



RVF SURVEILLANCE SYSTEMS IN PLACE IN LIVESTOCK POPULATION IN THE GHoA

SUB-REGIONAL CONFERENCE ON RVF:

New Options for Trade, Prevention & Control,

DJIBOUTI, 21st – 24th, April

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Outline

Background

SS in IGAD Region

Gaps in the SS

Recommendations &
Way Forward



Background...RVF(1)

- Region is global hotspot for RVF emergence
- The GHoA affected by impacts of RVF – livelihoods, PH and trade
 - the 1997-98 epizootic resulted in the loss of several hundreds of lives
 - cause for sustained import restrictions
 - economic losses for the livestock industry in Somalia alone were estimated at US\$109 million for the first ban (Feb1998 – May1999)
 - US\$326 million for the second ban (Sept. 2000 – Dec. 2002)



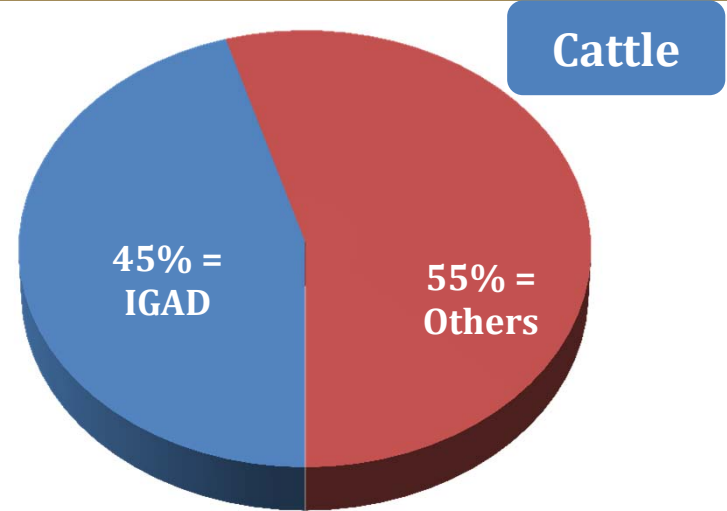
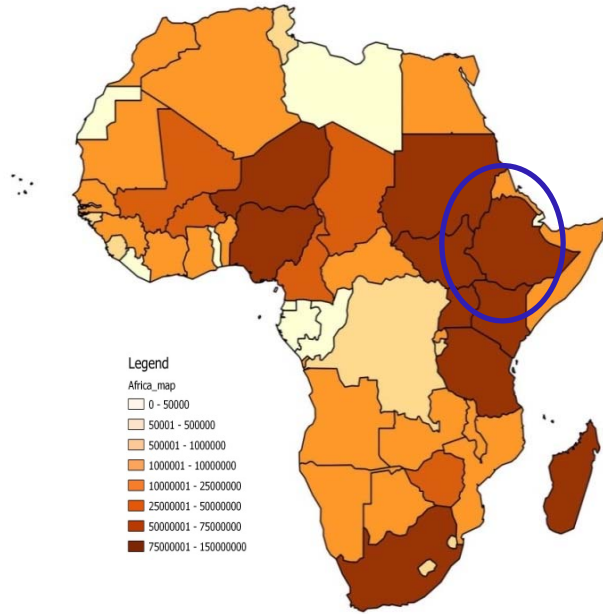
Background...RVF (2)

- **5 countries in the region officially reported occurrence of RVF**

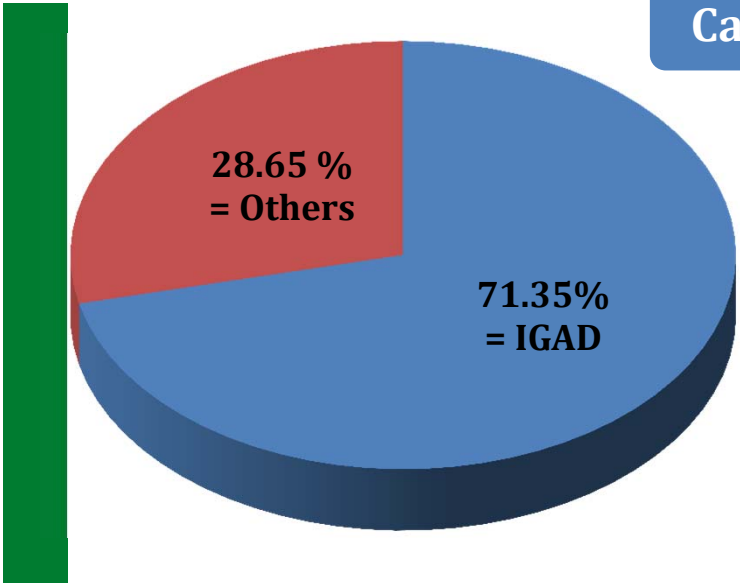
MS	RVF Situation	Date Last occurrence	Source
Djibouti	NR		WAHID
Eritrea	Not Reported	NA	VS
Ethiopia	NR		WAHID
Kenya	Reported	2007	WAHID, ARIS
Somalia	Reported	2007	WAHID, ARIS
South Sudan	Reported	2007	VS
Sudan	Reported	2008	WAHID, ARIS
Uganda	Serological evidence	2013	Research study



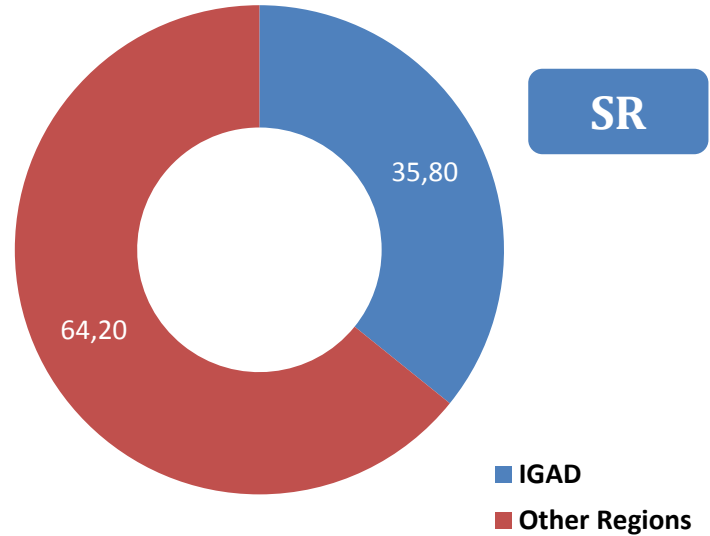
Background – RVF Susceptible Pop (3)



Camel



SR





RVF Surveillance Systems

- RVF is a priority TAD in the region
- MS developed EPP to guide their actions against RVF
- Surveillance strategies available in many countries to guide activities epizootic & inter-epizootic periods
- RVF surveillance undertaken jointly between AH and PH sectors (few) – inspire inter-sectoral collaboration (OH approach)

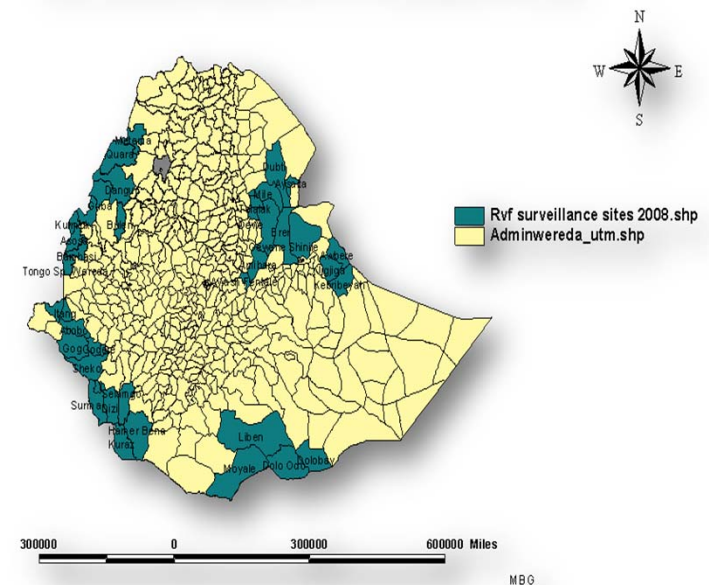


RVF SS...

Inter-Epizootic Period

- Surveillance undertaken in many countries during inter-epizootic period
- Objective is early detection of OBs through monitoring virus activity

Surveillance Sites of RVF Disease in 2008



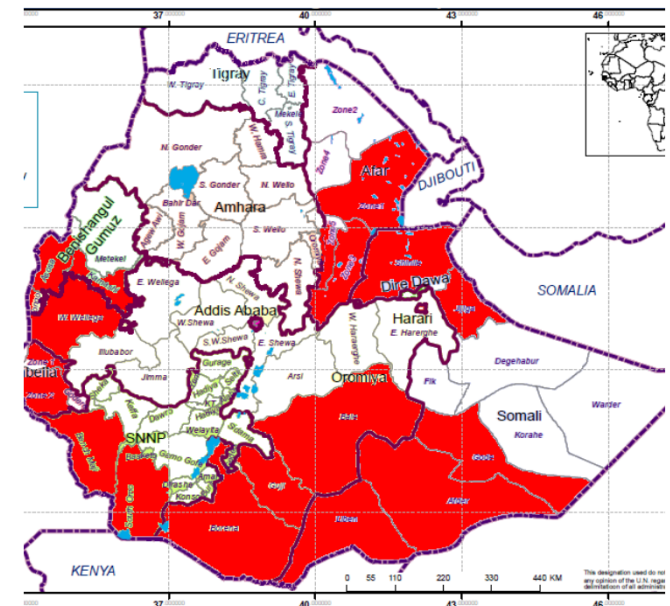
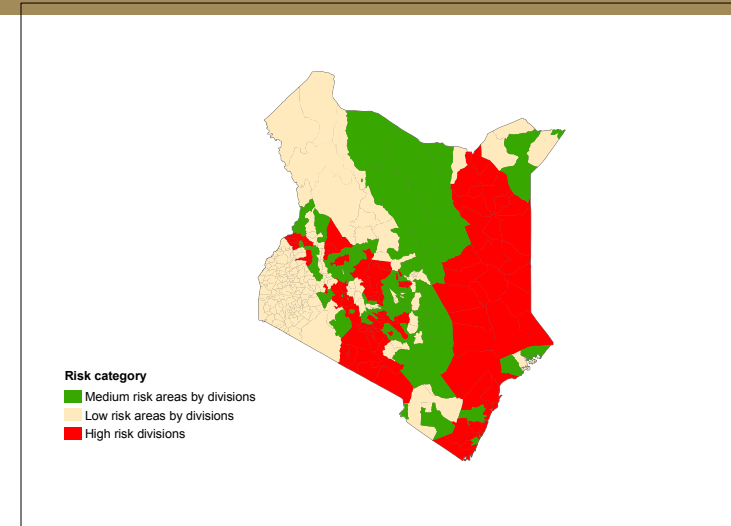


RVF SS...

Inter-Epizootic Period

■ Targeted surveillance in high risk areas

- ✓ based on historical data on geographical distribution of previous OBs
- ✓ areas bordering affected countries
- ✓ areas with climate similarity with affected areas





RVF SS...

Inter-Epizootic Period

- Sero-surveillance (detection of Abs) in randomly selected units
 - ✓ Ethiopia, Kenya, Sudan, Uganda





RVF SS...

Inter-Epizootic Period

- **Monitoring of sentinel herds (sero-conversion)**
 - ✓ Kenya, Somalia
- **Vector surveillance**
 - ✓ Ethiopia, Kenya





RVF SS...

Inter-epizootic Period

- Screening of export animals for evidence of RVF infection
- Animals destined for slaughter undergo ante and postmortem inspections





RVF SS...

Inter-Epizootic Period

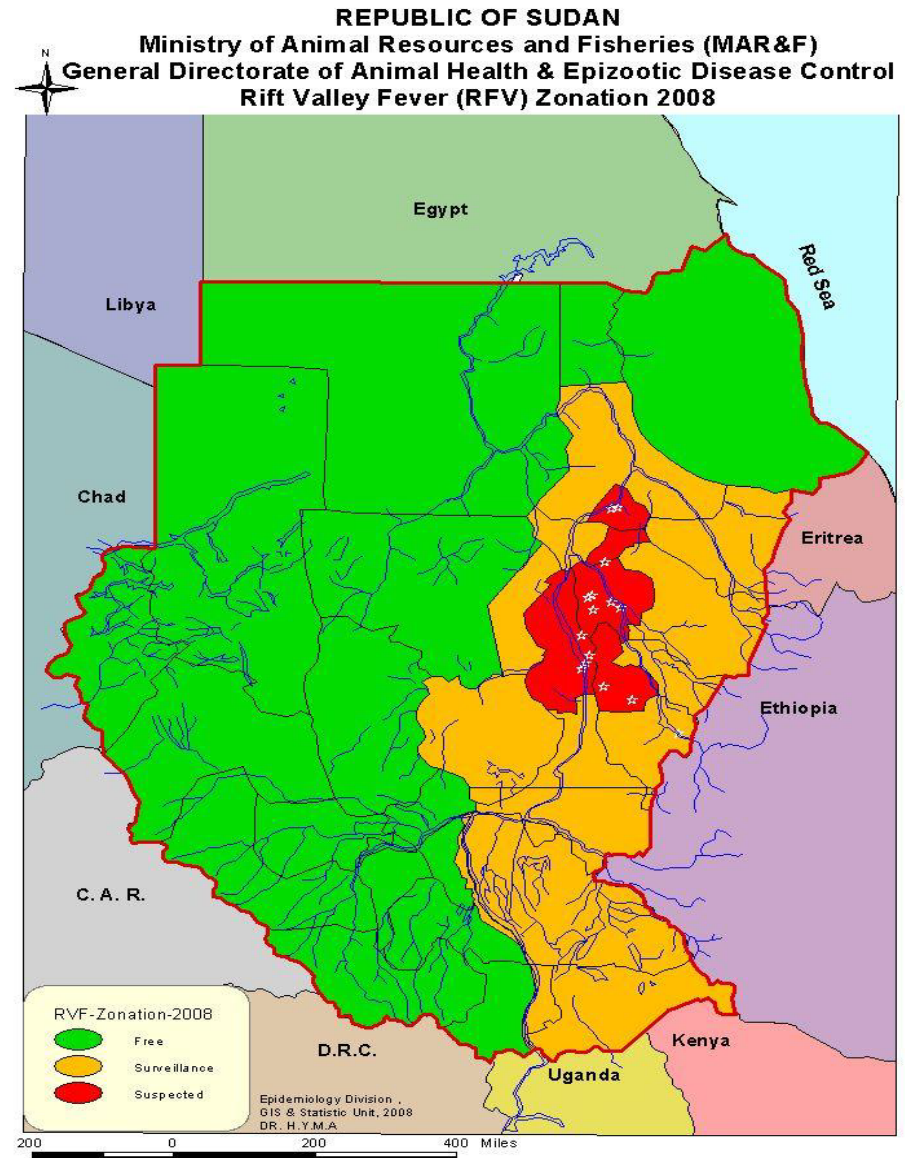
- **SS guided by early warning systems**
 - ✓ meteorological forecasts of favorable climate – excessive rainfall
 - ✓ intensified surveillance activities in high risk areas following environmental predictions
 - ✓ aims at early detection & trigger rapid response



RVF SS...

Epizootic Period

- Surveillance component of RVF response plan
- Aim is to determine extent of OB
 - ✓ geographical coverage
 - ✓ species involved
- Combines Ag and Ab (IgM) detection – sero clinical surveillance)





Most surveillance activities in place fairly consistent with the recommendations of chapters 1.4 and 8.13 of the OIE Terrestrial Code

Provisions to facilitate trade of animals and animal products during both the inter and epizootic periods by complying with the recommended sanitary measures



Gaps in the SS

- **Less focus on vector surveillance**
 - ✓ Critical to determine and identify areas and seasons of low and high vector activities – requirement to keep export animals in an area of low vector activity (article 8.13.8)

- **Identification of risk areas based on descriptive analysis of previous OBs**
 - ✓ lower sensitivity of SS
 - ✓ dynamic vector distribution, climate change, land use, animal movement



Gaps...

- **Weak inter-sectoral collaboration and harmonization in RVF surveillance activities**



Recommendations & Way Forward

- Integration of vector surveillance in RVF SS
- In-depth analysis to determine high risk areas by combining data on disease and risk factors using analytical tools
 - ✓ CS study undertaken to develop risk maps of RVF in the IGAD region



Recommendations...

- **Improve inter-sectoral collaboration between the animal and public health sectors**
 - ✓ setting up national and regional inter-sectoal coordination team
- **Ensure harmonization, coordination and information exchange at regional level**
 - ✓ establishing Regional RVF sub-network under the EAREN
 - ✓ streamlining RVF SMP



Acknowledgement

- **VS of the MS in the IGAD Region**



THANK YOU



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