Event Mobile Application (EMA-i) to strengthen animal diseases reporting, surveillance and early warning

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What is EMA-i

- Mobile App for Veterinary Services to facilitate quality & real time reporting of animal diseases from the field
- Integrated into EMPRES-i to safely store epidemiological data
- Access to disease events in real-time (“Near me” map)
- Improve communication among veterinary services, animal health workers, laboratory experts
- Support Early Warning for an effective Early Response to disease threats.
EMA-i workflow
EMA-i Results

- **8 countries** using EMA-i (Africa)
- **5 countries** planned for 2020
- EMA-i **customized** according to country specificities
- **813 users** of the App
- **Over than 11 000 disease events** reported from the field
- **Weekly reports** generated automatically
- Developed **M&E indicators (17)**
- **Data visualization analysis tool**
EMA-i showcase: Tanzania

Number of disease events (Jun 2016 - Dec 2019): 6,743
- Mainland (Dec 2017-Dec 2019): 4,334
- Zanzibar: (Jun 2016 - Dec 2019): 2,411

Implementation:
- Number of users: 177
- Districts: 81% (120/148)

Number of disease events reported countrywide:

- Paper based
- EMA-i (20 Districts)
- EMA-i (70 Districts)

Diseases reported

<table>
<thead>
<tr>
<th>Disease</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bovine anaplasmosis</td>
<td>681</td>
</tr>
<tr>
<td>Mange</td>
<td>590</td>
</tr>
<tr>
<td>East Cost fever</td>
<td>545</td>
</tr>
<tr>
<td>Trypanosomosis (tsetse-transmitted)</td>
<td>299</td>
</tr>
<tr>
<td>Lumpy skin disease</td>
<td>265</td>
</tr>
<tr>
<td>Foot and mouth disease</td>
<td>181</td>
</tr>
<tr>
<td>Bovine babesiosis</td>
<td>177</td>
</tr>
<tr>
<td>Newcastle disease</td>
<td>152</td>
</tr>
<tr>
<td>Contagious bovine pleuropneumonia</td>
<td>127</td>
</tr>
<tr>
<td>Mastitis</td>
<td>121</td>
</tr>
<tr>
<td>Coccidiosis</td>
<td>115</td>
</tr>
</tbody>
</table>

9 x more events reported!
Next step on Electronic reporting systems

- Expand the use of electronic reporting systems:
  - Scaling-up within countries already using electronic reporting system
  - New countries
- Support national policies and regulations through the institutionalization of Early Warning with an electronic animal disease reporting system (e.g. EMA-i)
- Interoperability:
  - Labs systems: such as SILABFA (ongoing)
  - Public Health/One Health systems (DHS2)
  - Syndromic surveillance systems (Afyadata)
- Expand data collection to Syndromic surveillance & to additional risk factors: quarantine, slaughterhouses, price, therapy/antimicrobial, system characterization (water points, markets...etc) to enhance risk analysis modeling and forecasting
- Integrate Disease recognition, EPI definition & best practice on sampling
- Create a Tele-diagnostic system with use photo library collected with EMA-i and creation of national, regional and international experts network (Feedback System).
Thank you!