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PPR situation in Georgia

National Food Agency

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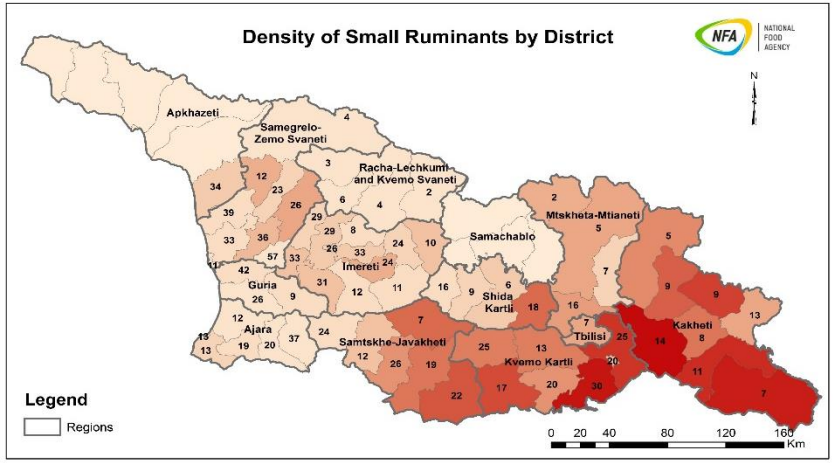
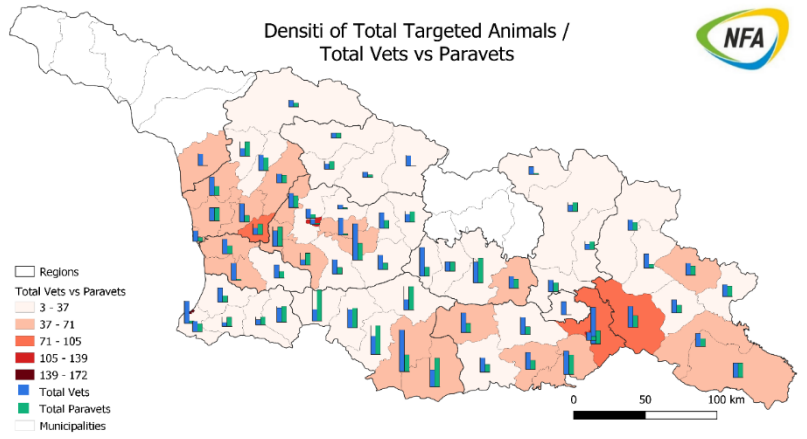
Brief overview of PPR epidemiological situation

1. Small ruminant population – 1 000 000;
2. History of PPR outbreaks in the country – first outbreak in 2016;
3. Current PPR epidemiological situation – second outbreak in 2024;

	2020	2021	2022	2023	2024
No. of reported outbreaks	-	-	-	-	1
No. of confirmed outbreaks	-	-	-	-	1





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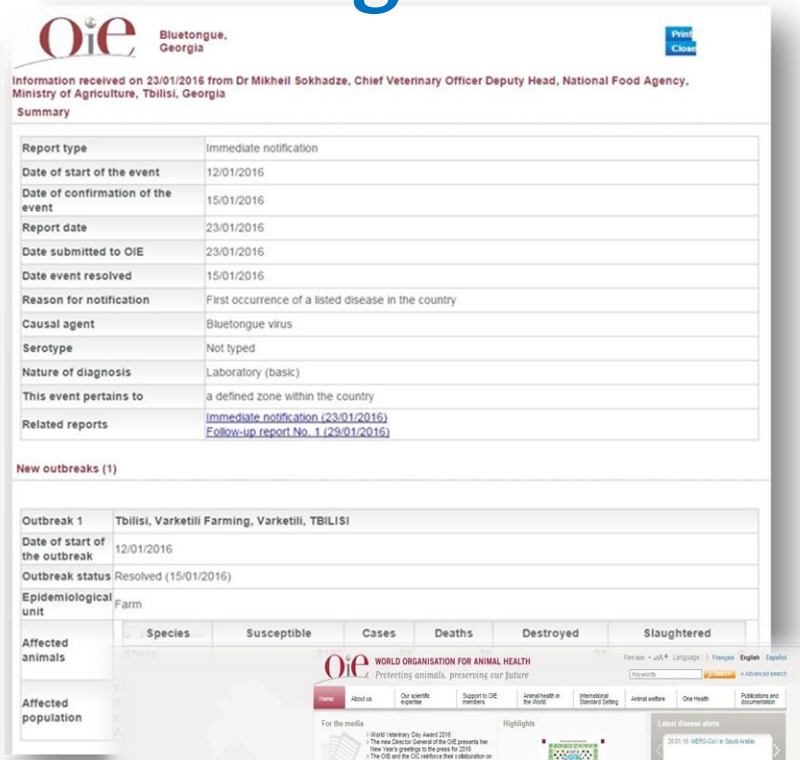
Brief overview of PPR epidemiological situation

- *History of PPR outbreaks*
- The first outbreak was reported in 2016
- Sheep farm located in Tbilisi Region
- “Unknown” disease accrued only in Lambs
- Clinical signs started at the end of December
- Flock moved from the Samtskhe-Javakheti region in November


OIE Bluetongue, Georgia

Information received on 23/01/2016 from Dr Mikheil Sokhadze, Chief Veterinary Officer Deputy Head, National Food Agency, Ministry of Agriculture, Tbilisi, Georgia

Summary

Report type	Immediate notification
Date of start of the event	12/01/2016
Date of confirmation of the event	15/01/2016
Report date	23/01/2016
Date submitted to OIE	23/01/2016
Date event resolved	15/01/2016
Reason for notification	First occurrence of a listed disease in the country
Causal agent	Bluetongue virus
Serotype	Not typed
Nature of diagnosis	Laboratory (basic)
This event pertains to	a defined zone within the country
Related reports	Immediate notification (23/01/2016) Follow-up report No. 1 (29/01/2016)

New outbreaks (1)

Outbreak 1	Tbilisi, Varketili Farming, Varketili, TBILISI
Date of start of the outbreak	12/01/2016
Outbreak status	Resolved (15/01/2016)
Epidemiological unit	Farm

	Species	Susceptible	Cases	Deaths	Destroyed	Slaughtered
Affected animals						
Affected population						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Brief overview of PPR epidemiological situation

- A second outbreak was reported in 2024;
  - START DATE - 2024/02/22;
  - CONFIRMATION DATE - 2024/03/01;
- Susceptible – 1700;
  - Cases – 95; Death – 77; Killed – 18;
- Sheep farm located in Kvemo Kartli Region;
- Flock moved from the Samtskhe-Javakheti region in November

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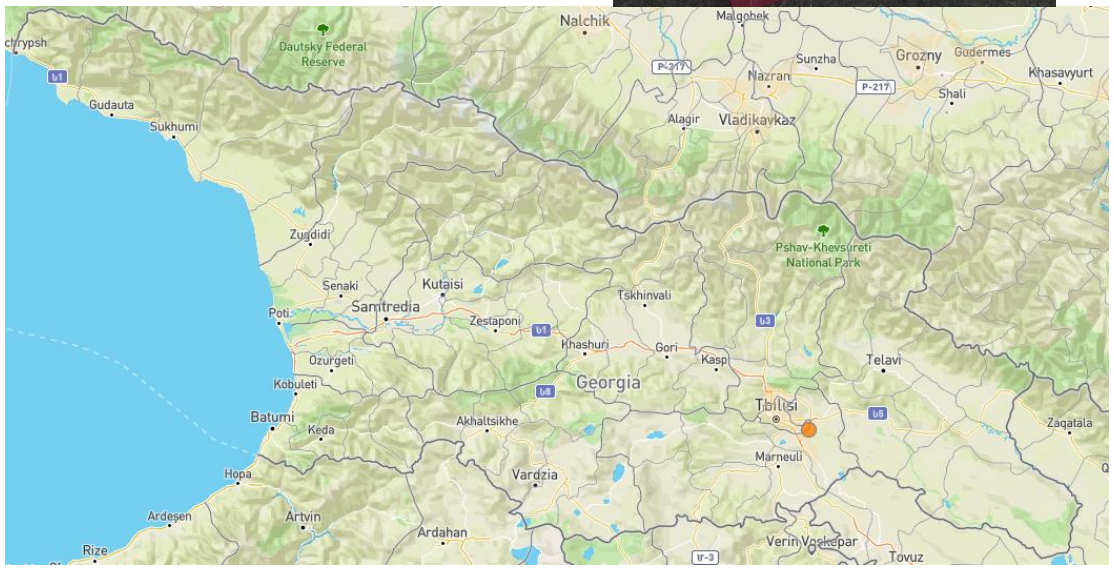
Control Measure

- Disinfection;
- Movement control;
- Official destruction of animal products;
- Official disposal of carcasses, by-products and waste;
- Quarantine;
- Surveillance outside the restricted zone;
- Selective killing and disposal;
- Surveillance within the restricted zone;



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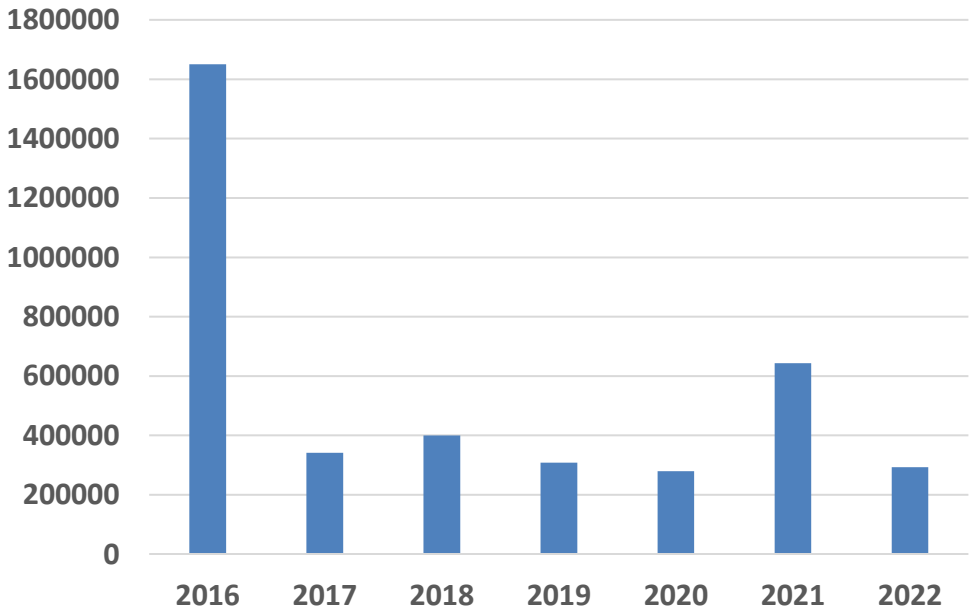
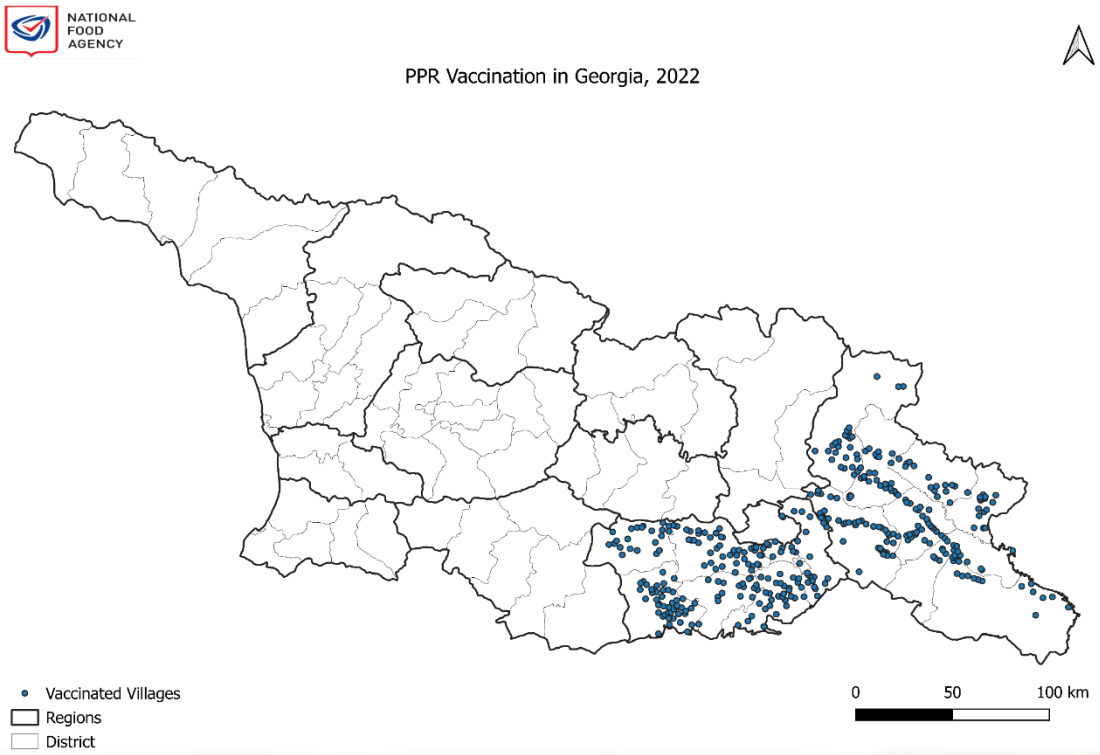
PREVENTION AND CONTROL

FAO has donated 400 000 doses PPR vaccine in 2020 and 500 000 doses in 2022

PPR Vaccination / revaccination of SR 2016-2022YY





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Vaccination Campaign

	2020	2021	2022	2023	2024
No. of vaccination doses used	279 382	643 088	293 083	-	800 000
Post vaccination evaluation	70%	84%	90%	-	ongoing
Cost of vaccination campaign	150 000	200 000	150 000	-	97,223.00
Source of funding	NFA /FAO	NFA	NFA /FAO	-	NFA /FAO

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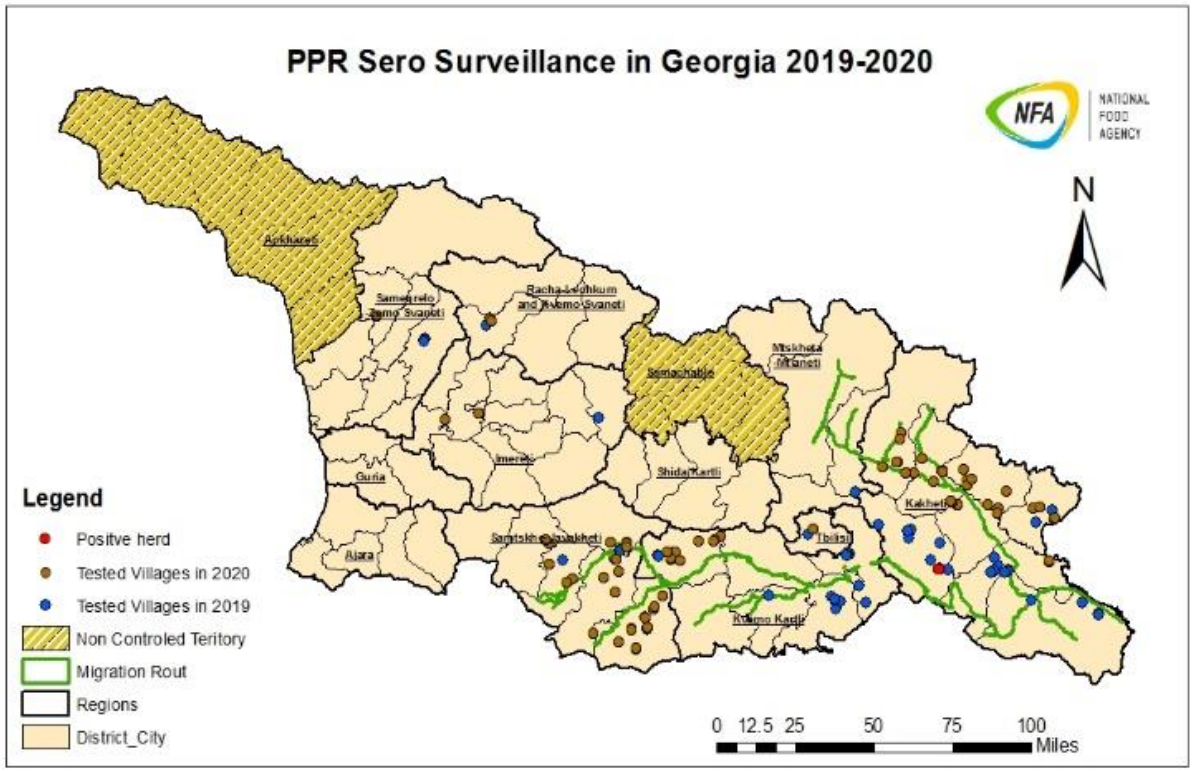
PREVENTION AND CONTROL

- Active serosurvey campaign (Project) in Georgia which was funded by DTRA;
- Totally 3 200 SR has been tested under this project;



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Participatory Surveillance

- The study was carried out in Georgia in June 2019;
- Four Regions were included in the study:
  - Kakheti,
  - Kvemo Kartli,
  - Samtskhe-Javakheti,
  - Tbilisi.

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Perceptions of pastoralist problems: A participatory study on animal management, disease spectrum and animal health priorities of small ruminant pastoralists in Georgia

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ABSTRACT

Small ruminants support the livelihoods of millions of poor pastoralist and sedentary households around the world. While pastoralists are generally not amongst the poorest in terms of assets, they are frequently marginalised in terms of their access to political power, health and education. This study was undertaken among pastoralist households keeping small ruminants in four regions of the country of Georgia. Small ruminants are an important cultural, social and economic asset in Georgia and are mainly managed in a transhumant pastoralist system. Georgia suffered its first, and so far only outbreak of peste des petits ruminants (PPR) in 2016. This qualitative interview study was designed to acquire contextual understanding of local small ruminant husbandry and the livelihood situations of the participating pastoralists, and to detect historical, unreported PPR outbreaks. Focus group discussions comprising participatory epidemiology tools and other forms of interviews were used to explore small ruminant management, disease spectrum and management, and animal health priorities.

The participants had experienced a wide variety of animal health constraints, with intestinal worms, braxy, piroplasmosis, pasture-related problems, predators and lameness emerging as priorities. No historic, unreported PPR outbreak was detected in this study, and PPR was not a priority for participants. Instead, the day-to-day reality of animal health for the pastoralists was characterised by co-infections of mainly endemic pathogens, and problems related to other challenges such as access to land, feed and genetic resources. The rationale behind the participants' prioritisation of animal health problems was supported by the need to pay extra attention to animals in order to avoid risk factors, keep animals healthy and minimise the negative impact of diseases or management problems; the various epidemiological and clinical parameters of the prioritised diseases; the economic impact of the specific problems and the zoonotic potential of diseases and predation. Even within regions, and within seemingly socially and culturally homogenous groups, there were important local differences in the problems faced by pastoralists that affect their livestock management. This study underlines the importance of a contextualised understanding of the local disease panorama and complexities in the livelihood situations of rural people when designing actions to improve animal health in general or, more specifically, passive surveillance as well as prevention or control measures. Finally, it is concluded that to achieve such an understanding, there is a need for participatory, scoping-style studies that specifically acknowledge diversity and power relations.

Perceptions of pastoralist problems: A participatory study on animal management, disease spectrum, and animal health priorities of small ruminant pastoralists in Georgia

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Training and Awareness Campaign

- Trainings for official veterinarians
- Trainings for private veterinarians
- Different booklets and informational papers were distributed to the farmers During vaccinations and the survey process.
- Veterinary authorities collaborate closely with sheep associations and other private sector organizations.

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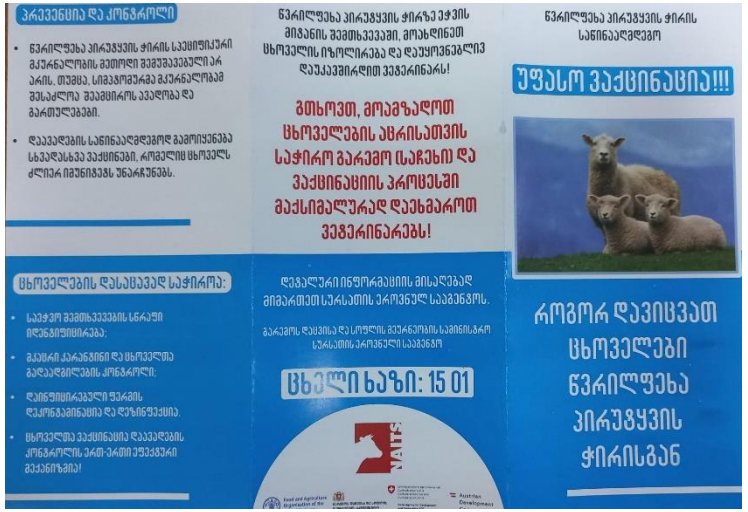
2024 FAO Support

- 1 000 000 doses of PPR vaccine donation;
- 1 000 000 disposable injection needles for vaccination;
- 1 000 double ended vacuum needles;
- 1 000 vacuum tub serum separation;
- 250 cool boxes for field veterinarians;
- Leaflets for farmers;



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Risk assessment through ArcGIS

Animal Density SR/LR;

Seasonal Migration SR/LR;

Live Animal Market;

Vet inspection points;

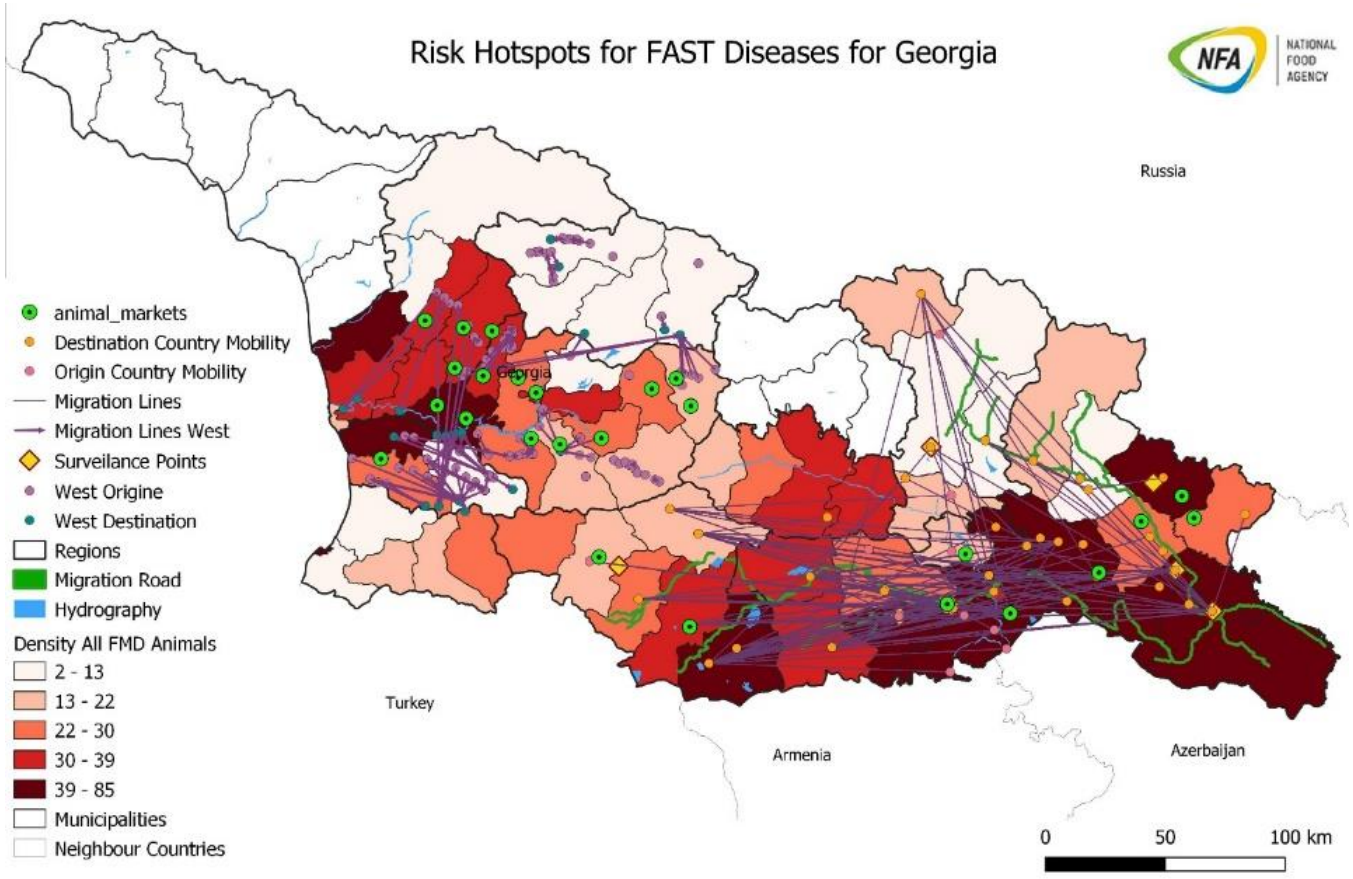
Water sources;

International Trade;

Pasture;

Animal Market;

Quarantine Zones;



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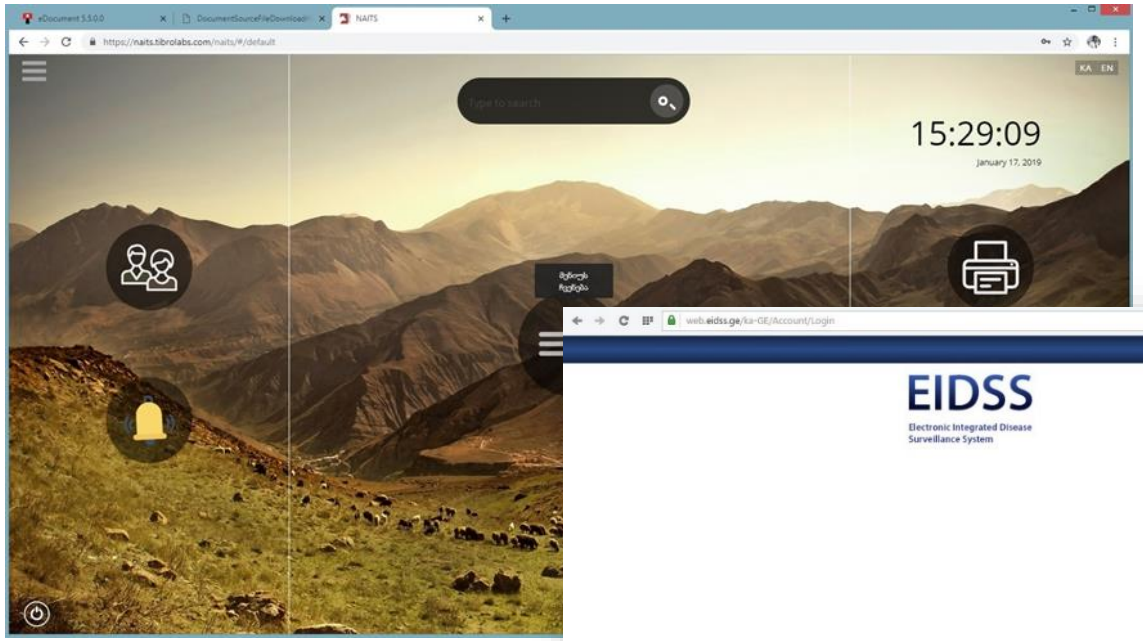
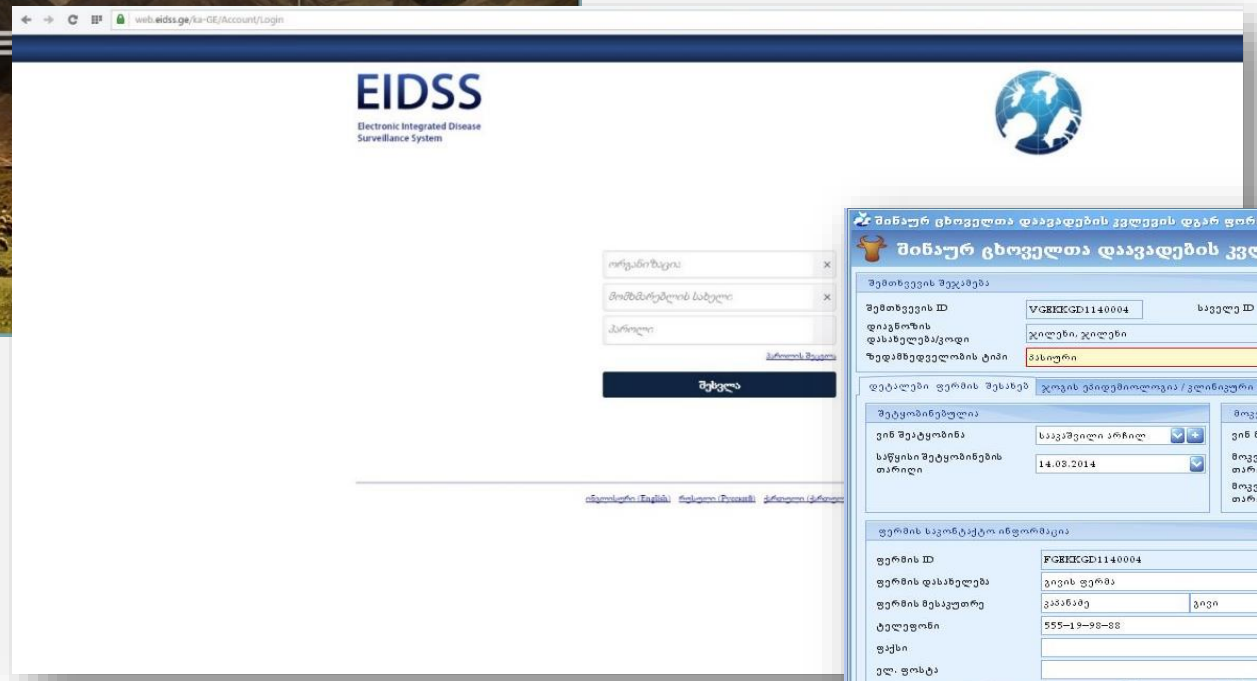
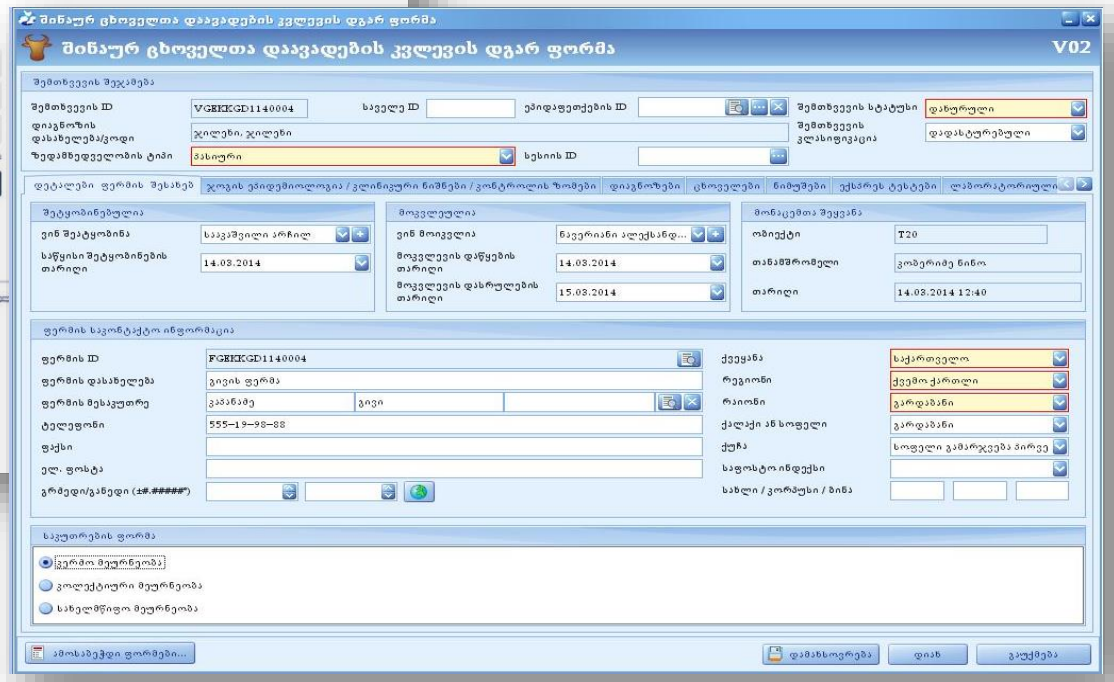
Electronic systems EIDSS and NAITS







System includes Veterinary, Human Health, Laboratories;

System ensures quick exchange of information and creation of database;

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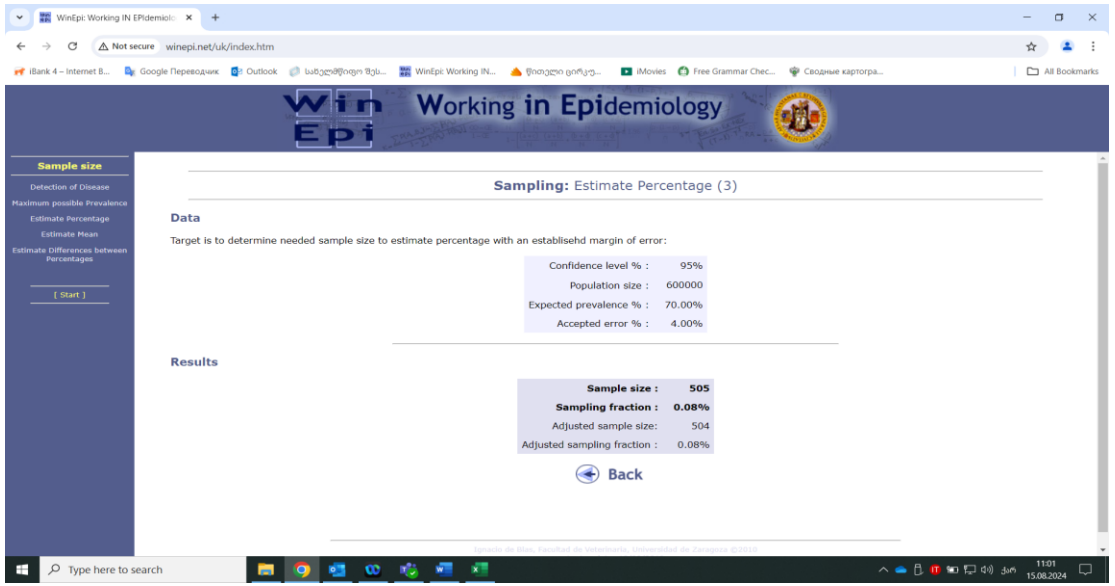
Post Vaccination Sero Surveillance 2024

1. *Confidence level – **95%;** population size – N of animals 600000; Expected prevalence – 70%, error 4 % in which **505 SR** were identified, which was rounded by **500 samples**.*
2. Sample size calculations were calculated using online sample size calculation: http://www.winepi.net. (Sample size/estimate percentage) *Confidence level – 95%; population size – N of municipalities 22; Expected prevalence 90%,* error 15% according to this calculation, **10 municipalities** will be tested;
3. The total sample size is 500 samples divided into ten municipalities (500/10=50), which means that 50 samples are in each randomly selected municipality (50*10).



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Surveillance strategy 2025

- The National Surveillance Plan for PPR has been elaborated;
- SOP and Guidelines have been updated for active surveillance;
- Case definition has been elaborated;
- Study design for 2025 seromonitoring has been elaborated;
  - Confidence Level 95%;
  - Population size – 1 000 000 SR;
  - Expected prevalence – 10%;
  - Accepted Error – 2%;
- 865 animals will be tested in 2025;
- Awareness campaign to support passive surveillance and increase notifications;

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Post-vaccination evaluation (lessons learnt)

- Animal identification and registration are crucial;
- Vaccination should be done before or after migration;
- High-quality thermo boxes in the field are crucial;
- Clear and transparent communication can help maintain or build public trust in vaccination programs;
- Local veterinarians are recommended to work in the community;

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PPR NSP implementation

- The government does not approve PPR NSP, it is submitted to the head of NFA for approval;
- What was achieved in the last 3 years in relation to the NSP activities?

1. Rigorous vaccination campaigns;
2. Establishment of robust surveillance systems;
3. Capacity building for veterinary professionals;
4. Fostering collaboration among stakeholders;

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PPR NSP implementation

- what worked well:
  - Availability of diagnostic tests RT-PCR;
  - Implementation of quality assurance and quality control systems in laboratories;
  - Participation in proficiency testing for diagnostic activities;
  - Easy and reliable access to reporting systems for veterinarians and livestock keepers;
  - Timely investigation and characterization of suspected PPR cases;
  - Integration of PPR prevention and control activities with other small ruminant disease control efforts;
  - Existence of legal measures for emergency response and import control;
  - Development and availability of communication/awareness materials for different stakeholders;

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PPR NSP implementation

- Challenges and drawbacks:
  - No surveillance of PPR in wildlife;
  - Animal migration;
  - Movement control;
  - Lack of legal basis for compensating farmers in case of culling for eradication;
  - No sufficient sanitary conditions in compartments;
  - Limited awareness among stakeholders about PPR eradication efforts and their roles;
  - Lack of private sector involvement in disease prevention and control;

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PPR NSP implementation

- Priority actions for 2024/2025
  - Mass vaccination campaign for all targeted populations;
  - Implementation of active surveillance system:
    - Serosurveillance;
    - Participatory surveillance;
  - Increase traceability system in small ruminants:
    - Animal Identification;
    - Animal registration;
    - Farm registration;

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Epidemiological Assessments to Identify Peste des Petits Ruminants (PPR) Risk Hotspots and Transmission Pathways in Georgia

- Extensively review of literature on PPR disease in Georgia;
- Map the key stakeholders of the small ruminant value chain (including public and private sectors) and small ruminant movement/density with thoroughness and inclusivity.
- Analyse market networks for small ruminants and identify potential disease hotspots and transmission pathways.
- Prepare overall monitoring and surveillance system/Plan for the country;
- Conduct risk-based survey and PPR disease outbreak investigations complemented with biological sample collection and analysis;
- Validation of the PPR risk map and the surveillance strategy/plan with key stakeholders nationally (25-30 people);

Thank you