



6th Annual West Eurasia Roadmap Meeting

FMD CONTROL AND PREVENTION IN ARMENIA

Satenik Kharatyan

NC of EUFMD project in Armenia

28-30 April 2014
Almaty, Kazakhstan



REPUBLIC OF ARMENIA

- Area – 29,800 km²
- Population – 3000000
- Capital – Yerevan
- Administrative –
territorial units –11 marzes,
40 districts
- Total border length – 1420 km



Armenia Map



FMD Susceptible animal population in Armenia

- The most common husbandry system can be characterized as family type ; <10 cattle, 3-4 pig, <10 sheep
- Most of them use a mixed type of rearing system depending on region

| Species | Population sizes |
|---------|------------------|
| LR | 675616 |
| SR | 729358 |
| Pig | 131075 |



Activities to address Gaps identified in 2014 Roadmap meeting

- SVO identified and affirmed an FMD Roadmap focal point for communication.
- Strategy are based to the mass vaccination.
- The vaccine amount were obtained a little more doses than the previous year.
- National FMD Task Forces (Nat. risk assessments, planning and implementation of FMD control and monitoring).
- In the process of development the Risk based strategy plan based on the guiding document on Developing a Risk –Based Strategic Plan for Control of FMD



Activities to address Gaps identified in 2014 Roadmap meeting

- Increasing the control tools of work of district veterinarians, evaluation of cool chain during vaccination campaign (distribution, transportation, storage, using) was conducted.
- Reconstruction of animal migration routes.
- Develop the slaughtering procedure and meat produced (reduction of slaughtering animals in the yard, 5 typical slaughterhouses start to action in total volume).





Activities to address Gaps identified in 2014 Roadmap meeting

- Develop information systems (with paper report system develop centralized and computerized system)- ANIPAS, LIMS.
- Randomly collected samples from exported animals for laboratory tests: SP and NSP.
- Data sharing within the region using of the EMPIRES-i.
- Strengthen laboratory capacity.
- Participation in WRL proficiency tests.
- Updated and reviewed SOPs for laboratory and field works.



Description of 2014-2015 FMD surveillance results

- **Vaccination** –FMD national strategy was based on the vaccination of susceptible LR animals and SR in the risks zones.
- Vaccination was performed twice a year– in spring and in autumn. Small ruminants are vaccinated only once. Only registered vaccines are used in immunization, agreeable to the OIE standards, particularly vaccine produced by RF (Pakrov biofabric). High potency vaccine ($\geq 6\text{Pd}50$) have been purchased, which are expected to provide better protection.



Description of 2014-2015 FMD surveillance results

- **TV vaccine-A Iran05, O PanAsia2, Asia1 Georgia2001**
- In 2014 were vaccinated
 - 1960302 LR (twice and revaccinated calves)

Prevalence of vaccination – 100%

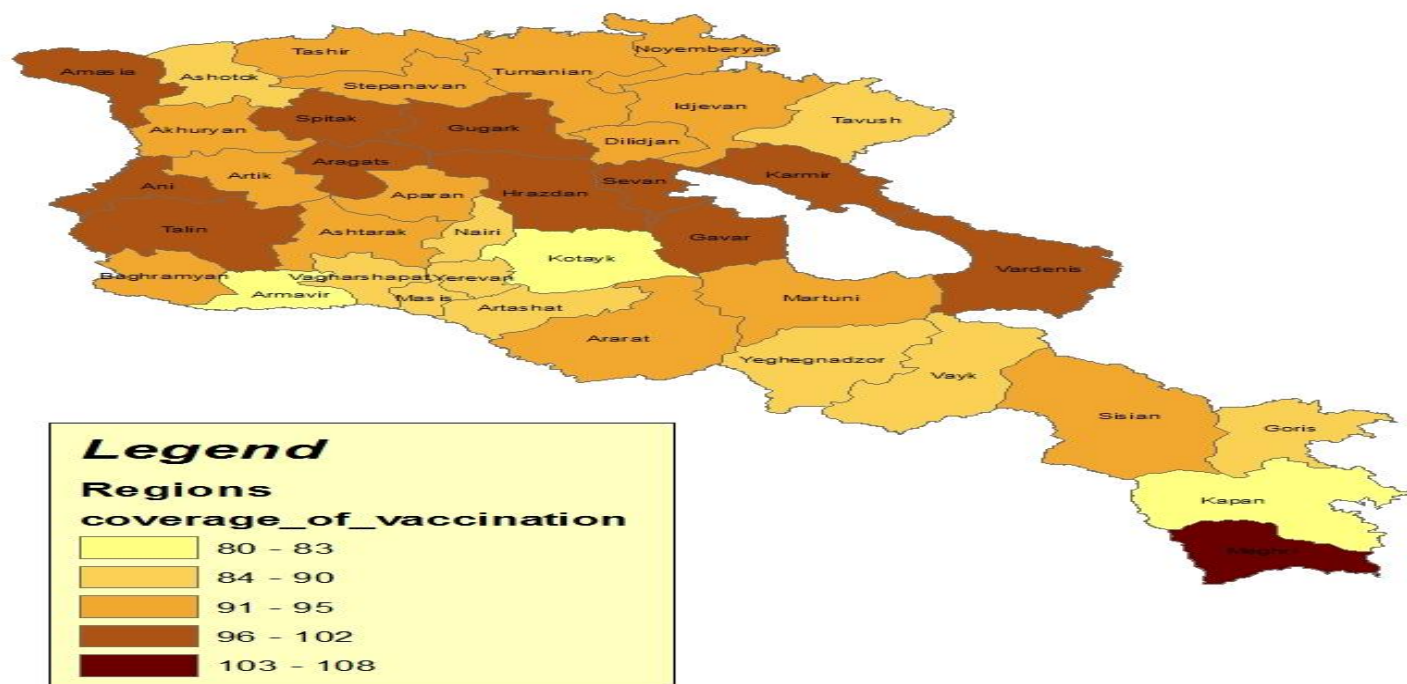
revaccination – 83%

- 413467 SR were vaccinated

Prevalence of SR vaccination - 58%



FMD Vaccination coverage of LR, 2014



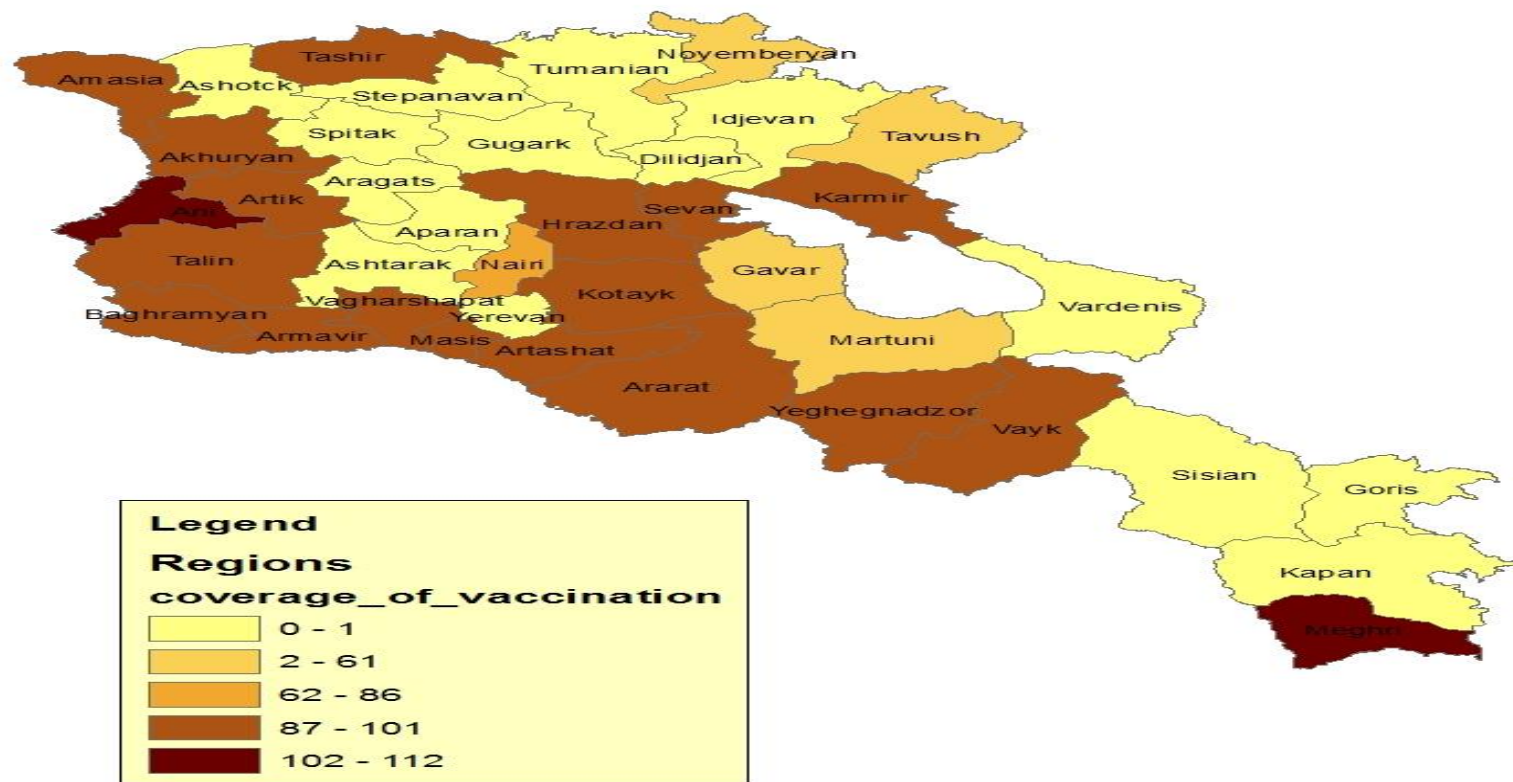


Coverage of FMD vaccination 2014

| N | Region_ID | vacc_LR | N_LR | Cov_vacc_LR | Vacc_SR | Num_SR | Cov_Vacc_S R |
|----|--------------|----------------|---------------|--------------|---------------|---------------|-----------------|
| 1 | Aragatsotn | 259640 | 85161 | 95,28 | 47182 | 95914 | 49,19 |
| 2 | Ararat | 126153 | 44225 | 89,14 | 81547 | 81369 | 100,22 |
| 3 | Armavir | 148431 | 54984 | 84,36 | 91169 | 92485 | 98,58 |
| 4 | Gegharquniq | 353235 | 112265 | 98,33 | 50044 | 101388 | 49,36 |
| 5 | Lori | 247163 | 81540 | 94,72 | 4120 | 32190 | 12,80 |
| 6 | Kotayq | 165937 | 59455 | 87,22 | 41514 | 44247 | 93,82 |
| 7 | Shirak | 321585 | 105729 | 95,05 | 68976 | 86484 | 79,76 |
| 8 | Syuniq | 162288 | 56273 | 90,12 | 3082 | 101559 | 3,03 |
| 9 | Vayots Dzor | 64036 | 22738 | 88,01 | 21343 | 21377 | 99,84 |
| 10 | Tavush | 104478 | 35960 | 90,79 | 4490 | 15734 | 28,54 |
| 11 | Yerevan | 7356 | 2673 | 86,00 | 0 | 1984 | 0,00 |
| | Total | 1960302 | 671786 | 91,19 | 413467 | 710248 | 58,21 |



FMD vaccination coverage of SR, 2014





Description of 2014-2015 FMD surveillance results

- The sero-surveillance was not planned generally in 2014, (lack of budget for the purchase of kits).
- but 291 samples of LR were tested NSP and SP (samples were selected randomly from the part of the animals of exported)



Result of sero-survey (NSP), 2014

| Type of animal | Number of sample | Positive sample | % |
|----------------|------------------|-----------------|-----|
| Cattle | 291 | 8 | 2,7 |



Result of th sero-survey (SP), 2014

| Type of animal | Number of sample | A % | O % | Asia 1 % |
|----------------|------------------|-------|-------|----------|
| Cattle | 291 | 96,56 | 97,94 | 95,94 |



Major FMD control measures described in control plan

- ***Description of vaccination plans:***

Approximately 2.106.000 doses TV vaccine of FMD were purchased by government of Armenia for 2015

The vaccine potency is $\geq 6PD_{50}$ and

strain are A Iran 05, O PanAsia2, Asia1 Georgia 2001

Planned to vaccinated 100 % of susceptible LR

58% of SR

- ❖ Vaccination of LR – all population twice per year (spring and autumn), 100 % coverage
- ❖ Re-vaccination for calves - 3 times every 3 months (till 18 months)
- ❖ SR once a year – chosen risk zones (borders, around live animal markets and migration ways)



Major FMD control measures described in control plan

- Plans related to FMD surveillance and control in the short term
- Finalise the National Risk Based Strategy plan
- Vaccination of LR – all population twice per year (spring and autumn) and revaccination of calves each 3 months.
- Vaccination of SR – all population in risk zones (borders, around live animal markets and migration ways), and in case of enough funds – all SR population in country at least once per year (in spring).
- FMD risk assessment and analyses, evaluation of the international epizootic situation, the presence of outbreaks in neighboring countries.



Major FMD control measures described in control plan

Plans related to FMD surveillance and control in the short term

- Start process of LR registration and identification.
- Finalize the membership of EuFMD.
- Improvement of animal movement control and strengthening control in the pastures.
- Strengthening quarantine measures on borders.
- Carrying out serosurveys, including markets.
- Activity action of slaughter-housing procedure.
- Improve public awareness, communication activities and cooperation with public and private sector.
- Regional and international cooperation programs



Major FMD control measures described in control plan

Plans related to FMD surveillance and control in the long term

- Finalize the registration and identification of animals and stakeholders.
- Finalize harmonization of veterinary legislation in accordance with international requirements.
- Further strengthening of the material-technical base of veterinary services in the central and regional level.
- Establishment and implementation of legal system regulated and controlled slaughter.



Major FMD control measures described in control plan

Plans related to FMD surveillance and control in the long term

- International accreditation of national central and if possible regional veterinary laboratories of country.
- Improvement of disease surveillance in order to protect human health and food safety.
- Improving veterinary education and a regularly organized classification of field veterinary and laboratory specialists.
- Analysis of socio-economical impact (international supporting).



Expected results and current assessment of the control plan achievements

For PCP Stages 2 and 3

- *Stage 2:*

- *Armenia is in the PCP Stage 2 with a provisional status*

- *Stage 3:*

- *Without registration and identification system we couldn't control moving animals in the duly, but veterinary services do everything for elimination every transboundary diseases. So after reviewing all legislation documents and stabile epizootic situation in the country expect to assess the control plan achievements to PCP3 Stage*



Expected results and current assessment of the control plan achievements

- The action plan will have the opportunity to prevent the spread of disease and outbreaks and solve the following problems.
- Preventive vaccination helps to have immunized animal population, reducing and preventing virus circulation and spreading.
- Apply specific policy with farmers for providing obligatory immunization all susceptible animals and control measures.
- Develop efficiency control measures (biosecurity and biosafety) in the farms and during animal movement to combat the disease.



Expected results and current assessment of the control plan achievements

- Increase the food safety of animal origin produced and biosecurity awareness of FMD risks.
- Active co-operation between the stakeholders.
- Cooperation with neighboring countries veterinary services, providing and obtaining information on the epidemiological situation and control measures should promote the national strategy of control FMD
- Moving the stage of PCP 3.



Summary

On the basis of these activities, Armenia is in PCP Stage 2 *with a provisional status*, want to keep a Stage 2; completed Stage 1&2 and going to move to Stage 3.

Thank you for your attention !

