Four years after the publication of the 2nd edition of the SEACFMD 2020 Roadmap, many changes have transpired on the technical as well as socio-economic and political situation in the sub-region. This calls for the revision of the Roadmap which provides a long-term strategic framework to guide members in achieving FMD freedom with vaccination in South-East Asia by year 2020.

The revision will consider the changes in economic patterns in the region and factors that will shape the future of Asia in the next few years. A number of issues need to be considered including the risk of new outbreaks, particularly of serotype A, and socio-economic and political developments.

Significant amount of scientific and epidemiological information on the status and behaviour of FMD in the region is available to inform the development or refinement of SEACFMD policies. The animal movement pathways and other main risk factors involved in the transboundary spread of FMD have also been mapped and will be valuable to the review.

New governance arrangements based on the revised Terms of Reference of the Sub-Commission will be considered as well as the alignment of SEACFMD Roadmap with the Global FMD Control Strategy and OIE Standards on FMD; linking the technical aspects of FMD control with the Veterinary Services systems strengthening; and, linking the latter with the PVS pathway and veterinary legislation.

The review will also take into account the contributions that were recently received from New Zealand and the People’s Republic of China. The Republic of Korea has also expressed its interest to provide funding.

Globally, SEACFMD has been recognised as a good model for sub-regional control of FMD in other parts of the world. The new edition of the roadmap will define SEACFMD Programme strategy from 2016 to 2020. The writing of the third edition will start before the next SEACFMD National Coordinators’ Meeting which will be held in August 2014. It will be finalized during the meeting and presented for adoption in the 21st OIE Sub-Commission Meeting for SEACFMD for comments before its planned publication at the end of 2015.
The OIE Sub-Commission for Foot and Mouth Disease Control in South-East Asia and China met on 11-14 March 2014 in Nay Pyi Taw, Myanmar. The meeting brought together 61 participants from OIE, 11 SEACFMD member countries, as well as representatives from partner organisations and observers.

In his opening remarks, H.E. Dr Aung Myat Oo, Deputy Minister for Livestock, Fisheries and Rural Development of Myanmar said his government recognizes the importance of the animal production sector and the impacts diseases such as FMD have on farmers’ livelihoods. Myanmar is confident to have the knowledge and the resources to control FMD by 2020. Dr. Bernard Vallat, OIE Director-General, noted the importance of controlling animal diseases as a tool for poverty reduction and socio-economic development.

The SEACFMD Programme has done a lot in controlling the impact of FMD over the last 20 years, while ensuring the application of OIE standards and the fulfilment of member countries’ needs. Dr. Myint Than, Director-General of the Livestock Breeding and Veterinary Department said FMD is an important disease to control not only for Myanmar but also for other ASEAN countries as he called for collaboration of neighboring countries.

OIE Sub-Commission President Gardner Murray noted the regional importance of the SEACFMD and the achievements it has made over the past 20 years. To build on them, Dr. Murray asked participants to provide advice on policies concerning strategic issues and governance matters that would drive activities in member countries in the next 12 months. This will include customizing national FMD plans and making them consistent with the Global FMD Control Strategy and the SEACFMD 2020 Roadmap.

The meeting reviewed the performance of the SEACFMD Programme and discussed the recommendations including issues related to governance and administration. In particular, participants reviewed the status of FMD in the region over the past year, noting with concern the spread of Serotype A.

The major FMD initiative in Northern Lao PDR (2014-2016) under the OIE SRR-SEA Australian-funded Stop Transboundary Animal Diseases and Zoonoses (STANDZ) Initiative received support from Member Countries. This is expected to have a positive impact on other activities supported by the SEACFMD Campaign. For their part, member countries agreed to share the responsibility for the delivery of FMD programmes and coordination costs while assuring the SEACFMD Campaign of their political support, counterpart funding and resources.

The meeting also discussed the proposed revision to the SEACFMD 2020 Roadmap and the findings of the independent Mid-Term Review of STANDZ undertaken by Australian DFAT. Taking advantage of the presence of regional and global experts on FMD epidemiology and diagnostics, a scientific forum was held to get their advice on the current regional FMD situation. On the last day, a special session on One Health and rabies was held to understand overall policy approaches and activities in member countries.
An expert group was convened in the margin of the Sub-Commission meeting in Nay Pyi Taw, Myanmar, to discuss scientific recommendations in response to the current FMD situation in the region. Recognized regional and global experts on FMD epidemiology and diagnostics discussed the various FMDV strains circulating in the region, a list of recommended vaccine strains to be made available, sustainability of the regional vaccine bank, better understanding and epidemiological situation and viral trends, and a list of research priorities.

Dr. Jemi Domenech of OIE presided over the meeting which was attended by 13 laboratory and epidemiology experts, four technical officers, and nine observers.

On selecting the vaccine strains to be maintained, the experts leaned towards not recommending specific strains but noted the importance of vaccine potency and putting together a framework for selection of vaccines. The effectiveness of most of the vaccines in use is in-vitro tested and there is an urgent need for in-vivo assessments. The experts raised concern about the lack of available field data and stressed the importance of post-vaccination monitoring (PVM) studies.

Given the gaps in information on circulating viruses and documented vaccination failure, the group agreed that it is premature to have a prescriptive list of vaccine strains and called for further understanding of the topotypes in the region, a list of which needs to be fully described. The absolute necessity of having PVM was noted and that the methodologies need to be completely adapted to the context. In particular it is important to determine whether outbreaks in vaccinated areas may be considered as due to vaccine failure or breaks in the vaccine delivery such as failure in cold chain or the overall strategy.

On potency testing, the group agreed that R1 values remain valuable enough, at least particularly as a starting point for emergency situation. But there is a need to continue to monitor field events and conduct potency test. For epidemiology, the group recognized that more surveillance is needed as well as more outbreak investigations, constant monitoring of circulating viruses, and identifying new trends and/or strains.

Another area of interest is on risk analysis, risk factors and control of animal movement. The need to strengthen management of animal movement/traceability, which may include bilateral arrangements between countries and enforcement of legislation was noted. The identification of transmission of the virus and its putative source is also important.

Increasing the samples being submitted to the national laboratories, and OIE Regional Reference Laboratories and World Reference Laboratory was reiterated as well as the need to strengthen collaboration between laboratory and the field.

Lastly, the group identified research priorities on vaccines and vaccination, circulating strains, laboratory issues and epidemiology and socioeconomics.

Vaccine Bank Updates
The OIE Regional Vaccine Banks set up under the European Union regional cooperation programme on highly pathogenic and emerging and re-emerging disease in Asia (EU-HPED) had delivered 1.4 million doses of FMD vaccines to Lao PDR, Myanmar and Cambodia. This represents about 80% of the current FMD vaccine bank budget.

A total of 750,000 doses of rabies vaccines, on the other hand were provided to Lao PDR, Viet Nam and the Philippines.

With the impending closure of the HPED Programme in December 2014, the OIE Sub-Commission should request donors, governments, private sector, and other relevant bodies to continue their support to the Regional FMD Vaccine Bank.
OIE Delegates meet to discuss FMD and Rabies

The OIE Delegates and/or their representatives from 11 SEACFMD member countries met with OIE officials in Nay Pyi Taw, Myanmar on 14 March 2014 to discuss FMD and rabies, the partnership between OIE and the Association of South-East Asian Nations (ASEAN), the PVS pathway and a new chapter in the OIE Code on horses for competition.

The meeting acknowledged the improving situation of FMD worldwide with neighboring countries showing strong political commitment to control FMD. China, Thailand, Myanmar and Viet Nam have agreed to strengthen bilateral and multilateral cooperation to improve animal movement control.

The important role of vaccination in the country’s quest for FMD freedom was noted. OIE Director-General Dr. Bernard Vallat said it is impossible to become free without a strong policy on efficient and relevant vaccination that is tailored to each country’s context and situation. To be successful, vaccination needs to be supported by effective Veterinary Services, sound legislation and strong public-private sectors partnership.

With regard to the PVS pathway, most countries in the region are already within the PVS. OIE is working on a new PVS for veterinary laboratory and OIE SRR-SEA will organize a seminar to promote better understanding of the PVS process.

The meeting then discussed One Health issues and the Memorandum of Understanding (MoU) between OIE and ASEAN.

Countries in the Upper Mekong discuss FMD zoning strategies

The 11th Meeting of the Upper Mekong Working Group (UMWG) on FMD Zoning and Animal Movement Management was held in Bokeo, Lao PDR on 12-14 February 2014. Participants from member countries, OIE and partner organisation FAO reviewed the zoning strategies and agreed that they needed to be refined in light of the economic developments, changing risk patterns and livestock movements in the Upper Mekong region.

The meeting recognised the significant challenge posed by increased movement of animals to UMWG FMD buffer and control zones. The risk of FMD incursion linked to animal movement has been acknowledged. The re-emergence of FMD serotype A in a number of countries in the region was considered as a major concern that needs to be addressed.

Population growth, infrastructure developments and changes in trade patterns due to growing demand for livestock and livestock products in China all play a role in increased animal movement. Socio-economic studies highlighted the need to constantly monitor trade patterns and value chains, which are fast changing along with the economic development in the region.

Participants agreed that a stronger cooperation between member countries is needed to address the risk of FMD incursion brought about by the growing cross-border trade in live animals. The SEACFMD Programme should continue to monitor animal movement patterns and coordinate with other partners and other existing projects to examine measures to reduce the risks of FMD along the pathway.

The UMWG consists of Yunnan Province of the People’s Republic of China and the northern parts of Lao PDR, Myanmar, Thailand and Viet Nam.

It was formed in 2002 under the SEACFMD Programme to focus on FMD zoning and animal movement management.
The Australian Government’s Department of Foreign Affairs and Trade commissioned an independent Mid-Term Review (MTR) of the OIE SRR-SEA-managed Stop Transboundary Animal Diseases and Zoonoses (STANDZ) Initiative. The MTR was conducted by Jonathan Hampshire from January to March 2014 and underscored that STANDZ reflects an effective strategic collaboration between DFAT and OIE Paris. Mr. Royce Escolar, DFAT Senior Programme Manager said the MTR found the approach of STANDZ and its four components to be consistent with aid effectiveness principles on alignment, partnership, flexibility, systems strengthening, and in leveraging partner resources. “Its focus on FMD eradication, rabies control, and veterinary systems strengthening are highly relevant to Australia’s aid, foreign affairs, and trade interests,” he said. The MTR found the STANDZ Initiative to be “highly relevant to promoting FMD control efforts in the region, to improving Veterinary Services, to controlling rabies and promoting a One Health approach, and to helping OIE strengthen its programme management capacities in the region”. It also found OIE SRR-SEA to be effectively implementing the key elements of the STANDZ Initiative, is a cost-effective vehicle through which to channel funding, and is generally efficient in managing resources. The MTR recommends, therefore, that “DFAT and OIE Headquarters should maintain their active support for the very useful work being undertaken by the SRR-SEA team based in Bangkok”. It also recommends to simplify the STANDZ design which was found to be overly complex particularly its Monitoring & Evaluation and gender mainstreaming components. To move forward, these should be simplified and focus more on practical management information needs of both OIE and DFAT. In terms of sustainability, the evaluation suggested an increase in counterpart core operating support to the SRR SEA from OIE, donors, and member countries by December 2015.
Socio-economic studies of FMD in Lao PDR, Cambodia

The socio-economic studies commissioned by the OIE SRR-SEA to determine the impacts of FMD at the household level in two countries found that the direct costs of the recent outbreaks of the disease were substantial and had devastating impact on poor farmers.

Earlier estimates of the financial cost of FMD per household in Lao PDR could exceed USD 1,200 which took into account only the costs of treatment and losses due to morbidity and mortality. This would go up significantly if indirect costs were considered. The present study found that farmers in the lowland and upland provinces incur losses of $224 and $902 accounting for 23% and 86% of their household income derived from the sale of large ruminants.

The poor households, however, are the most vulnerable with $436 losses or 128% of their household income from the sale of large ruminants.

In Cambodia, the total financial losses from FMD outbreaks for the year 2013 in 12 studied villages were at least USD 286,292 where 40 to 80% of their cattle were infected. The variables considered for the calculation of economic losses were cost for time spent in taking care of the infected animals, cost of treatment, cost of business opportunities and the cost of land preparation. Other variable costs like loss from selling infected animals at a lower price, loss from abortion, and loss from the death of animals were not included.

The Lao study provides evidence that women play a significant role in large ruminant health and production and that the financial impact of FMD is more severe on poorer households.

Majority of the respondents (70%) claimed that women were responsible for keeping money from the sale of large ruminants and 22% of respondents claimed that women provided significant labor input and were the primary caretaker for large ruminants.

In Cambodia, husband and wife are mainly responsible for all kinds of activities related to cattle raising, which account for more than 70% of the work (husband contributes about 45% and wife 25%). Children also share the responsibility (boy, about 16% and girl, about 8%). However, during an FMD outbreak, the wife’s responsibility increases to 30 to 32 per cent while the husband’s decreases to 40 to 44%.

The assessment was conducted in three provinces and 12 villages of Lao PDR from December 2013 to February 2014 where 124 smallholder farmers with were interviewed. In Cambodia, the assessment was conducted from September to November 2013 in two provinces and 12 villages where 288 households and 100 village chiefs, animal health workers and traders were interviewed. The study also conducted 24 focus group discussions with male and female groups.

OIE SRR-SEA holds gender training for staff

The OIE SRR-SEA conducted a gender training for its staff on January 29-30. Gender Expert Dr. Kate Frieson facilitated the training/workshop which aims to enhance staff awareness and commitment to use new knowledge on gender responsiveness in the overall work and outlook of the SRR. The workshop started with a gender scan questionnaire and review of the Gender Policy, Strategy and Action plan to ensure terminology, outputs and priorities are in line with current thinking and needs of the office. Staff then reviewed the STANDZ Monitoring and Evaluation results landscape to see how gender components were mainstreamed into the rationale and discuss further how this can be taken forward. Guidelines/check list for assessing gender responsiveness of policies, research studies, and small grants were introduced and exercises were conducted for staff to apply them to their own work. The last day of the workshop featured time blocks for staff to create their own action plans of how they will bring the learning from the workshop into their work portfolios, whether it be in reporting, strategizing with regional partners, reviewing how small grants can be more inclusive of gendered components, and how gender can be highlighted in the regional review of the STANDZ program.

The OIE SRR-SEA developed a Gender Policy in 2012 and completed a Gender Strategy to implement it in February 2013. The Gender Strategy stipulates that capacity development of all OIE SRR-SEA staff is a key focus area to build knowledge and “how to” skills among all the staff members. The workshop was the first such training.
Viet Nam studies FMD ‘hot spots’

SEACFMD Coordinator of Viet Nam, Dr. Phan Quang Minh, reported about the progress of the study being conducted to analyse and identify the foci of FMD infection in the country. Preliminary results showed that the incidence risk of FMD infected communes varied by province, but the highest incidence risk areas were located in the three main regions; the northwest, south of center and southwest. Case studies were conducted in three hotspot provinces involving 572 households. The provinces were selected because they have repeated outbreaks over the 2010-2012 period, they are close to the borders, and have high density of animals and high frequency of animal movement. Of the 872 serum samples collected, 212 samples from 177 households tested positive with an overall prevalence of 24.31 at the animal level or 30.94 at the household level. Animals found positive for the virus did not show clinical signs at the time of sample collection.

Spatio-temporal analysis of clusters of FMD outbreaks in 2010 and 2011 and for the 2006 to 2012 period indicate that animal movement played an important role in the spread of FMD outbreaks which repeatedly occurred close to the borders with high density of animals (mostly buffaloes and cattle) and high frequency of animal movements. Based on the results, Dr. Minh recommended that a system to record epidemic data down to the village or household level be developed to accurately characterize the epidemic. Dr. Minh also suggested that a larger study of animal movements within Vietnam and between Vietnam and neighboring countries (Lao PDR and Cambodia) be conducted.

A large-scale study of the economic impacts of FMD outbreaks should also be performed as well as a molecular study to identify the cartography of FMD virus strains. The study was conducted with funding from STANDZ Small Grant Facility managed by the OIE SRR.

WRL update on global FMD situation

Dr. Donald King, Head of World Reference Laboratory for FMD, presented the work of WRLFMD and the OIE/FAO reference laboratories network with regard to the genetic characterization of samples received from member countries in 2013, as well as vaccine matching results. More than 401 samples from 20 countries were characterised, of which 259 isolates had almost 60 percent classified as serotype A. The proportion of serotype A has increased while the proportion of serotype Asia 1 has decreased and no serotype C has been seen in the last 10 years, although until today it is still not clear why it has disappeared. WRLFMD carried out individual matching tests on 1,192 samples from 24 countries, almost 50% of total from pool 3. The 2013 OIE/FAO FMD reference laboratory network annual report presents the most up to date understanding of the circulating strains, their locations and the currently available vaccines which should allow effective disease control if used appropriately.

Photo Gallery: OIE Sub-Commission for SEACFMD
Risk-based control strategy for SEACFMD urged

The OIE Sub-Commission for Foot and Mouth Disease Control in South-East Asia and China recommended that the forthcoming revision of the SEACFMD 2020 Roadmap will take into account risk-based control strategy.

The principal objectives of a risk-based approach are to identify areas (e.g. geographical zones, production system, animal species) at higher risk of FMD introduction and/or presence in order to more effectively protect the health of livestock and consumers, to set priorities, and to allocate resources effectively and efficiently.

An important goal is to achieve a higher benefit-cost ratio with existing or reduced resources. Consequently, risk analysis and risk models can help identifying major contributors to the risk of FMD incursion in a particular area or population and define potential targets for intervention.

A risk-based approach is a useful approach to support both strategic and operational decision-making. In scarce-resource settings, human and financial resources available to support government veterinary services and livestock disease control can be limited. Thus, issues that present higher risks should merit higher priority so that control resources and investments can yield higher cost-benefit ratio.

Countries with limited resources should take advantage of the use of risk analysis to prioritise their actions to combat livestock disease. When it is known where the disease is and how it spreads, vaccination campaigns can be targeted to these specific areas. Surveillance can be improved and extra resources can be used to achieve good bio-security. The same affordable techniques used to estimate the prevalence of FMD can then be used to evaluate and monitor the efficacy of the control strategies that were put in place.

Upcoming Events

- Meeting on Northern Lao PDR FMD Control Project
  23-24 April 2014 (Luang Prabang, Lao PDR)
- Communication Workshop
  25-26 April 2014 (Luang Prabang, Lao PDR)
- STANDZ Mid-Term Review Workshop
  29 April 2014 (Bangkok, Thailand)
- Outbreak Investigation and Management Training
  16-20 June 2014 (Luang Prabang, Lao PDR)