

**FAO INNOVATION PROGRAMME FOR FOOD AND AGRICULTURE**

**Mapping innovative solutions and activities in the field**

**MAPPING FORM**

<b>Name</b>
Joint Outbreak Investigation Tool (JOInT)
<b>Type (regional initiative, programme, project, etc.)</b>
Regional initiative (Africa and Near East)
<b>Duration</b>
Two years (development of the tool, testing, refining + training + implementation)
<b>Status (ongoing, closed, etc.)</b>
not yet started
<b>Partners</b>
WHO, OIE, CDC
<b>Objectives (max. 600 characters)</b>
With the ongoing zoonotic disease prioritization under the Global Health Security Agenda (GHSA) program, there is a need for a coordinated approach for inter-country and inter-agency collection, assessment and analysis of outbreak investigation data, especially on transboundary zoonoses. The objective of JOInT is to standardize the outbreak investigation, linking the epidemiology and laboratory data of animal and public health sectors, assess the quality of the investigation process with automated data visualization and generation of investigation and assessment reports.
<b>Outcomes (max. 500 characters)</b>
JOInT will standardize the zoonotic outbreak investigation implementation and assessment processes under a One Health umbrella, and would be applicable to different outbreak scenarios. Key outcomes include: <ul style="list-style-type: none"> <li>- Improve understanding of the factors associated with animal and human exposure to zoonoses at country and regional levels.</li> <li>- Enhance joint outbreak investigation and information sharing activities.</li> <li>- Contribute to improving the relevance and efficiency of national zoonotic disease control programs.</li> </ul>
<b>Public/Audience</b>
Veterinary and public health authorities
<b>Country(ies)</b>
East Africa and NENA regions
<b>Budget (cost and source)</b>
- 150,000 USD/year. Funding sources still to be identified (possibly United States Agency for International Development – USAID).
<b>FPMIS Code (if applicable)</b>
<b>Webpage (if available)</b>
NA
<b>QUESTIONNAIRE</b>
<b>1 - Why do you classify this initiative as innovation?</b>

JOInT will be applicable to most zoonotic disease outbreak scenarios, with possibility of customization for a given disease or event. To date, there is no similar tool that address this area of work. JOInT would build on the previous achievements of the tripartite (FAO-OIE-WHO) four-way linking and one-health initiatives at country, regional and global levels.

**2 – What is the specific problem that you are trying to solve with this initiative?**

The joint collection, verification and analysis of zoonotic disease outbreak investigation data is not well established in many countries. The critical information regarding the prevalent modes of zoonotic disease transmission, implicated animal species and production sectors, practices and drivers associated with pathogen spillover are outstanding knowledge gaps, and almost based on expert opinion rather than outputs of well-designed national or regional studies. Consequently, the relevance, effectiveness and quality of the surveillance, preparedness and response plans are affected.

**3 - Which are the challenges you are hoping to address?**

- Absence of specific guidelines for zoonotic outbreak investigation under different scenarios of disease detection and spread.
- Uncoordinated actions between animal and public health authorities during zoonotic outbreaks.
- Slow generation and sharing of findings, late advice to decision makers, and therefore delayed or inappropriate outbreak containment and disease control.

**4 – What are your constraints for the solution?**

- In countries there is often a wide gap between animal and public health authorities in terms of technical and logistical capacities.
- The outputs of the tool will be affected by the quality of the investigation process in the field including interviews, observations, sampling and laboratory testing, so there is a need in ad hoc training for quality data collection in parallel to the use of the tool.
- Development of the tool needs collaborative action between technical (epidemiology) and data modelling (IT) experts.

**5 – Is this initiative able to be replicated in another country or region? List the main activities to do that.**

Yes, in any region. In particular:

- West Africa.
- South East Asia.

**6 - How do you think this initiative could be improved and scaled up? Which are the barriers?**

- JOInT will be flexible and can be customized for lingering and emerging zoonoses.
- JOInT is suggested to start as a desktop tool, and can be further built as a web-based system integrated in the national veterinary and public health web-databases.

The barrier is the commitment and transparency of countries to share the tool outputs between sectors and with international partners for further assessment and decision making.

**7 – What is the initiative business model in terms of sustainability?**

- Once the technical capacity is built at country level, there is no extra cost to use the tool in the routine outbreak investigation processes.

**8 – What is the FAO’s role to transform this initiative into an innovation case?**

- Support developing and testing the tool.
- Support discussion among partners to test and validate the tool.
- Support the training and implementation in pilot countries.
- Support the expansion to new countries/regions (training and follow up)

**9 – Are there partners interested to continue/replicate this initiative?**

- Not discussed with any partners yet – brand new idea.

