



Protecting livestock,
saving human life

Rift Valley Fever

The regional approach in the control of RVF: the SADC model



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RVF and its impact

Livestock
health

Human
health

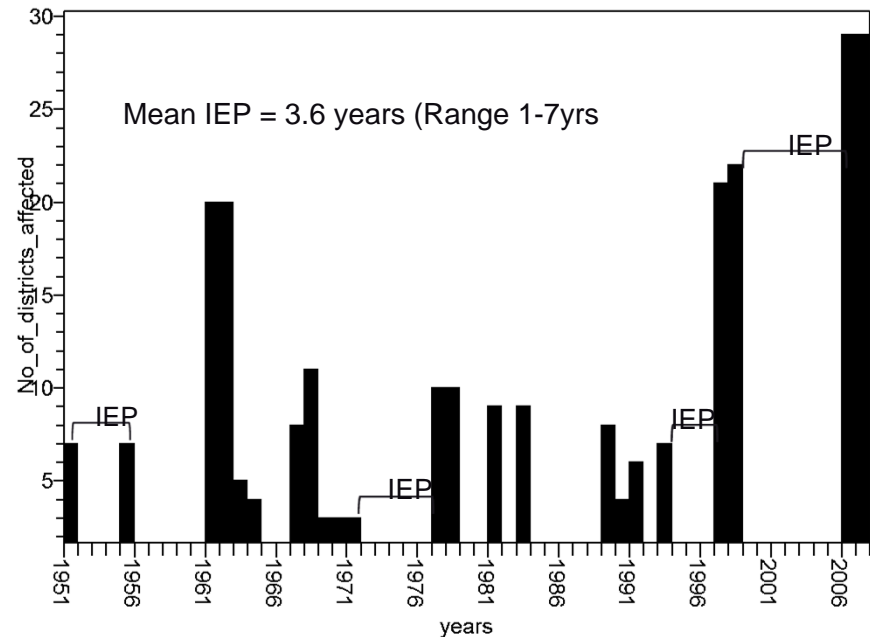
Trade

Livelihood

National
economy

RVF Control challenges

- Cyclical & long inter-epizootic periods
- Poor reporting at early stage of disease
- Challenges in implementing emergency preparedness plans
- Animals are largely Naive when outbreaks start
- Vaccine availability challenge
- Limited safety of Smithburn vaccine, while there is a need to protect all animals
- Limited diagnostic capacity in most countries

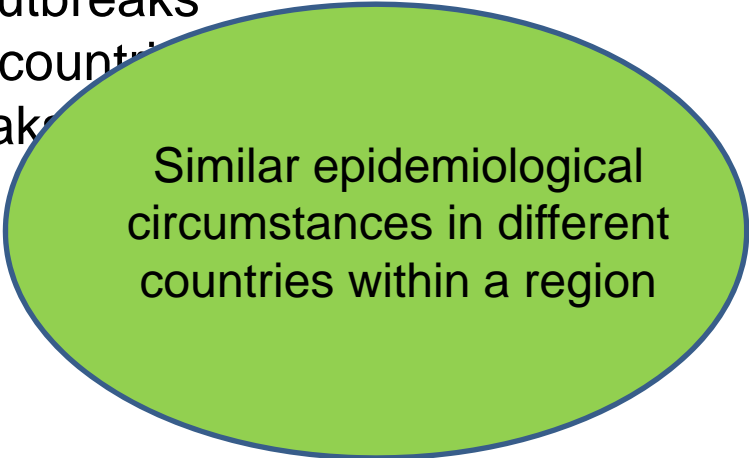


Key elements for a control strategy at country level

- Effective surveillance strategy: Policy level
- Diagnostic capacity
- Vaccination strategy
- Management of zoonotic aspects

Challenges

- Limited capacity in some countries,
- Limited vaccine availability during outbreaks
- Limited diagnostic capacity in most countries
- Simultaneous occurrence of outbreaks
- Trade impacts

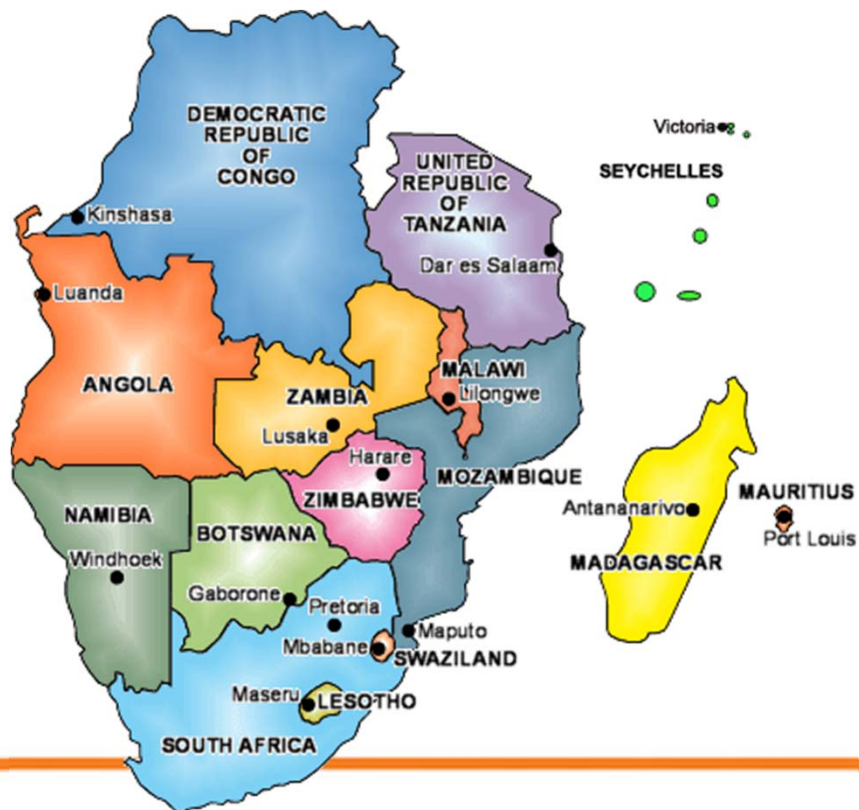


Similar epidemiological circumstances in different countries within a region

Need to consider regional approaches to the control

GALVmed working with SADC on regional strategy

- Built around the need to establish a vaccine strategic reserve
- RVF outbreaks impacting heavily on agriculture economies & poor livestock keepers
- Long inter-epizootic periods affecting implementation of effective control



GALVmed - SADC RVF regional strategy

- Understanding the policy landscape on RVF control in different countries
 - Is RVF a public or a private good in each country?
 - What is the vaccination strategy?
 - What surveillance system is in place?
- Strategic reserve or vaccine bank:
 - Technical feasibility
 - Country commitments and contributions
 - Size of the bank
- Maintaining good herd immunity during inter-epizootic periods
 - Yearly vaccination
 - Combination vaccine
- Diagnostic capacity in different countries
 - Central laboratory capacity
 - Field diagnostic capacity
 - Disease recognition capacity for field staff



GALVmed interventions in RVF

Adoption strategy for the different RVF products

Objectives	Availability strategy	Access strategy
Increased herd immunity	Combination LSD-RVF C13 (possible cross-protection with sheep & goat pox) Possibility of other combinations	Distribution & regular use relying on LSD, sheep & goat pox Policy interventions for vaccine uptake
Emergency vaccine	Strategic reserve; antigen/vaccine bank: based on C13 in collaboration with OBP	Vaccine bank (strategic reserves); Encourage participation of many countries Need for strong integrated control strategies in countries Policy interventions Risk mapping to determine size of bank and requirements
Field diagnostic	Development of OVI's nucleoprotein penicillin test	Integrated into regional and country's control programs
Cross-cutting intervention		Policy landscaping in different countries Establishment of a process with SADC: RVF Working group established

Strategic reserve (Vaccine bank)

- Vaccine bank managed by vaccine manufacturer (EC-FMD vaccine bank model)
- Target Southern & Eastern Africa initially
 - SADC, EAC, COMESA, PANVAC, AU-IBAR partnership
 - Possibility of partnerships beyond Africa
- Stockpiling of frozen pre-lyophilization (stabilized bulk) vaccine antigen or bottled vaccine?
- Technical feasibility of the RVF Clone 13 strategic reserve (*Pretoria, December 2011*)
 - R&D activities identified
 - Size determination: risk mapping
 - Infrastructure of the bank
 - Policy aspects & countries participations

Access strategy: Risk mapping

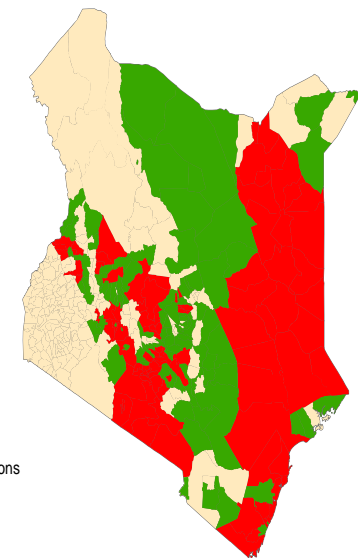
- **Background**

- Different approaches to RVF vaccination in different countries (State controlled or up to farmers)
- Different vaccination strategies (yearly/continuous or at signs of outbreaks)
- Different country policies

- **Risk mapping for participating countries**

- Definition of risk size (volumes of vaccine needs)
- SADC & EAC
- Establishment of community of practice
- Build on Kenyan model

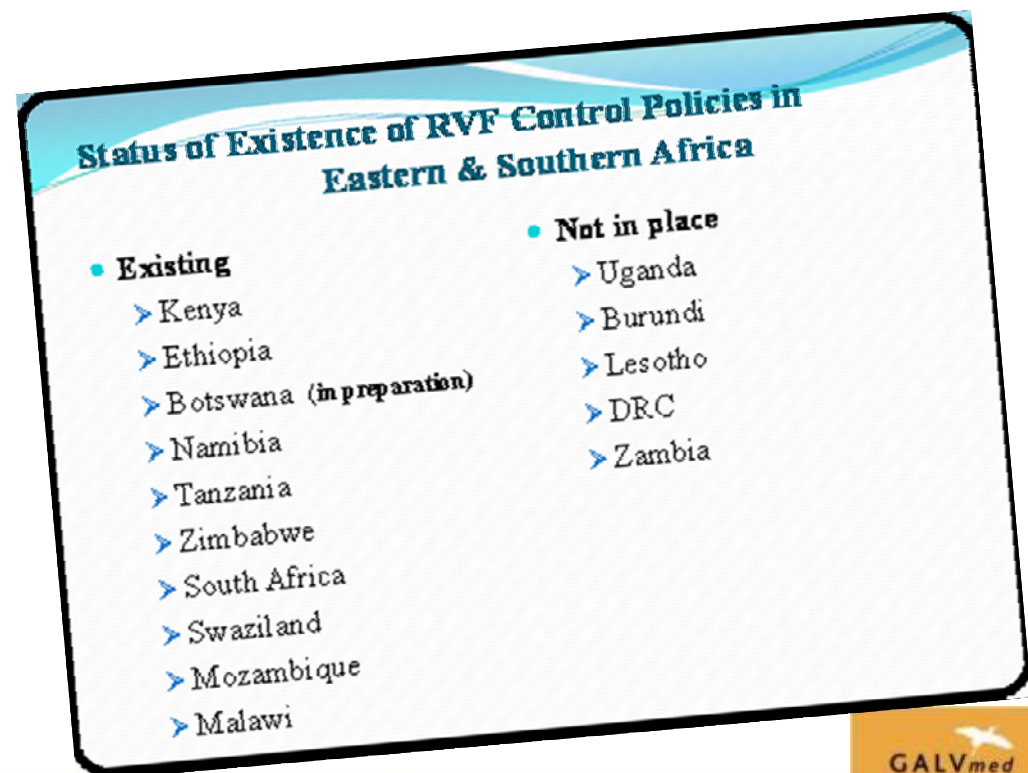
	Total National	High n(%)	Medium	Low
No. of districts n(%)	69	21(30.4)	20(29)	28(40.6)
Livestock No. (m)				
Cattle	17.4	5.5(32.0)	4.6(27)	6.8(39.1)
Sheep	17.1	5.7(34.0)	5.3(31)	5.5(32.2)
Goats	27.7	8.2(30.0)	9.6(35)	9.1(32.9)
Camels	2.9	0.8(27.8)	1.1(40)	0.9(31.0)
Total	65.1	20.3(31.2)	21(32.3)	22.3(34.3)
Cost of vaccine @ 0.04USD/dose (M)	2.6	0.85	0.85	



Munyua et al., 2011

Access strategy: Policy landscaping

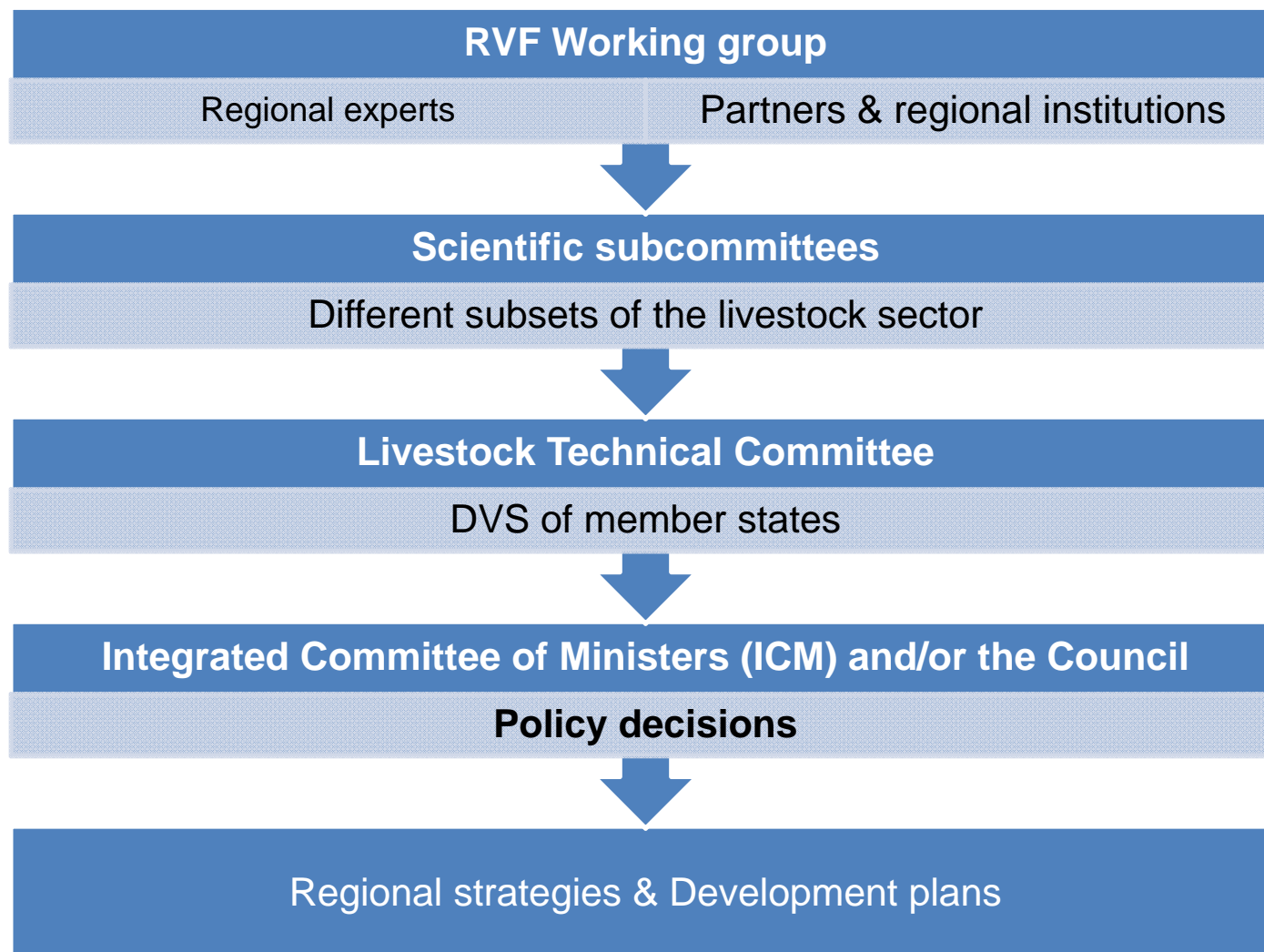
- Conducted in Southern & Eastern Africa
- Basis for further intervention in SADC
- Disparity between countries on policy around RVF



SADC RVF Working group

- Established in early 2012
- Made of experts from different countries in region
- Including regional institutions: laboratories, vaccine manufacturers, international partners etc.
- Integrated activity plan developed & being implemented

Process for RVF WG Policy contribution within SADC



This process has been successfully used for PPR & other diseases

GALVmed SADC RVF strategy

Progress to date

- Technical feasibility of vaccine/antigen bank ongoing
- Risk mapping being conducted in a number of countries
- Policy landscaping finalised
- RVF Working group established:
 - Activity plan developed
 - Questionnaires sent to different countries
- GALVmed collaborating with SACIDS: a project manager to coordinate activities

Specific Objective	Activity	Action By	YEAR 1		YEAR 2		YEAR 3						
			Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Operationalisation of Plan	WG Meeting	SADC											
	Finalisation of the redaction of the CS	WG											
	Dissemination of the CS to the MS	SADC											
	Inception Meeting (Workshop)	SADC											
	Follow-up surveillance activities (MS reports)	WG											
Evaluate the capacities of Laboratories to diagnose RVF identified gaps in the SADC region	Develop a questionnaire	CK, AM	■										
	Send Questionnaire to all labs in the region	CK, AM		■									
	Conduct on site needs assessment for the RVF diagnosis	SADC, TBA, BD			■								
	Complie report of the assessment	CK, AM,BD			■								
Propose strategies for mitigating/improving the identified gaps	Develop recommendation to the Joint committee (with a view of escalating it to the LTC)	WG			■								
Evaluate the capacities of SADC MS to undertake RVF surveillance (passive and active) and identify needs in RVF recognition and diagnosis.	Develop a questionnaire	LM, ES	■										
	Send Questionnaire to all Epi units in the region	LM, ES		■									
	Compile report of the assessment	LM, ES			■								
Propose strategies for mitigating/improving the identified gaps	Develop recommendation to the Joint committee (with a view of escalating it to the LTC)	WG			■								
Develop vaccination strategy for RVF control in the SADC region	Review vaccination strategy in each country (consult PG-Galvmed report)	PG, BD, GM	■	■									
	Evaluate vaccine needs based on mapping results	CS, Mok		■	■	■	■						
	Recommend modalities of setting up vaccine bank (strategic reserve)	PG, BD, GM		■	■	■	■						
	Review different vaccines/vaccine combinations to build up adequate herd immunity	TS, BD, NM,GM	■	■	■	■	■						
	Recommend that all RVF vaccines used in the region are quality controlled by PANVAC	WG	■										
	Produce vaccination strategy first draft	WG						■	■				
Surveillance	Standardisation of surveillance SOPs	WG											
	Standardisation of sampling SOPs	WG											
	Training on collection, storage, transport	SADC											
	Differential diagnosis and integrated surveillance	WG, SADC											
	Sero-surveillance	WG, SADC											



RVF WG Action plan (contd.)

Zoning	Mapping distribution of risk species	WG, SADC							
	Risk mapping and assessment	SADC							
Vaccination	Sourcing QA vaccines vs PANVAC	WG, SADC							
	Vaccination coverage (optimal rate)	WG, SADC							
	Post-vaccination period surveillance	WG, SADC							
Socio-economic impact	Estimate of disease cost in infected MS	WG, SADC							
	Estimate of disease prevention in at risk	WG, SADC							
Research	Definition and adoption of themes	WG							
	Organisation of a research-aimed WS	WG, SADC							
Policy and Legislation	Reviewing existing and recommend news	WG, SADC							
	Proper National Preparedness Plans	WG, SADC							
Regional Coordination	Creation of a Specific Crisis Committee	SADC							
	Determination of Communication Flow	WG, SADC							

Similar process could be considered for other regions



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Thank you!

