FAO Lumpy Skin Disease projects overview

Daniel Beltran-Alcrudo, Animal Health Officer
FAO Regional Office for Europe and Central Asia, Hungary
- Close monitoring (EMPRES-i)
- Regional Approach - Regional response plan
- Risk assessment for at risk countries
- Information sharing: lessons learnt and best practices
- Foster cooperation of all stakeholders: farmers, traders, processors, veterinarians, etc.
- Raising awareness
- Harmonization of vaccination protocols
- Harmonization of other preventive and control measures
- Piloting new approaches for risk mitigation and outbreak control

Previous FAO activities on LSD

- Publications
- Capacity building
- Expert meetings
Publications – Early warning messages

empres watch on LSD:
- November 2013 - LSD in the Middle East
- September 2015 - LSD in Europe

Publications: Coming soon

- EMPRES 360 Monograph on LSD in the Region
- FAO Position on the sustainable prevention, control and elimination of Lumpy Skin Disease, particularly in Eastern Europe and the Balkans
Capacity building

- **Webinar with EuFMD on LSD vaccination** with the participation of several experts from Jordan, Israel and UK April 2015

- **Sub-regional workshop LSD prevention and control: a new challenge for European countries** under GF-TADs Europe, Tbilisi, Georgia, 11-12 November 2015
  
  - Participants: Georgia, Armenia, Azerbaijan, Russian Federation, Belarus and Ukraine
  - Experts: Israel; FAO; EC Commission, DG SANTE; Pirbright Institute (UK), OIE Reference Laboratory on LSD
  - LSD epidemiology, surveillance, control, vaccination, networking, sharing experience on LSD control

Capacity building

EuFMD Practical training on vector transmissible animal diseases – from theory to practice (with focus on LSD)

- Participants: Albania, Greece, FYR of Macedonia, Kosovo, Serbia and Bulgaria
- 31 May-3 June 2016, Stara Zagora, Bulgaria
- Lectures on:
  - LSD vaccines
  - Israeli experience with LSD
  - vector surveillance & taxonomy
- Practical sessions on:
  - vectors trapping systems, vector traps used, best places for vector traps locations, observation on the field
  - entomological investigation of the trapped vectors, differential diagnosis of the trapped species, samples preparation for the laboratory investigation, vector species identification
The ad-hoc LSD expert meeting

- 25 July 2016, Belgrade, Serbia
- Organized upon request from CVOs from central and south Europe
- The following topics were discussed to inform revision of existing legislation:

1. Review and rank the potential ways that LSD virus could be transmitted from one infected holding to another, from the point of infection of animals to their carcass disposal on the site.
2. Review current measures, and propose updated guidance, to be taken after confirmation of LSD on a holding, including the question of alternatives to on-site burial.
3. Review the proposals for modification to measures to be taken after confirmation of LSD in animals recently vaccinated against LSDV.
4. Review the proposals for (a) modification to measures relating to restocking of holdings depopulated after LSDV, and (b) movement of animals and animal products after vaccination.
5. Identification of likely scenarios for spread of infection within the Balkan and Central European region and impact and likely duration of control options, that could be assisted by modelling and other studies.
6. Identify essential information that need to be collected and shared by affected countries, particularly to assist modelling of spread and impact of measures, and to enable review of the effectiveness of currently used vaccines.


Standing Group of Experts on Lumpy Skin Disease in South-East Europe

- Launched on 4-5 July 2016 under the GF-TADS umbrella
- Aims to build up a closer cooperation among LSD-affected countries, thereby addressing the disease in a more collaborative and harmonised manner across the region.
- Builds on the successful experience of a similar mechanism for African swine fever in the Baltic and Eastern Europe region (2014)

Members:
- Affected and at-risk countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, the former Yugoslav Republic of Macedonia, Greece, Hungary, Israel, Kosovo, Montenegro, Romania, Serbia, Slovenia, Turkey and Russian Federation
- Organisations: EC - OIE - FAO
- Experts: designated on an ad hoc basis

Meetings:
- Kick off meeting (SGE LSD1, 5-6 July 2016, Brussels / Belgium)
- SGE LSD2 (21 September 2016, Lisbon / Portugal)
- SGE LSD3 (12-13 December 2016, Istanbul / Turkey)

Overview of current projects

Three complementary projects on LSD assistance to the Balkans and the Caucasus running in parallel:

- **UTF/GEO/006/GEO**: On-demand assistance for LSD risk mitigation and control in Georgia - FINALIZED
  Beneficiaries: Georgia

- **OSRO/RER/601/HUN**: Regional workshops for lumpy skin disease (LSD) and field manual on LSD in Europe - FINALIZED
  Beneficiaries: The Balkans (Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, Montenegro, Romania, Serbia and Kosovo)

- **TCP/RER/643351**: Improving the understanding, awareness, prevention and control of lumpy skin disease in the Balkans
  Beneficiaries: Balkans + Caucasus (Georgia, Armenia and Azerbaijan) and Ukraine

External technical experts: Eeva Tupporainen, Tsviatko Alexandrov (BFSA), Jordi Casal & Alberto Allepuz (UAB), and Oran Erster (KVI)

---

**UTF/GEO/006/GEO**

*On-demand assistance for LSD risk mitigation and control in Georgia*

NTE: 31 March 2017

Finalized:

- Assessment of the situation, meeting with all stakeholders, and provide technical guidance on LSD control plan in Georgia.
- Training on LSD epidemiology, risk based surveillance, outbreak investigation and control.
- Training provided on LSD laboratory diagnosis (in March 2017).
- Develop, print and distribute information/awareness materials (posters and leaflets).
Activity 1.1. Regional workshop on LSD prevention and control strategies

Participants:
• Vet services from recipient countries in the Balkans, Caucasus and Ukraine;
• Vet services from other infected and at-risk countries: Bulgaria, Hungary and the Russian Federation;
• External experts and beef and dairy cattle associations.

Objectives:
• Provide an open forum for countries to share their experiences, improve their knowledge, and discuss the most challenging issues faced with the aid of experts
• Highly interactive thematic sessions moderated by experts on:
  • Contingency planning, risk management and communication;
  • Awareness campaigns; Animal movement control;
  • Insect control and environmental impact;
  • Diagnostic tools and vaccination strategies;
  • Stamping out strategies.
• Present and gather feedback on the LSD field Manual

Activity 1.2 FAO’s Field Manual on LSD (Europe-focused)

• Developed by experts in LSD and field implementation;
• Part of the EMPRES series of manuals;
• Audience: Private and official veterinarians (in the field and slaughterhouses), para-professionals and laboratory diagnosticians;
• Contents: Basic epidemiology, clinical recognition, sampling and shipping of specimens, and basic notions on the prevention and control of the disease;
• Feedback from affected and at-risk countries in the region (Budapest meeting).

Timeline:
• Currently under language editing;
• Translation into Russian, Turkish, Serbo-Croatian and Albanian;
• Distributed in the region (paper and electronic copies).
Output 1: Assessment of the risk and economic cost of LSD entry, spread and establishment

- **Activity 1.1:** Analysis of outbreak data from the Caucasus and surrounding countries to assess the epidemiological situation, understand spread patterns and risk factors, and identify spread pathways;
- **Activity 1.2:** Estimate the financial losses of LSD (LSD outbreaks and control costs) and perform a cost-benefit analysis for different LSD outbreak control options;

Output 2: Awareness raising for the prevention of LSD entry adapted to national needs

Output 3: Development of a project concept note for LSD prevention and control

---

**2nd Regional workshop on lumpy skin disease (LSD)**

- **Tirana, 10-11 May 2017**
- **Participants:**
  - Vet services from recipient countries (Albania, Armenia, Azerbaijan, FYR of Macedonia, Georgia, Kosovo, Montenegro, Serbia and Ukraine), plus Belarus, Bulgaria, Romania, Russian Fed. and Turkey.
  - Cattle associations from recipient countries
- **Highly interactive format**
- **Thematic sessions moderated by experts:**
  - Cost-benefit analysis
  - Vaccination strategies
  - Contingency plans
  - Risk Communication.
- **Objectives:**
  - Share experiences, improve knowledge, and discuss in an open forum with the aid of experts
  - Specifically, encourage discussions between cattle associations and vet services on how to best coordinate
  - Design the framework for a future regional project on LSD prevention and control.
### Agenda – Day 1 - Illyria 3 Room

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30-9:00</td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>9:00-10:15</td>
<td>Welcoming Address (20 min)</td>
<td>Albanian CVO &amp; FAO</td>
</tr>
<tr>
<td></td>
<td>Round-table introduction of participants</td>
<td>Daniel Beltrán-Alcrudo, FAO</td>
</tr>
<tr>
<td></td>
<td>Presentation of the LSD projects (20 min)</td>
<td>Eeva Tuppurainen, FAO</td>
</tr>
<tr>
<td></td>
<td>LSD introduction (20 min)</td>
<td></td>
</tr>
<tr>
<td>10:00-10:40</td>
<td>Epidemiology, cost-benefit analysis and control strategies of LSD in Israel – Historical perspective (40 min)</td>
<td>Nadav Gatson, Israel CVO</td>
</tr>
<tr>
<td>10:40-11:00</td>
<td>Tea/Coffee Break</td>
<td></td>
</tr>
<tr>
<td>11:00-12:30</td>
<td>The LSD epidemic in Turkey – Situation update and key challenges (30 min)</td>
<td>Esra Satir, PVCI</td>
</tr>
<tr>
<td>12:00-12:30</td>
<td>The LSD epidemic in the Russian Federation – Situation update and key challenges (30 min)</td>
<td>Aleksandr Kononov, ARRRAH</td>
</tr>
<tr>
<td>12:30-13:20</td>
<td>The importance of cost-benefit analysis for decision making (20 min)</td>
<td>Jordi Casal, UAB</td>
</tr>
<tr>
<td>13:20-15:20</td>
<td>Cost-benefit analysis framework (30 min)</td>
<td>Jordi Casal, Autonomous University of Barcelona</td>
</tr>
<tr>
<td></td>
<td>Group exercise on cost-benefit analysis (90 min)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>How to adapt that framework for the different countries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inputs on how to improve the model</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Available and quality of data</td>
<td></td>
</tr>
<tr>
<td>15:20-15:40</td>
<td>Tea/Coffee Break</td>
<td></td>
</tr>
<tr>
<td>15:40-16:50</td>
<td>Session on LSD vaccination (110 min)</td>
<td>Eeva Tuppurainen, FAO</td>
</tr>
<tr>
<td></td>
<td>Currently available vaccines and new products on the markets, vaccination strategies and adverse reactions (30 min)</td>
<td>Tsviatko Alexandrov, FAO</td>
</tr>
<tr>
<td></td>
<td>Case study – Purchase, short term storage and delivery of vaccines in the face of an outbreak (20 min)</td>
<td>Eeva Tuppurainen, FAO</td>
</tr>
<tr>
<td></td>
<td>General discussion and questions answered on the pros and cons of different vaccine products, best vaccination practices, regional harmonized vaccination campaigns and the earliest point of time for exit strategies (60 min)</td>
<td></td>
</tr>
<tr>
<td>19:00-21:00</td>
<td>Group dinner at Sheraton Hotel’s restaurant</td>
<td></td>
</tr>
</tbody>
</table>

### Agenda – Day 2 - Egnatia Room

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30-10:40</td>
<td>Session on risk communication</td>
<td>Jordi Casal, Autonomous University of Barcelona</td>
</tr>
<tr>
<td></td>
<td>- The role of dairy and beef cattle associations in face of an outbreak</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Communication with consumers and retailers on the safety of different cattle products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- How associations can participate in disease awareness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group exercise topics:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- How to best inform farmers on the spread of a disease and the vaccinations activities;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Identifying the best and fastest routes to deliver information amongst farmers;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Can social media be utilized for disease control?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Organizing farmers meetings;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- How farmers can protect their animals - Biosecurity measures at a farm level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Award to the best awareness poster.</td>
<td></td>
</tr>
<tr>
<td>10:40-11:00</td>
<td>Coffee</td>
<td></td>
</tr>
<tr>
<td>11:00-12:30</td>
<td>Contingency plans</td>
<td>Tsviatko Alexandrov, FAO</td>
</tr>
<tr>
<td></td>
<td>Group exercise on different sections of the contingency plan template</td>
<td></td>
</tr>
<tr>
<td>12:30-13:30</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>13:30-15:30</td>
<td>Simulation of different disease situations for group discussions</td>
<td>Tsviatko Alexandrov and Eeva Tuppurainen, FAO</td>
</tr>
<tr>
<td>15:30-16:50</td>
<td>Presentation and discussion of the follow-up regional project</td>
<td>Eeva Tuppurainen, FAO</td>
</tr>
<tr>
<td>16:50-17:00</td>
<td>Closure of the workshop</td>
<td>Daniel Beltrán-Alcrudo, FAO</td>
</tr>
</tbody>
</table>
Other issues

- Materials:
  - List of participants
  - Agenda
  - LSD Contingency Plan template
- Materials for Group exercises
- Poster session
- Dinner: Tonight at the Sheraton Hotel Restaurant
- Presentations: to be shared through FAO REU website

Thanks for your attention