FAO-Regional Strategy for Foot-and-Mouth Disease Control in the NENA

G. Khoury and M. Tibbo

FMD PCP
SUB REGIONAL POOL MEETING
18 Dec 2012  Beirut - Lebanon
Introduction

• FMD is an eminent TAD that severely affects livestock production disrupting regional and international trade in animal and animal products.

• In the NENA countries the adverse effects of FMD are often underestimated: the disease undermines food security and economic development, both at the level of village smallholders and the more organized production chains supplying urban and export markets.

• Most countries of the region do not invest enough in FMD control, either because they cannot afford it or because they fail to see the cost-effectiveness.
Introduction...

- Improved FMD control on regional scale can only be anticipated if a concerted effort is made by the regional community through, implementing regional programmes involving all concerned parties, public and private sectors.

- Is the control of FMD possible in NENA?

- Successful FMD control has not been restricted to developed countries. FMD freedom with vaccination has been achieved in large parts of South America and Southern Africa and elsewhere, e.g. recently the Philippines and Turkish Thrace (OIE 2011).
Introduction ...

- FMD control was achieved mainly through widespread vaccination and outbreak control, incorporating movement restrictions with or without culling.
- An effective state veterinary service is key to coordinate either zonal or national control programmes.
Economic impacts of FMD in the MENA countries

FMD infects more than 700,000 livestock units (LU) annually in the MENA countries, this number is equal to 0.4% of the total population of livestock in the region, in spite of using 20 million doses of FMD vaccine.

The overall economic impact was calculated based on the costs of a vaccine and its application being US$1 and that for any livestock unit affected by FMD it would cause a loss in production equivalent to US$100. The latter estimate takes into account the death of an animal, loss in weight gain, milk production and draught power and is felt to be a conservative estimation. The total annual impact of FMD is calculated to be USD 90 million.
Global FMD Control Strategy

- First recommended at the 1\textsuperscript{st} FAO/OIE Global Conference on FMD, held in Asuncion, Paraguay, in June 2009
- FAO and OIE embarked on the development of a Global FMD Control Strategy under the GF-TADs
- The joint FAO/OIE Working Group presented the first outline of the Strategy at the 79\textsuperscript{th} GS of OIE World Assembly of Delegates held in May 2011.
- The Global FMD Control Strategy has been adopted by more than 100 countries in a Conference held in Bangkok, June 2012.
Regional FMD Control Strategy

- Member countries requested FAO & OIE for technical support in controlling FMD in the region during 31st FAO Regional Conference for the Near East (NERC) held from 13-18 May 2012
- Upon the recommendations of the Regional GF-TADs
- Under the umbrella of the Global Strategy
- As a need for the region
- FAO took the initiative and commissioned a consultant to draft this regional strategy for review by member countries
Expected outputs of the strategy

- Control of FMD in the Region
- Improve Veterinary Services capacities.
- Control of other major animal diseases including zoonosis.
Governance at Regional and National Levels

- Governance at regional level (Regional GF-TADs Steering Committee, Regional Animal Health Centre, Regional Specialized Organizations, Regional Reference Labs, Regional Epidemiology Centre)

- Governance at national level (Veterinary Services, Public-Private Partnerships, National Epidemiology Units, National Veterinary Laboratories)
Milestones of the Strategy

• For management and evaluation purposes, the Regional Strategy is planned into three 5-year phases

• The milestones are the expected results on the dates indicated

• Based on the achievements, the programme can be continued (with or without changes) or be substantially modified and reoriented.

• The Regional Strategy will focus on countries which have no active control programmes, i.e. countries at Stages 0 to 2. For countries at Stage 3 the objective will be for them to retain that status and eventually progress to Stage 4 or 5
Tools to be used in the implementation

- PCP-FMD
- OIE standards, recognition of disease status
- Diagnostic Labs./reference Labs and centre
- Vaccines and vaccination
- Regional Epidemiology Center
- National Contingency plans
- Public private partnerships
- OIE-PVS and OIE PVS-gap analysis tools. The 33 CCs tools of particular relevance to the prevention and control of FMD and other TADs.
Underlying principles

- Efforts should focus on controlling the disease at source
- Applying the PCP-FMD
- Harmonizing national control programmes taking into account local circumstances
- Vaccines should meet OIE quality standards
- Most activities should be carried out at national level
- Using existing regional or national structures
- Support capacity building
- Co-ordinate FMD control programmes with local development programmes
Underlying principles...

- Use of incentives and combine other field activities
- Perform regular cost-effectiveness analyses
- The control strategy should be reviewed regularly and, if necessary, modify it to ensure optimal performance
- Ensure full engagement of livestock producers
- The term ‘Veterinary Services’ is used in accordance with the OIE definition
### Current PCP situation?

<table>
<thead>
<tr>
<th>Regional Cluster/Roadmap</th>
<th>Country</th>
<th>OIE endorsed Control Programme or recognised free area</th>
<th>PCP Status (Year of latest available assessment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEST EURASIA</td>
<td>Iran</td>
<td>-</td>
<td>Stage 2 (2012)</td>
</tr>
<tr>
<td></td>
<td>Iraq</td>
<td>-</td>
<td>Stage 1 (2012)</td>
</tr>
<tr>
<td></td>
<td>Syria</td>
<td>-</td>
<td>Stage 1 (2012)</td>
</tr>
<tr>
<td>OTHER MIDDLE EAST</td>
<td>Bahrain</td>
<td>-</td>
<td>Stage 1* (2012)</td>
</tr>
<tr>
<td></td>
<td>Jordan</td>
<td>-</td>
<td>Stage 1* (2012)</td>
</tr>
<tr>
<td></td>
<td>Kuwait</td>
<td>-</td>
<td>Stage 2* (2012)</td>
</tr>
<tr>
<td></td>
<td>Lebanon</td>
<td>-</td>
<td>Stage 1* (2012)</td>
</tr>
<tr>
<td></td>
<td>Oman</td>
<td>-</td>
<td>Stage 2* (2012)</td>
</tr>
<tr>
<td></td>
<td>Qatar</td>
<td>-</td>
<td>Stage 2* (2012)</td>
</tr>
<tr>
<td></td>
<td>Saudi Arabia</td>
<td>-</td>
<td>Stage 2* (2012)</td>
</tr>
<tr>
<td></td>
<td>United Arab Emirates</td>
<td>-</td>
<td>Stage 1* (2012)</td>
</tr>
<tr>
<td></td>
<td>Yemen</td>
<td>-</td>
<td>Stage 1* (2012)</td>
</tr>
</tbody>
</table>
### Current PCP situation

<table>
<thead>
<tr>
<th>Country</th>
<th>Stage (Year)</th>
<th>Stage Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudan</td>
<td>Stage 1 (2012)</td>
<td></td>
</tr>
<tr>
<td>Algeria</td>
<td>OIE endorsed Stage 3 (2009)</td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>Stage 1 (2012)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Libya</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td>OIE endorsed Stage 3 (2009)</td>
<td></td>
</tr>
<tr>
<td>Mauritania</td>
<td></td>
<td>Stage 0 (2009)</td>
</tr>
<tr>
<td>Tunisia</td>
<td>OIE endorsed Stage 3 (2009)</td>
<td></td>
</tr>
</tbody>
</table>
Action Plan

- Since most of the countries in the region are at stages 0 to 2 of PCP-FMD, it is expected by the end of the period, all NENA countries will have reached at least PCP stage 2, or will be for some countries stages 3 and 4. Which means all countries in the region are implementing with success an FMD control programmes.

- The activities described in the work plan can be different from one country to another, according to the stand of a country in the PCP-FMD stage.
Main activities during the first phase (5 years)

- Establishment of the Regional Animal Health Centre
- Establishment of a Regional Epidemiology Centre
- Upgrade one of the national laboratories to act as a regional leading laboratories
- Start the identification and seromapping of FMD virus strains and derivatives circulating in the region
- Assessing the situation of Veterinary Services
- Developing formal coordination mechanisms with stakeholders
- Assessing the socio-economic impact of FMD in different sittings.
- Developing national FMD control strategies.
Main activities - Second Phase (5-10 years)

- Evaluation of the progress achieved in the first phase
- Commence the passive and active surveillance
- Vaccination should be carried out using a potent vaccine based on matching information
- Follow up the improvement of Veterinary Services
- Identifying possible combinations of priority TADs control with FMD control programme
- Establishing a zoning approach with national animal ID and registration system
- Raising biosecurity awareness and strengthening extension services.
- Establishing and/or developing Veterinary Statutory Body
- Carry-out a cost-effectiveness and visible study for the establishment of regional vaccine bank
Main activities - Third Phase (10-15 years)

- Continuation of activities listed before
- Extension of FMD control measures to all susceptible domestic animal species
- Prompt response mechanisms (emergency planning, emergency preparedness)
- Development of an appropriate institutional environment
- Application to OIE for endorsement of the National FMD Control plans
FMD Vaccination Strategies

- Coverage should be at least 80%
- Campaigns should be completed in the shortest possible time
- Vaccination should be scheduled to allow for interference from maternal immunity
- Vaccines should be administered in the correct dose and by the correct route
- The efficacy of vaccination should be monitored
- The vaccination regimen should comply with the manufacture’s instructions and/or the recommendations of the OIE Terrestrial Manual
Costs of the Regional FMD Control Strategy (First phase)

- US$ 24.88 million at the country and regional level excluding vaccination costs
- US$ 250 million the costs vaccine and vaccination for cattle and buffaloes
- US$ 150 million for the vaccine and vaccination of sheep and goats
Thank you!