

# GF-TADs

GLOBAL FRAMEWORK FOR THE  
PROGRESSIVE CONTROL OF  
TRANSBOUNDARY ANIMAL DISEASES



Food and Agriculture  
Organization of the  
United Nations

Oie

WORLD ORGANISATION  
FOR ANIMAL HEALTH

*Doha, Qatar*

*1-3 December 2015*

## **3<sup>rd</sup> Regional FMD Middle East Roadmap Meeting**

## **Vision for the Middle East Roadmap for FMD Control**

Regional cooperation among Middle East countries for the progressive control of FMD leading towards freedom of clinical disease by 2021 for regional economic development, food security, and poverty alleviation.

# Acknowledgements

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Finally, FAO and OIE would like to express their deep appreciation to all countries of the Middle East FMD Roadmap for their commitment and contributions over the years.

# Abbreviations

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<b>CVO</b>	Chief Veterinary Officer
<b>EC</b>	European Commission
<b>EPIME</b>	Middle East Epidemiology Network
<b>EUFMD</b>	European Commission for the Control of Foot-And-Mouth Disease (an Inter-Governmental Commission based in the FAO)
<b>FAO</b>	Food And Agriculture Organisation of the United Nations
<b>FMD</b>	Foot and mouth disease
<b>GCC</b>	Gulf Cooperation Council
<b>GF-TADs</b>	Global Framework for the Progressive Control of Transboundary Animal Diseases
<b>OIE</b>	World Organisation for Animal Health
<b>PCP</b>	Progressive Control Pathway
<b>PVS</b>	Performance of Veterinary Services
<b>RAG</b>	Regional Advisory Group
<b>SAT2</b>	Southern African Territories Type 2 Strain of FMD
<b>TAHC</b>	OIE <i>Terrestrial Animal Health Code</i> , 2015 version
<b>WELNET</b>	Middle East Laboratory Network
<b>WG</b>	Global GF-TADs FMD Working Group
<b>WRLFMD</b>	The World Reference Laboratory for Foot and Mouth Disease

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*3<sup>rd</sup> Regional FMD Middle east Roadmap meeting*

# Summary

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## Introduction - storyline

1. The 3rd FMD Middle East Roadmap Meeting (hereafter referred as '2015 Doha meeting') was held in Doha, Qatar on 1-3 December 2015. The meeting was held in the context of the Global FMD Control Strategy published and discussed during the FAO/OIE Global Conference on FMD Control held in Bangkok, Thailand, 27-29 June 2012. FAO and OIE initial consultative meetings on FMD for the Middle-East were held in Beirut and Cairo in 2012. The 2<sup>nd</sup> FMD Middle East Roadmap Meeting was held in Amman in 2014. Consensus on the vision 'Middle East as a region free of clinical FMD by 2021' was achieved.
2. Representatives from nine countries and participants from FAO, OIE, EuFMD, and Merial attended the meeting. The list of participants is in Annex 2. The meeting was officially opened by the Representative of Qatar, Dr K. Al Qahtani, following remarks from Mr Mehdi Drissi from the FAO Subregional Office for the GCC States and Yemen and lastly by the OIE Regional representative, Dr G. Yehia.
3. The meeting's objectives were to:
  - Share information on FMD viruses' circulation within the Middle East countries/FMDV ecosystem, on major gaps and on the different strategies conducted by the countries of the region;
  - Assess the progress of each country along the FMD Regional Roadmap previously defined;
  - Assist countries preparing national FMD control programmes, project proposals for financial support on FMD control and submissions to the OIE for control programme endorsement and possible FMD status recognition for countries and zones.
4. The meeting enabled participants to address various topics described in the agenda including:
  - Update on PCP-FMD in virus pools 2 through 6
  - Report of the previous Roadmap meeting and implementation of Recommendations
  - Presentation of status of countries and Provisional Roadmap based on Self-Assessment Questionnaires
  - Overview of global and regional FMD situation
  - Country reports
  - Presentations from the parallel sessions
  - Criteria for selection and responsibilities of regional leading laboratory
  - Introduction to EuFMD FMD e-learning material

Presentation of roadmap based on PCP-FMD post-assessment by the Regional Advisory Committee (RAG) This assessment was based on the: **(i)** results of the evaluation of questionnaires and supporting evidence submitted by the countries prior to the meeting, with the preliminary assessment by the GF-TADs FMD Working Group (WG), and support from EuFMD experts; **(ii)** presentations of country's reports in plenary session; **(iii)** country interviews during the meeting, conducted jointly by the WG with the assistance of PCP-FMD experts; **(iv)** recommendations by RAG in consultation with the WG and EuFMD experts; **(v)** final assignments proposed by the RAG and agreed during the plenary session.

5. The composition of the Regional Advisory Group (RAG, voting members) was renewed. For 2015, the elected members of RAG included: Dr Elias Ibrahim, CVO of Lebanon (Chair); Dr Munther Al-Refai, CVO of Jordan; Dr Kaltham Al Kayaf, CVO of UAE, Dr Mohamad Abd-Eldaim from (lead of laboratory network); and Dr Faysal Bayoumi from Saudi Arabia (lead of the epidemiology Network). Non-voting members were RAG terms of reference are listed in Annex I.
6. Progresses in the implementation of the Amman 2014 recommendations and the FMD control since 2014 were reviewed. The roadmap (2015-2021) was updated for the nine participating countries.



## Outcomes

1. Presently Middle East countries are at different stages of managing FMD, which reflects their socio-economic development and livestock sectors. However, for global control, it is necessary to find ways to encourage all countries to engage in the global effort. Therefore, and despite the fact that the FMD situation seems to be similar in the region/sub- regions, the control programs are different. This clearly justifies the need for implementing national control strategies in the context of regional and global approaches.
2. Five FMDV serotypes including, serotypes O, A, Asia1, SAT1, and SAT2 continue to circulate in the region which is currently under the risk of the incursion of serotypes from virus pools 2, 3, 4 and 5.
3. The region's FMD epidemiological patterns has been changing. Since 2013, outbreaks of serotype O/MESA/Ind2011 have been reported in Saudi Arabia, UAE, Bahrain, Libya, Tunisia, and recently in Morocco. It is important to note that this lineage was first introduced to North Africa (Libya) in September 2013. Both O Manisa vaccine potency test and *in vivo* trial have provided relative low protection against the O strains circulating in the region at 3PD<sub>50</sub> and good protection at higher potency. Moreover, in 2015, Oman experienced an outbreak of serotype SAT2 belonging to a genetic lineage reported in Mauritania and in Egypt (Alx-12 sub-lineage) in 2014. Finally, a new serotype A (A/India, genotype VII/18) has been detected in September/October 2015 in Turkey and Saudi Arabia. This Indian virus strain has a poor match with the commercially available serotype A vaccine strains currently used in the region, posing a serious threat to FMD control.
4. The progress achieved since 2012 in the third year is considered acceptable. PCP stages of the Nine countries who participated in the 2015 Doha meeting (in pink) are summarized in the table below:



## RAG assessed stages

## Countries prospects

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bahrain	1	2	2	2*	3	3	3	4	4	4
Egypt	1	1	2*	2**	2	2	2	2	3	3
Iraq	2	2	2*	2**	2	2	2	2	3	3
Jordan	1	1	2*	2**	2	3	3	3	4	4
Palestine <sup>1</sup>			1							
Kuwait	2	2	3	3*	3	4	4	4	5	5
Lebanon	1	1	2*	2**	2	3	3	4	4	4
Oman <sup>1</sup>	2	2	2*							
Qatar	2	2	3*	3*	3	3	4	4	4	4
Saudi Arabia	1	1	2*	2*	2	3	3	3	4	4
Syria <sup>1</sup>	2	2	2*							
UAE	1	1	2	2**	3	3	3	4	4	4
Yemen <sup>1</sup>	1	1	1*							

<sup>1</sup>Countries absent from the roadmap meeting and not assessed in 2015

COUNTRIES THAT:

- \* RAG has assessed in provisional stage but need provide additional documentation
- \*\* RAG has assessed in provisional stage but have provided additional documentation to WG for review

5. The meeting reiterated what was already defined in the Amman's meeting in relation to the importance of using fundamental tools for disease control, as PCP-FMD, the OIE Performance of Veterinary Services Pathway (PVS Pathway), and the relevant articles of the OIE Terrestrial Code and Manual. National governments need to strengthen their capacities to prepare national control programs recognizing that effective Veterinary Services are indispensable for the development and implementation of FMD strategy.
6. The parallel session also demonstrated that there are several other tools of critical importance to the Global FMD Control Strategy, which could fulfill the needs of the members' countries in the region. These include a regional approach focusing on several components such as effective surveillance, competent diagnostic laboratories, emergency preparedness, and prompt response to new disease events. Capacity building was also outlined due to its importance at the technical and managerial level, as well as regular and effective communication to build public- private partnerships. Participants also discussed the Importance of the role and the services provided by a vaccine bank and the reference laboratories
7. Following countries presentations and the PCP-FMD assessment, majority of countries were identified to be in Stage 1 or 2, while Kuwait and Qatar were provisionally placed at stage 3. In order to advance to Stage 2, countries are requested to present their Risk-based Strategic Plan (RBSP) coherent with PCP guidelines, and with evidence of the required programme

preparation/development. It was also discussed the need for precise vaccination schedules/protocols and vaccine matching/effectiveness studies as part of the progressive FMD control. Veterinary Services of countries provisionally in stage 3 were also urged to develop contingency plans for the introduction of exotic FMDV from other virus pools.

8. Participants concluded that vaccination alone cannot prevent all FMD outbreaks, therefore other additional measures are crucial and should be considered as key elements for the success and progress of FMD-PCP process (e.g., import/export requirements, compliance with regulations). Veterinary services were requested to ensure that vaccine strains used are matching the virus circulating in the region with emphasis on the appropriate use of the vaccine matching services that can be offered by FMD reference centers. It was agreed that vaccines used by countries in the region should comply with the OIE *Manual of Diagnostic Tests Vaccines for Terrestrial Animals* in terms of Potency, safety and efficacy. Countries are also encouraged to carry out post-vaccination monitoring to determine level of protection and improve vaccination programs.
9. Countries were asked to identify and select 3 “points of contact” respectively for FMD laboratory, epidemiology and PCP-FMD for national coordination and actions.
10. The RAG proposed PCP stages for 2015 after careful evaluation of PCP questionnaire, country reports and outcome of country interviews. This was done with assistance from the FMD WG and PCP experts.
11. Countries have requested support to improve their capacity in epidemiology and socio-economic as the major gaps and challenges are the lack of epidemiological and laboratory networks, absence of a FMD reference centre, and limited capacity to conduct socio-economic impacts analysis. In this regard, Regional Laboratory and Epidemiology Networks should be established and a series of training courses on practical epidemiology for the progressive control in 2016 be organised by OIE and FAO.
12. Egypt and UAE identified themselves possible candidate countries to host a FMD regional leading laboratory.
13. Several considerations and recommendations were proposed by the participants for implementation by the responsible parties.
14. Overall, the 2015 PCP-FMD Stage Acceptance showed that the Roadmap remains on track to achieve the regional vision by 2021.

# Recommendations of the meeting



## Recommendations of the Third Regional meeting of the FMD Control Roadmap for the Middle East

Doha, Qatar, 1-2 December 2015

### Considering:

- The adoption of the FAO-OIE Global Strategy for the control of FMD (Bangkok, June 2012) with its 3 inter-related Components respectively on the control of FMD, the reinforcement of Veterinary Services and the combined control of FMD with other animal diseases;
- The importance of controlling FMD at regional level and the results of previous FMD regional Roadmap meetings which took place since 2012 (Cairo/2012; Amman/2014);
- The commitment from Middle-East countries to the Progressive Control Pathway for Foot and Mouth Disease (PCP-FMD) and Roadmap process;
- The importance of having a Regional Advisory Group (RAG) for the Middle East composed of three CVOs and leaders of the Epi and laboratory Regional networks (whenever established) to analyse and present the results of the assessments to the participating countries;
- That progression along the PCP-FMD requires a comprehensive understanding of FMD, including epidemiology, virological and socio-economic aspects, and the practical application of this knowledge to develop a control strategy;
- That effective Veterinary Services are critical for the control of FMD and that the PCP stages assessment includes reference to the performance of Veterinary Services (OIE PVS) criteria (critical competencies) relevant to FMD prevention and control;
- That socioeconomic impact assessment of FMD in livestock production, livelihoods and food security and cost/benefit analysis of FMD control options have to be undertaken and used when preparing national control programmes and financial project proposals;
- Five FMDV serotypes (O, A, Asia1, SAT1 and SAT2) continue to circulate in the region and the region is exposed to threat from virus from various pools (2 and 3 in particular);
- Vaccine matching results and vaccine effectiveness studies indicate that vaccines currently used may not provide sufficient protection against all circulating viruses;
- Vaccination alone cannot prevent all outbreaks and other additional measures are crucial;

**The nine countries here represented (Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Qatar, Saudi Arabia, UAE) agree:**

1. To validate the conclusions of the Middle East Regional Advisory Group (RAG)<sup>1</sup> as follows:

	RAG Doha/2015 conclusions
Bahrain	2*
Egypt	2*
Iraq	2*
Jordan	2*
Palestine	<i>(not assessed so the Stage agree in Amman/2014 remains: 1)</i>
Kuwait	3*
Lebanon	2*
Oman	<i>(not assessed so the Stage agree in Amman/2014 remains: 2*)</i>
Qatar	3*
Saudi Arabia	2*
Syria	<i>(not assessed so the Stage agree in Amman/2014 remains 2*)</i>
UAE	2
Yemen	<i>(not assessed so the Stage agree in Amman/2014 remains 1*)</i>

\*Provisional PCP stage

2. To use the assessments of 3<sup>rd</sup> regional FMD Roadmap Meeting (Doha/2015) as a basis to update the Roadmap Table for the Middle East countries.

**The countries recommend, for a better implementation of the Global FMD Control Strategy at regional level:**

1. To continue the Roadmap process for Middle-East countries to work towards the Vision of freedom from clinical FMD in the Middle-East by 2021, with an annual PCP-FMD review of progress, and convene an annual regional meeting if funding available. The Vision will be reassessed on a regular basis according to the context prevailing in the region;

<sup>1</sup> In the Doha/2015 meeting, the RAG is composed of the following Members for a three-year period:

Voting Members

- CVOs: Elias Ibrahim, from Lebanon (Chairperson); Munther Al-Refai, from Jordan; Kaltham Al Kayaf, from UAE
- Faysal Bayoumi from Saudi Arabia (Leader for Epidemiology Network) and Mohamad Abd-Eldaim (Leader for Laboratory Network)
- GF-TADs FMD Working Group: Samia Metwally (FAO), Dr Gregorio Torres (OIE); Nadège Leboucq (OIE),
- PCP experts: Christianus Bartels;
- OIE PVS Expert: Hassan Aidaros
- FAO Regional Officer: Markos Tibbo
- OIE regional representative for ME Ghazi Yehia

2. That countries which have a provisional PCP-FMD stage 2 or Stage 3 submit their revised Risk-Based Strategic Plan (RBSP) or National Control Plan, respectively, to the GF-TADs FMD Working group ([FAO-FMD@fao.org](mailto:FAO-FMD@fao.org) and [OIE-FMD@oie.int](mailto:OIE-FMD@oie.int)) for review no later than June 2016, including the countries which did not attend the Doha meeting. The revised RBSP should have clear evidence of the programme feasibility for implementation, in accordance to the template provided by the GF-TADs FMD WG;
3. That the new or revised RBSP should focus not only on FMD specific activities but also include activities on the reinforcement of Veterinary Services in line with OIE standards on the quality of Veterinary Services<sup>2</sup> (as part of the Enabling Environment to FMD specific activities) and the possible combination of FMD with other animal disease control activities, in line with the FAO-OIE Global Strategy for the control of FMD disease (components 2 and 3, respectively);
4. That countries continue to implement the Recommendations adopted during the second meeting of the FMD Roadmap meeting for the Middle-East (Amman, Jordan, March 2014)
5. That 4<sup>th</sup> meeting of the FMD Regional Roadmap meeting for the Middle-East be convened in Amman on 4-6 October 2016 (to be confirmed); a face-to-face meeting or teleconference with the RAG may take place in June-July 2016 to reassess the PCP provisional Stages for countries submitted their RBSP or control plans;
6. That countries appoint the three national Points of Contacts (PCP roadmap; laboratory; epidemiology) to assist with the regional FMD roadmap; more generally, countries should make the best use of their existing national Focal Points to improve intra and inter-regional coordination (especially Focal Points on disease notification and laboratory);
7. That countries consider requesting an OIE PVS initial evaluation or OIE PVS follow up mission (if the initial PVS evaluation was carried out before 2010) to have an updated understanding of their Veterinary Services (VS) capacity and addressed the gaps in the RBSP or National Control Program;
8. That countries consider that following prevailing FMD virus lineages circulating in the region:
  - **Established lineages**  
O/ME-SA/PanAsia-2  
A/ASIA/Iran-05 Asia-1
  - **Emerging lineages (that are present in some countries in the region)**  
O/ME-SA/Ind-2001  
A/ASIA/G-VII SAT2/VII

*The most appropriate strains for vaccine for current risks in the region and recommended for use in 2015 are provided in **Annex II**.*

9. That countries consider the establishment of regional epidemiology and laboratory networks for the Middle-East;

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<sup>2</sup> Section 3 on the quality of Veterinary Services of the OIE Terrestrial Animal Health Code

10. That countries consider the establishment of regional vaccine banks for FMD (and other diseases such as PPR when relevant); this mechanism, at the service of the countries, is principally for the emergency situations faced at national or regional level and should not pre-empt countries from the continuation of their normal preventive programmes for vaccination but will provide additional opportunities to obtain quality assured vaccines in a timely manner;
11. That countries consider the nomination of a regional Leading Laboratory based on the Terms of Reference provided by the FMD Working Group; countries are encouraged to show interest by writing to the FMD WG within 15 days;
12. That importing and exporting countries implement and follow the OIE Terrestrial Animal health Code standards (in particular when it comes to certification and quarantine procedures) to ensure and facilitate safe international trade of live animals and animal products;
13. That immediate and longer-term inter-regional technical and financial cooperation be improved (in particular with the Horn of Africa), through existing regional networks/mechanism (REMESA; GCC; network of OIE Delegates) as well as through robust public-private partnerships with the quarantine stations.

# Report of the Meeting by Session



## Session 1: FMD Situation and Regional Roadmap

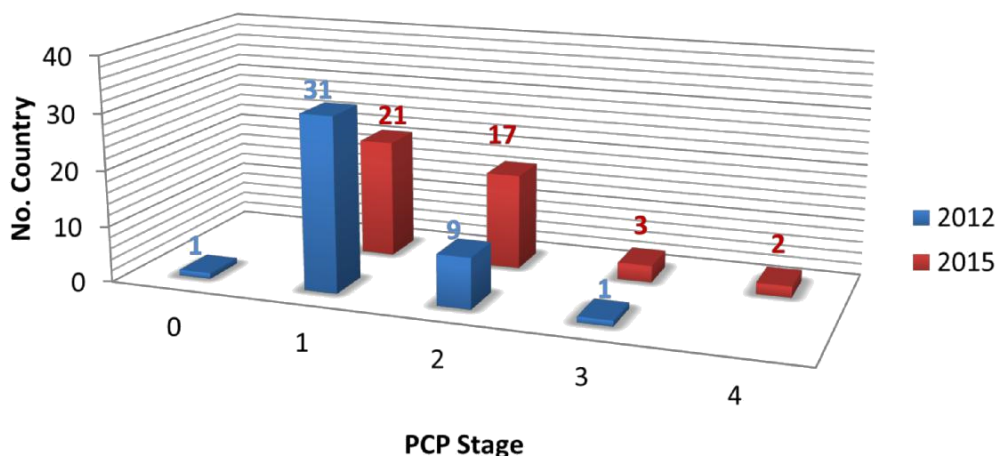
### **Update on PCP-FMD in virus pools 2 through 6 – Dr Samia Metwally**

Since the Global FMD Control Strategy was adopted, several initiatives have been made in order to establish an enabling environment to make FMD control a feasible option, particularly for countries that are affected the most by this disease.

Out of 87 FMD-endemic countries worldwide, at least 42 nations are currently engaged, at various levels, in the implementation of PCP-FMD in the quest to reduce or eliminate FMD virus circulation by 2020-2025. Some regions are making progress in FMD control, such as South America and South East Asia. However in a number of countries in Asia, Middle East and Africa, FMD remains endemic, or shows typical sporadic patterns. Since 2012, the FMD WG has provided on-going coordination of member countries PCP Stages evaluation, revising FMD control plans for countries moving from one PCP stage to another, and evaluating the progress on uptake and implementation of PCP-FMD by the FMD affected countries. Nine regional roadmap meetings with the East Africa, Middle East, SAARC and West Eurasia FMD were successfully coordinated. Training of PCP-FMD principles were delivered to FAO headquarters and field staff in Africa and the Middle East.

Technical guidelines on socio-economic studies principles, post vaccination monitoring, sero-surveillance, field investigation and risk-based control approach were being developed. Profiles for the FMD global expert groups were developed and data was collected in order to produce the FMD Global report.

### **Progress of Countries along the PCP-FMD stages:**



Between 2012 and 2015, countries advanced in PCP stages with clear shift to have more countries in PCP stages 1 and 2 in 2015 compared to 2012. A few countries progressively advanced to stages 3 and 4 by 2015. The trend was particularly visible for the West Eurasia, East Africa and Middle East regions, showing how effective has been the implementation of the Global Strategy for those countries.

## **Overview of global and regional FMD situation - Dr Donald King**

Worldwide, serotype O is still the most dominant type of the seven virus serotypes followed by type A. The less dominant serotypes in a decreasing order of prevalence are SAT2, Asia 1 and SAT1. Serotype C has not been reported since 2005. The Middle East belongs to FMD virus pool 3 where serotypes O, A, SAT2 and are known to be circulating. Since 2013, outbreaks of FMD type O (O/ME-SA/Ind-2001) were reported in Saudi Arabia, UAE, Bahrain, Libya, Tunisia, and recently in Morocco. This virus has been circulating in the Indian subcontinent since 2001 and the lineage reported in Tunisia and Algeria is most closely related to viruses from Nepal, Bhutan, Sri Lanka and India. It is important to note that this lineage was first introduced to North Africa (Libya) in September 2013. Both O Manisa vaccine potency test and animal studies have shown to provide relatively low protection against the O strains circulating in the region. New SAT 2 variants were also isolated from outbreaks and the VP1 sequencing showed two different genetic groups within topotype VII. The virus was first isolated in Oman in 2015, and is closely related to FMD viruses from Egypt (Alx-12 sub-lineage), Mauritania 2014, and Nigeria 2012. Of concern, are outbreaks of a new strain of serotype A reported in Saudi Arabia and Turkey between September and October 2015. This strain originated from the Indian sub-continent and all the commercial vaccine strains currently in use in the Middle East region have shown to have poor efficacy. Countries are encouraged to collect and ship samples from outbreaks to reference laboratories to identify the strains circulating in the region for better understanding of the FMD situation and selection of the appropriate vaccine strains.

## **Quick report of the previous Roadmap meeting and implementation of the Recommendation – Dr Markos Tibbo**

The Middle East is surrounded by FMD endemic areas. This characteristic makes the region prone to risk of FMD introduction both from Africa and Asia, which causes a constant evolution of the FMD epidemiological status. Due to the complexity and the intensity of animal movement, a regional approach is essential to coordinate control measures in the region. Twenty-two (22) recommendations were agreed during the 2nd FMD Roadmap meeting in Amman/Jordan in 2014. These recommendations have served as guidelines for countries and FAO and OIE (under the GF-TADs umbrella) to further progress towards achieving the regional Vision by 2021, and thereby, implementing the FAO/OIE Global Strategy for the control of FMD in the Middle East region. The Global GF-TADs FMD Working Group was in charge of monitoring the proper implementation of these 2014 recommendations over 2014-2015. The global strategy was recognized to be flexible enough to work for all the countries. The recommendations were to further develop guidance for PCP based project proposal, review vaccination strategies, and define where training is needed and how disease control campaigns are designed, particularly when outbreaks continue.

## **Presentation of status of countries and Provisional Roadmap based on Self-Assessment Questionnaires – Dr Nadege Leboucq**

An overview of PC-FMD status of participant countries based on the outcomes of the Amman meeting was given. In 2014, the PCP-FMD Stage of 6 countries (Bahrain, Palestine, Kuwait, Qatar, Saudi Arabia and UAE) was confirmed, while seven countries (Egypt, Iraq, Jordan, Lebanon, Oman, Syria and Yemen) were left in provisional Stage 2. To progress from Stage 1 to Stage 2, a RBSP is to be provided, in which the outcomes of Stage 1 are clearly described and addressed (understanding of FMD epidemiology and risk).



Countries already in Stage 2 (provisional). During the 2014 PCP assessment, it was indicated that Bahrain, Oman, Syria, UAE, Qatar and Kuwait indicated they would move to Stage 3 in 2015.

Based on the prior work conducted by the countries since the Amman meeting, the provisional 2015 Middle East PCP assessment was presented in Doha, founded solely on the information provided by the self-assessment questionnaires filled in by Member Countries.

Concepts related to PVS were also reintroduced to members, to stress the importance of its synergistic use together with its alignment with the PCP process.



### Session 2: Country reports

A 10 minutes presentation on the FMD situation in their country was given by a country representative. Country information presented in Annex 3 also includes the outcomes of the self-assessment questionnaires.

In the last two years (2014-2015), clinical FMD cases were reported in all countries except Jordan, Kuwait, and UAE. The number of reported outbreaks varied from few in Bahrain) to hundreds in Saudi Arabia. Overall, samples of FMD were taken for further identification through characterization of the virus. Few countries further use the isolated FMD virus for vaccine matching. Vaccination is the control measure used most around an outbreak. The use of preventive vaccination is applied in most countries. The serotype most used for vaccination, both preventive and as control measure, are: O Manisa, O 3039, SAT 2 Eritrea, Asia 1 Shamir, A Iran 05, A Saudi Arabia 95. The proportion of livestock receiving vaccination is related to funding and time-head resources. The majority of countries in the region are qualified in PCP stage 2 with a different level of implementation of the stage related activities. Some of those may require to further revise their plan for gaining a better understanding of the FMD situation and socio-economic impact. Technical assistance is needed in formulating the RBSP. No country has progressed further along the PCP



### Session 3: Important issues for FMD control at national and regional levels

While countries were being interviewed for PCP assessment, a parallel session was run with participant to discuss important issues for FMD control at national and regional levels. The outcomes of the parallel sessions were the following:

a. **Regional approach (priority 1)**

1. Epidemiological transparency and sharing information on FMD circulating strains and outbreaks;
2. Harmonizing regional FMD regulations and protocols including live animals and animal products import/export conditions and control, notification of cases, vaccination strategies

### **The need:**

- Regional/sub-regional EpiME to be established in the region and training workshop on practical epidemiology for progressive control in 2016/17 to be organised by OIE and FAO. The Epi-Network produces a comprehensive review of the epidemiology of FMD in the Middle East, to summarise the findings and lessons learnt in the first 5 years.
- A regional leading laboratories established to serve the countries per terms of references provided by the FMD WG and as potential future reference centre, and LabME be established in the region (Amman 2014);
- Strengthening at the (sub)regional level the work of the OIE/FAO National Focal Points for Laboratories and National Focal Points for Disease Notification;
- Strengthening the existing sub-regional networks (GCC and REMESA were mentioned) and potentially enlarge the scope to other ME countries.

### **b. Vaccine**

1. Regional approach to vaccine usage and availability, and harmonisation of vaccination strategies. In order to achieve so the following issues need to be considered:
  - a) Vaccine quality (GMP, OIE standards...);
  - b) Vaccine potency against circulating FMD strains (Matching);
  - c) Vaccine availability on the market;
  - d) Vaccine funding by governments;
  - e) Animal population critical coverage (70% minimum at regular frequency);

#### **Proposals:**

- Review of vaccination strategies against FMD, covering the range of current programmes in use in the region, be developed and Regional / Sub-regional training workshop(s) organised in vaccination programme development, monitoring and evaluation (recommendation, Amman 2014)

### **c. Control of live animal at risk**

1. Control of unregulated importations and lack of confidence of some legal importations (i) within the region and (ii) from abroad especially from the Horn of Africa destined mainly to GCC -Saudi Arabia- before Hajj ;

#### **Proposals:**

- Promoting the use of the OIE international standards on trade (Animal health certification, zoning & compartmentalization by Veterinary Services);
- Missions to evaluate quarantine stations at borders and importing countries inspectors to be based in the stations
- Submit the national control plans to OIE endorsement for stage 3 countries; (recommendation, Amman 2014);

2. In wildlife (antelopes in GCC countries);

**Proposals:**

- Issue to be addressed by the National Focal Points on Wildlife during the training seminars organized by the OIE

**d. Preparedness**

1. Contingency planning;
2. Effectiveness of Epidemio-surveillance and Early Warning Systems;

**Proposals:**

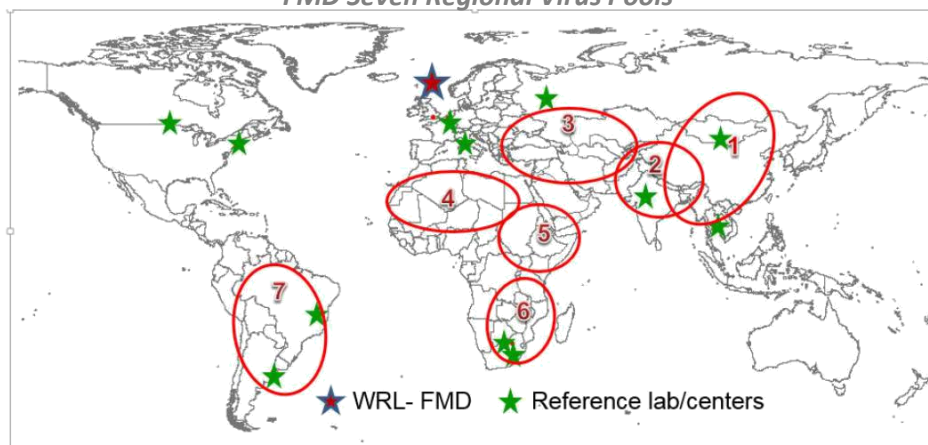
- That Veterinary Services develop contingency plans for the possible introduction of exotic FMDV from other virus pools, including the risk of spread of serotype SAT2 from infected parts of Sub-Sahara Africa

**Criteria for selection and responsibilities of regional leading – Dr Samia Metwally**

Following the parallel session discussion, criteria for selection and responsibilities of regional leading laboratory were introduced. The need of developing, maintaining and strengthening an integrated international, regional and national network of laboratories that can respond quickly to needs for rapid and accurate testing, and timely notification was reiterated. Laboratories networks are essential to:

- Gain more intelligence on FMD virus strains circulating in regions
- Improve vaccine selection – supporting both endemic and free countries and essential to progressive control
- Enhance diagnostic capability for other priority diseases in the region

*OIE-FAO FMD Reference Laboratory Networks  
FMD Seven Regional Virus Pools*



Note the lack of reference centers in FMD virus pools 3-5 including the ME region. The proposed mechanism for selection of regional labs and terms of reference were presented and described as follows:

Regional leading laboratories selection criteria are based on:

- Creditability and acceptance by countries of the region
- Commitment from the government to support and sustain lab functions as described in the terms of reference
- Lab capacity and capability to perform diagnostics for FMD/PPR/other TADs
- Capability to handle exotic viruses from other countries in the region
- Certification to ship and receive international diagnostic samples
- Participated or willingness to take part in OIE twinning program
- Keen interest to be designated as a FAO/OIE reference center
- Established link with FMD reference laboratory
- Maintain good performance on proficiency testing carried by reference center

The term of references for those laboratories are as follows:

1. Produces diagnostic reagents, SOPs and protocols
2. Provides training to national laboratories using “train the trainers approach”
3. Coordinates proficiency testing for the region (limited to screening tests)
4. Receives and processes samples for diagnostics from countries of the region
5. Ships samples to FAO/OIE reference centers for full characterization
6. Ensures and assist in regional procurement of essential diagnostic reagents for emergency release
7. Participates in regional laboratory network activities (potential leader)
8. Links with the regional epidemiology network

### **Introduction of the EU-FMD e-learning tools – Dr Chris Bartels**

Finally, a brief presentation was given to introduce learning tools available to member countries to enhance their knowledge on FMD and related control strategies. The EuFMD offers additional E-learning on and about PCP-FMD, which currently consists of three levels: PCP-FMD what it means, what involves PCP-FMD, and how to apply progressive control of FMD. The commission also provides a short course on FMD that teaches where to find the disease, how to recognise and diagnose it, and what impact FMD has on livestock and what can one do about it. Specifically the course touches the following points:

- What can be done about FMD control?
- How country can assess the PCP-FMD Stage in which they are in?
- How the PCP-FMD contribute to the global strategy on FMD control?
- What activities are needed for progressive control of FMD?
- What Risk-based means?

The Target audience are the people working on FMD control at national level and PCP-trainers. The Objective of the course is for trainees to understand how to develop a RAP, a RBSP or a National Control Plan and to train or support national veterinary staff to do the above



## Session 4: Roadmap Assessment

There is now a general agreement on the following key principles inherent to a FMD Roadmap:

1. A country cannot be assessed by two different Roadmap Regional Advisory Groups (RAGs)
2. Countries are free to decide by which Roadmap RAG they want to be assessed; however, there are objective geographical or epidemiological rationale for countries to belong to a given Roadmap, and these should be preferably considered;

Based on the RAG decisions and comments for the 2015 PCP-FMD Stage ranking (see Table below) and on the prospect of progression expressed by the countries themselves, the following progression timeline could be produced (to be confirmed during the RAG Fall meeting):

Country	2014	RAG proposal (plenary)	Comments
Bahrain	2	2*	<ul style="list-style-type: none"> <li>• Vaccination cattle sheep and goats twice a year</li> <li>• Protocol for importation and quarantine</li> <li>• Need to perform regular serosurvey and PVM</li> <li>• Enhance border control</li> <li>• Outbreaks in 2014 and 2015, samples submitted to Pirbright</li> </ul> <p><b>Risk Based Strategic Plan submitted within 6 months</b>  <b>Submit questionnaire within 1 month</b></p>
Egypt	2	2*	<ul style="list-style-type: none"> <li>• They prefer to consolidate stage rather than progress</li> <li>• Socioeconomic studies and value chain analysis in progress</li> <li>• Risk of under reporting despite awareness efforts</li> <li>• Mobile lab to improved diagnosis (PCR, ELISA)</li> <li>• Vaccination coverage need to be improved</li> <li>• More progress made since 2014</li> <li>• Request for PVS Follow up</li> </ul> <p><b>WG to review RBSP within 3 weeks</b></p>
Iraq	2*	2*	<ul style="list-style-type: none"> <li>• May design and implement additional sero survey, including a questionnaire to further understand the level of infection in livestock</li> <li>• 'Control plan' to be provided</li> <li>• Control activities in place but not risk-based</li> <li>• No PVS, but requested</li> <li>• Difficult security context</li> </ul> <p><b>WG to facilitate submission of FMD samples to WRL</b>  <b>WG to provide feed-back on RBSP (3 weeks)</b>  <b>Final RBSP to be provided (6 months)</b></p>
Jordan	2*	2*	<ul style="list-style-type: none"> <li>• On-going sero-survey (results March 2016), to be shared</li> <li>• Motivate clinical reporting by private stakeholders</li> <li>• First draft of risk-based control strategy; to be updated according to the result of the sero-survey</li> <li>• Request for PVS Follow up</li> </ul> <p><b>WG to provide feed-back on RBSP (3 weeks)</b>  <b>Final RBSP to be provided (6 months)</b></p>

Kuwait	3	3*	<ul style="list-style-type: none"> <li>• Confident of their reporting system. Incentives.</li> <li>• NSP and serosurvey in cattle, not in small ruminants</li> <li>• Share results of serosurvey</li> <li>• Border control to be improved</li> <li>• Sheep vaccination should be mandatory (now is voluntary)</li> <li>• Advice PVS follow up</li> </ul> <p><b>Submit national control plan and contingency plan within 6 month</b></p>
Lebanon	2*	2*	<ul style="list-style-type: none"> <li>• Sero-survey (pre-vaccination to be shared with WG. Follow up with NSP study in young livestock (6-24 months))</li> <li>• Request for PVS Follow up is already submitted</li> <li>• Control Strategy is provided</li> <li>• No vaccination exit strategy because of regional situation</li> </ul> <p><b>WG to provide feed-back on RBSP (3 weeks)</b></p>
Qatar	3	3*	<ul style="list-style-type: none"> <li>• Provide evidence that FMD is not circulating</li> <li>• Animal identification system is in place</li> <li>• No Serosurvey, no PVM.</li> <li>• No sample submission to ref lab. Characterisation of virus relies on results from the region (Imported country)</li> <li>• Request for a PVS follow up</li> </ul> <p><b>Risk Based Strategic Plan submitted within 6 months</b> <b>Submit questionnaires of stages 2 and 3 within 1 month</b></p>
Saudi Arabia		2*	<ul style="list-style-type: none"> <li>• Vaccination voluntary. Not sufficient for elimination</li> <li>• Protocol for importation. Compliance?</li> <li>• Include socio-economic aspects in the RBSP</li> <li>• Provide the results of the ongoing serosurvey</li> <li>• Enhance implementation importing protocol</li> <li>• Movement restriction within the country is a challenge.</li> <li>• Cost-benefit analysis being done</li> </ul> <p><b>Risk Based Strategic Plan submitted within 3 months</b> <b>Submit stages 1 and 2 questionnaires within 1 month</b></p>
UAE	2	2*	<ul style="list-style-type: none"> <li>• National control plan (5 diseases) with an eradication objective; need to be endorsed by government. Non-endorsed draft plan to be provided within 1 month.</li> <li>• FMD in captive animals</li> <li>• Need for strengthened coordination between local</li> <li>• NO data from the private sector on control activities</li> <li>• Request for PVS Follow up is already submitted</li> </ul> <p><b>WG to provide feed-back on RBSP (3 weeks)</b></p>

The PCP-FMD Stages of Middle East countries as December 2015 are shown in the table below:

Country	RAG assessed stages				Countries prospects					
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bahrain	1	2	2	2*	3	3	3	4	4	4
Egypt	1	1	2*	2**	2	2	2	2	3	3
Iraq	2	2	2*	2**	2	2	2	2	3	3
Jordan	1	1	2*	2**	2	3	3	3	4	4
Palestine <sup>1</sup>			1							
Kuwait	2	2	3	3*	3	4	4	4	5	5
Lebanon	1	1	2*	2**	2	3	3	4	4	4
Oman <sup>1</sup>	2	2	2*							
Qatar	2	2	3*	3*	3	3	4	4	4	4
Saudi Arabia	1	1	2*	2*	2	3	3	3	4	4
Syria <sup>1</sup>	2	2	2*							
UAE	1	1	2	2**	3	3	3	4	4	4
Yemen <sup>1</sup>	1	1	1*							

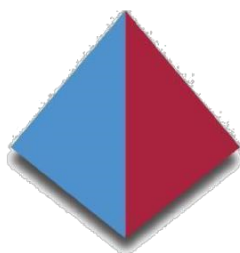
<sup>1</sup>Countries absent from the roadmap meeting and not assessed in 2015

COUNTRIES THAT:

- \* RAG has assessed in provisional stage but need provide additional documentation
- \*\* RAG has assessed in provisional stage but have provided additional documentation to WG for review

It was noted the intention of the participants to conduct the next FMD Roadmap meeting for the Middle-East in Amman in 2016.

# Annex 1 – Meeting Agenda



## GF-TADs

GLOBAL FRAMEWORK FOR THE  
PROGRESSIVE CONTROL OF  
TRANSBOUNDARY ANIMAL DISEASES



### FMD and PPR roadmap meeting for the Middle East region 7th Meeting of the GF-TADs Regional Steering Committee for the Middle East 1 – 3 December 2015, Doha, Qatar

#### 1 December 2015

09.00 – 09.30	General opening welcome addresses Objectives of the meeting	Representative of Qatar K. Al Qahtani (president ME RSC) GCC representative M. Tibbo (FAO) G. Yehia (OIE)
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#### *FMD Control Pathway (Middle East)*

*Chair: OIE*

09.30 – 10.30	<b>Session 1: FMD situation and regional roadmap</b>		<b>Chair: Ghazi Yehia</b>
	Update on PCP-FMD in virus pools 2 through 6		Samia Metwally
	Overview of global and regional FMD situation-WRL		Donald King (WRL)
	Quick report of the previous Roadmap meeting and implementation of the Recommendations		Markos Tibbo/Xavier Pacholek
	Presentation of status of countries and Provisional Roadmap based on Self-Assessment Questionnaires		Nadège Leboucq
10.30 – 11.00	Coffee / Tea break		
11.00 – 12.30	<b>Session 2: Country reports</b> (5/12 Middle East countries) 15 minutes presentation and 5 minutes questions and answers per country (justify PCP Stage assessment, as per template provided)		<b>Chairs: RAG/ Samia Metwally</b>
12.30 – 13.30	Lunch		
13.30 – 15.00	<b>Close sessions:</b> interviews with countries to review their PCP-FMD questionnaires and control activities (30 min per county, two/ three	<b>Parallel session</b> for not interviewed countries (technical discussions in 3 Groups. Group A: Regional Leading	



	interview panels; for the 6 countries who reported in the morning, session 1)	Laboratories Group B: Needs for a vaccine bank Group C: Epi and lab networks All Groups: regional priorities for 2015-16)	
15.00 – 15.30	Coffee / Tea break		
	<b>Session 2 (cont.): Country reports</b> (6/12 ME countries ) 15 minutes presentation and 5 minutes questions and answers per country (justify PCP Stage assessment, as per template provided)		<b>Chairs: RAG /Gregorio Torres</b>
17.30 – 19.00	<b>Close sessions:</b> interviews with countries to review their PCP-FMD	<b>Parallel session</b> for not interviewed countries	
	questionnaires and control activities (30 min per county, two/ three interview panels; for the 6 countries who reported in the afternoon, session 1)	(introduction to the EuFMD e-learning tool)	
19.00	Closure of day 1		
<b><u>(19.00 – 19.30)</u></b>	<b><u>Close meeting of the Regional Advisory Group</u></b>		<b><u>(Regional Advisory Group)</u></b>

## 2 December 2015

<b>Regional FMD Roadmap meeting: Progress Review</b>		<b>Chair/Facilitators</b>
9.00 – 9:45	<b>Session 3: Parallel session</b> Presentations from the parallel sessions Criteria for selection and responsibilities of regional leading laboratory (10 min)	<b>Chair: Markos Tibbo</b>  Samia Metwally and Gregorio Torres
9:45 – 11.00	<b>Session 4: Roadmap assessments</b> Presentation of roadmap based on post-assessment by the Regional Advisory Committee Roundtable discussion: viewpoints from countries.	<b>Chairs: Samia Metwally/Nadège Leboucq</b> RAG President
11.00 – 11.30	Coffee / Tea break	
11.30 – 12.00	<b>Session 5: Recommendations and closure of the FMD meeting</b>	<b>OIE-FAO (Markos Tibbo and Ghazi Yehia)</b>
12.00 – 13.30	Lunch	

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# Annex 3 - Summary of contents of country reports

## Bahrain



PCP-FMD Stage	
2014	2
2015	2*
OIE PVS evaluation	2008

### Provisional Roadmap 2015

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bahrain	1	2	2	2*	3	3	3	4	4	4

\*indicates a provisional status given to the countries in 2015

FMD outbreaks & surveillance:  
 2 confirmed outbreaks in 2014  
 Musharraf Governorate: 3 cases  
 2- Northern Governorate: 6 cases  
 Serotypes A, O and Asia-1 detected, mainly serotypes O and Asia 1  
 Mainly passive surveillance

FMD Control Measures:  
 Vaccination response to 2015 outbreak: 2692 cattle  
 Closing infected farms and disinfection  
 Closing of the infected farms.  
 Collecting blood samples (141 samples collected) for differentiation between the infected and the vaccinated cattle by using FMD 3ABC ELISA in local laboratory.  
 Vaccination all farms surrounding the foci of infection in a ring manner of a radius 3 km by using Aftovax Inactivated Polyvalent Vaccine (O Manisa, O-393, A Iran 05, A Saudi 95, Asia 1 and SAT2) of Merial.  
 Tissue samples were collected from infected cattle and sent to Pirbright FMD reference laboratory (FMD virus strain O Turkey 09 was identified).

Other notes and priorities for the future:

Routine vaccination

- Control and Animal Health Directorate performs a routine vaccination campaigns to eradicate FMD. Campaigns performed 2 times a year.
- Decivac FMD DOE trivalent vaccine from MSD has been introduced in the vaccination campaigns of October 2015 after performing vaccine matching tests in Pirbright.

The country didn't submit the PCP Stages questionnaire for the present meeting

# Egypt



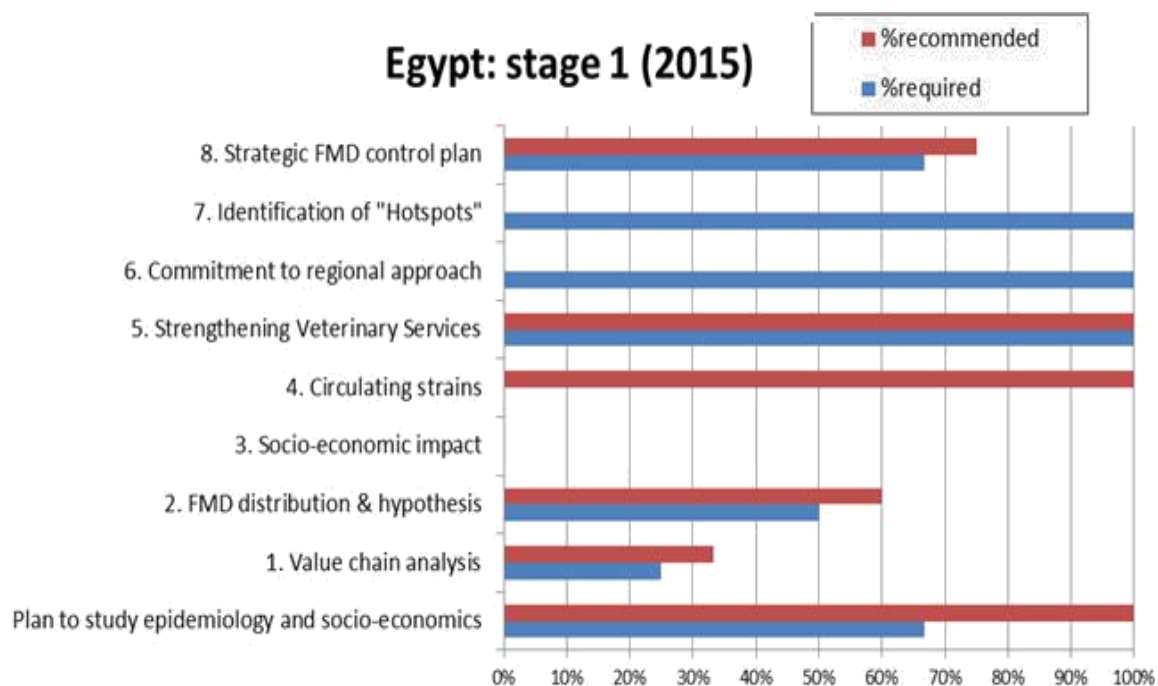
PCP-FMD Stage	
2014	2
2015	2
OIE PVS evaluation	2009

## Provisional Roadmap 2015

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Egypt	1	1	2*	2*	2	2	2	2	3	3

\*indicates a provisional status given to the countries in 2015

Achievement of required and recommended outcomes for the PCP Stage 2:



**FMD outbreaks & surveillance:**

In 2014, 699 outbreaks in 599 villages

In 2015, 441 outbreaks in 398 village

FMD incidence decreasing

Disease distribution following the river Nile

Active surveillance carried out in Jan 2015 – sero survey in 162 villages, clinical investigation

**FMD Control Measures:**

Quarterly vaccination in 2014, 23% of 44% LR and 23% SR

Trivalent local produced vaccine

Awareness campaign

Bio security measures

**Other notes and priorities for the future:**

Some of the gaps identified during the 2014 meeting have been resolved. However the socio-economic impact study was not conducted due to financial constrain.

Egypt plans relate to FMD surveillance are both long term and short term

Short term: strengthening passive surveillance and improve the data flow system

Medium term: achievement of vaccination coverage 80% with local produced vaccine and full understanding of animal movement and in to Egypt

# Iraq



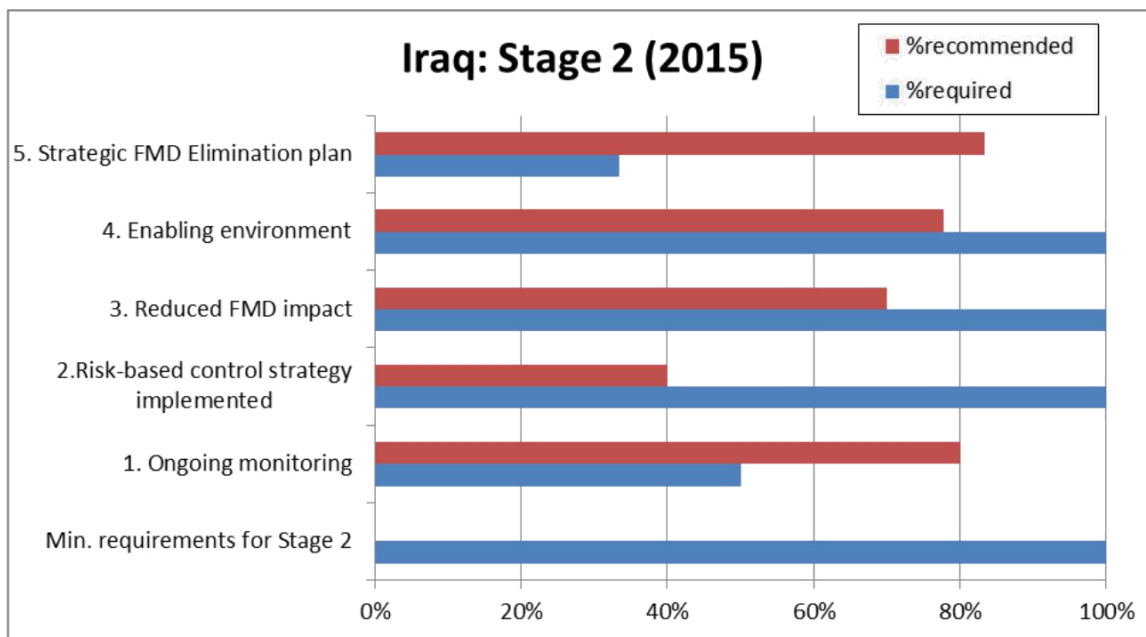
PCP-FMD Stage	
2014	2*
2015	2*
OIE PVS evaluation	None

## Provisional Roadmap 2015

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Iraq	2	2	2*	2*	2	2	2	2	3	3

\*indicates a provisional status given to the countries in 2015

Achievement of required and recommended outcomes for the PCP Stage 2:



<p><b>FMD outbreaks &amp; surveillance:</b>          2014 Clinical disease:          Laboratory diagnosed: 141 positive over 420</p>	<p><b>FMD Control Measures:</b></p>
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Other notes and priorities for the future:

Two vaccination campaigns were conducted during 2014, the 1<sup>st</sup> on covered bovine and buffalo that involved the vaccination of about 1736437 animal with high potency (>6pd50) trivalent vaccine. The 2<sup>nd</sup> vaccination campaign involved the vaccination of 1268131 animals (bovine and buffalo) and 4292653 animals (ovine and caprine). The Control strategy of FMD disease in Iraq must be applied on two stages as Iraq consider to be endemic with the disease:

**First stage**

- Compulsory routine vaccination campaign to all large and small ruminants, twice yearly in whole country.
- Restriction of live animal movement, and animal products.
- Increase awareness and communication about the importance of this stage and start to prepare the field veterinarian in both the public and private sectors for the next stage that will required more attention and efforts to keep, maintain and forward go on in the control of the disease.

**Second stage**

- Starts after the success control of clinical disease in one or more sector or zone in the country with the continuous using of mass vaccination strategy.
- This stage required in addition to the activities in the first stage the following action:

1. Initiate good, very active and quick communication networks, and preparing hot lines for any suspected cases.

2. Preparing and training the veterinary authority at the free zones as well as the veterinary private sectors on contingency plans to contain any emergency cases suspected with the disease.
3. Legislation of compensation laws or regulation in order for the stamping out of the affected animals in the free zone as a strategy for controlling any new disease foci.

Vaccine:

- A/ Turk/2006/20
- O/Turk/05/2009 Panasia2
- Asia1/Pak/8/2008-sindh-08 ( Previously Shamir)
- Those strains are formulated in an adjuvant, double oil emulsion vaccine with potency  $\geq 6PD50$ .



# Jordan



PCP-FMD Stage	
2014	2*
2015	2*
OIE PVS evaluation	2009

## Provisional Roadmap 2015

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Jordan	1	1	2*	2*	2	3	3	3	4	4

\*indicates a provisional status given to the countries in 2015

### FMD outbreaks & surveillance:

- Last FMD outbreak was in October-December 2006
- Classification currently: Endemic

### FMD Control Measures:

Vaccination

### Other notes and priorities for the future:

- FMD was placed on List A of notifiable animal disease in Jordan Quarantine and border checks ()
- Animal movement and product restrictions (Compulsory vaccination in infected zones and prophylactic vaccination in whole country)
- Small ruminants: Monovalent type O twice/year
- Cattle: Monovalent type O three times/year imported from Turkey
- Bivalent (O+A) was used after FMD outbreak imported from Russia
- O 1 manisa , pan asia2
- Iran2005

The country didn't submit the PCP Stages questionnaire for the present meeting

# Kuwait



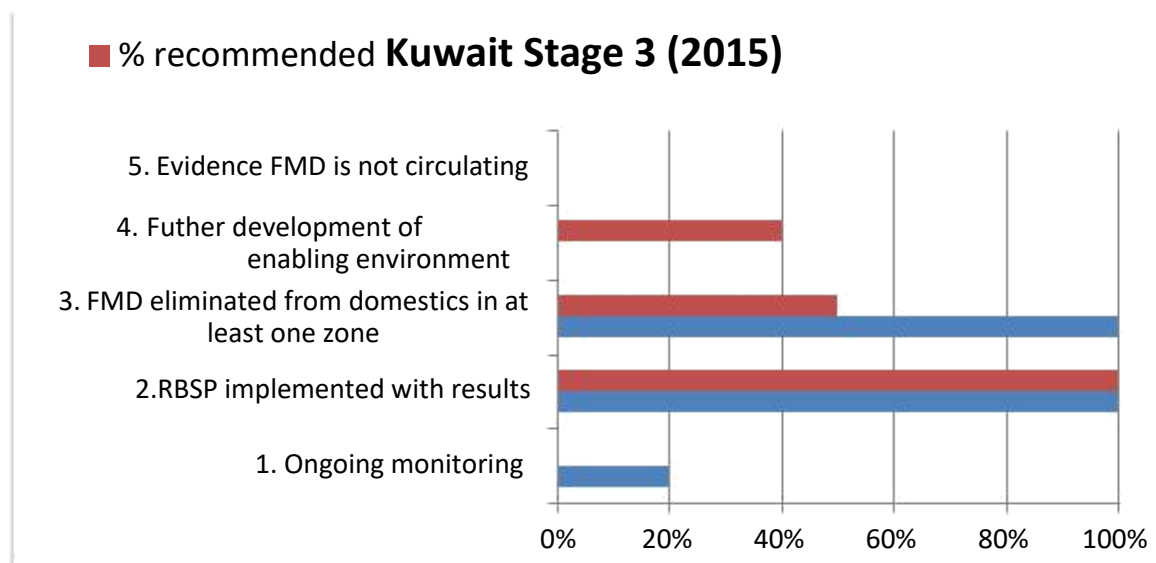
PCP-FMD Stage	
2013	3
2014	3*
OIE PVS evaluation	2007

## Provisional Roadmap 2015

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Kuwait	2	2	3	3*	3	4	4	4	5	5

\*indicates a provisional status given to the countries in 2015

Achievement of required and recommended outcomes for the PCP Stage 2:



FMD outbreaks & surveillance:  
None

FMD Control Measures:

Other notes and priorities for the future:

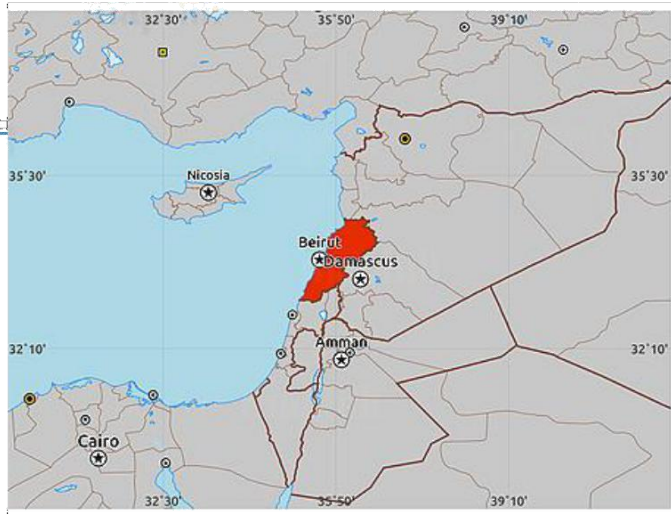
**Ongoing FMD Control plan**

- Early detection of suspicious clinical cases
- Isolation of affected animals
- Movement restrictions
- Collection of specimens for laboratory examination
- Diagnosis in the national and international laboratories
- Serotype and vaccine matching by international laboratory
- Report and monitor illness
- Disposal of carcasses and disinfection
- Emergency vaccination if necessary
- Public awareness about FMD

**Preventive measures**

- Official vaccination in cattle
- Three times in a year Vaccine used to protect for circulating FMD serotypes
- Border posts security
- Vaccine (Aftavaxpur, Merial) contains following serotype and strains.
  - o O: O1 manisa, O 3039, o A: Saudi 95, Iran 05, o Asia 1 and SAT 2.
- Bio-security

# Lebanon



PCP-FMD Stage	
2014	2*
2015	2*
OIE PVS evaluation	2008

## Provisional Roadmap 2015

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Lebanon	1	1	2*	2*	2	3	3	4	4	4

\*indicates a provisional status given to the countries in 2015

FMD outbreaks & surveillance:	FMD Control Measures:
None	

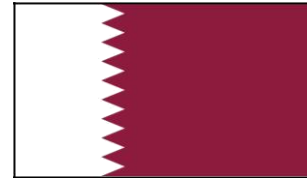
Other notes and priorities for the future:

**Comprehensive plan with consideration to epidemiology and to socio-economic impact on stakeholders includes:**

- Structure of livestock production.
- FMD incidence (identification of hot spots areas).
- Transmission pathway.
- Socio-economic impact (increase of big industrial dairy farms).
- Registration of farms and production firms.
- Identification of animals.
- Departmental control.
- Sampling and testing.
- Vaccination program.

The country didn't submit the PCP Stages questionnaire for the present meeting

# Qatar



PCP-FMD Stage	
2014	3*
2015	3*
OIE PVS evaluation	2008

## Provisional Roadmap 2015

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Qatar	2	2	3*	3*	3	3	4	4	4	4

\*indicates a provisional status given to the countries in 2015

FMD outbreaks & surveillance:	FMD Control Measures:

Other notes and priorities for the future:

The country didn't submit the PCP Stages questionnaire for the present meeting

# Saudi Arabia



PCP-FMD Stage	
2014	2*
2014	2*
OIE PVS evaluation	Requested in 2015

## Provisional Roadmap 2015

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
SaudiArabia	1	1	2*	2*	2*	3	3	3*	4	4

\*indicates a provisional status given to the countries in 2015

FMD outbreaks & surveillance:

FMD Control Measures:

Other notes and priorities for the future:

The country didn't submit the PCP Stages questionnaire for the present meeting

# UAE



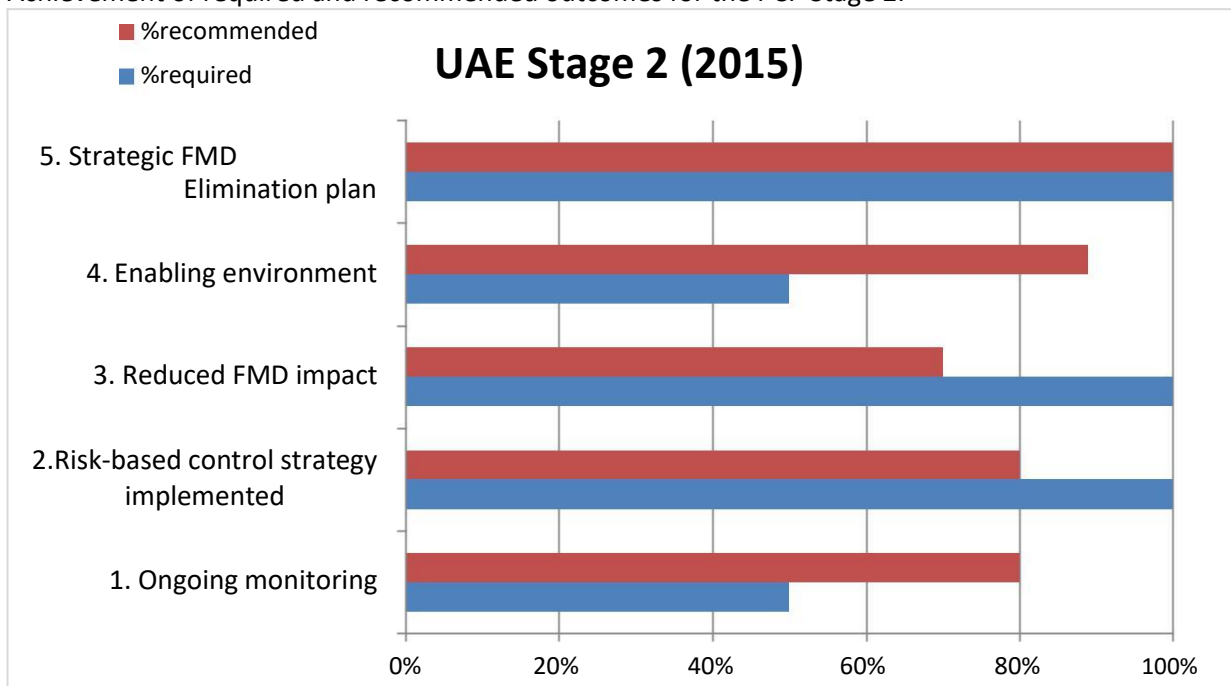
\*indicates a provisional status given to the countries in 2015

PCP-FMD Stage	
2014	2
2015	2
OIE PVS evaluation	2009

## Provisional Roadmap 2015

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
UAE	1	1	2	2	3	3	3	4	4	4

Achievement of required and recommended outcomes for the PCP Stage 2:



FMD outbreaks & surveillance:

FMD Control Measures:

Other notes and priorities for the future:



## **Annex I – RAG Terms of Reference**

The Members of the RAG are elected *personae intuitae* for a 3-year mandate, renewable. The Terms of Reference of the RAG are recalled in the text box below; the new RAG Members will be trained to their responsibilities as RAG Members within the next 12 months by the GF-TADs FMD Working group, if time and budget permits

- To review the progressive control pathway (PCP)- FMD stage assessments of countries during the PCP-FMD regional roadmap meetings (Component 1)
- To guide FMD training and capacity development activities in countries to support FMD regional /national strategies and their alignment with the principles of the FAO-OIE Global FMD Control Strategy(June 2012)
- To provide an advice on the status of PCP assessments including the analysis of Performance of Veterinary Services (PVS) evaluations for relevant Critical Competences as identified in Component 2 of the FAO-OIE Global FMD Control Strategy
- To support technical review and implementation of national risk-based strategic control plans and other national and regional control plans
- To advise on issues or factors preventing effective progress of the FMD roadmap
- To support countries, if requested , in the preparation of applications to OIE for endorsement of their FMD national control strategy and for status official recognition
- To assist resolving problems and issues related to the implementation of regional activities and national strategies for the progressive control of FMD
- To promote ownership and enhance establishing enabling environment for implementation of control programs at national and regional levels To advocate at regional level with countries, private sector and donors the importance to invest in FMD control and prevention

*Text box 1 – Terms of Reference of the RAG (main responsibilities)*

Based on the RAG decisions and comments for the 2015 PCP-FMD Stage ranking (see Table below) and on the prospect of progression expressed by the countries themselves, the following progression timeline could be produced (to be confirmed during the RAG Fall meeting)

## **Annex II– Vaccines recommendations**

*OIE/FAO Reference Labs recommend that Veterinary Services ensure that the vaccines used are appropriate for the viruses circulating in the region.*

*The selection and deployment of these vaccines should consider the extent of these co-circulating lineages and available data from in-vitro (vaccine matching) and in-vivo (vaccine challenge and field efficacy evaluation) studies.*

*Internationally produced vaccines (used individually or in combination) that can be used in the region for current risks in the Middle-East (see recommendation 8) include:*

*PanAsia-2 including O-Tur-5-2009 (or equivalent such as O-3039)*

*O-Manisa*

*A-Iran-05 (A-TUR-06)*

*A22 Iraq*

*Asia-1 Shamir*

*SAT2 Eritrea (or SAT2 Saudi Arabia)*

### Points to note:

- Very poor matching data was generated for the recent A/ASIA/G-VII samples collected in Saudi Arabia across a range of different candidate serotype A vaccines – including A-Sau-95 which is the closest genetic relative available from the International Suppliers. Follow up is now required to assess whether in-vivo protection can be achieved using any of these serotype A vaccines (including high potency formulations)
- Many recent field isolates from the A/ASIA/Iran-05 lineage are poorly matched (using in-vitro tests) with A-Iran-05 and A-Tur-06 vaccines. There is also now an urgent need to evaluate whether these vaccines are still providing protection in the field.
- Vaccine strains used in India (if available) may be suitable to address the emerging serotype O and A lineages from the Indian sub-continent
- Other vaccines may be suitable for use in the region, but advice should be sought from the OIE/FAO Reference Laboratories regarding their use. The OIE/FAO Laboratories also recommend that greater use should be made of the vaccine matching services offered by the World Reference Laboratory at Pirbright and other FAO/OIE Reference Centres.