



alert



FAO and IGAD alert countries in **eastern Africa** to enhance preparedness for **Rift Valley fever**

May 31st, 2021

Key facts

1. RVF is an acute, vector-borne, viral, and zoonotic disease that has severe impacts on livelihoods, national and international markets, and human health.
2. The disease has been observed in sheep, goats, cattle, buffaloes, camels, and humans and is spread primarily by mosquitoes and the movement of animals.
3. Heavy rains and prolonged flooding increase habitat suitability for vector populations, determining massive hatching of RVF competent mosquitoes (e.g. *Aedes* and *Culex*), thus influencing the risk of RVF emergence, transmission and spread.
4. The dynamic prediction model calibrated by FAO builds upon the work by Anyamba *et al.*, (2009; 2010), which utilizes vegetation and rainfall anomalies as a proxy for ecological dynamics to map areas at potential risk of RVF in Eastern Africa.
5. The FAO RVF Early Warning panel of experts verifies the risk areas with the experts on the ground and assesses if conditions warrant an RVF alert (FAO 2019).
6. RVF outbreaks can disrupt the livestock sector in depleting the future generation of affected herds and therefore constitutes an important socio-economic and food security threat to vulnerable households. In addition, it can also affect the funds directly available to households through their animals and impact their capacities to access health care and child education. Moreover, it results trade ban and affect national and regional economy.

Rift Valley fever (RVF) is an endemic vector-borne zoonotic disease that represents a threat to human health, animal health, and livestock production, in the Eastern Africa Region. The epidemiology of RVF is complex, making monitoring of RVF risk and carrying out efficient and timely control measures challenging. To increase knowledge on RVF epidemiology and inform disease management policies, FAO has developed and maintains a web based RVF Early Warning Decision Support Tool (RVF DST) for near real-time RVF forecasting based on precipitation and vegetation anomalies, among other environmental factors. To this end, FAO, in partnership with the Intergovernmental Authority on Development (IGAD), has been alerting the countries in the region through joint alert messages about the increased risk and what needs to be done to mitigate the risk.

On 12 May 2021, the FAO Animal Health Service, based on the analysis of data available through the FAO web-based RVF Early Warning Decision Support Tool (RVF DST), Global Livestock Early Warning System (GLEWS+), Global Animal Disease Information System (EMPRES-i) and expert knowledge, concluded that the **risk of RVF occurrence in the region remains high both in animals and humans in the next three months (June-August 2021), either due to favorable environmental conditions and/or through potential movement of infected animals**, and highlighted the urgent need to ensure adequate preparedness for potential disease outbreaks, in particular through the One Health coordination.

Despite diverse climatic conditions in the region over the past four months, with heavy rains and floods in some countries and below-average rains and dryness in others, large suitable hotspots for RVF vector amplification persist in the region. **Concerns remain for large, predicted hotspots in central-southern Kenya, South Sudan, northern Tanzania and localized hotspots in Uganda, Sudan, Somalia, Rwanda, Burundi, Ethiopia**, as well as in **eastern Saudi Arabia and Yemen**. Suitable areas are predicted in **proximity to irrigated lands, swamps and/or high density of susceptible livestock** (Figure 1). The rainfall forecast for the period June-August 2021 highlights above-average rains in the region, particularly in July and August, suggesting that the risk remains high in those countries.

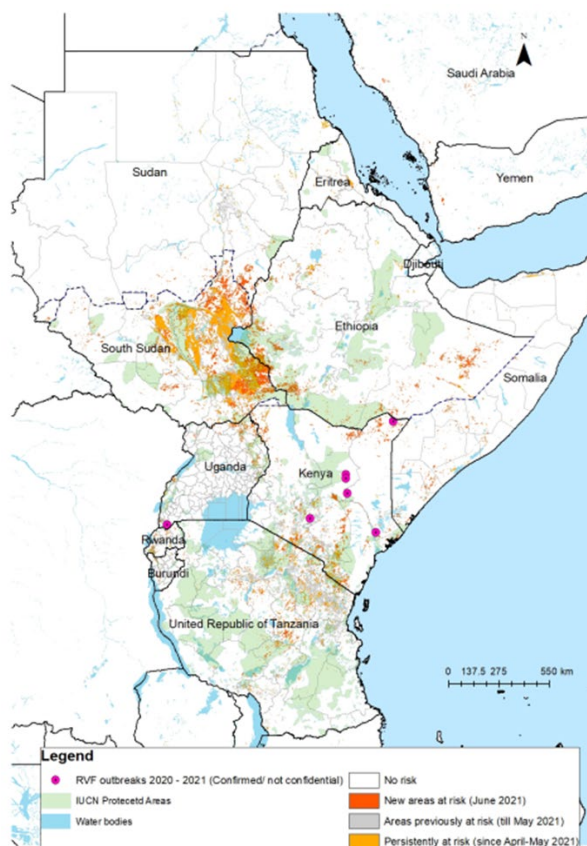
Useful Links

- ▶ Rift Valley fever surveillance (FAO Manual 2018)
www.fao.org/3/i8475EN/i8475en.pdf
- ▶ Recognizing Rift Valley fever (FAO Manual 2003)
www.fao.org/3/y4611e/y4611e00.htm
- ▶ Preparation of Rift Valley fever contingency plans (FAO Manual 2002)
www.fao.org/3/Y4140E/Y4140E00.htm
- ▶ Decision-support tool for prevention and control of Rift Valley fever epizootics in the Greater Horn of Africa. (ILRI and FAO. 2009) Version I. ILRI Manuals and Guides. no. 7. 28p. Nairobi (Kenya): ILRI.
cgspace.cgiar.org/handle/10568/22
- ▶ Real-time monitoring and forecasting of Rift Valley fever in Africa (FAO FCC Information Sheet 2019)
www.fao.org/3/ca5511en/ca5511en.pdf
- ▶ Anyamba, *et al.* 2009. *Prediction of a Rift Valley fever outbreak*. Proceedings of the National Academy of Sciences 106(3): 955-959.
www.pnas.org/content/pnas/106/3/955.full.pdf

Useful Information

- ▶ EuFMD, in collaboration with EMPRES-Animal Health and FAO Regional Offices, launched a new online, open-access 'mobile first' course on efficient recognition, surveillance, prevention and control of Rift Valley Fever (RVF). The course will soon be available in a "just in time" basis in the field, and also in a downloadable version for offline use as needed. For more information, please contact eufmd-training@fao.org.

Figure 1. Confirmed RVF outbreaks (2020 – 2021) and forecasted risk of RVF vector amplification for June 2021



Source: UN, 2020 modified with the data from the web based RVF Early Warning Decision Support Tool, June 2021 (RVF DST).

Disclaimer: The boundaries and names shown and the designations used on these map(s) do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries. Dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Final boundary between the Sudan and South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

Therefore, FAO and IGAD are advising the countries to increase awareness, improve preparedness at national, subnational and community levels to safeguard livestock, livelihoods and public health, especially for exposed and vulnerable communities (farmers, pastoralists), and improve coordination with public health and environment services around the on-going risk of RVF outbreaks.

More specifically, FAO and IGAD recommend

- **National Veterinary Authority to increase awareness** about the disease, **assess the current situation and the specific risk to the country regarding RVF, and identify the actions** to support the country to increase its preparedness to RVF outbreaks.
- **National Veterinary Authority to get in touch with their public health counterparts to coordinate joint preparedness activities**, especially in countries where there is no **One Health platform**; to ensure a **coordinated One Health and humanitarian approach to this threat**.

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Countries should verify if:

- Staff at all levels (national to local) are aware of specific high-risk areas.
- An RVF contingency plan with SOPs for outbreak control exists and was endorsed/activated.
- Staff are equipped and trained to implement the plan in case of outbreak.
- Staff are equipped and trained to conduct passive and possibly active RVF surveillance, especially in high-risk areas.
- Additional actions should be taken to increase awareness of populations.
- Proper safety/protection measures are in place for first responders/staff.

In case of any inquiry on the subject, including the need for technical support or information on the at-risk areas, you may wish to contact FAO (Dr. Ricarda Mondry and Dr Charles Bebay) and IGAD (Dr. Solomon J. Muchina Munyua and Dr. Guleid Artan).