



FAO/OIE
GF-TADS
GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES
For Africa



**WORKSHOP
ON THE DEVELOPMENT OF A LONG TERM ACTION PLAN
(ROADMAP)
FOR IMPROVED SURVEILLANCE AND CONTROL
OF FOOT-AND-MOUTH DISEASE IN AFRICA**

Held in NAIROBI, Kenya

26-30th January 2009

*Convened by FAO as a GF-TADS Workshop
in collaboration with the OIE and AU-IBAR.*

REPORT

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EXECUTIVE SUMMARY

A five-day Workshop was held in Nairobi, Kenya, organized by FAO, jointly by the FAO, OIE, AU-IBAR and the ALive Secretariat/GF-TADs, and hosted by the African Union Inter-African Bureau on Animal Resources (AU-IBAR). In total, 40 participants attended the meeting (see: list of participants, [Appendix 1](#)).

The Objectives of the Workshop were:

1. The main objective of the workshop was to develop consensus on the vision and elements of a long term plan for improving FMD surveillance and planning of control measures in the sub-Saharan Africa region, to guide the GF-TADs Steering Committee
2. a secondary objective was to share information on FMD virus circulation within the viral ecosystems in West, Central, East and SADC region and to identify priorities and plans of action for improved identification of suitable vaccines for these ecosystems
3. a third objective was to improve the networking of African FMD specialists and epidemiologists to increase sharing of expertise and information¹

Outcome and outlook

1. It was expected that the Workshop should lead to is part of the development of " continental or regional African FMD Roadmaps", which could form the basis for a long term co-operative effort of countries in the region to progressively bring FMD under control and open up the possibilities of safe trade and FMD free zones. The vision and action plans would be further developed for endorsement by the Regional GF-TADS Steering Committees, and be presented at the OIE/FAO International Conference in June 2009
2. A vision statement for the continental control of FMD was developed, built upon three subregional vision statements, which together with their associated subregional roadmaps signal the view of participants that progressive control of FMD in the region could lead to freedom from clinical cases of FMD being achieved by the majority of countries by the year 2020.
3. The realisation of the vision requires a subregionally co-ordinated set of national efforts under an overall framework of progressive risk reduction, supported by regional services and sharing of information, technical knowledge, and possible donor support.
4. The workshop recommended that at regional level, programs be established to elevate laboratory services, information systems and planning tools, FMD vaccination campaigns and to resolve trans-boundary animal movement issues; a Secretariat should be established to provide co-ordination of these supportive services, and for monitoring and communication of progress.
5. A framework for monitoring progress was developed, based on indicators of country progress in risk identification and risk management, along a progressive control pathway, with 5 stages (0-4). Despite the great disparity in risk and resources, it was foreseen that most countries should attain at least level 3 (FMD under control and approaching disease freedom) by 2020.
6. The "African regional Roadmap" that was developed should, if implemented, benefit countries that trade in animals and animal products by reduced risk from this region, including those in Europe and the middle-east which in the recent past have been affected by extension of epidemics from sub-Saharan Africa.
7. In addition, the implementation of the Roadmap should encourage and complement the efforts in West EurAsia, China, India, and South-east Asia to address the problem of FMD in the old world (Africa and the whole of EurAsia) on a long term basis.
8. The Workshop recommended that at least annual meetings be convened by FAO/OIE to monitor progress, with the follow up regional meeting to be held in November 2009.

¹ in line with recommendations of the 3rd SC of GF-TADS Africa

9. A framework for securing long term national participation in the Roadmap is needed, and it was recommended that a declaration of commitment, or other instrument, is developed for endorsement by the relevant Ministries in each of the participant countries, ahead of the OIE/FAO International Conference on FMD control planned in June 2009.

Vision for the Pan African Roadmap for FMD Control

Vision statement agreed at the Final Plenary Session, 30th January:

'By 2020, there will be sufficient control of FMD in Africa to enable the livestock sector to participate in local, regional, sub-continental, international trade, and contribute to improved food security and livelihoods. In this regard, obtain by 2010 the commitment from the public and private sectors and other relevant role players to enter into the FMD progressive control pathway'.

Sub-Regional Vision Statements

- **West/Central Africa vision statement:**

The objective is that by 2020, all countries in West and Central Africa will be at least at stage 2, and we expect the best advanced countries to have reached stage 4 and the intermediate countries stage 3.

- **East Africa vision statement:**

An East African region in which FMD will be under control and approaching disease freedom (Stage 3) in the majority of member states by 2020, with zonal or country freedom (Stage 4) being reached in some parts of the sub region.

- **Southern Africa vision statement:**

A SADC region whose member states have attained a minimum stage 4 of the GF-TADS FMD pathway with or without vaccination by 2020, through:

- *Enhanced capacity building for TADs surveillance*
- *Increased collaboration by public, private, regional and international organizations*
- *Sustained political support and commitment to livestock disease control*

RECOMMENDATIONS

AU-IBAR HEADQUARTERS, NAIROBI, 26-30 JANUARY 2009



Workshop on the Development of Action Plans for Improved Surveillance and Control of FMD in Africa

From 26 (pm) to 30 January 2009
At AU-IBAR Headquarters, Nairobi

DRAFT Recommendations to Build a Long-Term Strategy for FMD Control in Africa

Considering that:

- Foot-and-mouth disease is endemic in almost all countries in Africa and thereby remains a major impediment to food security and intra-regional and international trade in animals and animal products;
- Some risk factors for the spread and maintenance of foot-and-mouth disease infection are unique to the African continent;
- Wildlife is an important reservoir for harbouring some FMD viral serotypes and maintaining their circulation in certain geographical areas;
- Transboundary and transhumance migratory practices in West, Central and Eastern Africa are inherent to the African continent and create a permanent impediment to totally eliminate the disease from the continent;
- Many countries in Africa are experiencing severe infrastructural and resource limitations to effectively control the disease;
- There is an urgent need to improve the capacity and effective governance of the veterinary services in the majority of African countries to effectively prevent, diagnose and control FMD;
- Most countries in Africa are in need of a strong political and governmental commitment to move towards the national, regional and global control of FMD;

- Urgent research and surveillance is needed on the existing viral strains of FMDV in the continent;
- Vaccination of livestock for FMD constitutes an important complimentary control measure which can only be successful if quality vaccines are used that are effective against current circulating FMD virus strains within the identified regional viral pools;
- A regional approach to effectively and collectively control foot-and-mouth disease is urgently needed;
- FAO/OIE/AU-IBAR Regional Animal Health Centres are ideally placed and equipped to assist in facilitating a regional approach for FMD control;
- The OIE and FAO together with AU-IBAR and regional organisations on the African continent are committed to move towards the global control of FMD;
- The ALive initiative and its animal health component - the GF-TADs for Africa - offer the proper political and technical arena to commonly address TADs at the regional level, and that FMD is identified as one of the priority diseases of the GF-TADs for Africa;
- The Third Steering Committee of the GF-TADs for Africa (Rome, April 2008) and the subsequent Recommendation # 21 on the need to establish GF-TADs regional networks for FMD - in association with the RAHCs - be established in west, central, east and southern Africa, to improve access to quality information and reference laboratories services;
- The global FMD strategy currently jointly being developed by FAO and OIE, and addressing the global, regional and national level, to be officially presented at the Paraguay conference in June 2009;

General

1. That each country is encouraged to adhere to the principle of initiating actions along the Africa 2020 FMD Progressive Control Pathways (i.e., Roadmap), through a set of sequential activities and stages involving assessment of the risk of FMD, and development and implementation of each national FMD risk reduction programme to manage the risk.
2. To undertake economic impact assessments of FMD at the local and national level and consider other relevant means to levy interest and investment by governments, the private sector (includes large commercial, small holdings, pastoralists, traders...), and the donor/development community to promote food security, employment, business development, and trade.
3. That increased effort should be made by the international agencies, and by the national veterinary services, to communicate the importance of FMD control and bring attention to the Ministries (of Agriculture and others - Finance, Commerce, Foreign Affairs) as to the impact of the disease and cost of preventive programmes to the public and private sectors across the entire region. The use of the GF-TADs/ALive platform is strongly encouraged to raise the profile of FMD, and opportunities taken to present the importance of FMD progressive control at regional economic fora and other summits by RAHCs, AU-IBAR, OIE, and FAO.
4. To develop regional (sub-Continental) strategies to embark on FMD progressive control efforts through the leadership of the Regional Animal Health Centres, with support of the veterinary networks, and regional economic communities (RECs).
5. To have RAHCs have a legal standing in relation to FAO, OIE, African Union, and relevant regional economic communities.
6. That each country initiate a National FMD Risk Reduction Control Plan/Strategy by 2010, where they do not exist; review and revise legislation, where appropriate; and ensuring that these complement existing Regional Agricultural Common Policies.

In their development, the following representatives should be included:

- the official veterinary services

- The involvement of the private sector (large and small livestock producers) and private veterinary professionals.
 - Representatives of key Ministries (Finance, Commerce, Public Security, Tourism ...)
 - Vaccine producers or importers, where appropriate
 - Wildlife and conservation agencies
 - NGO's - national and international
7. That country veterinary authorities/partners will actively participate in the monitoring or progress of action plans and their role to implement the "Africa 2020 FMD Progressive Control Pathways" and contribute to regional meetings (GF-TADs for Africa, OIE Regional Meetings, FAO Regional Conferences, AU Ministerial Commission reunions ...), the FAO/OIE annual FMD progress report (for decision makers and potential donors). An annual progress meeting is considered at the sub-Continental level where key stakeholders will be invited and whose organisation rests with the RAHC and is to take place within the ALive / GF-TADs for Africa framework.
- Regional approaches should involve AU, AU-IBAR (ALive) AU-PANVAC, and regional economic communities.
 - Regional approaches should be in line with existing Regional Agricultural Common Policy.
 - Consideration and engagement of stakeholders in delivery veterinary systems and developmental NGO's.
8. That in parallel with the above, each country should request the OIE PVS evaluation, if not already done so, to assess and strengthen the capacities of their National Veterinary System, and thus facilitate the implementation and follow up of the Africa 2020 FMD Progressive Control Pathways and the National FMD risk reduction Control Programs.
9. That each of the RAHCs should facilitate the coordination and follow-up of the progressive control of foot-and-mouth disease; that each RAHC is to liaise with AU-IBAR HQ and the 3 other RAHCs in the Continent, and that the RAHCs will operate within the overall framework of the ALive / GF-TADs for Africa.
10. That FAO and the OIE should assist the development of national and regional expertise to control FMD through the existing/incipient networks (labs, epidemiosurveillance, socio-economic, communication) and through the establishment of thematic working groups, especially to build capacity in epidemiology and diagnostic laboratory services.
11. To establish thematic working groups with appropriate levels of support, to contribute to the capacity of each veterinary service in its development and for the implementation of national FMD risk reduction plans; including safeguarding against new epidemics. These working groups are:
- A FMD Laboratory Working Group, in coordination and consultation with the OIE/FAO FMD network, for virus characterization and vaccine selection (whose lead is to be identified by a consultative process through ALive).
 - A FMD Epidemiology and Preparedness Working Group to improve planning disease control measures, use of epidemiology and risk analysis. (The lead to be identified by a consultative process through ALive).
 - A Wildlife Working Group to improve understanding of risk and options for FMD mitigation and management. (The lead to be identified by a consultative process through ALive).
 - A FMD Trade Working Group for multi-lateral actions to reduce risk associated legal and informal trade across land borders, and explore options for marketing opportunities (i.e., commodities). (The leading coordinator to be identified by a consultative process through ALive).
 - A FMD Vaccine and Vaccination working group to work with PANVAC in the harmonisation, optimisation and monitoring of the use of FMD vaccination across the region.
 - A FMD communication working group, in charge of FMD Communication, Awareness and Training, to be identified by a consultative process through ALive.

For Regional Epidemiology Units

With the support of the FMD Preparedness and Wildlife working groups,

12. At RAHC level, to coordinate the regional surveillance networks and collate existing information from the national epidemiological units for analysis, sharing of data, and serve as a training facility for advanced epidemiology techniques, including GIS, risk analysis, and modelling, where needed.
13. That Regional Epidemiological Units will work in close and timely collaboration with the FAO/OIE/WHO GLEWS initiative.
14. That the role of the wildlife as reservoir of FMD should be studied and mitigation options for decreased virus transmission between wildlife and livestock species be designed.

For Diagnostic Laboratory Services

With the support of the FMD Laboratory working group,

15. FMD laboratories for the Africa region and sub-regional level should be identified with the following actions or expectations:
 - IBAR/PANVAC to tabulate the diagnostic capabilities of the national laboratories where FMD diagnosis is undertaken.
 - to harmonize the laboratory procedures to improve the confidence of veterinary services in the results obtained across the region;
 - to improve early detection of emergent viruses, and communicate information to assist the preparedness of each country for new threats;
 - to build expertise in each country, and improve capacity and performance of laboratories across the region;
 - to strengthen veterinary diagnostic networks, particularly in FMD and its differential diagnosis.
 - to implement in network members a system for ring (proficiency) testing;
 - A leading laboratory to be identified for gap analysis, training, and manage proficiency tests, will interface with RAHCs, and host a laboratory network website.

FMD Vaccines and Vaccination

With the support of the FMD Vaccination working group, the workshop recommends:

16. For PANVAC to take the necessary steps and actions to ensure independent quality testing of FMD vaccines produced in Africa.
17. That a FMD vaccination campaign database should be maintained by the RAHCs, for preparation of FAO/OIE FMD Global Report and to assist member countries with standardised country information on vaccination campaigns, coverage of species, and epidemiology units across the region.
18. That FMD vaccination campaigns should make increasing use of the targeting of high risk animal populations or sectors for virus transmission (i.e., known areas where repeated virus circulation occurs or in areas where there is an interface of livestock and wildlife reservoirs), particularly where vaccine is limited or where complete population coverage was not affordable or feasible.
19. That those countries practising FMD vaccination should undertake sero-monitoring to ensure that antibodies levels are adequate and effective herd immunity exists (especially in critical areas).
20. That vaccine matching - based on virus neutralisation assays - should be undertaken at reference laboratories of the region (BVI, KEVEVAPI, and OVI). Results should be shared seamlessly between laboratories, FAO, and OIE and the OIE/FAO FMD laboratory network, led by WRL.
21. That each country should ensure its selected FMD vaccines are approved and appropriate to the expected risk, and so doing should refer to the recommendations of the OIE/FAO/AU-PANVAC FMD laboratory network reports.
22. That FAO/OIE should establish a mechanism to guide countries and the regions on the relevant vaccine antigens that should be used for vaccine use, through the laboratory working group in consultancy with WRL, PANVAC and other reference laborator(ies). To be considered is the feasibility and need for a vaccine bank to ensure the provision of quality and adapted vaccines.

23. To promote and develop synchronised vaccination timetables for application across shared borders, especially where these are of regional priority to prevent epidemic spread.
24. To develop protocols for harmonisation of FMD post-vaccination monitoring across the region, and that each veterinary service should undertake studies and the necessary analysis to share within the region on the level of coverage, determination of [effective] flock/herd immunity, and duration of immunity.
25. To work with the socio-economic working group or other specialists in reviewing incentive mechanisms for the promotion of vaccine use in critical areas or populations at risk and where reluctance to have the susceptible animals vaccinated exists (i.e., value added at point of trade, awareness, offer for other treatments or prophylaxis ...).

Economic Investment and Socio-economic impact

With the support of the FMD Epidemiology and Preparedness and Trade working groups

26. To promote socio-economic studies on the impact of FMD in endemic settings (local and national)
27. To undertake economic impact studies in the control of outbreak control (direct costs and benefits)
28. To have AU-IBAR collate financial data from the public sector dedicated to animal health, veterinary services, disease detection, prevention, and control.
29. Programme interventions at Regional Economic Community meetings to promote the importance of progressive FMD control for awareness and advocacy purposes.
30. To undertake participatory approaches to disease and prevention/vaccination awareness; improve understanding on local knowledge, attitudes, and practices to improve vaccine delivery and acceptance.

Wildlife Working Group (African buffalo and other)

With the support of the FMD Epidemiology and Preparedness, Wildlife and Laboratory working groups,

31. To promote needed wildlife studies (capture, sampling, and release) in West, Central and East Africa to obtain information of FMD serotype circulation, virus characterisation, and prevalence and incidence rates.
32. To identify possible sample/serum collections (banks) in the different countries to historically describe FMD activity.
33. Promote interaction with local hunting and trophy hunting groups for sample collection (serum and OP/dorsal soft palate).
34. To reactivate the network of wildlife specialists developed during the PACE programme.

Establish a programme for communication and awareness exchange between conservationists, disease managers, and veterinary services, including the review and analysis of the outcomes of the Kasane workshop ("[Achieving compatibility between the Transfrontier Conservation Area concept and international standards for the management of Transboundary Animal Diseases](#)", Kasane, Botswana, 11-14 November 2008).

Trade and Transboundary animal movement

With the support of the FMD Trade working group,

35. To encourage greater emphasis on developing bilateral and multilateral protocols that will:
 - Legalise animal movements across borders and reduce the FMD associated risk;
 - Manage informal movements, by the provision of holding facilities across border with no negative repercussion to the transporters;

- Manage the risks of transhumant livestock across common borders, including wildlife interface, reaching agreement on vaccination, animal identification and other measures; the use of the international certificate for transhumance could serve this purpose.
- Analyse and study options for compartmentalisation and/or (added value) commodities for trade purposes at national, inter-continental, and international trade.

36. In support of the above, greater effort should be made to refine understanding of temporal and spatial movements across borders at the local level for risk management measures.

37. These recommendations and findings should be elevated to the attention of (1) the African Union Administrators and members of the African Union Commission; (2) CAADP/NEPAD through the ALive Secretariat requesting their commitment and support for the implementation of activities towards the progressive control of FMD in Africa and (3) participants in the next GF-TADs for Africa Steering Committee, to be held in Nairobi, March 9 and 10.

REPORT OF THE WORKSHOP PROCEEDINGS

Opening

The workshop was opened by Mr. Castro Camarada, FAO Representative to Kenya, who considered the Workshop should be another milestone in the concerted efforts of FAO, OIE, AU-IBAR to prevent and control transboundary animal diseases. He reminded the participants that foot-and-mouth disease is one of the priority diseases to prevent and control, considering the massive burden it represents worldwide, both for poor livestock producers and international trade in live animals, meat and meat products; therefore its control will have direct impact on improvement of peoples' livelihoods and poverty reduction.

A welcome was then given by the Acting Director of AU-IBAR (Dr Ahmed El Sawalhy), followed by opening remarks by the Deputy Director General of the OIE (Dr Gideon Bruckner), and the Head of FAO/EMPRES (Dr Juan Lubroth).

Organization of the Workshop

The Workshop was structured as follows (see: Agenda, [Appendix 2](#))

- Day 1 presented the Global and Regional Context for FMD control, within the framework of GF-TADS for Africa, recent FMD technical meetings, and situation with epidemiological and laboratory networks (see: presentations Day 1, [Appendix 3](#)).
- Day 2 focussed on continental situation with FMD virus circulation and working groups considered how to improve the information base to guide vaccine selection, including priorities for improved surveillance, laboratory services and improved information sharing to decision makers (see: presentations Day 2, [Appendix 4](#)).
- Day 3 considered the concept of the progressive control pathway (PCP-FMD), reviewed the results of the country PCP survey, and then group work considered for each region the actions needed to progress towards the next country stage (see: presentations Day 3, [Appendix 5](#)).
- Day 4 considered the “big issues” of political and social will to control FMD, the issue of vaccine quality and management of the risk from wildlife. Group work focussed on improvement of vaccine quality assurance in Africa, and further refined the regional logical frameworks and vision statements (see: presentations Day 4, [Appendix 6](#));
- Day 5 reviewed the subregional (West/Central, East and Southern) Africa Roadmaps: the expected country progress, the vision for 2020, and the logframes for actions to support forward progression, before reviewing the Pan African Vision Statement, and recommendations of the Workshop (see: presentations Day 5, [Appendix 7](#)).

Closing of the Workshop

At the final plenary session, the vision for the Pan African FMD Roadmap, and the recommendations of the workshop were first reviewed and agreed. Thereafter, in closing remarks, the representatives of the international organisations voiced their strong support for the principles of the progressive control pathway and for their practical application through subregional Roadmap actions.

In closing, Dr. El Sawalhy re-iterated the support of the AU-IBAR.

Dr. Sumption thanked the AU-IBAR for their hosting of the meeting. The participants showed their high appreciation, and unanimously called on FAO/OIE/AU to organise a follow-up meeting to gauge progress, within a year.

PROCEEDINGS: REPORT BY DAY

Day 1: Presenting the Global and Regional Context for FMD control

Purpose:

- to give participants a better understanding of the GF-TADS framework for co-operation on animal health between the international organisations and how this relates to FMD control, and on the status of laboratory and epi-surveillance networks ;
- to consider the recommendations of the meeting held in Erice, Sicily, on overcoming technical and organisation constraints to improved FMD control;

Format:

After the Opening Statements, the Workshop first received reports on the GF-TADS for Africa Framework (Dr Niang), and on the outcomes of the Global FMD technical meeting held at Erice, Sicily (Dr Sumption, see [Appendix 3](#)). Dr Amanfu then gave a presentation on the status of status of laboratory and epi-surveillance networks (on behalf of Dr Lebrun, see [Appendix 3](#)).

Day 2: FMD virus circulation in Africa and improving the information base to guide vaccine selection

Purpose:

- To review the state of knowledge on FMDV topotype and antigenic type distribution in Africa, and to clarify if separate pools of FMDV exist that support a subregional approach to FMD control;
- to identify priorities for actions to improve FMDV strain typing and vaccine selection and the communication of this information to decision makers

Format:

Dr El-Sawalhy, Director of AU-IBAR, first presented an overview on the FMD situation in Africa, and the perspective of IBAR on FMD control (Dr El Sawalhy, see [Appendix 4](#)). Nick Knowles, representing the FAO World Reference Laboratory for FMD at Pirbright, UK, then reviewed the historic and recent distribution of FMDV genetic groupings (topotypes) in Africa, and illustrated how studies on SAT3 had been used to identify rates of introduction of FMDV strains from wild buffalo in some regions (see [Appendix 4](#)). Presentations were then given the status of FMD control and risk factors for regional spread, covering West Africa (Dr Couacy-Hymann, see [Appendix 4](#)), Central Africa (Dr Rufael, see [Appendix 4](#)), East Africa (Dr Barasa, see [Appendix 4](#)) and Southern Africa (Dr Mokopasetso, see [Appendix 4](#)).

Working groups then considered:

- 1) FMDV distribution: are the FMDV types distinct between regions, and what are the priorities for obtaining information on virus circulation to better improve risk assessment and vaccine identification?
- 2) FMD laboratory diagnostic services: what is the minimum capacity of service needed for each level of surveillance and what support is needed from an FMD lab network?
- 3) Information to decision makers: what actions are required to improve the communication of FMD information to animal health managers?

Output:

Each working group presented their outcomes to the Plenary Session, with 1-2 key recommendations:

- Group 1: Virus Distribution (see [Appendix 8](#))
- Group 2: Diagnostic Lab capacity requirements (see [Appendix 9](#))

- Group 3: Information requirements of decision makers (see [Appendix 10](#))

Day 3: Progressive control pathway (PCP-FMD) approach: review of the Pan African PCP survey, and group work to identify for each region the actions needed to progress towards the next country stage

Purpose:

The objectives of the day were:

- to introduce the PCP approach, and peer-review the results of the Pan African PCP-FMD survey
- to identify actions needed at regional level to influence and support countries to adopt and move along the pathway progress

Format:

A presentation on the PCP approach (see [Appendix 5](#)) was given by FAO (Dr Lubroth). The purpose of the pathway is to provide a system for countries to review their progress in FMD risk management, culminating in a sufficient level of control that they may qualify for official (OIE) status of freedom from FMD. The pathway has a set of stages/activities, with the emphasis on the use of active surveillance activities to identify FMD circulation and to develop national risk management plans to address critical risk points. The initial activities focus on measuring risk, developing plans, and later stages on implementation of the plans and measurement of success through surveys on the incidence of infection.

A presentation was then given by Dr Sumption on the results of the country survey which had been organised by FAO in advance of the Workshop (Dr Sumption, see [Appendix 5](#)). The survey had used a self-assessment worksheet (see [Appendix 14](#)) to identify national progress on the pathway, and constraints to progression to higher stages. The provisions of the OIE Terrestrial Animal health Code for freedom for FMD were also recalled (G. Bruckner, see [Appendix 5](#)).

Following a discussion session, during which the approach was welcomed and strongly supported by the participants, the group divided into three to review the survey results and to fill gaps resulting from non-responses. The subregional “FMD control status” was then discussed in plenary session and validated by the group.

In the afternoon, the regional working groups then considered: what is the expected progression of countries to the next stage, and what type of support would be required to promote/assist progress of countries towards the next stage in the PCP? ; followed by discussion in the final plenary session.

Outputs: African Roadmap to 2020

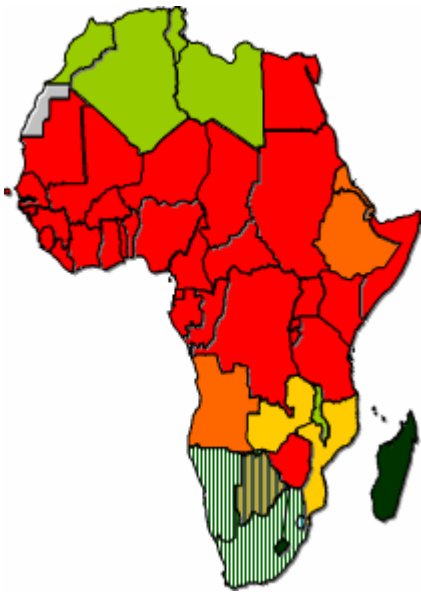
Table 1: Expert opinion on progression along the PCP; sub-Saharan Africa.

Survey results were reviewed by subregional working groups; country stage and progression were estimated. Note that the position of North African countries was not included and the results below are from the survey returns.

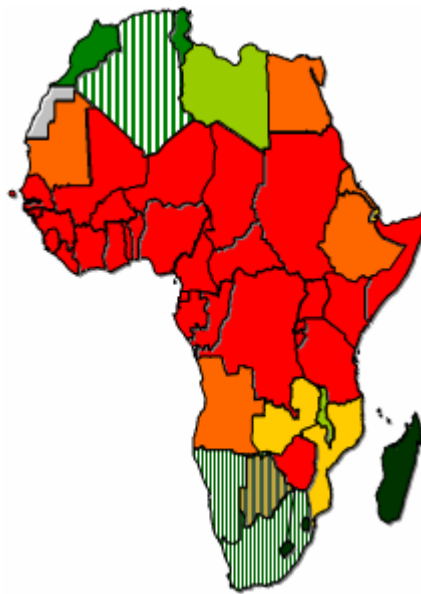
	Countries	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
North	Algeria												
	Egypt												
	Libya												
	Mauritania												
	Morocco												
	Tunisia												
	Western Sahara												
Western	Benin	0	0	0	0	1	1	2	2	2	2	2	2
	Burkina Faso	0	0	0	0	1	1	2	2	2	2	2	3
	Cote D'Ivoire	0	0	0	1	1	2	2	2	3	3	3	4
	Gambia	0	0	0	0	1	1	1	2	2	2	2	2
	Ghana	0	0	0	1	1	2	2	2	3	3	3	4
	Guinea	0	0	0	0	1	1	2	2	2	2	2	3
	Guinea-Bissau	0	0	0	0	0	1	1	2	2	2	2	2
	Liberia	0	0	0	0	0	1	1	2	2	2	2	2
	Mali	0	0	0	1	1	2	2	2	3	3	3	4
	Niger	0	0	0	1	1	2	2	2	3	3	3	4
	Nigeria	?	?	0	1	1	2	2	2	3	3	3	4
	Senegal	0	0	0	1	1	2	2	2	2	2	2	2
	Sierra Leone	0	0	0	0	0	1	1	2	2	2	2	2
	Togo	0	0	0	0	0	1	1	2	2	2	2	2
Central	Cameroon	0	0	0	1	1	2	2	2	3	3	3	4
	Cape Verde	0	0	0	0	0	1	1	2	2	2	2	2
	Central African Republic	0	0	0	0	0	1	1	2	2	2	2	2
	Chad	0	0	0	0	1	1	2	2	2	2	2	3
	Congo (Dem. Rep. of the)	0	0	0	0	1	1	2	2	2	2	2	3
	Congo (Rep. of the)	0	0	0	0	0	1	1	2	2	2	2	2
	Equatorial Guinea	0	0	0	0	0	1	1	2	2	2	2	2
	Gabon	0	0	0	0	0	1	1	2	2	2	2	2
	Sao Tome and Principe	0	0	0	0	0	1	1	2	2	2	2	2
	East	Djibouti	1	2	2	2	2	2	3	3	3	3	3
Eritrea		1	1	1	1	2	2	2	3	3	3	3	4
Ethiopia		1	1	1	1	2	2	2	3	3	3	3	4
Kenya		0	0	0	1	1	1	1	2	2	2	2	3
Somalia		0	0	0	1	1	1	1	1	1	1	1	2
Sudan		0	0	0	1	1	1	2	2	2	2	2	3
Tanzania		0	0	0	1	1	1	1	2	2	2	2	3
Burundi		0	0	0	1	1	1	1	2	2	2	2	3
Rwanda		0	0	1	1	1	2	2	2	3	3	3	4
Uganda		0	0	0	1	1	1	1	2	2	2	2	3
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	Comoros	0	0	0	0	1	1	1	2	2	3	3	3
	Lesotho	5	5	5	5	5	5	5	5	5	5	5	5
	Madagascar	5	5	5	5	5	5	5	5	5	5	5	5
	Malawi	3	3	3	4	4	4	4	4	4	4	4	4/5
	Mauritius	5	5	5	5	5	5	5	5	5	5	5	5
	Mayotte (France)	5	5	5	5	5	5	5	5	5	5	5	5
	Mozambique	2	2	2	3	3	3	3	3	3	3	4	4
	Namibia	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5
	Reunion (France)	5	5	5	5	5	5	5	5	5	5	5	5
	Seychelles	5	5	5	5	5	5	5	5	5	5	5	5
	South Africa	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5	4/5
	Swaziland	4/5	5	5	5	5	5	5	5	5	5	5	5
	Zambia	2	2	2	3	3	3	3	3	3	4/5	4/5	4/5
Zimbabwe	0	0	1	1	1	1	1	3	3	3	3	3	

	N	Z
Level 0		
Level 1		
Level 2		
Level 3		
Level 4		
Level 5		

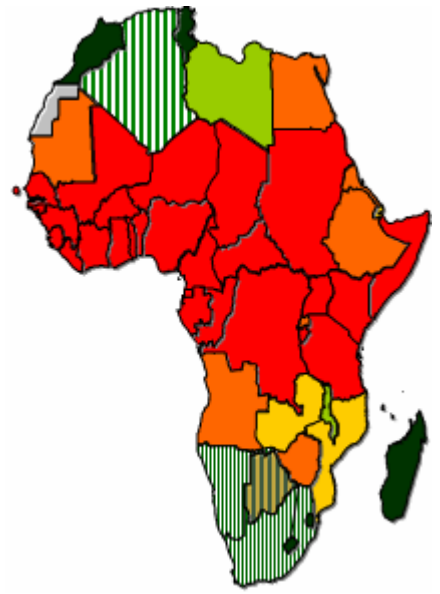
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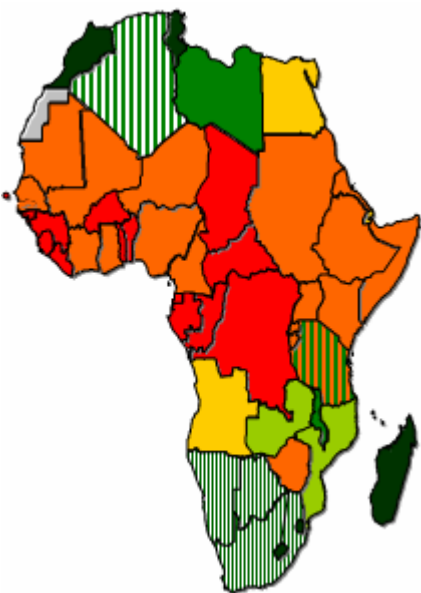
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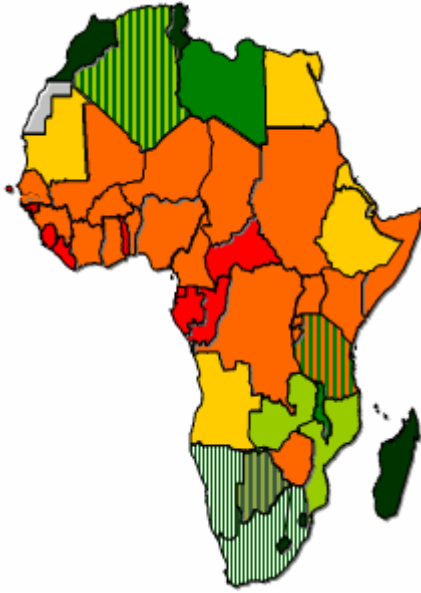
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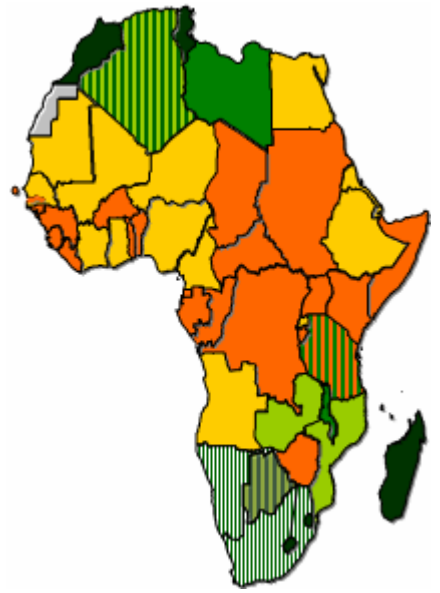
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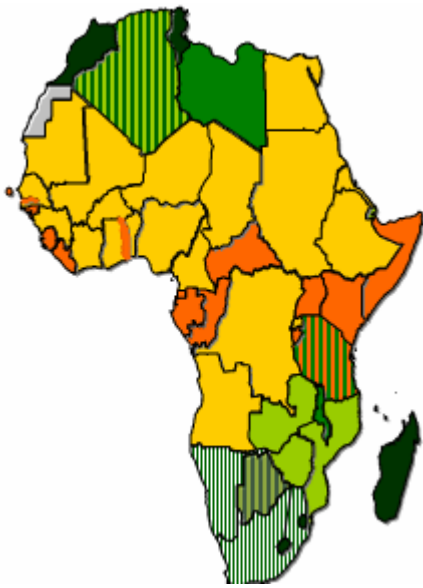
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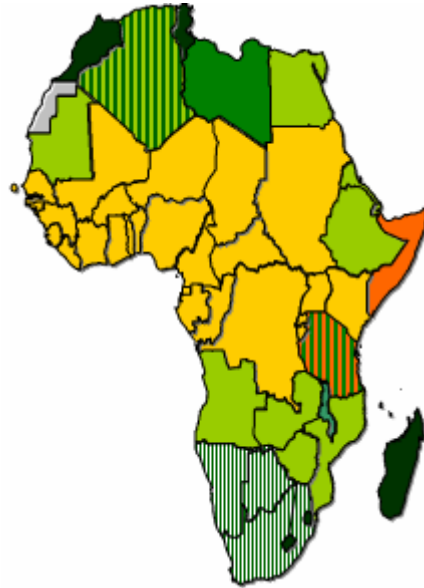
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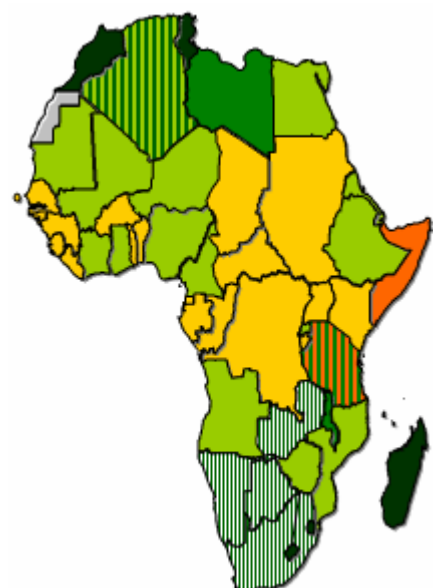
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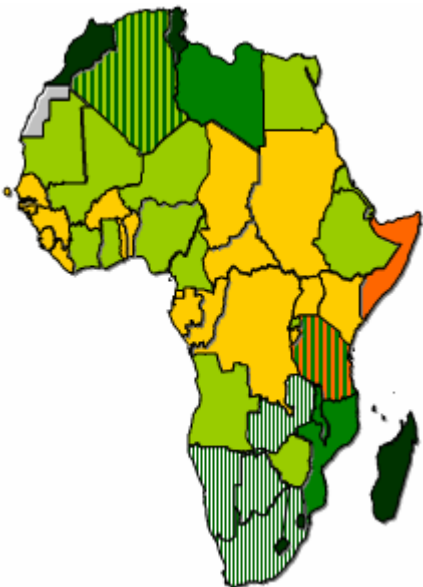
2016



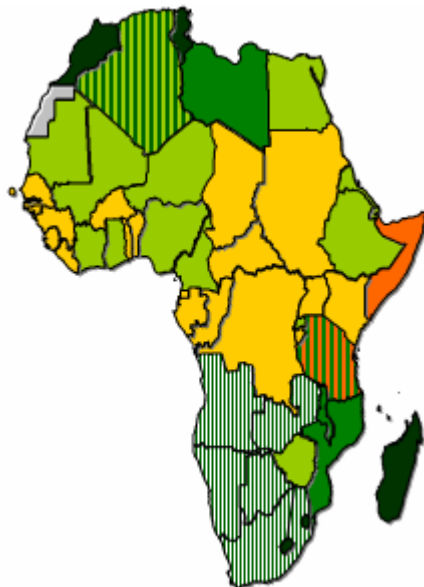
2017



2018



2019



2020



Summary:

The Final Roadmap indicates the expert opinion that if the Roadmap were implemented with expected success, in 2020, of 46 countries in sub-Saharan Africa, 14 countries would be at least at level 2, and 32 countries at level 3 or above. In most of the continent, therefore, also in terms of the at risk population, FMD would be under control and most countries would have a sufficiently low incidence to be approaching disease freedom.

Delegates gave enthusiastic support for the pathway concept, but cautioned that political will and interest to progress could be limited in countries which do not export livestock products. The risk based approach was also considered to be compatible and complementary with use of compartmentalisation and commodity based trade approaches, with the focus on risk identification and management likely to increase confidence in potential trade partners.

The logframe approach to summarise actions required at subregional level was supported and each region agreed to produce a logframe and “subregional vision” for the Report (see Day 5 Outputs).

Day 4: Addressing the “big issues”: the issue of vaccine quality, the political and social will to control FMD and the management of the risk from wildlife.

Purpose:

The objectives of the day were:

- to identify possible solutions to the issues of vaccine quality and availability, political will and the delivery of services, and management of wildlife related risk;
- to adapt the activities planned in the Roadmaps to address the major constraints;
- to identify how FMD vaccine selection and vaccine QA for Africa could be improved

Format:

The day was organised in four sections:

1) FMD vaccine selection, vaccine quality assurance and the monitoring of success of vaccination programs

Presentations were given by PANVAC (Dr Karim Tounkara, see [Appendix 6](#)) on QA of FMD vaccine production and the potential role of PANVAC to undertake independent quality and safety tests including serological potency tests, and by the WRL Pirbright (Antonello di Nardo, see [Appendix 6](#)) on QA of FMD vaccine production but also the need to monitor vaccination programs to better maintain effective immunity and to adjust program frequency and delivery to reduce gaps in coverage.

A working group was formed in the afternoon, which reported conclusions and recommendations to the plenary session (see [Appendix 11](#))

Outputs

- Recommendations of the Vaccine group (see [Appendix 11](#))

2) Managing FMD risk from wildlife in the context of greater integration of wildlife and domestic animal in land use

Dr Bruckner, OIE, opened this section with a presentation of main issues (Dr Bruckner, see [Appendix 6](#)). Nick Knowles, Pirbright, summarised information on epidemiology of FMD in buffalo populations (Dr Knowles, see [Appendix 6](#)). The issue of transfrontier conservation areas and the potential increased introduction of FMD from buffalo into domestic populations, and options and recommendation from the Kasane Conference for managing the impacts of such introductions, were presented by Andrea Massarelli (SADC/EC FMD Project; see [Appendix 6](#)).

Dr Lebrun, FAO, presented a paper prepared under the PACE Program (see [Appendix 6](#)), on risk of disease introduction from wildlife, and sampling strategies for assessing risk, with a focus on west and central Africa.

Issues and Discussion

The importance of buffalo populations as reservoirs of FMDV is well known in parts of southern Africa, but almost unknown in west and central Africa. Evidence from southern Africa suggests that FMD viral populations can be isolated as a result of fragmentation of buffalo habitats. The TFCA are expected to increase buffalo-domestic interaction, although in east Africa, and possibly places in West Africa, such interactions already exist. Given the larger domestic populations, there is also a risk that buffalo may be infected from cattle.

Most speakers agreed that in most of sub-Saharan Africa, strict segregation of wild and domestic populations, or eradication from wild populations, was not feasible, therefore progressive control concept, being risk based, would need to address the wildlife risks but without the expensive measures of segregating populations. Understanding and managing WL FMD risk would therefore need a greater emphasis on identification of risk populations, hotspots for virus entry into domestic species, and appropriate protection (vaccination) and movement control measures. The diversity of WL associated SAT viruses requires better identification and availability of quality vaccines.

Incentives for owners of cattle at risk would be needed, to increase uptake of protective measures and economic value from animals in TFCA areas and those where buffalo -domestic interactions cannot be prevented. The relevance of the commodity based trading approach was briefly discussed. The approach is not new, but has not been yet promoted as an option for offtake of animal products to boost incomes in non-FMD free areas.

The need for wildlife expertise to advise/assist in design of surveillance and control options in each region of Africa was discussed and agreed. The serum bank, and expertise from the wildlife surveillance for Rinderpest under PACE, was considered an important asset. Each roadmap/region should identify projects on wildlife that could assist with samples to improve recognition of risk populations/FMDV strains in wildlife, especially in east/west/central Africa.

3) *Socio-economic considerations*

Dr Martin Barasa (VSF-Suisse, Nairobi) gave a presentation (see [Appendix 6](#)) of the main socio-economic factors that affect uptake and delivery of FMD prevention and control measures. He illustrated that FMD can be of very high impact even where no export is involved, through direct losses in several production sectors; his work in pastoralist areas of South Sudan provided compelling evidence of the impact of FMD on communities, affecting livelihoods and food security. He challenged the usual position that FMD is only important in export areas, and indicated that the impact on communities at risk created an opportunity for intervention, and the prospect that some owners would be willing to pay for prevention services. Therefore some FMD vaccination programmes might be partially or fully subsidised by the owners. Quality of vaccines and delivery services were also important, and willingness to pay might be quickly eroded if vaccines failed to protect against epidemic strains.

He concluded that developing the will to prevent and control FMD required incentives/drivers that would operate at state and/or private level, with owners benefiting from income or lower risk to their livelihood and at national level, a political will in the country driven more by the livestock community than from outside; many east African countries were exploring export opportunities, and this was already driving improvements in FMD prevention, surveillance and control. Delivery at owner level would ultimately require prevention services available locally and seen to be effective, which is a difficult challenge for FMD in regions with diversity of FMD viruses and limited access and quality of vaccines.

Issues and discussion: it was concluded that effort should be made in each region to identify the socio-economic drivers for improved FMD control, including identification of the most at risk communities, the willingness to pay for FMD control, and the socio-economic benefits of improved control, including benefits from export zones. These analyses will be needed at regional and country level to stimulate potential investment in FMD control, and to guide the national strategies for FMD, especially the balance between public and private investment.

4) *Working Groups*

The remaining period of the day was spent in 5 working groups: the FMD vaccine group; the regional working groups to further develop the logframes for interventions/actions in West/Central, East and Southern Africa, and the Workshop Conclusions/Recommendations group.

Day 5: Vision 2020; Regional Roadmaps and expected country progress, the vision for 2020, and the logframes for actions to support forward progression

Purpose:

The objectives of the day were:

- 1) to review the vision statements, and logframes for the subregional FMD Roadmaps for West/Central, East and Southern Africa
- 2) to review and agree the vision statement on Pan African control of FMD;
- 3) to review the Draft Recommendations of the Workshop

Format and Outputs:

1. Subregional visions statements and logframes: presentations were given by rapporteurs of the 3 working groups:

➤ **West/Central Africa vision statement:**

The objective is that by 2020, all countries in West and Central Africa will be at least at stage 2, and we expect the best advanced countries to have reached stage 4 and the intermediate countries stage 3.

The West/Central Africa logframe and recommendations are given in [Appendix 11](#).

WCA Recommendations:

1. Promote socio-economical impact studies
2. Harmonization of national surveillance plans through epidemiology and laboratory regional networking

➤ **East Africa vision statement:**

An East African region in which FMD will be under control and approaching disease freedom (Stage 3) in the majority of member states by 2020, with zonal or country freedom (Stage 4) being reached in some parts of the sub region.

The East Africa logframe and recommendations are given in [Appendix 12](#).

EA Recommendations:

1. Need for a structured and sustained data collection on FMD to facilitate socio-economic impact assessment studies for forwarding to the key stakeholders (policy makers and development partners) to serve as an advocacy instrument for support in the control of FMD.
2. Risk assessment studies along the value chain for appropriate decision making e.g. risk based epidemio-surveillance system should be carried out
3. Strengthen the role of livestock, animal health and control of TADs in the EAC and IGAD Secretariat and to internalize animal health policies within the RECs
4. Development of legal/formal frameworks for partnerships amongst the two RECs and the technical institutions that includes OIE, FAO and AU-IBAR; e.g. through networking; public/private partnerships
5. Improve information sharing through harmonisation of activities across borders, laboratory and epidemio-surveillance networking and ensuring feedback to all the stakeholders (demand driven)
6. Improvement of vaccine production, quality assurance and availability by involving the key stakeholders at regional and international levels
7. Establish the role of wildlife in the epidemiology of FMD clarified (infection and transmission)

➤ **Southern Africa vision statement:**

A SADC region whose member states have attained a minimum stage 4 of the GF-TADS FMD pathway with or without vaccination by 2020, through;
- Enhanced capacity building for TADs surveillance
- Increased collaboration by public, private, regional and international organizations.

- Sustained political support and commitment to livestock disease control

The Southern Africa logframe and recommendations are given in [Appendix 13](#).

SA Recommendations:

1. Conduct extensive studies in buffalo populations to better understand circulating FMD viruses;
2. Socio-economic studies to be undertaken
3. Proactive engagement of the Regional Animal Health Centres to provide technical support to RECs and MS

2. Pan African vision statement:

This statement was developed a by a working group and presented by Juan Lubroth, FAO. The final statement was achieved after significant discussion and editing, to reflect the common view that the vision should indicate what is considered possible to achieve by 2010 as well as the need to achieve commitment to the FMD pathway approach in the short term.

Vision statement agreed at the Final Plenary Session, 30th January:

By 2020, there will be sufficient control of FMD in Africa to enable the livestock sector to participate in local, regional, sub-continental, international trade, and contribute to improved food security and livelihoods. In this regard, obtain by 2010 the commitment from the public and private sectors and other relevant role players to enter into the FMD progressive control pathway.

3. Recommendations of the Workshop:

These had been reviewed by the recommendations working group. The reading of the recommendations enabled gaps to be identified, which were noted and addressed in the version finalised and circulated after the Session. Recommendations are available in [Page 5](#).

The Closing of the Workshop followed the reading and review of the Workshop Recommendations.

* * *

