# MINISTRY OF AGRICULTURE OF AZERBAIJAN REPUBLIC STATE VETERINARY CONTROL SERVICE

# BRUCELLOSIS IN AZERBAIJAN and REGIONAL PERSPECTIVES (CENTRAL ASIA)



Sixth GF-TADs for Europe Steering Committee meeting

01 October 2015 Brussels, Belgium

# Background

- Brucellosis is still endemic in Central Asian countries, including Azerbaijan, epizootic situation remains rather strained and complicated for many years.
- For the first time brucellosis was detected in Azerbaijan in 1937. Since this time, disease is annually registered among animals in all regions of republic.
- In Azerbaijan brucellosis is one of priority diseases, preventive actions are financed from State Budget

## Main activities

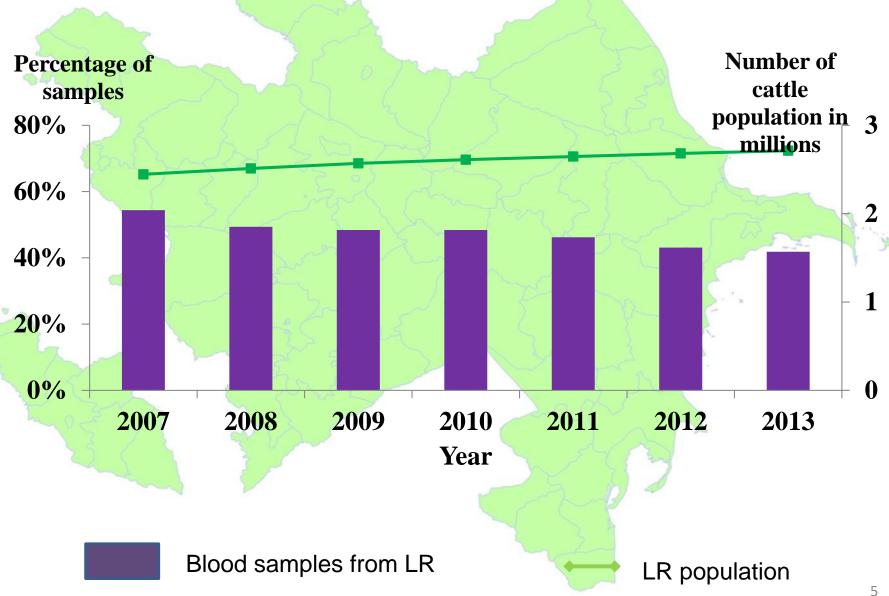
- Defining infected and non-infected units by seromonitoring of susceptible animals
- Carrying out designed seromonitoring campaigns in the first half of the year (random selection) from all districts annually
- Testing of collected samples by screening test (Rose Bengal Test); all positive results confirm by the CFT and ELISA
- All laboratory-confirmed sick animals are subjected to forced slaughter
- Carrying out necessary veterinary-sanitary measures to prevent spreading of disease
- Awareness campaigns



# Seromonitoring among LR in Azerbaijan in 2007-2015

- More than 9,7 million (47% in average of the total livestock) blood samples for the period 2007-2013 were collected and tested
- More than 1,12 mln (42% of the total livestock) blood samples in 2014 and 1,16 mln (45%) in 2015 were collected and tested

#### Percentage of tested blood samples from LR in Azerbaijan in 2007-2013

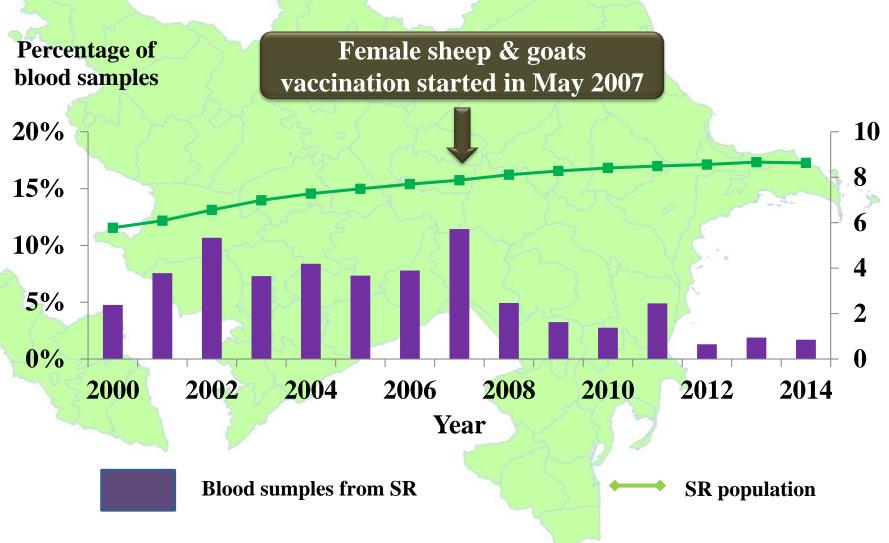




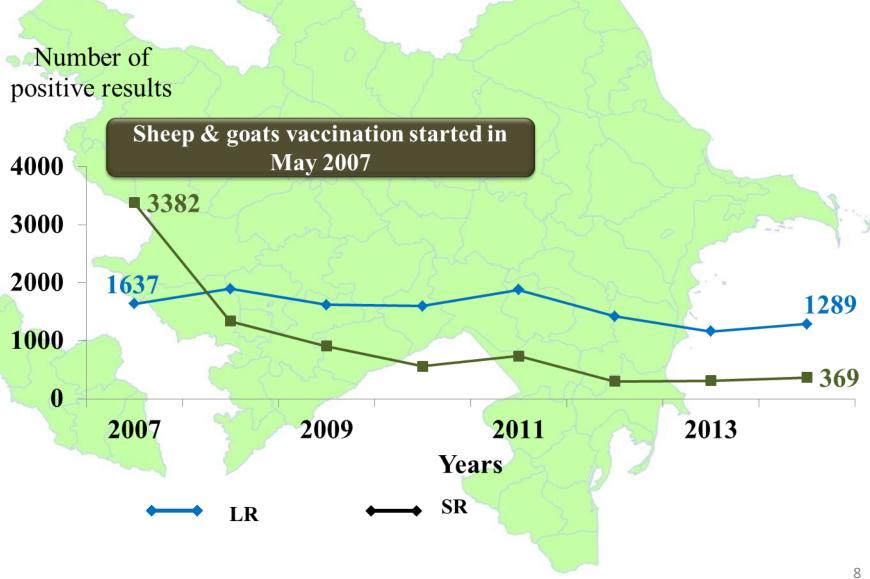
# Seromonitoring among SR in Azerbaijan in 2007-2015

- More than 2,4 mln (4% of the total livestock) blood samples in 2007-2013 were collected and tested
- More than 150 000 (1.7%) blood samples in 2014 and 415 000 blood samples in 2015 (4,6% of the total livestock) were collected and tested

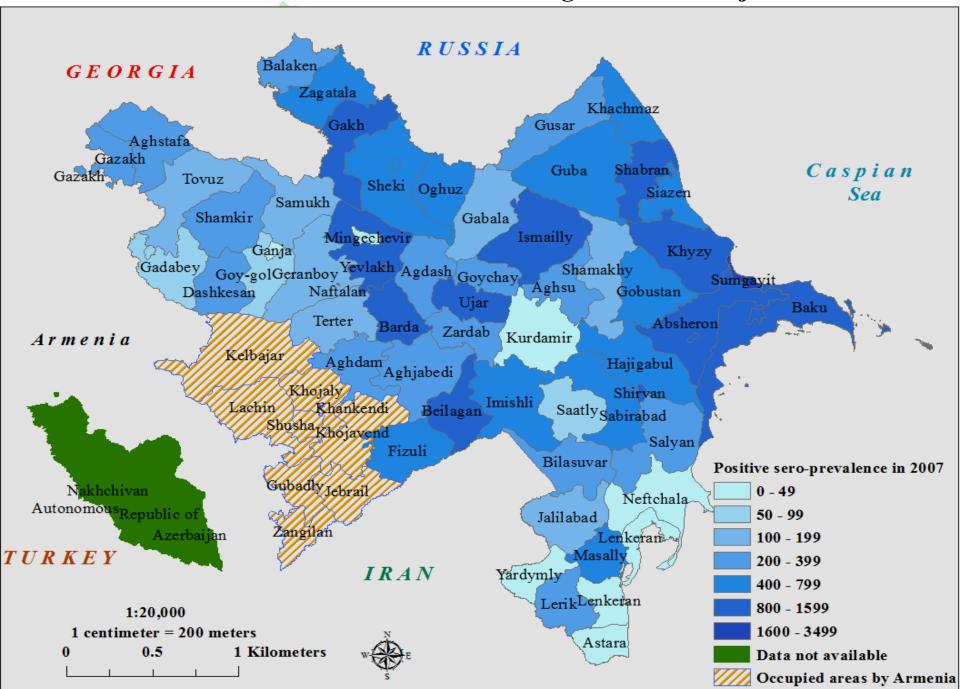
# Percentage of tested blood samples among SR in Azerbaijan in 2000-2014



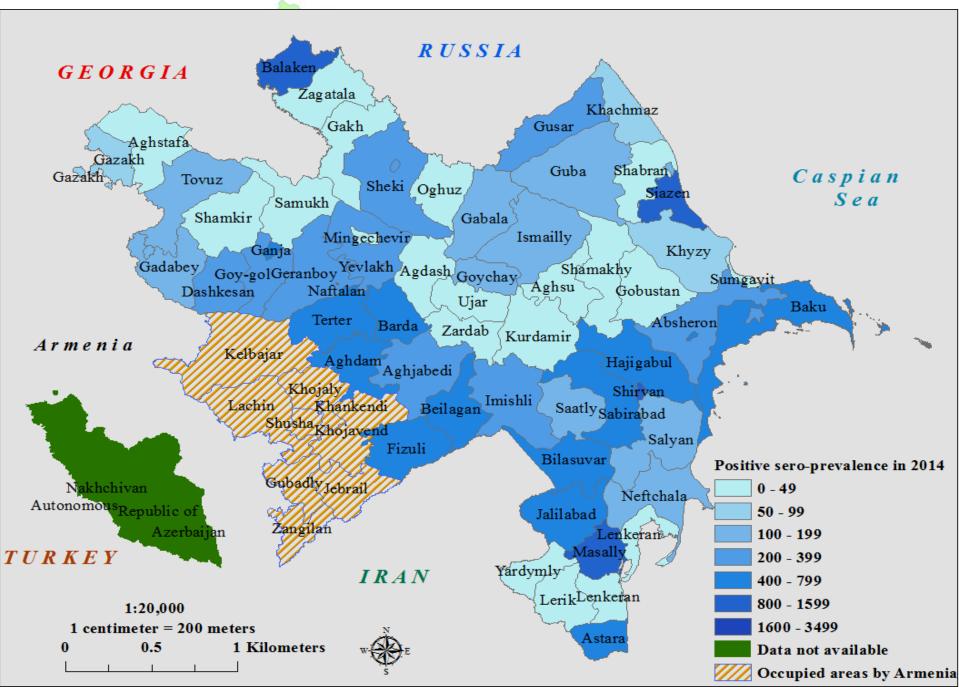
#### Number of Positive Results Among LR & SR in Azerbaijan in 2007-2015



#### Annual Positive Serum Prevalence Among SR in Azerbaijan in 2007



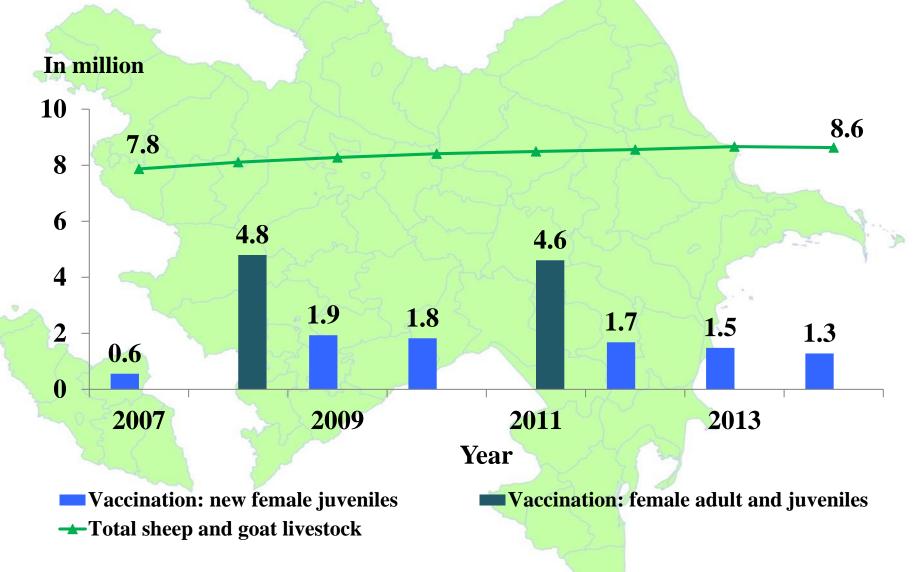
#### Annual Positive Serum Prevalence Among SR in Azerbaijan in 2014



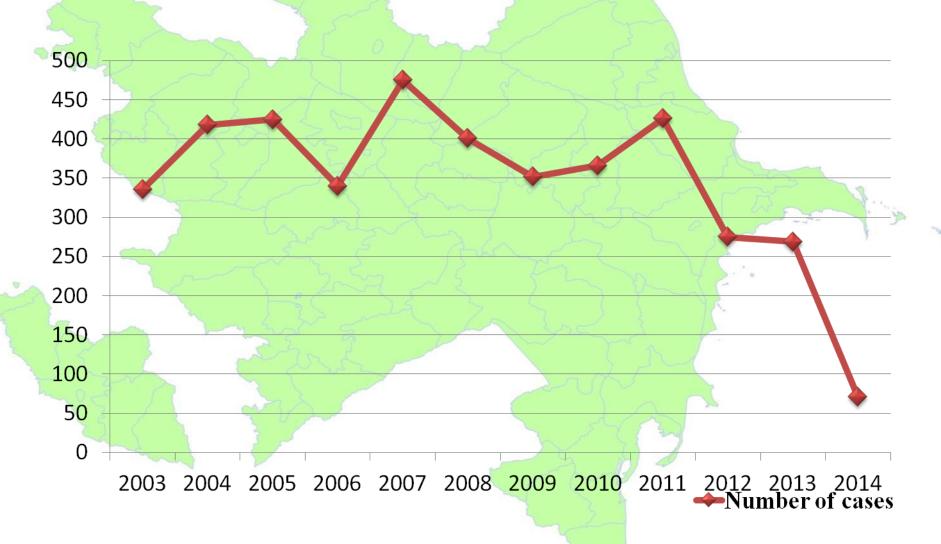
#### Sheep and Goats Vaccination with Rev-1 vaccine

- Sheep and goats' vaccination was launched in May 2007 with the application of subcutaneous vaccine made in the Republic of Kyrgyzstan, the immunity duration was 2 years
- World Bank funded vaccination with eye drops was begun with a pilot program (2008-2010) in four districts of the country (Sheki, Balakan, Qakh, Zaqatala)
- Since 2011 the vaccination is carried out all over the country with the vaccine (eye drops) made in Jordan, the immunity duration is 4 years

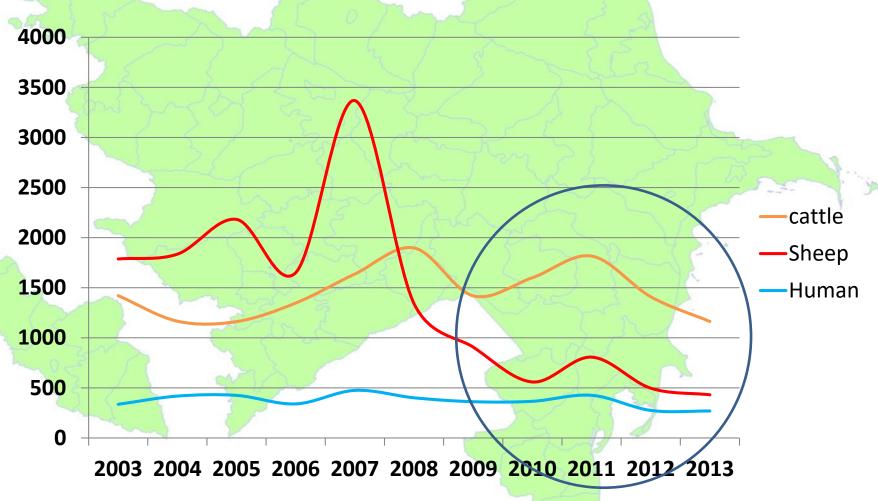
#### Number of Vaccinated SR in Azerbaijan in 2007-2014



## **Human cases**



# Interrelation between cases among people, sheep and cattle



#### CONCLUSION

#### • LR:

- 1 289 (0.11%) of positive results in 2014
- 12 507 (0.13%) of positive results within 2007-2014 Indicator of positive serum prevalence of tested blood samples decreased from 123/100,000 in 2007 to 114/100,000 in 2014, which is relevant to 7% reduction

#### • **SR**:

- 369 (0.25%) of positive results in 2014
- 7 902 (0.32%) of positive results within 2007-2014
  Indicator of positive serum prevalence of tested blood samples decreased from 376/100,000 in 2007 to 246/100,000 in 2014, which is relevant to 35% reduction
- Despite the reduction of the number of tested blood samples among the SR (between 2007 and 2014), a substantial decrease of serum prevalence indicators has been observed since 2007, which means that the vaccination program shows its efficiency

# Our plans

- WB Project (2015 2019) has started activities for technical assistance on prevention and surveillance on brucellosis
- Trainings for epidemiologists and laboratory specialists in all districts (already 418 specialists have trained)
- Providing of diagnostic kits and vaccine
- Autumn 2015 seromonitoring campaign for LR and SR to define positive prevalence
- March 2016 vaccination campaign for SR
- October 2016 –vaccination campaign for LR

### REGIONAL PERSPECTIVES

 Develop regional cooperation and harmonization of brucellosis control in animals and humans

sharing information
harmonized vaccination campaigns
quality of vaccines

surveillance activities

- Enhance capacity of national veterinary services to develop and implement National Strategy Plan in each country
- Develop of intersectoral collaboration and public awareness for brucellosis

### REGIONAL PERSPECTIVES

Supporting from Government is necessary:

- Harmonization of legislation
- Establishment of identification system of animals
- Establishment slaughter-houses for sanitary slaughtering of infected animals
- Improving of compensation system for owners slaughtered infected animals

