

## IMPLEMENTATION OF A GLOBAL STRATEGY FOR FMD CONTROL

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**Summary:** *This report presents the steps to be followed in the elaboration of a global strategy for foot and mouth disease (FMD) control, which will set out the medium- and long-term objectives, the general principles and options, the costs and a timetable for implementation. This strategy will be prepared by the OIE<sup>1</sup> and FAO<sup>2</sup> within the framework of their GF-TADs<sup>3</sup> partnership.*

*Some results of economic studies are provided but emphasis is placed on the need for evaluations of the socio-economic impacts and the costs/benefits of prevention and control programmes, since few currently exist.*

*A control programme cannot be successfully implemented unless countries make a firm political and economic commitment. However, in view of the transboundary nature of the disease, a regional approach is indispensable, as is coordination at a worldwide level. Some examples of regional programmes are given (Europe, South America, South-East Asia, etc.) followed by a description of the basic principles and necessary tools for implementing any control strategy.*

*The report then deals with the special role of OIE, both in specific fields (standards and guidelines, official recognition of the FMD status of countries or zones within countries, etc.) and in cross-cutting areas (epidemiological surveillance, PVS Pathway, etc.), and the activities of FAO and a number of regional bodies (EuFMD<sup>4</sup>, EC-DG SANCO<sup>5</sup>, AU-IBAR<sup>6</sup>, PAHO<sup>7</sup>, SEACFMD<sup>8</sup>, etc.). The report also refers to the setting up of an OIE/FAO GF-TADs Global FMD Working Group, the finalisation of a monitoring and control tool PCP-FMD<sup>9</sup>, and the outcome of several major international conferences on FMD.*

*The OIE's commitment to a new phase of support for the prevention and control of FMD is reflected in the proposed new article for Chapter 8.5. of the Terrestrial Animal Health Code (Terrestrial Code), which provides for the OIE to endorse national FMD control programmes submitted to it by countries on a voluntary basis and accompanied by documentary evidence that the programme can be successfully implemented.*

*A detailed OIE-FAO global strategy will be presented and discussed at the 2nd Global Conference, to be held in Bangkok, Thailand, in June 2012. A document on the costs/benefits of prevention and control programmes and a costed implementation agenda will also be presented to donor agencies and government representatives, to convince them of the importance of investing in the control of this major transboundary disease of livestock, since the associated strategies and tools clearly come under the heading of global public goods.*

<sup>1</sup> OIE: World Organisation for Animal Health

<sup>2</sup> FAO: Food and Agriculture Organization of the United Nations

<sup>3</sup> GF-TADs: Global Framework for the Progressive Control of Transboundary Animal Diseases

<sup>4</sup> EuFMD: European Commission for the Control of Foot-and-Mouth Disease, Rome, Italy.

<sup>5</sup> <http://www.fao.org/ag/againfo/commissions/en/eufmd/eufmd.html>

<sup>6</sup> EC-DG SANCO: European Commission – Directorate General for Health and Consumers, Animal Disease Notification System (ADNS), [http://ec.europa.eu/food/animal/diseases/adns/index\\_en.htm](http://ec.europa.eu/food/animal/diseases/adns/index_en.htm)

<sup>7</sup> AU-IBAR: African Union – Interafrican Bureau for Animal Resources. <http://www.au-ibar.org/>

<sup>8</sup> PAHO: Pan American Health Organization. <http://www.paho.org/>

<sup>9</sup> SEACFMD: Sub-Commission for Foot and Mouth Disease Control in China and South-East Asia

<sup>9</sup> PCP-FMD: Progressive Control Pathway for FMD control

## **Preface**

The report that follows will explain why the OIE has acted to prepare and support the implementation of a global strategy to control foot and mouth disease (FMD). It must be emphasised that the OIE is not acting alone and that in recent years a strong partnership has developed on the subject with various regional and international bodies, and first and foremost with FAO. Within the framework of the FAO/OIE GF-TADs agreement, FMD control has become a major topic for collaboration between the two institutions and a special working group has been set up. The report presented hereafter therefore draws on the work of OIE bodies (Scientific Commission for Animal Diseases [Scientific Commission] and its *ad hoc* Group on Evaluation of FMD Status of Members; Conferences and Regional or Specialist Commissions; studies on foot and mouth disease and cross-cutting studies; etc.) as well as work carried out with FAO and their international and regional partners and, of course, work carried out at Member Country level by the national authorities concerned (Veterinary Services, research bodies).

### **1. Introduction**

FMD is one of the most contagious animal diseases and its transboundary nature is accentuated by the rapid development of international trade in animals and animal products. Due to the economic losses it causes, FMD is one of the major diseases affecting production and trade of food of animal origin. In developing countries, which are poorly equipped to prevent it, FMD can also affect food security and economic development, both for small-scale rural farmers and for more organised production chains serving urban markets or export markets. FMD control strategies and tools are typically classed as global public goods (16, 20) since they benefit all countries, or several groups of countries, and all populations and future generations, and these benefits extend beyond national borders and not just the productivity of livestock populations (the fight against poverty and food insecurity, notably in developing countries). Moreover, a single country failing to control the disease can have adverse consequences for neighbouring or even distant countries. FMD is widespread throughout the world<sup>10,11</sup> and only a minority of OIE Members have, in the relatively recent past, managed to achieve lasting freedom; these are in addition to countries that either have always been FMD free, such as Australia and most island countries in the south Pacific, or have a very long history of FMD freedom, such as the countries of North America.

In the past, Europe was infected enzootically or epizootically. The disease was then eradicated in Western Europe but has since made several incursions, one of which, the 2001 epizootic that first and foremost affected the United Kingdom, will go down in history as one of the most devastating (18, 34).

During the past 12 years, the incursions in regions neighbouring Western Europe (North Africa, the Middle East, the Caucasus and Turkey) have originated from five different virus pool ecosystems: West and Central Africa, East Africa, South Asia, Eurasia). The degree of spread is highly dependent on the capacity for early detection of the first outbreaks and the ability to control them through effective contingency plans.

The Near East is an enzootic sub-region and has a strong potential for virus spread due to movements of animals, and small ruminants in particular.

FMD is widespread in many countries of intertropical Africa, a regions that remains widely infected. Several southern African countries maintain national or zonal FMD-free status on a fairly regular basis: South Africa, Namibia, Botswana, Lesotho and Swaziland.

In South America, the Southern Cone region has succeeded in controlling or even eradicating the disease; most Southern Cone countries have for several years been officially recognised as free from FMD, either with or without vaccination. Other countries or regions of the continent remain infected, however, as is probably the case with the Amazon region of Brazil and confirmed in the countries in the north of the Andes region (Venezuela, Ecuador).

In Asia, serotypes O and A are endemic in several countries. The years 2010 and 2011 saw the development of epizootics, notably due to type O, in the People's Republic of China, Mongolia, Vietnam, Japan, the Republic of Korea and the Democratic People's Republic of Korea.

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<sup>10</sup> <http://www.oie.int/en/animal-health-in-the-world/the-world-animal-health-information-system/the-oie-data-system/>

<sup>11</sup> <http://web.oie.int/wahis/public.php?page=home>

Currently, out of the 178 OIE Member Countries, 96 do not have an FMD free status, 66 countries are officially recognised as FMD free (65 without vaccination and 1 with vaccination) and 16 countries have one or more zones officially recognised as FMD free (10 without vaccination and 6 with vaccination).

The evolution of the FMD situation worldwide is well documented by the OIE, which continuously collects data on outbreaks notified by countries and publishes them, notably in the form of geo-referenced maps (WAHID<sup>12</sup> and WAHIS<sup>13</sup> systems). OIE and FAO Reference Laboratories for FMD, in particular the FMD Reference Laboratory at Pirbright (United Kingdom)<sup>14</sup>, monitor and publish details of the virus strains circulating in infected countries. The epidemiological situation is also analysed and published by the joint FAO/OIE/WHO<sup>15</sup> platform GLEWS<sup>16</sup> and by a number of regional bodies, such as the FAO's EuFMD Commission, AU-IBAR, EC-DG SANCO and PAHO/Panaftosa<sup>17</sup>.

In view of the global situation the OIE, with partners such as FAO and regional organisations, is mobilising to encourage Member Countries and donors to increase their efforts aimed at better control of the disease.

Our knowledge of FMD has developed in four phases: recognition of the disease in the 18th and 19th centuries, identification of the virus at the end of the 19th century, development of effective vaccines and vaccination campaigns between the two World Wars and the two decades that followed, and, lastly, the current phase with the eradication of FMD in many developed countries accompanied by the cessation of vaccination. Ever since its creation, the OIE has backed up and supported these advances by developing standards and guidelines applicable to FMD control and international trade, surveillance and diagnostic methods and tools, and vaccines, published in the *Terrestrial Animal Health Code (Terrestrial Code)* and the *Manual of Diagnostic Tests and Vaccines for Terrestrial Animals (Terrestrial Manual)*.

For detailed descriptions of the virus and disease and the various methods of diagnosis, prevention and control, the reader is referred to the many scientific publications on the subject (10, 13, 18).

## 2. Economic losses

FMD is one of the major scourges of large domestic animal production. Its economic importance is related to the fact that it is extremely contagious with a very high morbidity rate, and sometimes causes significant mortality in young animals. Trade bans imposed when the disease occurs are also a source of considerable economic losses. Knowledge of these losses and cost-benefit (C/B) evaluations of control programmes are both crucial since the necessary budgets for prevention and control cannot be secured if sufficiently precise socio-economic data are not available. The direct impacts are generally considered to be production losses linked to the disease, the cost of control programmes and the loss of markets, especially export markets. The indirect impacts are related, for instance, to the loss of income for operators further down the production chain and impacts on other sectors, such as tourism and the service industry. Impacts on food security also need to be considered, including the impact on plant production and transport due to the loss of work output when draught animals are affected by the disease (3, 11, 17, 20, 28).

There are a number of problems involved in evaluating the costs – especially the indirect costs – arising from the complexity of production systems in some countries. Moreover, even if it is accepted that the long-term, indirect impacts are greater than the direct impacts, few studies have managed to quantify these differences precisely. C/B studies are relatively rare but we know that the benefits of eradication in terms of trade are generally greater than those related to gains in herd productivity.

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<sup>12</sup> WAHID: World Animal Health Information Database. <http://web.oie.int/wahis/public.php?page=home>

<sup>13</sup> WAHIS: World Animal Health Information System. <http://www.oie.int/en/animal-health-in-the-world/the-world-animal-health-information-system/the-oie-data-system/>

<sup>14</sup> Institute for Animal Health, OIE-FAO World Reference Laboratory for Foot and Mouth Disease, Pirbright, United Kingdom, <http://www.wrlfmd.org/>

<sup>15</sup> WHO: World Health Organization. <http://www.who.int/en/index.html>

<sup>16</sup> GLEWS: Global Early Warning System for Major Animal Diseases, including Zoonoses. [http://www.fao.org/docs/eims/upload/217837/agre\\_glews\\_en.pdf](http://www.fao.org/docs/eims/upload/217837/agre_glews_en.pdf)

<sup>17</sup> PAHO/Panaftosa: Pan American Health Center/Pan American Foot and Mouth Disease Center. <http://www.paho.org/panaftosa/>

Several economic evaluations can be listed:

- In the United Kingdom, which had to contend with about 2 000 outbreaks in 2001, costs were evaluated at over USD 5 billion to the State and over USD 8 billion to the private sector. Some authors have suggested that the impact on tourism and leisure activities in rural areas was in the region of USD 1 billion (1, 3, 18).
- In Chinese Taipei in 1997, the epizootic in swine affected more than 6 000 production units and 4 million pigs were culled. The halting of exports to Japan resulted in losses of USD 1.5 billion and the State spent USD 380 million on vaccines and on compensation for culled animals (3).
- In the Philippines, cost-benefit (C/B) studies on eradication programmes showed that, based on the chosen hypotheses for exports, the C/B ratios would range from 1.6 for eradication by 2010 (without exports) to 12 for eradication by 2005 (with exports of 5 000 tonnes of products annually). The commercial swine sector was estimated to capture 84% of the benefits generated by eradication versus only 4% by backyard swine producers (30).
- Several studies were carried out in South America in 2009-2010, in countries such as Brazil, Bolivia, Peru and Colombia. The internal rates of return on investments are always very favourable, and in the region of 20 to 50% when the programmes enable the opening of export markets (2, 12).
- In Argentina, in a single year (2000/2001), FMD resulted in the loss of USD 439 million in beef exports and the C/B calculations showed that significant benefit could be derived from control programmes due to the increase in herd productivity and the reopening of export markets.
- In Uruguay, beef exports practically doubled after the country had been declared FMD free without vaccination in 1996. In the period that followed, access to the market in the United States of America alone had the effect of adding USD 20 million per year to income derived from the country's beef exports (3).
- In Brazil, due to the FMD outbreak in October 2005, growth in beef exports for that year was only half the rate registered during the previous 5 years (3).

### 3. Some major regional programmes

A number of countries have developed and applied FMD prevention and control programmes on a regional or sub-regional basis. The need for harmonised and coordinated regional approaches is one of the key elements.

In some regions, such as the European Union, the results are obvious and the strategies could therefore, in similar contexts, serve as models. The key elements in these strategies are the halting of vaccination accompanied by the strengthening of essential tools such as those referred to below (19).

In South-East Asia, the OIE and the member countries of ASEAN<sup>18</sup> have, since the end of the 1990s, developed a programme for the progressive control of FMD within the region, called SEAFMD<sup>19</sup>. Coordination plays an important part and all aspects of the programme are continuously monitored and evaluated. A programme aimed at achieving FMD freedom with vaccination by 2020 has been developed and adopted (SEAFMD 2020 Road Map) (21, 32) and it receives support from the OIE, FAO, ASEAN and all its member countries as well as numerous donors (Australia, Japan, Asian Development Bank, the European Union and some other European countries). Positive results have been obtained, such as OIE recognition of countries, or zones within countries, as being FMD free, either with or without vaccination (Indonesia, Brunei, Philippines, Malaysia). The programme includes the establishment of buffer zones between infected zones and of priority control zones such as those of Myanmar, the Lower Mekong, the Red River Delta and the Upper Mekong. This chronological, sequential approach, based on epidemiological characteristics and benefiting from strong political involvement on the part of ASEAN member countries and sound governance, is a good example of what can be achieved collectively at a regional level for the benefit of each partner country. Numerous reports and publications exist on the implementation of the SEAFMD programme, many of which are available on the dedicated website.

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<sup>18</sup> ASEAN: Association of South-East Asian Nations

<sup>19</sup> SEAFMD: South East Asia Foot and Mouth Disease Campaign (has now become SEACFMD following the inclusion of the People's Republic of China, Brunei and Singapore in the programme). [www.seafmd-rcu.oie.int](http://www.seafmd-rcu.oie.int)

It would be impossible to mention all the regional programmes in progress but some, as in Southern Africa, in the SADC<sup>20</sup> region, should be highlighted. Central Asia and the Caucasus region also receive support in the form of regional programmes implemented by FAO and EuFMD, respectively, with funding from sources such as Italy, the European Union, the World Bank and the Asian Development Bank. The results are encouraging but FMD control in these regions must be strengthened and maintained in the long term.

The case of South America and its Southern Cone region is worth looking at in more detail as the results achieved are very positive and can also serve as a model.

In 1987, the countries of South America signed the Hemispheric Foot-and-Mouth Disease Eradication Plan 1988-2009 (PHEFA), which, over the years, helped to reduce the number of outbreaks in the continent (27, 31). At the end of the 1990s, Argentina, Chile, Guyana and Uruguay were officially recognised by the OIE as FMD free without vaccination, which at that time represented about 60% of the bovine population, 40% of herds and 60% of the total area of the continent. However, FMD reappeared in several Southern Cone countries in 2001, calling into question the sustainability of the 'FMD free without vaccination' status in this sub-region. Generalised vaccination was resumed, coupled with actions such as animal movement controls within and between countries, surveillance and an immediate response to outbreaks, the harmonisation and coordination of programmes and the strengthening of Veterinary Services and cooperation between the public and private sector. The results were very positive and, from 2008, only Venezuela, Colombia (a country that became very close to free status in 2010) and Ecuador were still reporting outbreaks.

A new programme, PAMA<sup>21</sup> has been signed by the regional body Mercosur and its member countries and associated countries: Argentina, Bolivia, Brazil, Paraguay and Uruguay (5). PAMA is implemented by the Mercosur Committee, which incorporates the representatives of the Standing Veterinary Committee of the Southern Cone (PVC). PAMA covers 10 domains including surveillance and risk evaluation at bi- and tri-national borders (4, 5).

A specific agreement between the OIE and the Mercosur PVC, signed in March 2007, provided for the setting up and monitoring of activities in border zones, known as "high surveillance" zones (not to be confused with the existing officially recognised FMD free zones) extending approximately 15 km each side of the border (depending on the particularities of each zone). Surveillance operations have been considerably strengthened in these high surveillance zones: active search for evidence of virus circulation, complete identification of animals and farms, strict control on animal movements, harmonisation of vaccination schedules for the various susceptible species and quality of the vaccines used, etc. The OIE appointed experts to carry out initial identification mission in 2006 (22) followed by follow-up missions in the four countries concerned, in 2007 and 2009 (23). In February 2011, in view of the progress made with carrying out activities and the satisfactory results achieved (no outbreaks in the high surveillance zones since the start of the operation), the Scientific Commission reinstated the status of "FMD free with vaccination" for the high surveillance zones of the four countries subject of the zones being separated from the existing zones and the activities mentioned above being repeated in 2011.

These various programmes, PHEFA, PAMA, Control of High Surveillance Zones by OIE, as well as other projects such as those implemented by FAO in the Andes region, show that a regional approach, supported by a political and financial commitment on the part of governments and the private sector, can achieve excellent results, using a whole range of already available tools, methods and strategies.

#### **4. Preparation of a global strategy for FMD control**

As the national Delegates are well aware, the OIE supports FMD control programmes in many ways, including through the activities of its experts at Headquarters and in the Regional and Sub-Regional Representations, its Regional and Specialist Commissions and its Reference Laboratories and Collaborating Centres as well as through specific FMD control projects and more generic programmes such as the PVS programme<sup>22</sup> (24, 25). The control of FMD has always been one of the main concerns of the OIE and the proposals put forward are fully in line with previous programmes.

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<sup>20</sup> SADC: Southern African Development Community

<sup>21</sup> PAMA: Mercosur Free from Foot-and-Mouth Disease Action Program

<sup>22</sup> PVS: Performance of Veterinary Services

However, the time has come to take a new step forward and, building on previous advances, embark on a phase involving the development and implementation of a global control programme, with particular emphasis on regions of the world where the disease remains enzootic and which represent an increasingly serious threat to FMD free countries. Defining a global strategy and convincing governments and donors to make a proactive commitment are among the conclusions and recommendations of the OIE/FAO Global Conference on FMD, held in Asunción, Paraguay, in June 2009 (26).

#### 4.1. Essential tools for implementing a strategy

The list of tools needed for the implementation of any FMD control strategy is well known and is given here simply as a reminder:

- Effective, transparent Veterinary Services, meeting the OIE's quality standards and notifying the OIE of all outbreaks detected;
- Efficient epidemiological surveillance and early warning systems, placed under the supervision of the Veterinary Services, and capable of rapidly detecting outbreaks using the methods best suited to local conditions;
- Efficient national diagnostic laboratories operating in a network with regional and international reference laboratories;
- Detailed contingency plans to deal immediately with any occurrence of outbreaks and simulation exercises to test the plans;
- Good quality vaccines that comply with the standards laid down in the OIE *Terrestrial Manual* and, where necessary, vaccine or antigen banks containing, as a minimum, the vaccine strains that will afford protection against the pathogen strains circulating in the country or region. The research conducted by the Pirbright Reference Laboratory and the other OIE and FAO Reference Laboratories on FMD and the definition of regional virus pools will serve as the basis for the choice of vaccine strains;
- Geo-referenced registration data for livestock holdings and animal identification systems, allowing better monitoring of movements of herds and animals. Centralised pooling of this type of information is increasingly being promoted in developed countries;
- Public-private partnerships, especially those developed with private sector veterinarians and livestock producers working together, both in epidemiological 'peacetime' and in emergency operations in periods of crisis;
- Networks of community-based animal health workers, placed under the responsibility of veterinarians and operating in regions where they are needed;
- Delegation of authority, as appropriate, with private sector veterinarians being authorised to act on behalf of the official services where this is feasible;
- Application of official standards and guidelines issued by the OIE and guides to good practice, especially those issued by the OIE and FAO;
- An active network of Reference Laboratories and Collaborating Centres providing support for national and/or regional diagnostic laboratories and conducting research in fields requiring further development (vaccines, diagnostic tools, epidemiology and role of wildlife);
- Socio-economic studies to evaluate the impacts of the disease, the cost of control and prevention programmes, and C/B analyses of these programmes;
- Strengthening of the partnership between international bodies (OIE, FAO) in the many different fields involved, such as international surveillance (GLEWS platform) and emergency intervention (CMC-AH)<sup>23</sup>.

Use of the new tool for monitoring national control programmes, called PCP<sup>24</sup>, is dealt with below in section 4.4.

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<sup>23</sup> CMC-AH: Crisis Management Centre – Animal Health, FAO-OIE, Rome, Italy,  
<http://www.fao.org/emergencies/home0/emergency-relief-and-rehabilitation/cmc/en/>

<sup>24</sup> PCP: Progressive Control Pathway

## 4.2. Forthcoming stages in the preparation of a global strategy

In line with the conclusions of the OIE/FAO Global Conference on FMD held in Asunción in June 2009 and its recommendations, a Global FMD Working Group, reporting to the GF-TADs Global Steering Committee, was set up, associating the OIE and FAO. The Working Group is tasked with proposing a draft global strategy, in collaboration with the regional bodies and relevant experts and by analysing the results of strategies currently being implemented in Member Countries, particularly in regions where positive results have been achieved. As and when required, experts from the networks of Collaborating Centres and Reference Laboratories, OIE and FAO Regional Representations, and experts from the OIE Specialist Commissions will be called upon to assist.

A number of documents already exist, developed at various levels, for example by the OIE Scientific Commission and its *ad hoc* Group on Evaluation of Foot and Mouth Disease Status of Members and by the EuFMD Commission research group. The specific chapters on FMD and some transversal articles in the OIE *Terrestrial Code* and *Terrestrial Manual*, some FAO documents, such as the manual on contingency plans (14), as well as documents produced by the European Commission's DG SANCO will be used.

The objective of the OIE and FAO is to define a global strategy for the control of FMD, which will take the form of a document to be presented at the next Global Conference on FMD, organised jointly by the two organisations and the Government of Thailand, due to be held in Bangkok in June 2012. The aim is also for this global strategy to be accompanied by a costed action plan and an economic analysis to convince participants representing governments and donors of the importance of investments to support FMD prevention and control programmes, especially in all developing countries, in which the disease is now often enzootic.

## 4.3. Basic principles for preparing a global strategy

The global strategy will be aimed at maintaining the status of FMD free country without vaccination for those that have already obtained it. For zones or countries that are FMD free with vaccination, the target will be progression towards the status of FMD free without vaccination. The disease will be controlled in countries where it occurs to help them progressively limit its impact and subsequently eradicate it. For the time being a regional approach will usually be preferred, though it should be noted that this will never be possible if the countries in the region lack the political will to do it themselves and, for the poorest countries, if they do not receive the economic means to finance the required actions. The epidemiological data and the concept of regional virus pools that has emerged in recent years provide additional arguments in favour of a coordinated regional approach, widely recognised as necessary and already put into practice (15, 29, 33).

Support for the Veterinary Services in charge of implementing this strategy will be a basic component and the procedure and tools of the OIE PVS programme will be used wherever necessary in order to define the specific actions required to make them more effective.

The involvement of livestock producers and private sector operators in the animal production sectors and their partnership with the public services will also be indispensable.

The methods used to prevent virus introduction, detect the first outbreak and implement immediate emergency measures to eliminate it will need to be validated, operational and effective. To achieve this in any global strategy, the components for developing and implementing the tools listed in Section 4.1. will need to be defined and put in place, without forgetting the research component, for which specific initiatives are already underway, such as the GFRA (Global FMD Research Alliance) and the research programmes of the various OIE and FAO Reference Laboratories.

## 4.4. Recent advances and new factors to be taken into account in preparing the global strategy

Several international conferences have helped to advance our knowledge of FMD, both in terms of the situation in the various countries and in terms of the development of new tools:

- The OIE/FAO Conference in Asunción in June 2009 (6, 26), which included presentations on all aspects of the disease and culminated in recommendations that clearly defined prospects for the future and have, for the past two years, guided the approaches and activities of the OIE and FAO, placing particular emphasis on support for a coordinated approach at the worldwide level and noting the effectiveness of the GF-TADs platform for this collaboration.

- The international conferences organised by the EuFMD research group at Erice, Sicily, Italy, in October 2008 (7) and, more recently, in Vienna, Austria, in September 2010 (8), which brought together a large number of specialists, experts and researchers in the field of FMD and provided an opportunity to present the latest research results and feedback on programmes and projects in the field.

The development of new tools included the following:

- The recent finalisation of the PCP document (9) prepared by FAO and the OIE, with contributions from numerous experts and participants at regional workshops organised by FAO and the OIE and, more recently, at the Pirbright laboratory in October 2010. The document is available on the websites of both FAO and the OIE. It will be an essential tool for implementing and monitoring the global strategy. It describes a set of activities, divided into different stages, which can be used to evaluate the stage of advancement of a country or region in their FMD control and eradication programmes. The PCP is not intended as a compulsory tool for countries but rather a tool for self evaluation, or external evaluation on a voluntary basis at the country's request. Countries that have already acquired an official FMD free status for all or part of their territory will clearly already be at an advanced stage and will not normally need to use the PCP. The tool is intended rather for countries where the disease is present and where a clearer knowledge of the local situation (epidemiological factors, circulating virus strains, etc.) and the preparation and implementation of control programmes to reduce the impact of the disease are needed. The criteria to be used to monitor progression through Stages 0 to 4 of the PCP are described in the published document and they are sufficiently precise but also flexible so that they can be adapted to a variety of situations. At the end of Stage 3, countries may if they wish proceed with the objective of eradication of the disease. Recognition of such a status by the OIE would bring them up to PCP Stage 4 (i.e. ready to apply for the status of officially free with vaccination) or Stage 5 (officially free without vaccination).
- The OIE, which has accompanied the preparation of the PCP, is already involved through the official recognition of FMD status of countries, or zones within countries, in accordance with the very precise procedures laid down in the *Terrestrial Code*. This policy will of course continue, with the application dossiers that countries submit to the Scientific Commission being analysed by the Commission with the support of its *ad hoc* Group on Evaluation of FMD Status. The Scientific Commission then submits its recommendations on the maintenance of previously recognised official statuses or the awarding of new official statuses to a vote by the World Assembly of Delegates at the annual General Session of the OIE.

A major advance in the OIE's involvement in the implementation of a global strategy is the preparation of a new article for Chapter 8.5. of the *Terrestrial Code*, for submission to the OIE Delegates for adoption at the present General Session in May 2011. The new article provides for the OIE to endorse national FMD control programmes submitted to it by countries that are not FMD free. The countries that choose this procedure will already be at an advanced level of Stage 3 of the PCP, in other words they will already have successfully implemented a first FMD control programme (i.e. not eradication). The new control programme being submitted to the OIE will mark the country's entry into the pathway to eradication. This programme, accompanied by a list of documents demonstrating that the country is in a position to implement it successfully (the documents will need to show that the country meets conditions such as: effectiveness of the Veterinary Services, knowledge of the FMD situation in the country, a major reduction in the impact of the disease, the existence of suitable legislation, effective surveillance and diagnostic systems, the existence of contingency plans, etc.), will be examined by the OIE *ad hoc* Group on Evaluation of FMD Status. Following approval by the Scientific Commission, the Commission will submit its recommendations on endorsement of the national control programme to a vote by the Delegates at the annual General Session. On the recommendation of the Scientific Commission, the OIE will publish a list of Member Countries whose national programme has been endorsed.

- Further elements relevant to the preparation of a global strategy have accumulated since the Asunción Conference, including the following:
  - Analysis of regional situations by various OIE and FAO bodies;
  - Setting up of the GF-TADs Global FMD Working Group, which currently meets once a month;
  - Continuation of PVS missions by the OIE in a number of countries (110 dossiers in progress), relating to evaluation of Veterinary Services, the analysis of investment requirements (Gap Analysis) or support with the preparation of suitable legislation;



- Continuation of the work of the OIE Scientific Commission and its *ad hoc* Group on Evaluation of FMD Status, which have notably worked on a number of points to be taken into account for the preparation of the global strategy;
- Continuation of FAO programmes in certain countries and regions, and especially in the Maghreb, Southern Africa, Central Asia and the Andes region of South America, for FMD control and use of the PCP, as well as the work of the EuFMD Commission, especially in Central Asia, the Middle East and Eastern Europe;
- Continuation of OIE programmes, in particular in South-East Asia, South America and the Maghreb;
- Economic studies on the cost/benefit of animal disease prevention and in particular on FMD control programmes in South America.

## 5. Conclusions

FMD remains a priority disease for the OIE and the purpose of this report is to explain how the Organisation's commitment has now taken on a new dimension, including the objective of global control of FMD.

The OIE's policy on support for FMD control is reflected in a series of decisions and actions designed to help countries control the disease and to organise the necessary level of worldwide coordination to implement a global strategy. Several regions have managed to achieve lasting eradication, though they still face the risk of virus reintroduction and must therefore maintain constant vigilance. In contrast, numerous developing countries are experiencing more difficult conditions and help needs to be mobilised to assist them in their efforts, which will of course have direct favourable consequences by reducing the risk of re-infection for FMD free countries. It is therefore in the interests of FMD free countries to help infected countries eradicate the disease.

The OIE is therefore preparing, with its partner FAO, within the framework of the GF-TADs agreements and in accordance with the recommendations of the Conference in Asunción, a global strategy for FMD control.

The agenda for the coming year has been presented. The aim is to finalise the strategy and to present it at the Global Conference on FMD being organised by the OIE, FAO and the host country, Thailand, and to be held in Bangkok in June 2012. Part of the Conference will be devoted to presenting donors and governments with the necessary documents to convince them of the need to invest in FMD control.

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