpsi and Manyonyaneni. Kitchen staff cook for the teams. Gesawu offers lodging and meals	Lodgings and meals	NDMA and PS	March to July 2026
	Vaccination supplies	Nothing has been delivered to date	See Attached L1	NDMA	March to July 2026
	Transport	24 vehicles (Double cabs, SUV, sedan, kombi)	16 vehicles	NDMA	March 2026
	PPE	Two piece Gum boots Safety shoots	Two piece 522 Gum boots 402 Safety shoots 201	NDMA	March 2026

		Rain coats Jackets Hats Leather gloves pair	Rain coats 201 Jackets 201 Hats 201 Leather gloves pair 240		
Alternative sources of vaccine supply	BVI Argentina Saudi Arabia	Maintain and update on demand with BVI	120 000 doses delivered 80 000 enroute Vaccine cost, delivery, vaccine matching, PANVAC certified, WOAH compliant Response from Foreign affairs	DVLS	March 2026
Movement Controls	Quarantine of diptanks	Placing on quarantine all diptanks within 10km radius			
	Setting up of checkpoints	<ul style="list-style-type: none"> • Full checkpoints <ul style="list-style-type: none"> ○ Sganganyaneni-Buhleni ○ Lozimvu-Buhleni ○ Tempest-Nhlangano ○ Ngwane-Nhlangano ○ Magalonini ○ Mahhoshe ○ Mashayekhatsi ○ Jerusalema-Mbulungwane ○ Sandleni-Mbulungwane ○ Gum Tree- Manzini ○ Nhlabeni-Manzini • Mini checkpoints <ul style="list-style-type: none"> ○ Tjendlovu ○ Mbelebeleni 	Pending; <ul style="list-style-type: none"> • Herefords-Buhleni • Mdvonsa- Ndzingeni • Holneck-Mahamba • Per required need (following potential spread) 	NDMA/DVLS	March-July 2026

		○ Lwandle/Mathayini-Manzini			
	Personnel	•			
	Food	•			
	Transport	1 x Transport	8 needed		
Rehabilitation of Sanitary Cordon Fences	Fencing material	7km erected at Mkhwakhweni area 19km erected at Sitsatsaweni area (outer cordon fence)	600 km outer fence 171 km inner fence (veldspan) Consider Zoning; requires an inner cordon south to west frontier.		March 2026 – March 2027
	Microprojects	Overseeing rehabilitation of Sitsatsaweni- Mhlumeni cordon	Pending engagement to oversee rest of cordon fence	DVLS/NDMA	March 2026- March 2027
Regional Cooperation	Trilateral Communication with neighboring countries through Ministry of Foreign Affairs	Ministry of Agriculture requested Ministry of Foreign Affairs to engage South African counter parts on the maintenance of the frontier lines.	Response from Ministry of Foreign Affairs.	PS	March 2026
Awareness/Sensitization	Community sensitization (transmission, biosecurity)	Ongoing	Ongoing	DVLS	March-July 2026
Surveillance	Inspection, mouting and reporting on disease occurrence.	Ongoing. Passive surveillance- national Active surveillance- risk based	Ongoing	DVLS	March-July 2026

	Laboratory confirmation.				
Capacity Building Diagnostics-Lab (equipment)	<p>Realignment of parastatal to cater for research in Livestock</p> <p>Establish facility to produce veterinary and medicinal products</p>				
Harness technology in Livestock Management e.g. Livestock Tracking					
Update Legislation on FMD control (penalties)					
Commerce, transition to normal trade					
Increasing national herd through ELVIS, AI					

