## Output 1: Assessment of Levels of Collaboration for 16 Key Technical Areas

<table>
<thead>
<tr>
<th>Technical area (cards)</th>
<th>Rabies</th>
<th>Anthrax</th>
<th>H5N1</th>
<th>Brucellosis</th>
<th>Echinococcosis</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication w/ media</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Finance</td>
<td></td>
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<td>8</td>
</tr>
<tr>
<td>Coordination at a technical level</td>
<td></td>
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<td></td>
<td>7</td>
</tr>
<tr>
<td>Education and training</td>
<td></td>
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<td>7</td>
</tr>
<tr>
<td>Coordination at a local level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Field investigation</td>
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<td></td>
<td>6</td>
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<tr>
<td>Laboratory</td>
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<td>6</td>
</tr>
<tr>
<td>Emergency funding</td>
<td></td>
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<td></td>
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<td></td>
<td>5</td>
</tr>
<tr>
<td>Legislation / Regulation</td>
<td></td>
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<td></td>
<td>5</td>
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<tr>
<td>Response</td>
<td></td>
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<td>5</td>
</tr>
<tr>
<td>Risk assessment</td>
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<td></td>
<td>5</td>
</tr>
<tr>
<td>Communication w/ stakeholders</td>
<td></td>
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<td>4</td>
</tr>
<tr>
<td>Coordination at a high level</td>
<td></td>
<td></td>
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<td>4</td>
</tr>
<tr>
<td>Joint surveillance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Human resources</td>
<td></td>
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<td>3</td>
</tr>
</tbody>
</table>

For each disease, the performance of the collaboration between the human health and the animal health sectors is color-coded: green for “good collaboration”, yellow for “some collaboration”, and red for “collaboration needing improvement”. The score uses a semi-quantitative scale (2 points for a red card, 1 for a yellow card and 0 for a green card). Technical areas marked in bold were selected and addressed in-depth throughout the rest of the workshop.
## TECHNICAL AREA 1: LABORATORY AND SURVEILLANCE

<table>
<thead>
<tr>
<th>Objective 1: Enhancement of lab diagnostics of priority zoonoses</th>
</tr>
</thead>
</table>

### 1.1 Expert workshop “Modern diagnostics of priority zoonoses”
- **Action**: Organize and deliver 2-days workshop on modern diagnostics methods of zoonoses with priority to the country.
- **Responsibility**: CVDENR, DSES.
- **Process**: Joint discussions on protocols used by two sectors, Conduct gap analysis of the current laboratory diagnostics methods, Address gaps in the current lab diagnostics, Harmonization of methods of lab diagnostics, Discuss possible exchange of materials and reagents.
- **Timeline**: Q4 2019.
- **Difficulty**: ++
- **Impact**: +++

### 1.2 Modernize diagnostic methods for priority zoonoses and train laboratory staff
- **Action**: Analysis of current methods for priority zoonoses, Study existing standards of WHO and OIE, Update existing national standards on zoonoses.
- **Responsibility**: SIVPS, GKR, CVDENR, DSES.
- **Process**: Involve technical expert on ELISA and PCR to develop specifications, Procure ELISA and PCR equipment (4 sets of ELISA and PCR) for North and South regions for both sectors, Train lab specialists (8 people: 4 serologists and 4 parasitologists – 2 from North and South regions from both sectors), Install the equipment.
- **Difficulty**: ++
- **Impact**: +++

### 1.3 Train laboratory staff of both sectors on diagnostics of zoonoses
- **Action**: To train lab staff of the Center for Disease Prevention, DSES, CVDNR, and CVD in the South Region on modern methods of lab diagnostics as well as on information exchange.
- **Responsibility**: Ministry of Health Veterinary Service.
- **Process**: Sign the agreement between two sectors to conduct PTS, Define areas to conduct PTS to test samples from humans and animals, Develop PTS, Conduct PTS.
- **Timeline**: 1 quarter 2020.
- **Difficulty**: ++
- **Impact**: +++

### 1.4 Define the need in ELISA and PCR equipment in both sectors
- **Action**: Involve technical expert on ELISA and PCR to develop specifications, Procure ELISA and PCR equipment (4 sets of ELISA and PCR) for North and South regions for both sectors, Train lab specialists (8 people: 4 serologists and 4 parasitologists – 2 from North and South regions from both sectors), Install the equipment.
- **Responsibility**: CVDENR, DSES.
- **Process**: Involve technical expert on ELISA and PCR to develop specifications, Procure ELISA and PCR equipment (4 sets of ELISA and PCR) for North and South regions for both sectors, Train lab specialists (8 people: 4 serologists and 4 parasitologists – 2 from North and South regions from both sectors), Install the equipment.
- **Difficulty**: ++
- **Impact**: +++

### 1.5 Develop a joint national strategy on Professional Test Schemes (PTS)
- **Action**: Sign the agreement between two sectors to conduct PTS, Define areas to conduct PTS to test samples from humans and animals, Develop PTS, Conduct PTS.
- **Responsibility**: DSES, Department of disease prevention SIVPS, GKR, CVDENR, Kyrgyz Veterinary Research Institute.
- **Process**: Sign the agreement between two sectors to conduct PTS, Define areas to conduct PTS to test samples from humans and animals, Develop PTS, Conduct PTS.
- **Timeline**: 4 quarter 2020.
- **Difficulty**: ++
- **Impact**: +++

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## Objective 2: Development of joint strategy on zoonoses surveillance

### 2.1 Establish a working group to develop a surveillance strategy on priority zoonoses
- **Action**: Update legislation on epi surveillance of zoonoses, Develop ToR for a working group on development of joint surveillance strategy on zoonoses, Establish the working group.
- **Responsibility**: MOH VS.
- **Process**: Update legislation on epi surveillance of zoonoses, Develop ToR for a working group on development of joint surveillance strategy on zoonoses, Establish the working group.
- **Timeline**: 1 quarter 2019.
- **Difficulty**: +
- **Impact**: +++
<table>
<thead>
<tr>
<th>Objective 3: Update of legislation on sample receiving, sampling, and transportation of samples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2.2 Establish a joint database to exchange surveillance data between two sectors</strong></td>
</tr>
<tr>
<td>4 quarter 2019</td>
</tr>
</tbody>
</table>
| MOH VS | 1. Analyze existing databases in both sectors  
2. Develop ToR for the database and a budget  
3. Find financial support (international donors?)  
4. Hire IT-specialists and develop the database  
5. Test and fine-tune the database  
6. Train the staff |
| **2.3 Develop a joint active and passive surveillance plan for zoonoses** |
| 4 quarter 2019 | +++ | +++ |
| MOH VS | 1. Establish a working group  
2. Analyze existing plans  
3. Define ToR for the joint plan  
4. Involve external experts  
5. Develop a joint plan engaging the technical help  
6. Issue decrees to implement the plan  
7. Implementation of the joint plan |

**Objective 3: Update of legislation on sample receiving, sampling, and transportation of samples**

**3.1 Develop SOPs on sample receiving, sample transportation, and exchange of results**

| 2 quarter 2019 | + | +++ |
| CVDENR MOH | 1. Analyze existing SOPs  
2. Develop SOP for sample receiving  
3. Coordinate work with Coordination Steering Committee  
4. Development of SOP for sample transportation |

**3.2 Train laboratory staff on the new SOPs**

| 3 quarter 2019 | ++ | +++ |
| MOH Coordination Steering Committee VS | 1. Find financial support for the workshops  
2. Nominee participants from both sectors  
3. Conduct workshops on a national scale  
4. Train the national trainers to conduct workshops on a local level |

**TECHNICAL AREA 2: COORDINATION ON THE CENTRAL, LOCAL, AND TECHNICAL LEVELS**

**Objective 4: Development of joint strategy and legislation for the inter-ministerial committee on zoonoses**

**4.1 Develop the memorandum between two sectors on cooperation and coordination in the area of zoonotic diseases**

| 4 quarter 2019 | + | +++ |
| MOH SIVPS GKR | • Establish a joint working group to develop a memorandum  
• Define technical areas for the scope of the memorandum |

**4.2 Establishment and functioning of the intersectoral committee on prevention and control of zoonoses**

| 1 quarter 2019 | + | +++ |
| MOH SIVPS GKR | • Develop legislation necessary to establish the committee  
• Develop ToR  
• Regular meetings at a high level to exchange information (2 times a year)  
• Nominee participants into committee |

**Objective 5: Improvement of coordination and information exchange between two sectors**
### 5.1 Nominee focal points for mutual information exchange between sectors on oblast and rayon level

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Level</th>
<th>MOH, SIVPS GKR</th>
<th>Details</th>
</tr>
</thead>
</table>
| 1 quarter 2019 | + | +++ | - Nominee candidates  
- Develop ToRs  
- Update the list of focal points not less than twice a year |

### 5.2 Develop SOPs for information exchange between focal points of two sectors on the local level

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Level</th>
<th>Joint Committee of MOH and VS</th>
<th>Details</th>
</tr>
</thead>
</table>
| 2 quarter 2019 | + | +++ | - Develop SOPs, including the algorithm of information exchange  
- Agree and approve SOPs  
- Conduct monthly coordination meetings between sectors |

### 5.3 Develop electronic report system for two sectors

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Level</th>
<th>Joint Committee of MOH and VS</th>
<th>Details</th>
</tr>
</thead>
</table>
| 2 quarter 2019 | ++ | +++ | - Analyze best practice existing in this field in the other countries  
- Define types and focus of the reports to be included in the system  
- Develop electronic report forms  
- Set parameters of report exchange |

### TECHNICAL AREA 3: RESPONSE AND FIELD INVESTIGATION

#### Objective 6: Training of both sectors on joint response and field investigation

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Level</th>
<th>Deputies of MOH, VS, Ministry of Education</th>
<th>Details</th>
</tr>
</thead>
</table>
| 2-4 quarters 2019 | ++ | +++ | - Engage international technical experts for curricula development  
- Develop One Health module(s) to include into student curricula  
- Agree the plan to jointly include the developed module(s) into curricula |

#### 6.1 Update of curriculum for students on veterinary and medical faculties to include One Health aspects

1. Update post-graduation curricula of veterinarians with aspects of response and field investigation of zoonosis cases  
2. Conduct step-by-step training for 200 specialists – 2 per 7 oblasts and 2 cities; 42 specialists from rayons; central veterinary office  
3. Involve existing centers for post-graduate education of MoH (7 centers) for joint educational programs  
4. Continue remote education, paused earlier due to insufficient funds, including the following aspects:  
   - Defining the infection source  
   - Spread, prevention, and treatment  
   - Clinical aspects (symptoms of zoonoses)  
   - Epidemiology  
   - Risk groups |

#### 6.2 Develop an educational program for specialists of two sectors on response and field investigation

1. Nominee representatives of MOH and VS  
2. Develop a general framework plan of joint response, including among others:  
   - logistics (personnel, materials, transport, disinfectants, personal protection equipment, etc.)  
   - joint deployment on the ground when emergency  
   - ToRs  
   - joint investigation act |

### Objective 7: Standardizing of a joint response to zoonotic emergencies

#### 7.1 Develop a joint response framework plan for zoonotic outbreaks

1. Establish a joint working group  
2. Nominee representatives of MOH and VS  
3. Develop a general framework plan of joint response, including among others:  
   - logistics (personnel, materials, transport, disinfectants, personal protection equipment, etc.)  
   - joint deployment on the ground when emergency  
   - ToRs  
   - joint investigation act |
| 7.2 Develop sub-plans on joint response on priority zoonoses |  + | +++ | Joint working group of MOH and VS | Develop sub-plans detailing the following zoonoses: brucellosis, echinococcosis, TB, rabies, anthrax, leptospirosis, listeriosis, influenza (avian, swine) |
| 7.3 Develop ToR to enable joint disease control centers for response and field investigation (for zoonoses outbreaks) |  + | +++ | Joint working group of MOH and VS | Develop ToRs for joint disease control centers of different levels, including staffing, aims, scope, etc. |
| 7.4 Establishment of joint emergency supplies reserve | 1 quarter 2019 |  + | +++ | Joint working group of MOH and VS, and Ministry of Emergencies of Kyrgyz Republic | • Establish a joint working group on emergency supplies reserve procurement  
• Define top-priority medicines and food  
• Count needs in emergency reserve items based on localization  
• Nominee responsible persons, develop respective ToRs |
| 7.5 Conduct training and simulation exercises to enable a high level of operational efficiency of two sectors |  ++ | +++ | MOH, VS, and Ministry of Emergencies of Kyrgyz Republic | • Develop document packages for the training and exercises  
• Define the target audience  
• Find financial support  
• Conduct training on the general framework response plan and disease-specific response sub plans  
• Conduct table-top exercises  
• Conduct functional and full-scale simulation exercises |

**TECHNICAL AREA 4: COMMUNICATION**

**Objective 8: Establishment of a structure for joint communication**

| 8.1 Establish communication department in Public Health and Veterinary Services and nominee focal points in both sectors | 2020 | ++ | +++ | SIVPS GKR MOH | • Issue decree approving the new staff structure  
• Hire communication specialists  
• Nominee personal responsible for constant communication between sectors |
| 8.2 Develop joint communication strategies for priority zoonoses | 2020 | + | + | SIVPS GKR MOH | • Agree and approve joint communication strategies  
• Define the aims and scope of awareness campaigns  
• Define the target audience  
• Define communication channels  
• Develop jointly complementary content for awareness campaigns |
| 8.3 Develop SOPs for risk communication | 2020 | ++ | ++ | SIVPS GKR MOH | • Develop draft SOPs  
• Engage communication experts for SOPs development  
• Agree and approve SOPs |
| 8.4 Develop joint educational and information materials on priority zoonoses | Ежегодно с 2019 г. | +++ | ++ | SIVPS GKR MOH | • Identify priority diseases  
• Define types and formats of communication materials (video, posters, brochures, etc.)  
• Estimate budget  
• Find financial support |
### Objective 9: Training on joint risk communication

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
<th>Difficulty</th>
<th>Impact</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>9.1 Conduct training on risk communication for specialists from both sectors</strong>&lt;br&gt;Annually from 2019</td>
<td>+++</td>
<td></td>
<td></td>
<td>• Involve international experts in communications to develop train-the-trainer training&lt;br&gt;• Deliver the train-the-trainer training for 1 medical and 1 veterinary specialist per each oblast&lt;br&gt;• Train risk communication specialists (4 people from each sector from each oblast (28 total))</td>
</tr>
<tr>
<td><strong>9.2 Conduct joint training for medical, veterinary specialists and village health committees</strong>&lt;br&gt;Annually from 2019</td>
<td>+++</td>
<td>++</td>
<td>SIVPS GKR MOH</td>
<td>• Develop a training program&lt;br&gt;• Define regions suitable for training&lt;br&gt;• Estimate budget&lt;br&gt;• Find financial support</td>
</tr>
</tbody>
</table>

### Objective 10: Increase population awareness on control and prevention of diseases

<table>
<thead>
<tr>
<th>Activity</th>
<th>Frequency</th>
<th>Difficulty</th>
<th>Impact</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>10.1 Update school curricula with information on priority zoonoses</strong>&lt;br&gt;2020</td>
<td></td>
<td>++</td>
<td>+++</td>
<td>SIVPS GKR Department of Disease Prevention and Episurveillance&lt;br&gt;• Update secondary school curriculum (subject &quot;Principles of personal and social safety&quot;) with aspects of prevention of zoonotic diseases&lt;br&gt;• Agree with Ministry of Education&lt;br&gt;• Train teachers</td>
</tr>
<tr>
<td><strong>10.2 Create One Health section for zoonoses on websites of two ministries</strong>&lt;br&gt;2020</td>
<td>++</td>
<td></td>
<td>SIVPS GKR MOH</td>
<td>• Design One Health pages for the websites of MoH and VS; develop the content devoted to One Health and zoonotic diseases&lt;br&gt;• Update the content regularly</td>
</tr>
</tbody>
</table>

**Difficulty of implementation:** Low +, Moderate ++, Very difficult +++  
**Impact:** Low impact +, Moderate impact ++, High impact +++
All participants were asked to vote individually via sticking white stickers onto the objective cards to select which five of the identified objectives they considered as of the highest priority. Voting results showed uniformity, with none of the objectives being considered as a low priority, and few objectives showing high scores, highlighting the importance of all of the identified objectives for strengthening the cooperation and communication between two sectors.