



FAO/OIE
GF-TADs
GLOBAL FRAMEWORK FOR THE
PROGRESSIVE CONTROL OF
TRANSBOUNDARY ANIMAL DISEASES

**4TH ROUND TABLE ON FMD SURVEILLANCE AND CONTROL IN THE MIDDLE EAST
05-06 SEPTEMBER 2007**

AMMAN, JORDAN

Report

The 4th Roundtable was organised by OIE and FAO under the Regional Steering Committee of the GF-TADs for the Middle-East, and co-funded by OIE and FAO.

Participating countries:

Bahrain, Cyprus, Egypt, Jordan, KSA, Kuwait, Lebanon, Iran, Palestinian Authorities, Qatar, Sudan, Syria, and Yemen.

Summary:

The session considered the progress made since the 3rd roundtable, held in Damascus in November 2006, received reports on the recent epizootic events and current risk situation, reviewed the recommendations related to inclusion of specific regional antigens in vaccination programs, debated on improving quarantine management to secure the trade of animal and animal products, specially from the Horn of Africa to Middle Eastern countries, and discussed the draft project proposal developed by the OIE Regional Representation on FMD control in the region.

13 recommendations were adopted in session to reinforce national capabilities (diagnostic using PCR tests, emergency plans, vaccination, border protection) and to implement a regional strategy through the OIE/FAO Regional Animal Health Centre for the Middle East.

The participants have also stressed the necessity to continue organising annually such round table.

1. Discussion on recommendations of the 3rd FMD Round Table

Dr Sumption (EUFMD) mentioned the importance and value of the 3rd FMD Round Table, which was held in Damascus in November 2006, at which early warning messages of the new type O epidemic were given, and control measures for the epizootics of type A Iran 05 and A Egypt 06 were compared and discussed.

Each of the recommendations of the 3rd Roundtable was then discussed in the plenary. Despite the early warning given in November 06, a regional epidemic of type O had followed, affecting many middle-eastern countries. There was therefore significant discussion on the progress of each of the recommendations made in the 3rd Roundtable. It was agreed that the recommendations of the 4th Roundtable must address the major points where progress was limited.

Relating to control of FMD in ME region;

1.1. The whole of the Middle East areas should be considered as one FMD epidemiological region, but with possible subregions reflecting different ecosystems for circulation of FMDV strains, requiring a set of co-coordinated prevention, control and eradication programs to be elaborated covering the entire region at risk;

Subregions (FMD ecosystems) were discussed, and defined as East African, West Asian and Middle-Eastern. It was agreed these subregions should not be seen as political entities but based on FMD epidemiology.

1.2. A strategy to achieve international recognized disease free zones or FMD free country status must be developed in the region, within the framework of the progressive control of transboundary animal disease program (GF-TADs);

Dr Yehia (OIE – Middle East) explained that this point is included within the draft project for the Middle East subregion, and would be presented later in the meeting.

Representative of Members countries advocated a focus on exporting/producing countries.

1.3. in support of the above, each country is encouraged to “map” their ruminant livestock population in the country, and consideration should be given to developing a standard format for livestock population mapping that is applicable across the region, and which will assist each country in planning disease control measures;

Nothing has yet been done on this issue. Dr Khoury, GF-TADs chairman, explained that considering the complexity of animal movements within the region it is very difficult to achieve precision in livestock mapping. The implementation of specific project on this issue would be very helpful.

1.4. The countries of the region establish an FMDV network,, to facilitate exchange of information and to respond rapidly to an emergence of any new serotype in the region;

Dr Yehia mentioned that a draft working plan, with specific budget, has been proposed to validation at OIE and FAO level, including specific program on FMD, notably a surveillance network.

He advocated also countries to participate actively as soon as such network would be in place.

Dr Sumption clarified the importance of such network for risk analysis and communication, particularly on virus circulation, and notably on subtypes involved. At present the EUFMD Commission undertakes this work in part of the region, using the World Reference Laboratory (WRL) for virus typing.

1.5. Member Countries of the Middle East region are urged to develop, test and keep a regularly updated national foot and mouth disease preparedness plan that will assist them to ensure a rapid and effective response to new epidemic events;

It was mentioned that most countries have plans for national FMD control. Dr Sumption underlined the importance to develop preparedness plans for new epizootic FMD strains.

Dr Koni (Cyprus) proposed the assistance of Cyprus, which has significant experience in developing plans to EU specification.

Relating to early warning of FMD risk in the ME region;

1.6. when threatening events of regional significance are identified, emergency meetings be rapidly convened by the RSC to assess the risk and necessary international response;

The FMD current situation in the Middle East although serious did not result in an emergency meeting this last year; there had been no call from member countries, despite the epizootic of type O PanAsia in Turkey, Lebanon, Jordan and Palestinian Authority.

Member countries agreed that the international organizations should not always wait for requests, but actively convene such emergency meetings.

A regional FMD network supported by the RAHC should provide updated information to member countries on the disease situation in the Middle East.

1.7. the Regional Steering Committee of GF-TADS organise regular roundtable meetings on FMD prevention and control, at least at yearly basis;

FMD Round Tables are now organized each year by the RSC of the GF-TADs. The OIE Regional Representation of Middle East, considering its function in this Committee, will have the responsibility to organize and convene such meetings, in full consultation with FAO, and ensuring the Agenda items reflect the priorities of the RSC.

Relating to improved control of epidemic FMD;

1.8. That each country develops and formalises a contingency plan for FMD that addresses the particular problem of entry of an exotic type of FMD virus to which the regular vaccination programs do not protect.

This point was discussed above (point 5).

Relating to priorities for inclusion in vaccination programs and in antigen banks;

1.9. that the WRL, through the OIE and FAO, is requested to produce a list of priority antigens for inclusion in vaccination schedules in the MENA countries on a regular basis; the list should be reviewed by the RSC or a task force nominated by this group, before being made publicly available;

Dr Sumption explained that although a representative of the WRL could not attend the Round Table, the WRL had provided up to date information on virus typing from the region, and he would include this in the presentation on vaccination schedules and priorities for 2007-8.

1.10. that the RSC or a nominated task force develops guidance on the subjects

1.10.1. harmonisation of vaccination in the ME region to ensure coverage against the most prevalent (priority) viruses;

1.10.2. vaccination of small ruminants;

These points were on the Agenda for 4th Roundtable and discussed later.

Improving laboratory capacity and harmonisation of FMD laboratory test performance in the region

1.11. that member countries ensure that their national laboratories re-assess their methods and reagents to ensure that diagnostic tests are appropriate for detection of the current A (including A Iran 05, A Egypt 06), O, Asia-1 and SAT types expected in the ME region;

Participants emphasized their desire for a regional reference laboratory. Dr Sumption underlined that this has been frequently raised, but there are several issues, one being that live virus methods present a risk and require very strict biocontainment measures. Iran is actually developing such facility. Considering that typing is a very specialized process, it is a practical measure to contract arrangements for FMD conformation to competent labs, within the region or outside; many smaller European laboratories do this.

Dr Orabi proposed APHIS assistance for sending samples to USA (Plum Island Laboratory).

Dr Koni mentioned Cyprus has specific arrangements with an Italian laboratory for FMD confirmation.

Dr Sumption recommended also exploring if RTPCR confirmation service could replace live virus methods in a regional or national laboratory facility, enabling reference services without need for full veterinary containment levels..

Dr Geiger (FAO – Iran) mentioned that Iran is willing to receive samples from the region. A new facility will open soon where samples could be tested.

1.12. that participants in the Roundtable encourage or organise assessment missions to their NRLs for evaluation, and which will guide the potential establishment of a regional reference laboratory (RRL);

Dr Yehia explained that evaluation missions could be organised on the request of Member countries. OIE will provide experts, from Reference laboratories, to implement the assessment. National Laboratories could also ask OIE for assistance under the twinning program. This program was developed by OIE to increase the number of Reference Laboratories by developing cooperation between national labs and OIE Reference Laboratories.

Since the last meeting, three national laboratories have requested such assistance, Kuwait, Qatar and Egypt; their requests have received appropriate response.

1.13. the RSC develop guidelines for biosecurity of laboratories that will assist compliance with OIE and are feasible throughout the region;

The laboratories evaluation missions will contribute on compliance with international guidelines for biosecurity and countries will evaluate the possibility to adopt PCR techniques, to reduce need for live virus containment levels.

Dr Aidaros mentioned that in its working plan, the RAHC will follow this point and propose assistance and training.

Epidemiological support for planning of FMD preventive and control measures;

1.14. that the RSC establish an epidemiology advisory group to assist in response to request from countries for technical support, for example

1.14.1. in the design of surveillance programs for establishment of export zones in the ME region

1.14.2. in the design of sero-monitoring programs post-vaccination

This action will be presented in the framework of the RAHC.

1.15. that the RSC consider nominating one or more centres of expertise in the region to promote the application of modern epidemiological tools and methods to improve planning of FMD control measures; one such centre could be in Iran, making use of epidemiological capacity of the Iranian Veterinary Organisation and the support received from the FAO/EC and another one elsewhere in the ME region, with the help of the international organisations.

On behalf of Iran, Dr Geiger (FAO – Iran Project) mentioned that the Iranian Veterinary Organisation is willing to provide epidemiology training programs

2. Country report

Representatives of Member Countries presented the current situation of the disease in their country.

2.1. Egypt

Dr Samaha mentioned that the last outbreak due to the A epizootic strain from east Africa was observed in June 2006. This strain had circulated widely last year in Egypt, The situation seemed to be under control thank to the implementation of vaccination. However, the week before, new outbreaks (not confirmed) had been reported from 5 governorates.

Vaccination is implemented every 4 months in lactating animals and every 6 months on fattening animals with a bivalent (A – O) vaccine produced locally.

He expressed also the need of technical and financial support for FMD diagnosis.

2.2. Iran

Taking into account that Dr Otarod (IVO) could not obtain the visa to participate at this meeting, Dr Francis Geiger presented the situation of FMD in Iran on behalf Iranian Authorities.

This year, Iran has been faced to an increase of outbreaks. The type O PanAsia is the most pathogenic strain circulating and widespread in the country, representing 70 % of the total.

Type A Iran 05 is still observed in some Provinces, near Turkey, and A 87 is also currently reported.

In sheep and goat, the type O is usually reported.

To implement a coherent surveillance program, Iranian Authorities have invested in use of GIS to identify high risk populations.

The vaccination is implemented every 4 months on cattle and 1 year on sheep. The goal is to reach at least 70 % of vaccinated animals. However the vaccination is not sufficient in the specific conditions of Iran due to important animals' movement, including illegal importation. The vaccine used is a Merial tetravalent vaccine in intensive units and local vaccines (Razi) in other situations (trivalent, tetravalent and A05 monovalent).

In 2008 studies on comparison of immune responses to vaccines used in Iran will be implemented.

The main objective of the next year is to improve implementation of biosecurity measures in farms to decrease the impact of the disease.

2.3. Sudan

Dr Mohamad A. Razig A. Aziz mentioned that FMD is endemic in Sudan.

In 2007, SAT 2 and A have been reported.

The main objective of Sudanese authorities is to develop FMD free zones where vaccination is practised, notably to secure the export of animals.

A large discussion occurred concerning the capacity to secure the trade from exporting countries, like Sudan.

It was agreed a risk assessment should be implemented to identify risks and suitability of risk management to reassure the importers. Importing and exporting countries should discuss together on this specific issue.

2.4. KSA

Dr Faisal Bayouni explained that there are no epidemiological changes in the situation of KSA regarding FMD.

Vaccination is performed routinely involving the 7 types, in high risk units

2.5. Jordan

Dr Amer Al Tahaineh mentioned that the last outbreaks reported in Jordan occurred between October and December 2006.

The type O PanAsia was mainly reported. A Iran 05 was detected in only one outbreak. From January 2007, no new cases or suspected cases were notified and this episode was officially concluded in February 2007 (notification to OIE).

Vaccination strategy is considered in Jordan as the only way to control the disease. Small ruminants' flocks are vaccinated against O serotype twice per year, cattle flocks three times per year.

Some dairy farms routinely vaccinate with a trivalent vaccine (O – A – Sat 1).

Vaccines are imported from Turkey and Russia.

3 private quarantine facilities, supervised by Jordanian Authorities, are used for the control of imported livestock.

2.6. Lebanon

Dr Obeida Moudawar reported that in February 2007, outbreaks appeared in Bekkaa Valley. Unfortunately the strain was not typed.

Vaccination is performed with a trivalent vaccine, with the objective to vaccinate all susceptible animals from next year.

Actually vaccination on cattle is intensively implemented.

2.7. Syria

Dr Georges Khoury mentioned that FMD had not been reported in Syria since February 2002.

Cattle are vaccinated twice a year, sheep and goats annually, with a trivalent vaccine (A Iran 96 – O Indian 53/79 – Asia 1).

Vaccines are imported.

Concerning diagnostic only ELISA tests are used. The use of RT-PCR tests is in study.

2.8. Bahrain

Dr Salman Abdelnabi Ebrahim Al Kuzaei reported that the serotype O still circulating in Bahrain but no new outbreak was reported this year.

Vaccination programs are implemented also on wildlife in national reserves.

2.9. Qatar

Dr Kassem Al-Qahtani mentioned that Qatar is an importing country and have developed quarantine facilities to control imported animals.

Animals are now identified and a vaccination program in livestock will start this current year.

Wildlife (Oryx) are vaccinated twice a year with a trivalent vaccine (O – A – Sat 2)

2.10. Cyprus

Dr Alexandros Koni reported that Cyprus is free from FMD since 1964 and that the last vaccination occurred in 1985.

As Member of European Union, Cyprus has to respect the EU regulation notably on contingency plans.

Simulation exercises are regularly organised and for the surveillance the Veterinary Authority has a contract with the Italian NRL.

The main risk of FMD introduction in Cyprus is from Turkey.

2.11. Palestinian Authorities

Dr Imad Mukarker mentioned that in 2006 about 30 cases have been described. A larger number of suspicions have been reported and EHD has also been confirmed.

In February 2007 cases occurred in the north of West Bank to end in May 2007.

The O PanAsia was involved in these outbreaks.

Intensive program of vaccination occurred since 2005 with a trivalent vaccine used on cattle and a monovalent O vaccine on small ruminants.

2.12. Summary

Since the 3rd FMD Round Table, the invasion of the new genotype of type O PanAsia is the main event. This new strain probably originated from a strain circulating in India in 2000, affecting Iran in summer 2006. This epizootic strain has affected last winter Turkey, Jordan, Iran, Israel, Palestinian Authorities and probably Lebanon, causing high mortality in young animals.

- Countries should ensure rapid virus strain typing when outbreaks occur. The O PanAsia epizootic has been difficult to control, occurring even in well vaccinated units. .
- A group of countries share a part of animal population (from Jordan to Iraq). Type O is endemic in this population and cooperative control programs could be very beneficial.

- Wild gazelles have been affected this year in Israel where a large population of wild boars is present. A better knowledge of the role of wildlife in the spread between countries could be important to control the disease in livestock.
- The table below summarizes the situation in Middle Eastern countries as reported during this meeting.

Country	Status	Situation in 2006¹	Situation in 2007	Vaccine used in 2007
Bahrain	+	O	O	O
Cyprus	1964	-	-	Prohibited
Djibouti	2001	-	Not present	Not present
Egypt	+	A	A	Local O – A
Iran	+	A, O, Asia 1	A Iran 05, A 87 O PanAsia	Merial Trivalent Razi (Mono, Tri and tetravalent)
Iraq	+	A – O	Not present	Not present
Jordan	+	-	O PanAsia A Iran 05	Monovalent O Trivalent (O – A – Asia 1) Imported from Turkey and Russia
Kuwait	+	O	Not present	Not present
Lebanon	+	O	O	Trivalent
Libya	2003	-	Not present	Not present
Oman	+	O	Not present	Not present
Palestinian Authorities	+	O	O PanAsia	Trivalent (Cattle) O Monovalent (
Qatar	+	O	O	Trivalent (O – A – Sat 2) on wildlife (Oryx)
Saudi Arabia	+	A – O	A - O	Including 7 types
Sudan	+	-	O -A- Sat 2	Not implemented
Syria	2002	-	-	Imported Trivalent A Iran 96 – O Indian 53/79 – Asia 1
Turkey	+	A – O – Asia 1	Not present	Not present
UAE	+	O	Not present	Not present
Yemen	+	O	No report	No report

Table 1: Situation of FMD in Middle Eastern countries according to report presented during the 4th FMD Round Table

¹ According to country reports presented during the 3rd Round Table in Damascus, November 2006

3. Vaccination

3.1. Vaccination in sheep (Dr Sumption)

Dr Sumption summarised the issues relating to the inclusion of vaccination of sheep in emergency and routine FMD vaccination programs.

In Middle Eastern countries, type O is the main strain affecting sheep.

The implementation of vaccination in this species depends on the objectives of the Veterinary Authority of the country, and also on economic aspects. Several examples were given where FMD freedom had been gained with cattle-only vaccination, and where FMD subtypes had disappeared without requiring effective levels of sheep vaccination. This had led to vaccination of sheep being seen as unnecessary in some regions. The middle-east may be an exception, given the high ratio of cattle to sheep in several countries. However, it remains unclear the extent to which sheep vaccination is required.

The objectives of a vaccination program involving sheep must be clear, to limit disease impact in cattle and/or sheep, or to development FMD free zones, including buffer zones separating two areas with different FMD status. .

Dr Geiger explained that in the case of Iran, sheep vaccination is implemented to protect intensive dairy farms. In provinces where transhumance is done, first symptoms occurred on sheep when type A is involved. The vaccination is then applied before and after the transhumance.

Concerning the type O PanAsia, 70 to 80 % of mortality has been observed on lambs in East Iran, where sheep vaccination is not undertaken because of the absence of dairy farms.

Dr Fares Al Bakhit explained that considering the lambing season in Jordan, from November to February, matching the FMD seasonal period, vaccination is implemented in September in ewes.

Prof. Aidaros underlined that FMD is not a single disease, but a group of disease, and so the situation could be very different from region to region, justifying different vaccination strategies.

3.2. Recent Epidemics events and their influence on vaccine and antigen selection (Dr Sumption)

Dr Sumption presented recommendations on FMD virus strains to be included in routine vaccination and in emergency reserves for 2007 in the Middle East, based on the recommendations of the WRL to the EUFMD Commission.

High Priority (routine programs)	O Manisa (<i>covers PanAsia strain</i>)
	A22 Iraq
	Asia 1 Shamir
	(A Iran '96: no need shown in 2007)
Medium Priority (reserves/vaccine and antigen banks)	A Eritrea
	A Iran 87 or A Saudi Arabia 23/86 (<i>or equivalent</i>)
	A Iran '99
	(SAT 2 Saudi Arabia (<i>or equivalent</i>) : if high import risk)
Low Priority	SAT 2 Kenya
	SAT 1 Kenya

Table 2: WRL recommendations on FMD virus strains to be included in routine vaccination and in emergency reserves for 2007 in the Middle East

He insisted that the recommendations were simply a guide, and that since not all countries were exposed to the same risk, each country should do its own risk assessment, using the recommendations of regional meetings as guide.

He then reported the worldwide situation, which could be summarized as:

- Regional epidemic spread of A-Irn-05 into Saudi Arabia, Turkey (including Thrace), Jordan and Pakistan;
- FMDV type A Africa introduced into Egypt from East Africa;
- Pandemic dispersal of new O PanAsia lineage: India (2001), to Malaysia, Nepal, Bhutan, Pakistan, Iran, Jordan, Turkey, Israel & UAE, Kazakhstan and Kyrgyzstan;
- Spread of the FMDV O Cathay topotype into Malaysia and Thailand during 2005;
- In South America, distinct southern cone (type O) and Andean (types O and A) virus lineages;
- Continuation of the Asia-1 epidemic in China/the far-east, affecting DPR of Korea in 2007 (most easterly location yet).

4. Trade (Dr Yehia)

Dr Ghazi Yehia noted that the aim of importing countries, essentially Gulf countries, is to implement pre-export quarantine station in exporting countries.

He exposed the general principles that are considered in establishing such facilities. He stressed on the respect of international standards and the importing countries requirements, to secure trade.

Establishing pre-export quarantine facilities in East Africa countries, is aiming to implement control measures required before shipment so to reduce risk of introduction of exotic diseases into the importing countries, and in the same time to exercise a transparent and effective livestock inspection, quarantine and quality assurance program for the export bound livestock, and to facilitate dialogue between importers and exporters

A large discussion occurred on the capabilities of exporting countries to perform adequate certification on such trade.

Dr Yehia reminded that International Organisations could not certify in place of countries but may assist member countries in harmonization of certification in compliance with international standards and evaluate implemented measures

International Organisations could provide expertise for the evaluation of Quality of Veterinary Services using the PVS mechanism

Dr Al Qahtany mentioned to the audience his recent information mission to the Djibouti quarantine facility, for use as a potential pre-export facility for livestock trade to Qatar, and a bilateral agreement has been set to implement required measures. He invited interested countries to do the same.

5. Regional projects

5.1. Activities of the EUFMD Commission (Dr Sumption)

Dr Sumption presented the EUFMD program, implemented in close co-ordination and with financial support of the EC, with oversight by a Committee of CVOs, with OIE and the WRL involvement in each meeting.

The main objective of this program is to protect European Union from an introduction of FMD across its borders, and increasingly this involves co-operative programs with countries outside the EU but in the European neighbourhood, such as in the Middle-East.

The main activities of this program are:

- Organisation of emergency meetings;
- Regular review of vaccine priority;
- Collaboration with Eurasian countries to control FMD: Turkey, Iran, Caucasus, Syria;
- Supporting global virus observation through facilitating access to the WRL and other reference laboratories.

In the last 2 years, emergency supply of vaccine was done by EUFMD in Turkey and Caucasus country (Type A in 2006 – Type O in 2007).

The Turkish Thrace is one of the important interfaces between vaccinated countries and unvaccinated ones in Eurasia. To protect Turkey and the middle-east, more attention is needed to the control of FMD movement from Central Asia (Pakistan-Afghanistan) through West Asia (Iraq, Iran, Turkey, Caucasus) to Thrace, and therefore there is a strong component of collaboration with Iran.

One main issue is the low vaccination coverage in some areas and some age groups, which enables a reservoir of infection in the larger countries, and a risk to the region.

5.2. FMD Surveillance in Iran (Dr Geiger)

Dr Geiger presented the FMD surveillance project in Iran established in collaboration between FAO, the European Union (EC), France and Iran.

The main objective of this project is to improve early detection of virus strains circulating in Iran, and to assist the Iranian authorities in their efforts to prevent and control FMD

A specific unit in the Iran Veterinary Services is dedicated to FMD, the FMD Taskforce. 30 people have been trained in the whole country to deal with FMD surveillance.

The program is focused on epidemiological units which have been primarily identified.

Considering the persistence of FMD in the country, the FMD control program will be reorganised in 3 components:

- Control in "source" areas;
- Control in high risk areas;
- Border control.

A pilot program, using official authentication of vaccinated flocks in epidemiological units by a "green card", will be implemented in regions identified as "source".

This program is based on a analysis of the FMD incidence at the level of epidemiologic units, and could be adapted to other countries or subregions,

5.3. The OIE Draft project of FMD Control in West Asia (Dr Yehia)

Dr Yehia presented a draft project prepared by the OIE Regional Representation for the control and eradication of FMD in West Asia subregion as recommended during the third Round Table.

Bahrain, Jordan, Kingdom of Saudi Arabia, Kuwait, Lebanon, Palestinian Autonomous Territories, Oman, Qatar, Syria, United Arab Emirates, Yemen have been identified as beneficiary countries because they represent a similar epidemiological status related to FMD and similar control strategies

The project is scheduled on two phase. The first phase would identify and evaluate the needs in term of surveillance and diagnostic capabilities and would last 1 year.

The second phase would implement the control strategy by training field control teams, reinforcing diagnostic capabilities and strengthening preventive measures. This phase would last 3 years.

The draft will be finalised and presented to member countries during the next Conference of the Regional Commission.

Dr Mohamad A. Razig A. Aziz wished that Sudan could be integrated as an observer in this project, to a better collaboration between countries from Horn of Africa and Middle East.

Dr Samaha requested to incorporate Egypt in the list of beneficiary countries. This proposal was seconded by the FAO representative.

Dr Yehia highlighted the need to launch a project based on a feasible program and within reachable possibilities.

Dr Orabi mentioned that the idea of a regional project has been discussed during the last round table. It is now important to implement a sustainable project.

Dr Sumption underlined that this is not the only project on FMD, and to achieve success may be best targeted to subregions with common problems of animal trade and transboundary movements.

He estimated also this project too ambitious, and should make clear what it can directly achieve such as detailed assessments and strategy plans to raise national (and regional) capacity,

He thought that donors will have the same opinion. The evaluation of gaps is a first step.

Dr Yehia noted that this project is addressed to a sub region where countries have relatively low animal population and similar preventive strategies. Assessment and evaluation of needs will be addressed in the first part of the project.

6. Conclusions

- Unfortunately some countries were not present during this meeting. Nevertheless discussions were large and very constructive;
- The main event of this year was the occurrence of the epizootic O PanAsia strain in the region. Awareness have been made during the 3rd Round Table in November 2006 of the possible threat of this strain but unfortunately it was not sufficient for country to implement efficient protection;
- No harmonisation strategies, notably on each subregional level, occur;
- A need of capabilities assessment was stressed by Members countries;
- New approaches in diagnostic have been discussed: utilisation of RT-PCR at a national level, exploration of regional diagnostic facilities (Iran), possibility for country to contract with other Reference Laboratory (Europe, USA...);
- A regional project is wished but as to be realistic.

7. Recommendations

Cf. annex 1.

8. Agenda

Cf. annex 2.

9. List of participants

Cf. annex 3.



ANNEX 1: RECOMMENDATIONS



FAO/OIE
GF-TADS
GLOBAL FRAMEWORK FOR THE
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TRANSBOUNDARY ANIMAL DISEASES

Regional Steering Committee for the Middle-East of the GF-TADS

Meeting on FMD surveillance and control (4th FMD roundtable)

5-6th September 2007

Amman, Jordan

Specific recommendations related to the GF-TAD's Regional Steering committee and the activities of the Regional Animal Health Centre:

The participants of the 4th FMD roundtable recommend that:

1. The whole of the Middle East area is considered as one FMD epidemiological region, with subregions reflecting different ecosystems for circulation of FMDV strains: East Africa/West Asia/Middle East, and that risk mapping and strategies are developed for each;
2. that effort to increase virus surveillance for early warning is supported by the international organisations, particularly in Iran and Pakistan (for west Asia/middle-east), and in Sudan, Ethiopia and the Somali ecosystem (for the Horn of Africa and regions connected by trade), and the results are communicated to decision makers at regional meetings, such as the FMD roundtable;
3. Considering the above concept, a mapping of the FMD susceptible animal population is required through a regional and/or a national approach.
The Iranian experience can be considered as a pilot example.
4. Among the activities of the OIE/FAO Regional Animal Health Center (RAHC) which was established in Beirut-Lebanon in July 2007, the center is requested to develop a regional FMD network for Member Countries to facilitate the exchange of information and to respond rapidly to an emergence of any new serotype circulation in the region;
5. Member countries are also urged to participate actively in the above mentioned network and provide regular and updated information related to their FMD particular situation.
6. Within its framework, the RAHC will be requested for technical support to assist countries of the region :
 - workshop on livestock population mapping and vaccination monitoring
 - workshop on contingency planning for FMD response

- in the design of surveillance programs for establishment of export zones in the ME region
 - in the design of sero-monitoring programs post-vaccination
 - workshop on FMD diagnostic methods and increased use of PCR;
7. Member Countries are requested to develop and formalise a contingency plan for FMD that addresses emergency situation and in particular the problem of the introduction of an exotic type of FMD virus to which the regular vaccination programs do not protect;
 8. Member Countries are requested to include in their vaccination programmes the priority antigen list produced by WRL and to harmonise it with their neighbours in order to ensure coverage against the most prevalent strains, and that in future the subregional vaccination priorities are identified;
 9. Considering the epidemiology of the FMD, Member Countries are encouraged to consider the implementation of a specific vaccination strategy for small ruminants when required and the RAHC should provide guidance on the circumstances when vaccination of sheep should be performed;
 10. According to the recommendations of the 3rd FMD Round Table meeting held in Damascus, Syria, in November 2006, Members countries reconfirm the importance of maintaining preparedness for diagnosis, and the use of assessment of national diagnostic capabilities through the RAHC. This will guide the potential establishment of a regional laboratory;
 11. Members countries are urged to undertake a realistic risk analysis at import and implement relevant sanitary measures in compliance with international standards;
 12. The FMD surveillance and control draft project presented by the OIE Regional Representation for the Middle East during this Round Table be presented for adoption by Members Countries during the 9th Conference of the OIE Regional Commission to be held in Damascus, Syria, 29 October 2007 and be updated and revised according to the comments received during this Round Table;
 13. The next FMD Round Table will be held in Beirut, Lebanon, August 2008 as proposed.

ANNEX 2: AGENDA



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4TH FMD ROUNDTABLE (SURVEILLANCE AND CONTROL)
AMMAN, JORDAN
5-6 September 2007

WEDNESDAY 5TH OF SEPTEMBER

SESSION 1: EVALUATION OF FMD STATUS IN THE MIDDLE EAST

9.00 – 9.30 Summaries of the previous recommendations and adoption of the agenda (Dr K. Sumption)

9.30 – 10.00 Overview of the actual situation (OIE)

10.00 – 11.00 Control and strategy in selected member's countries:
Egypt, Iran, Turkey (20 minutes by country)

11.00 – 11.30 *Coffee break*

11.30 – 13.00 Control and strategy in selected member's countries (cont.):
Sudan – KSA – Iraq – Ethiopia – Jordan – Lebanon (15 minutes
country)

by

13.00 – 14.30 *Lunch break*

SESSION 2: VACCINATION: SELECTION AND USE IN THE REGION

14.30 – 14.50 Follow up on conclusion and recommendation regarding FMD vaccine
banks and strains

14.50 – 15.10 Vaccine quality

15.10 – 15.30 Vaccination in sheep

15.30 – 16.00 *Coffee break*

**SESSION 3: TRADE: A MAJOR RISK FOR FMD DIFFUSION
(DR K. SUMPTION AND DR G. YEHA)**

16.00 – 17.30 Trade in meat and livestock – Quarantine facilities, supervision and
official certification

THURSDAY 6TH OF SEPTEMBER

SESSION 4: REGIONAL STRATEGIES

- 9.00 – 9.30** Update on FAO Regional Projects
- EUFMD (Dr K. Sumption)
- Iran (Dr F. Geiger)
- 9.30 – 10.00** OIE-ME Draft on a Regional Strategy to control FMD
(Dr G. Yehia and Dr P. Primot)
- 10.00 – 11.00** Forum of discussion
- 11.00 – 11.30** *Coffee Break*
- 11.30 – 13.00** Conclusion and recommendations
- 13.00 – 14.30** *Lunch break*

ANNEX 3: LIST OF PARTICIPANTS



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

**3RD MEETING OF THE GF-TADS STEERING COMMITTEE
4TH FMD ROUNDTABLE (SURVEILLANCE AND CONTROL)
FOR THE MIDDLE EAST
Amman - Jordan
4-6 SEPTEMBER 2007**

List of Participants

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