UPDATE ON FOOT-AND-MOUTH DISEASE (FMD) SUB-REGIONAL NETWORK IN EASTERN AFRICA

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PRESENTED AT THE 4TH EARLN-FMD ANNUAL MEETING
29TH – 30TH AUG. 2013, ENTEBBE-UGANDA.

PRESENTATION OUTLINE

1. INTRODUCTION OF THE FMD SUB-NETWORK
2. FMD REGIONAL STATUS and LABORATORY CAPACITIES
3. REGIONAL CONTROL STRATEGIES
4. PAST ACTIVITIES OF SUB-NETWORK
5. RECENT ACTIVITIES
6. FUTURE ACTIVITIES

14 COUNTRIES IN FMD EARLN-FMD NET

1. Burundi
2. DRC
3. Djibouti
4. Eritrea
5. Ethiopia
6. Kenya
7. Rwanda
8. Somalia
9. Sudan
10. South Sudan
11. Tanzania
12. Uganda
13. Comoros
14. Yemen

INTRODUCTION; CREATION OF THE NETWORK

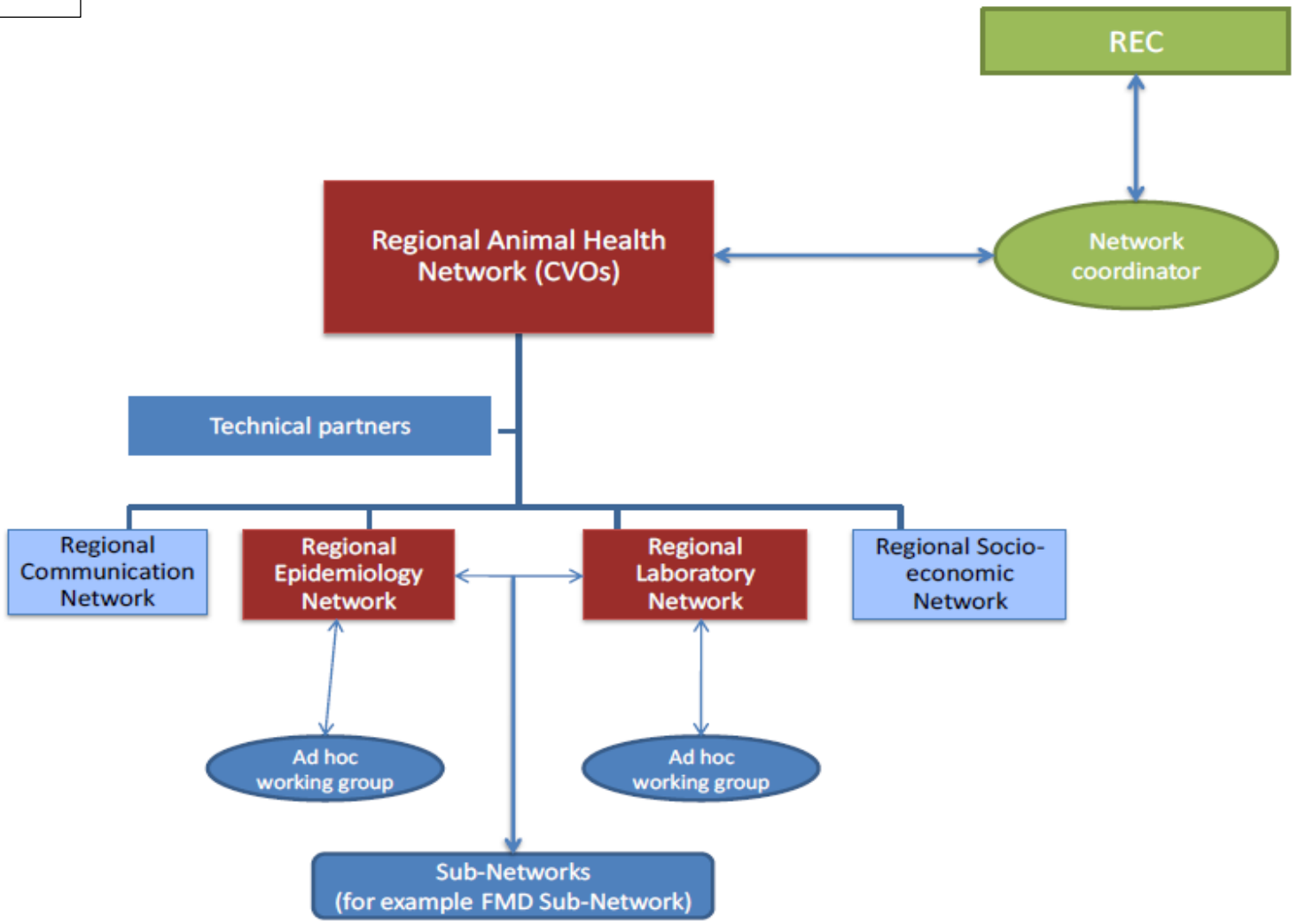
- Established in February 2010 as a sub-network of the bigger EARLN
- Mainly to address lab. and epidemiological Issues of FMD

OBJECTIVES

1. To understand global and regional FMDV circulation, research and recommendations on vaccine/FMD control
2. To Improve the quality of lab. tests regionally
3. To Complement activities of each individual country in fulfilling the objectives of the Progressive Control Pathway (PCP) for FMD (PCP-FMD)

Legal Recognition

Organogram



EARLN-FMD 12 COUNTRIES FOCAL POINTS

Country	Name	Designation/Lab. Station
Kenya	Dr. Sabenzia N. Wekesa	Vet. FMDL/Coordinator
Tanzania	Dr. Chanasa Ngeleja M	Vet.CVL/Asst coordinator
Kenya	Dr. Abraham Sangula	Vet. FMDL
Uganda	Dr. Chris Ayebazibwe	Vet/NADDEC
Ethiopia	Drs Ayelet Gelagay/Rufael Tesfaye	Vets/NVI/NAHDIC
Burundi	Dr. Lazare Butunungu	Vet/Lab
Sudan South Sudan	Dr. Mohammed Habiela Dr. David Ajwok/Jacob Korok	Vets/CVRLab Vet/admin
Rwanda	Dr David Kiiza	Vet/Lab
Somalia	Dr. Mohamoud Jabra	Vet Epidem/SAHSP
Eritrea	Dr. Tesfaalem Sebhatu	Vet/NVL
Djibouti	Said Waiss Miguil	Tech/NLDAD
DR Congo	Dr Bushu Mulinda	Vet/Lab director

REGIONAL FMD EPIDEMIOLOGICAL STATUS

- Serotypes currently in EA region ; O, A, SAT 1, SAT 2, SAT 3 (Hammond, 2012).
- Current Risk; Serotype A in Kenya, Uganda and Tanzania
- Probably C as serologically indicated in Uganda (Ayebazibwe et al., 2010; Ethiopia (Rufael et al., 2008); Eritrea (Sebhatu T. T. et al., 2010)
- Serotype C last isolated in Kenya in 2004 (Sangula et al.,2010)
- SAT 3 last isolated in 1997 in buffalo in Uganda, may still be present due to serological evidence (Ayebazibwe et al., 2010).

FMD IN THE PAST 2 YEARS AS REPORTED TO OIE /EUFMD/ NETWORK AND SITUATION BY APRIL 2013

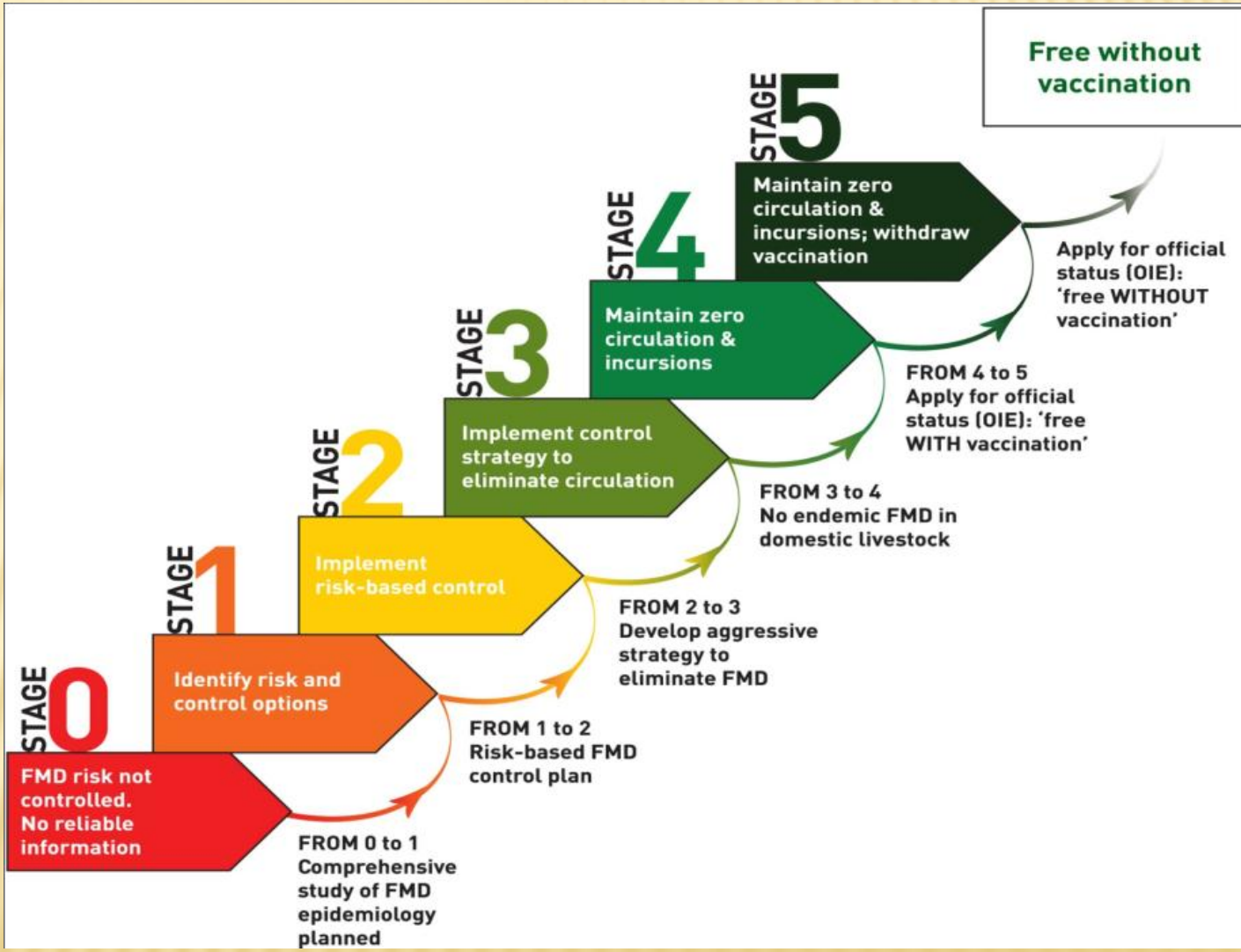
- **BURUNDI: 2011** – O, A, SAT 1, SAT 2
- **COMOROS: 2011** - DISEASE SUSPECTED BUT NOT CONFIRMED
- **CONGO D. R**: 2011- 2012- O, A, SAT 1: 2013- NOT TYPED LIMITED TO EASTERN REGIONS
- **DJIBOUTI:** 2011 to 2013 – ABSENT- DISEASE NOT REPORTED IN THIS PERIOD
- **ERITREA**: DEC.2011 – O
- **ETHIOPIA**: 2011 –O, A, SAT 1: 2012/13 – O (EA-3 and EA-4)

FMD IN PAST 2 YEARS AS REPORTED TO OIE AND SITUATION BY APRIL 2013.

- **KENYA:** 2011–O, SAT 1, SAT 2; 2012-2013 –A,SAT 2
- **RWANDA:** 2011 – ABSENT; 2012 – NOT TYPED
- **SOMALIA:** 2011 – NO VIRUS ISOLATION DATA AVAILABLE
- **SUDAN:** 2011 – Isolated A, O , 2013- O,A,SAT1 and SAT2 (serologically)
- **SOUTH SUDAN:** 2011, 2012 – A, O, SAT 1, SAT 2 (serologically)
- **TANZANIA:** 2011 – SAT 1(buffalo), SAT 2
- (cattle), 2012 – A, O, SAT 1, SAT 2, 2013 – O
- **UGANDA:** 2011 – O, A, SAT 1, SAT 2, 2013 – A (Wakiso), SAT 2.
- **YEMEN:** NO AVAILABLE DATA

REGIONAL CONTROL STRATEGY….PCP-FMD

- Embraced by most EA countries
- Developed by FAO and EuFMD, adopted by OIE
- Intended to assist FMD-endemic countries to progressively reduce the burden of FMD
- 5 stages that progressively increase the level of FMD control



REGIONAL CONTROL STATUS

- CONTROL: Quarantine 9/12 and vaccination 7/12([Namatovu et al.,2013])
- 11/12 countries below stage 3 of PCP-FMD

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Burundi	1	1	1	1	2	2	2	2	3	3	3
DR Congo eastern zone	1	1	2	2	2	2	2	3	3	3	3
Rwanda	1	2	2	2	3	3	3	4	4	4	5
Uganda	1	1	2	2	2	2	2	3	3	4	4
Tanzania (zone)	1	2	2	2	3	3	4	4	4	4	4
Kenya (zone)	1	1	1	2	2	2	2	2	3	3	3
South Sudan zone A	0	1	1	1	1	1	2	2	2	2	2
South Sudan zone B	0	1	1	1	1	1	1	1	1	1	1
Sudan South zone C	0	1	1	1	1	1	1	1	1	1	1
Eritrea central	1	1	2	2	2	2	2	3	3	4	4
Eritrea western	1	1	1	2	2	2	2	3	3	3	3
Eritrea eastern	1	1	1	2	2	2	2	3	3	3	3
Djibouti	1										
Somalia	1	1	1	2	2	2	2	3	3	3	3
Ethiopia	1	1	1	2	2	2	2	3	3	3	4
Sudan zone A	1	2	2	2	2	2	2	3	3	3	3
Sudan zone B	1	2	2	2	2	2	2	2	2	2	2
Sudan zone C	1	2	2	2	2	2	2	2	2	2	2

REGIONAL FMD LAB. CAPACITIES

- 12/13 labs use serological techniques to diagnose FMD …….(Namatovu et al.,2013)
- 3 countries have fully functional BSL 3 labs with Ag ELISA capability
- 3/13 also used molecular techniques
- Only 4/13 (31%) participated in proficiency testing for FMD.
- 6/13 (46%) laboratories had no quality management systems (QMS) in place and where QMS existed it was still deficient.
- None has achieved accreditation for FMD diagnosis.

PAST ACTIVITIES

Trainings in;

- PCR in Tanzania to network member countries
- Sampling techniques to Vets and Technicians in Burundi in 2011
- Vaccine matching to Kenya (2 Vets trained in Nov.2011 at Pirbright)
- Series of Real-time field trainings (NTCs)– 9 within 3 years

Regional activities;

- Participated in regional meetings on PCPs
- Laboratory network activities; meetings and information sharing
- Meetings with the EA Epidemiology and lab.network
- Collaborative projects and partnerships with; EuFMD, FAO, WRL-Pirbright
- Initiation of laboratory twinning processes (Ethiopia,Kenya…)

RECENT ACTIVITIES

- EAREN/EARLN FMD meeting Bujumbura, Burundi 16th-19th July 2013
- Participation in SMP-AH development-Juba July 2013
- RSL meeting in Addis, Ethiopia, 9th-11th July 2012
- Global FMD lab. meeting in Jerez, Spain in October 2012
- Production of First issue Sub-Network news bulletin – On EuFMD Wikispace
- Proficiency testing
- Wildlife surveillance on FMD (Kenya, Uganda, Tanzania)…On going

ENVISAGED ACTIVITIES

- Production of 2nd issue of news bulletin
- Production and launching of the FMD quick guide for laboratory and field use
- Vaccine evaluation/matching – training and execution
- Participation in Proficiency testing
- Cross-boarder meeting with CVOs
  - To Share expert opinions on regional way forward towards the PCP-FMD
  - To Share recent research activities/findings

FUTURE ACTIVITIES

- Twinning with ref. Labs
- Towards ISO 17025 and 9001; training and accreditation
- Capacity building for local production of laboratory reagents……AU-PANVAC?
- Establishment of OIE regional reference laboratory for FMD
- Collaboration on research activities

CONSTRAINTS

- Poor communication within the network
- Inadequate funding for network activities
- Uncertain sustainability of network
- Coordination

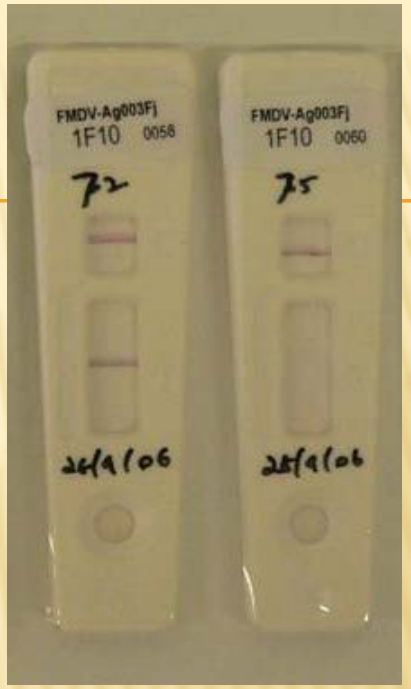
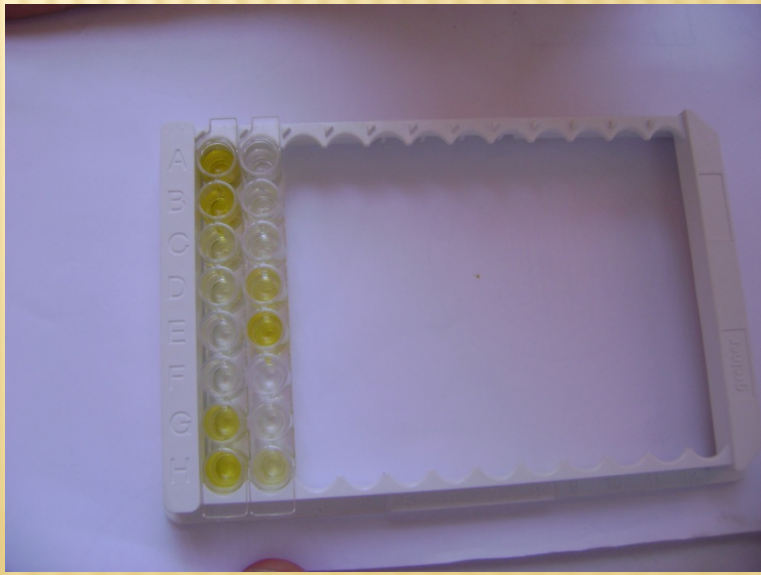
SUGGESTIONS FOR SUCCESSFUL CONTROL OF FMD

- Strengthening regional collaboration thru AU-IBAR
- Continue with Regional Roadmap activities
- Advocacy for FMD control to be given prominence on national animal health agenda

.....SUGGESTIONS.....

- Need for AU-IBAR and RECs to enhance involvement
- Improved resource mobilisation
- Efforts to improve Veterinary Services
  - Based on PVS reports
  - Technical capacity on FMD surveillance and control
  - Private sector involvement along the PCP
  - Socio-economic studies on FMD – To gain Political and social goodwill

ACKNOWLEDGEMENTS

- EuFMD
- FAO Rome
- FAO-ECTAD
- All national governments within the sub-network
- Sub-network members

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