FAO/OIE Sub-Regional Seminar

"Progressing towards Foot and Mouth Disease (FMD) Control and OIE recognized status of SADC Member States"

World Organisation for Animal Health
SUB-REGIONAL REPRESENTATION FOR SOUTHERN AFRICA
SRR Southern Africa

Food and Agriculture Organisation
of the United Nations
Emergency Centre for Trans-boundary Animal Diseases
ECTAD Southern Africa

Regional Animal Health Centre
for Southern Africa
Gaborone, Botswana

16-18 March, 2011

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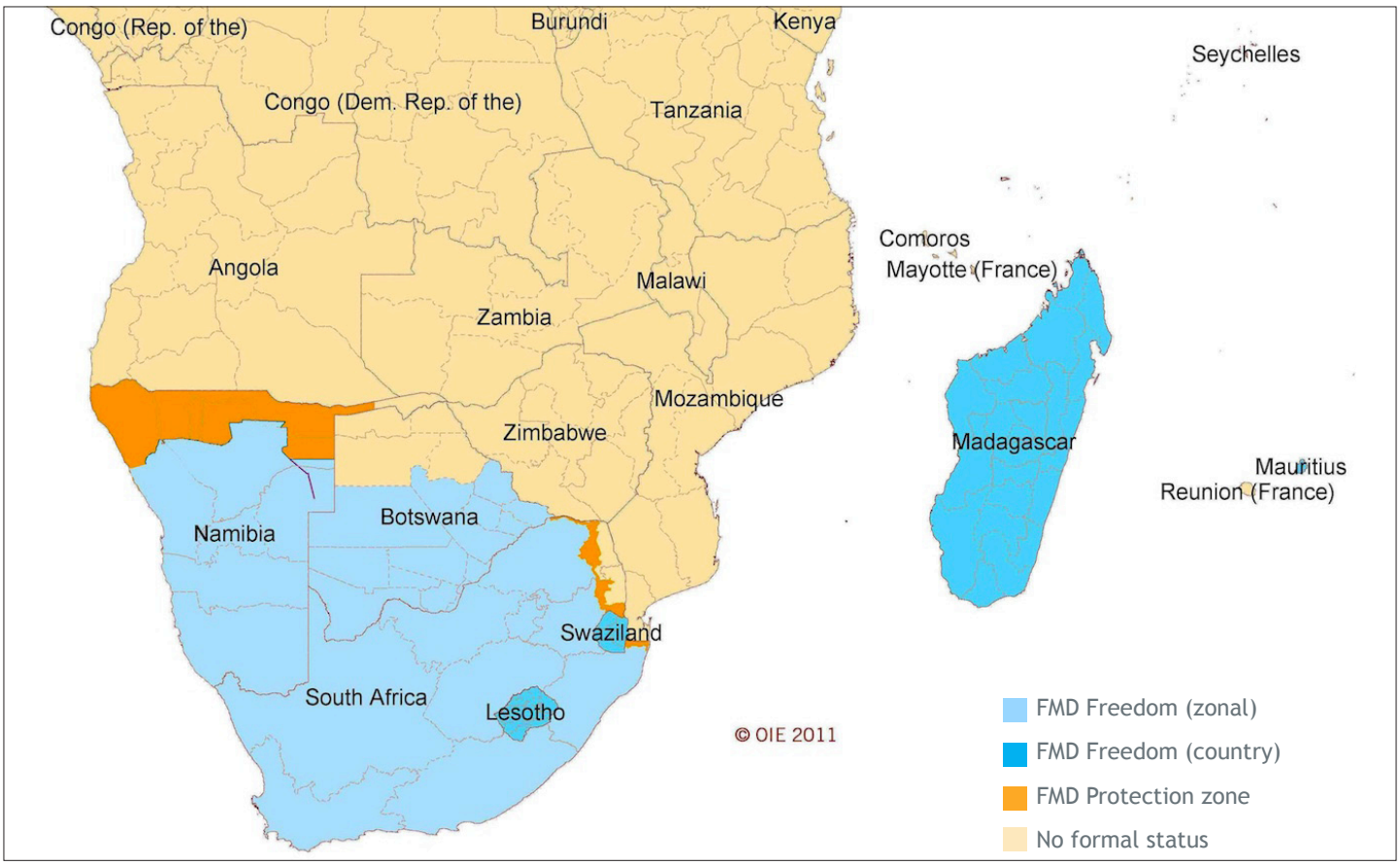
iii). Acronyms

AU-IBAR	African Union - Inter-african Bureau for Animal Resources
ARC	Agricultural Research Council (of South Africa)
BVI	Botswana Vaccine Institute (Gaborone)
CIRAD	(French Agricultural Research Centre for International Development)
DFZ	Disease-Free Zone
DRC	Democratic Republic of Congo
EC	European Commission
ECTAD	Emergency Centre for Trans-boundary Animal Diseases [FAO]
EIS	Epidemiology and Informatics Sub-committee [LTC]
EU	European Union
EU-FMD	European Commission for the Control of Foot-and-Mouth Disease [FAO]
FANR	Food, Agriculture and Natural Resources (directorate) [SADC]
FAO	Food and Agriculture Organisation of the United Nations
FMD	Foot-and-Mouth Disease
GF-TAD	Global Framework for the progressive control of Trans-boundary Animal Diseases
GREP	Global Rinderpest Eradication Programme
IAH	Institute for Animal Health (Pirbright)
LTC	Livestock Technical Committee [FANR]
NVI	National Veterinary Institute (Lindholm) [TUD]
OIE	World Organisation for Animal Health
OVI	Onderstepoort Veterinary Institute (Pretoria) [ARC]
PCP	Progressive Control Pathway (for FMD)
PPP	Public – Private Partnership
PVM	Post-Vaccination (sero) Monitoring
PVS	Performance of Veterinary Services [OIE]
RA	Risk Analysis
RAHC	Regional Animal Health Centre(s)
S/G	Sheep/goats
S/holders	Stakeholders
SACIDS	Southern African Centre for Infectious Disease Surveillance
SADC	Southern African Development Community
SAT	Southern African Type [FMD]
SC	Sub-Committee [SADC]
SRR	Sub-Regional Representation [OIE]
SRR-SA	SRR for Southern Africa
TAD	Trans-boundary Animal Disease(s)
TFCA	Trans-frontier Conservation Area(s)
TUD	Technical University of Denmark
WAHID	World Animal Health Information Database [OIE]

1. Introduction

The goal of the seminar was to make progress on the progressive control pathway (PCP) for Foot-and-Mouth Disease (FMD) in Southern Africa, pursuant to a process that was kick-started at the Global Conference on FMD control, held in Asuncion, Paraguay in 2009 in line with the OIE/FAO GF-TADs framework. The seminar focused on SADC Member States that have not yet attained official OIE recognized status with regard to FMD. These countries, Angola, Dem. Rep. Congo, Malawi, Mozambique, Seychelles, Tanzania, Zambia and Zimbabwe need to be assisted in progressing towards official recognition of FMD freedom with or without vaccination by 2020.

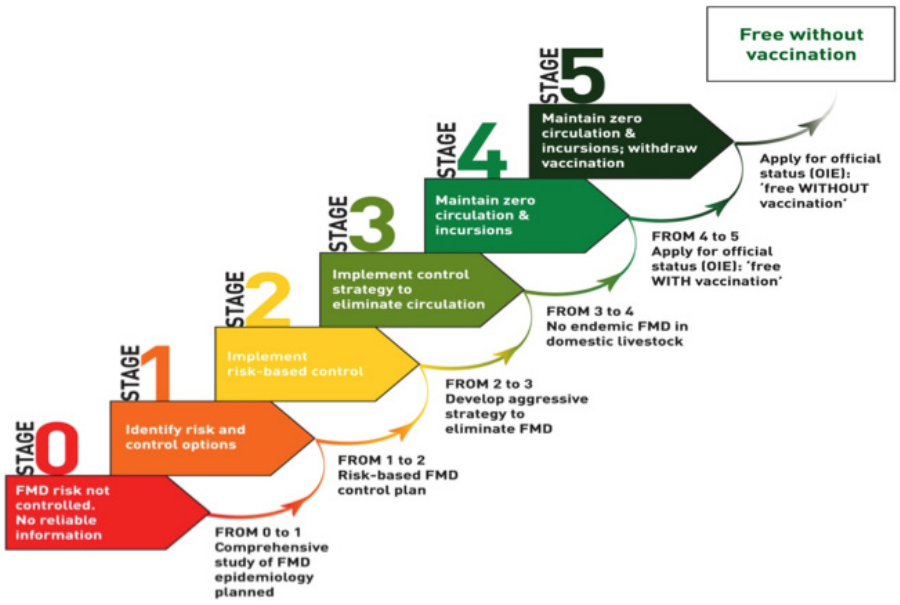


The main focus was to assist these countries in advancing on the stages of FMD control, aspire for an OIE endorsement of their respective national FMD control programmes, leading to official recognition of FMD free status with or without vaccination, including options for zoning and compartmentalization as appropriate. This was achieved through interactive practical working sessions with exchange between the countries present and technical experts to identify specific needs of individual countries. Botswana and Swaziland provided experiences and supported the technical experts from OIE and FAO. Seychelles was advised and assisted to prepare a dossier for submission to the OIE for FMD freedom based on historical grounds.

SADC Secretariat's role needs to be acknowledged as central to harmonizing efforts in a regional approach to the progressive pathway of FMD control complemented by the SADC TADs project to achieve regional integration.

2. The FAO progressive control pathway for FMD & the OIE official FMD free status procedures

The progressive control pathway for FMD proposes a stagewise approach, allowing for a regional or eco-system based synchronization between countries, similar to the approach known as OIE rinderpest pathway followed under the Global Rinderpest Eradication Programme (GREP), now concluded. The FMD PCP consists of six stages ranging from zero (0), when there is continuous FMDV circulation with no reporting or control actions, to five (5) where a country is ready to be officially recognized by the OIE as free without vaccination. Currently, the OIE recognizes only three categories for countries with regards to FMD: 1) Countries not free from FMD (PCP stages 0-3), 2) FMD free countries or zones practising vaccination (PCP stage 4) and 3) FMD free countries or zones where vaccination is not practised (PCP stage 5).



Zoning provides a useful tool to prioritize the use of resources and constitute the building blocks towards reaching country-wide freedom. Zones could theoretically extend over more than one country for which simultaneous applications for OIE endorsement or official recognition could be submitted. However, countries should be evaluated separately to ensure equivalence of other factors such as the quality and governance of veterinary services, animal movement patterns, etc.

FMD PCP and OIE FMD recognized status procedures are complementary in support to the overall objective of global FMD control. To strengthen the level of integration between both approaches, the OIE will recognize the effort of FMD infected countries by endorsing their official FMD control programmes and strategies as an important milestone in stage 3 of the process. While this endorsement will not change the status of a country or zone (i.e. still considered as infected), it will provide additional assurance that a country or zone has control over the situation and thus acts as an incentive to governments and donors to increase their efforts. This will enhance credibility when complying with the requirements stipulated in the chapter 1.6 on FMD in the Terrestrial Animal Health Code contributing to safer trade in animals and their products within and between countries.

3. Objectives of the seminar

The main purpose of the seminar was to raise the level of understanding of OIE Delegates and their national epidemiologists, on the progressive control pathway for FMD and how their national control programmes and strategies should be aligned with the regional goals (roadmaps) and global objectives. The seminar specifically focused on the recognition of country's national control programmes against FMD, as a prerequisite in the existing approach for FMD freedom, described in the OIE Terrestrial Code for the 8 SADC Member States of Angola, Democratic Republic of Congo, Malawi, Mozambique, Seychelles, Tanzania, Zambia and Zimbabwe which have not yet attained formal OIE status as far as FMD is concerned. Specific activities and or milestones towards regional freedom from FMD were developed for these countries up until 2020.

4. Experiences from countries already declared FMD free (national/ zonal)

Botswana (BW)

Botswana has progressively extended its FMD free zones over the years since 1994. Currently 85% of its cattle population resides in FMD free zones. The country has developed a national FMD Control Policy hinging on the following pillars: passive and active surveillance, movement controls, zoning, strategic vaccination, stamping out where relevant, biosecurity, good legal framework, public education, bilateral and regional collaboration. FMD freedom opens up animal movements locally, regionally and creates access to all levels of markets including international markets.

It is critical that surveillance designs are in accordance with OIE international standards and be adapted for local epidemiological situations. Legislation has to be appropriate and be implemented for stakeholder compliance and to achieve the objectives of the veterinary services. Other challenges faced by Botswana include shortage of technical capacity in the field, diagnostic capacity to process the statistically derived samples within the shortest practical time frames for the epidemiologists to act in time. This is compounded by shortage of financial resources to build laboratory capacity and employ more veterinarians and veterinary technicians for the laboratory and field operations. Another significant challenge is maintaining disease freedom at the wildlife / livestock interface, the high risk zones in northern Botswana.

Despite repeated outbreaks of FMD in Botswana, the country has maintained zonal FMD freedom without and with vaccinations. However, only the zones free without vaccination are officially recognized free from FMD by OIE. The country has regained its lost status in certain zones due to clear delineation of such zones.

Botswana is therefore on stage 4 of the FMD PCP and it is unlikely the country will ever proceed to stage 5 due to the presence of large buffalo populations, which are FMD infected in the northern part of the country. Botswana benefits immensely from the OIE FMD recognized status by enjoying beef market access to the EU from FMD free zones without vaccination. Maintaining the status obviously comes at a cost in relation to good veterinary governance and adherence to the OIE standards. Full commitment at all levels to maintain the status and the understanding that attaining a free status is a process rather than an event were highlighted.

Swaziland (SZ) Swaziland follows principles of good veterinary governance where the country is demarcated into sub-regions for the supervision and control of animal diseases with a clear, though small organisational structure. There is political support and strong implementable legislation that has recently included livestock identification. Reporting structures, communication and infrastructural support is significant. Budget allocation is from the central government treasury.

Swaziland experienced three FMD outbreaks since the 1960s and has clearly demonstrated its capacity to control these outbreaks and regain their FMD free status. Zoning, vaccination, quarantine, farmer sensitization, post vaccination sero-monitoring (PVM), surveillance and clinical inspections are some of the pillars of FMD control. Movements of livestock between farms, to markets and slaughterhouses including importations are documented and managed by a permit system. There is coordination, collaboration and information sharing with neighbouring countries but there remain challenges which could be improved by cross border meetings. Swaziland has an FMD contingency plan.

The diagnostic laboratory support for outbreak virus identification and surveillance programmes are sought from reference laboratories in the SADC region (BVI and OVI) with a clear agreement between Swaziland and the laboratories to facilitate a quick diagnosis. The zones in Swaziland are not delineated by fences except for private farms. There is a herd of 80 FMD free buffaloes enclosed in a private farm and there is no regular sero-monitoring of wild animals.

Swaziland has an OIE recognized FMD freedom without vaccination status (Stage 5) and strives to maintain this status despite challenges of FMD introductions from neighboring South Africa and Mozambique.

The major difference between the two countries is the presence of infected African buffalo (Syncerus caffer) in Botswana, negating the possibility of country-wide freedom, while in Swaziland the buffalo population is very small and are verifiably known to be free from FMD infection. In Botswana and Swaziland beef exports have been the major driver for implementation of the OIE standards and ultimate recognition of the countrywide or zonal FMD freedom.)

5. Review of country information on WAHID

A brief presentation was made based on the information submitted by the SADC Member States to WAHIS and available to the public through WAHID (http://web.oie.int/wahis/public.php?page=home). This included information on the history of FMD outbreaks from 2009 to date, how these outbreaks were managed, current control measures, and in which species. Some discrepancies were observed on the information available on the database. However what is important is that information is accessible to the public and WAHID is seen as an official source of animal health information internationally. Country information on WAHID is available and taken into consideration by the OIE Ad-Group on evaluation of FMD status of Members when considering country applications on FMD free status.

6. Working Group Sessions

Following reflections on the joint FAO-BVI-EUFMD Technical Workshop which preceded the present seminar, and presentations made by Botswana and Swaziland, the 8 countries were divided into three groups:
Group 1: Angola, Dem. Rep. Congo, Tanzania and Zimbabwe;
Group 2: Malawi, Mozambique and Zambia and;
Group 3: Seychelles

Countries in Group 1 were perceived to be at Stage 1 of the FMD PCP. These countries used the questionnaire "The Progressive Control Pathway for FMD control (PCP-FMD) Principles, Stage Descriptions and Standards" to determine what activities are required to be in place in preparation to move into the next stage. Minimum requirement for inclusion in Stage 1 and the 8 key outcomes were evaluated for each country.

The other countries in Group 2 were considered more or less at Stage 2 (advanced level) and were evaluated on the 5 key areas indicating activities required to move to the next stage.

The outcome of these exercises is presented in Table 1 overleaf.

The following are summaries of the country situational reports with respect to the FMD PCP principles, stage descriptions and standards.

Angola (AO). 70% of cattle, mainly beef herds, reside in communal areas. The epidemiological unit used is the village. Control is based on a risk based approach, starting with the high risk areas in the south-east and the south-west. The north-central part of Angola is regarded as a low risk area. The cattle population in the high risk areas is estimated at 3 million heads. Cattle movements are well defined. Limited vaccination is carried out in certain areas on the basis of identified cattle movements. All stage 2 measures will be in place by 2014 and stage 3 should be reached by 2017.

Democratic Republic of Congo (DC) Dairy herds are found in North and South Kivu Provinces, while (beef) ranches are encountered in the Katanga Province. Village farming systems are mainly found in Ituri and other parts of the country. Kivu and Ituri are regarded as high risk areas, Katanga and other parts as low risk areas. The FMD control in dairy farms in Kivu and Ituri is funded by public funds, whereas ranches in Katanga are private sector driven. There are limited local funds available for FMD control, hence the need for a centralized approach/strategy.

2015 is the target date for stage 2. The main challenges are the overall security situation and resultant animal movements between DRC, Uganda, Rwanda, Burundi and Tanzania (the Kagera ecosystem). There is an information gap on circulating FMD virus serotypes.

Malawi (MW). FMD has been occurring sporadically in Malawi over the years, but only in the south in the Shire Valley where there is contact between cattle and buffaloes. Usually SAT 2 is implicated and the disease dies out quickly following ring vaccinations. The country is divided into three zones, the central zone is nationally self-proclaimed FMD free without vaccination while the northern part of the country bordering Tanzania is considered low risk area. Malawi could quickly move into stage 3 and should be able to present an official FMD control plan for endorsement by OIE by 2013.

Mozambique (MZ). A large proportion of the domestic animals were lost during the liberation war in Mozambique. Cattle populations are slowly building up again, particularly in the south and with the growing human population in Maputo, there is a resultant trade of livestock and livestock products from southern Mozambique where FMD is considered endemic. The situation in southern Mozambique is further complicated by the presence of infected buffaloes in the Kruger National Park and by TFCA-related interventions. The central and northern parts of the country are largely un-inhabited and considered relatively free from FMD. Activities envisaged in stage 2 should lead to the country entering stage 3 by 2013 and possibly declaring the central and northern part of the country free from FMD by the year 2016.

Seychelles (SC). Seychelles will have to be assisted in preparing a dossier for historical freedom from FMD by May 2012.

Tanzania (TZ). The beef sector is the priority production sector in the agro-pastoral herds and FMD control in this system is a public good. Small holder dairy is private sector driven and FMD control will likely be also in private hands, since it is possible for small holder dairy farmers to purchase/import FMD vaccine. The FMD risk is spread from north to south and in the agro-in pastoral herds. Vaccination and animal movement restrictions are the main tools for control, but fencing is not an option, at least not in the communal grazing system. Constraints include limited vaccination (coverage), inadequate livestock statistics and domestic/wild animal interactions.

2016 is the target date for stage 3 possibly going to stage 4 (zonal) by 2018.

Zanzibar and Pemba Islands are part of the United Republic of Tanzania but have a separate government. Livestock and fisheries are not Union matters according to the current constitution. The islands should strive to attain stage 3 by 2013 and possibly go to stage 4 by 2016.

Zambia (ZM). FMD is endemic in the east and south parts of Zambia where regular vaccinations are carried out. However these need to be synchronized with Angola, Botswana and Zimbabwe. To the north there is a constant threat of FMD been introduced from Tanzania. The country has an ambitious plan to establish zones in which an FMD free zone without vaccination is to be established at the centre of the country, in and around the capital Lusaka. Zambia's rural/countryside is largely un-inhabited but as urban-to-rural migration takes place, more and more people will be engaged in agriculture, including livestock rearing, hence increasing the risk of FMD spreading to new areas. 2013 is the target for entering stage 3.

Zimbabwe (ZW). Dairy herds predominate the newly demarcated FMD Zones (DFZs) in Zimbabwe, but ranches and breeders are also present in the proposed setting. Biosecurity measures within the proposed DFZ and FMD vaccinations will be carried out routinely around high risk areas. PPP initiatives will be strengthened in undertaking biosecurity measures, including fencing and vaccination using public funds as appropriate. Zonal vaccinations and animal movement controls are already in place in compliance with Stage 1 and the proposed alignment of fences is under consultation with affected communities and relevant stakeholders. 2013 is the target for stage 3 possibly going into stage 4 zonal freedom by 2016.

Minimum requirement for inclusion in Stage 1: There is a comprehensive plan in place to gain insight into the epidemiology and socio-economic impacts of FMD in the country, and results are available from activities working towards Key Outcomes below

Key out-comes	1	2	3	4	5	6	7	8
Angola	Needs more work Trans-bor-der market-ing	Not done Needed – for low & high risk serology with TADs project	Incomplete but govern-ment support available S/holders?	Not recent	PVS still to be done Delivery possible	yes	Identified but need documentation	2, 5 & 7
Democratic Republic of Congo	Incomplete	Incom-plete, serological <12mo	To do.	incomplete	To do. Delivery & cost recovery	yes	To do. More complete/all areas	1, 2, 3, 4, 5 & 7
Tanzania	Yes. Reports	Wildlife – study Cattle – study S/G – to do Pigs – study to complete	To do.	Yes done	PVS done Gap analysis done Models for vaccine delivery available	yes	90% but needs to consider critical control points in high risk zones	3 & 7 especially to do
Zimbabwe	yes	Planned	yes	yes	yes	yes, OIE re-ports	Mapping Available, Incomplete RA	Partial requires 2 & 7

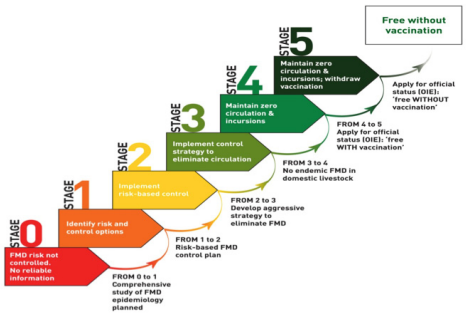
Minimum requirement for inclusion in Stage 2: Completion of Stage 1, and results are available from activities working towards Key Outcomes below.

Key outcomes	1	2	3	4	5	Current Stage
Malawi	yes	Done	Yes	Yes	Zonal basis	2
Mozambique	Actively ongoing coun-trywide Done	Control plan for all coun-try but focused on hotspots	Yes e.g. PVM & regular surveys	done	Improve survey system. Enabling environ-ment Strategy being finalized**	2
Zambia	Done	Yes	Yes	Done	Plan being re-viewed Surveillance in 3 & involve PPP & S/holders in 4 to be done.	2

Table 1: Assessment key outcomes of countries in Stage 1

Countries	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Angola	1	1	1	2	2	2	3	3	3	3
Angola (zonal)	1	1	1	2	2	3	3	4	4	4
Congo (Dem. Rep. of the)	1	1	1	1	2	2	2	2	2	3
Malawi	3	3	3	3	3	3	3	3	3	3
Malawi (zonal)	3	3	3	4	4	4	4	4	4	4
Mozambique	2	2	3	3	3	3	3	3	3	3
Mozambique (zonal : Tete, Manica)	2	2	3	3	3	5	5	5	5	5
Mozambique (zonal : south)	2	2	3	3	4	4	4	4	4	4
Seychelles	hist.freed.	5	5	5	5	5	5	5	5	5
Tanzania	1	1	2	2	2	3	3	3	3	3
Tanzania (zonal : mainland)	1	1	2	2	2	3	3	4	4	4
Tanzania (islands : Zanzibar, Pemba)	1	1	2	3	3	4	4	4	4	4
Zambia	2	2	3	3	3	3	3	3	3	3
Zambia (zonal)	2	2	3	3	4	4	5	5	5	5
Zimbabwe	1	2	3	3	3	3	3	3	3	3
Zimbabwe (zonal)	1	2	3	3	3	4	4	5	5	5

Table 2: Projections for countries (zonal, nationwide) and stages



7. Next steps

Each of the 7 countries (excluding Seychelles) must prepare the appropriate documentary evidence as required by the FMD PCP in support of their current stage. Those entering stage 3 should already start to collate data and documentation for a dossier to the OIE for endorsement of their official FMD control programme according to Chapter 1.6 Article 1.6.5 bis, pending adoption of the new texts by the World Assembly of OIE Delegates in May 2011. Animal movements as a result of informal trade within and across borders in SADC Member States should be given due attention in the course of the FMD PCP process.

Seminar participants mandated Tanzania and Zambia to present the outcome of this seminar to the SADC Epidemiology and Informatics Sub-Committee meeting (EIS) scheduled to take place in Arusha, Tanzania from the 29th of March 2011. The SADC Veterinary Laboratory Sub-Committee (Vet Labs) should also be linked to the FMD PCP related activities and the Chairpersons of both the EIS and Vet Labs SC should regularly submit recommendations to the SADC LTC meetings with regards to FMD PCP and from there hopefully to the next SADC FANR Cluster of Ministers meeting(s).

It was agreed that countries should develop their respective roadmaps including activities and evidence of such activities, conducted prior to this seminar and these should be to be presented and discussed at the next SADC meeting on FMD PCP as part of the SADC GF-TADs programme for Southern Africa. It was acknowledged that national FMD PCP actions will require a significant amount of human and financial resources. Consensus was reached that Governments and private sector should therefore allocate adequate budgets to support FMD PCP activities. Where necessary, development partners may assist through projects which will address specific interventions on FMD and these should be mainstreamed into the activities of the national veterinary services to ensure sustainability.

The SADC TADS project and its linkages to the FMD PCP were discussed and it was recommended that for the sake of sustainability, interventions at country level should take into consideration the FMD PCP approach. This may include the project funding of relevant activities identified by the SADC EIS and Vet Lab Sub-Committees.

Meanwhile OIE/ FAO and AU-IBAR as partners to the RAHC for Southern Africa are committed to assist in the coordination and provision of technical support to the SADC Secretariat and individual SADC Member Countries on the FMD PCP process. The RAHC is also committed to work with headquarters in order to assist in resource mobilization from donors and international community for the implementation of the FMD PCP at SADC level. The FMD PCP will have a far reaching positive impact on quality and good governance of national veterinary services with added value on safe farming and trade in animals and animal products. This initiative, as launched in the SADC region, will contribute to the goal of achieving world-wide FMD control by 2020.

8. Useful reading, background information and internet resources

FAO : www.fao.org and www.fao-ectad.gaborone.org
OIE : www.oie.int and www.rr-africa.oie.int
EU-FMD (FAO) : www.fao.org/ag/againfo/commissions/en/eufmd/eufmd.html
OVI : www.arc.agric.za/home.asp?pid=2564
BVI : www.bvi.co.bw
MoA : www.moa.gov.bw (Ministry of Agriculture, Botswana)
WAHID (OIE) : http://web.oie.int/wahis/public.php

Workshop on the development of a long-term action plan (roadmap) for improved surveillance and control of foot-and-mouth disease in Africa (GF-TAD) January 26 - 30, 2009. Nairobi, Kenya :
www.rr-africa.oie.int/docspdf/en/2009/FMD-workshop-Nairobi-Report-text.pdf

Global Conference on Foot and Mouth Disease (FAO & OIE) 24-26 June 2009. Asunción, Paraguay :
www.oie.int/fileadmin/Home/eng/Conferences_Events/sites/A_FMD_2009/presentations-FMD.html

The Progressive Control Pathway for FMD control (PCP-FMD) : Principles, Stage Descriptions and Standards* (2011) FAO & OIE :
www.rr-africa.oie.int/docspdf/en/2011/FAO_OIE_PCP_FMD_Final.pdf

The Terrestrial Animal Health Code (2010) : Table of contents :
www.oie.int/en/international-standard-setting/terrestrial-code/access-online/

The Terrestrial Animal Health Code (2010) : Chapter 8.5. (FMD) :
www.oie.int/index.php?id=169&L=0&htmfile=chapitre_1.8.5.html

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