



Organisation  
Mondiale  
de la Santé  
Animale

World  
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for Animal  
Health

Organización  
Mundial  
de Sanidad  
Animal

22nd Conference of the  
OIE Regional Commission for Asia,  
the Far East and Oceania  
Kathmandu (Nepal), 27-30 November 2001

**FINAL REPORT**



Office international des épizooties

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## List of Abbreviations

AAHL	:	Australian Animal Health Laboratory
APHCA	:	Animal Production and Health Commission for Asia and the Pacific
AusAID	:	Australian Agency for International Development
BAI	:	Bureau of Animal Industry
BLU	:	Bluetongue
BSE	:	Bovine spongiform encephalopathy
CIRAD	:	<i>Centre de coopération internationale en recherche agronomique pour le développement</i> Centre for International Cooperation in Agronomic Research for Development
CSIRO	:	Commonwealth Scientific and Industrial Research Organisation
ELISA	:	Enzyme-linked immunosorbent assay
FAO	:	Food and Agriculture Organization of the United Nations
FMD	:	Foot and mouth disease
GMP	:	Good Manufacturing Practice
GREP	:	Global Rinderpest Eradication Programme
LDC	:	Less developed countries
NACA	:	Network of Aquaculture in Asia Pacific
ND	:	Newcastle disease
OIE	:	Office International des Epizooties
OWSWF	:	Old World Screwworm fly
PPR	:	Peste des petits ruminants
RRL	:	Regional Reference Laboratory
SAARC	:	South Asian Association for Regional Cooperation
SEAFMD	:	South East Asia Foot and Mouth Disease
SNT	:	Seroneutralisation test
SPC	:	Secretariat of the Pacific Community
USDA	:	United States Department of Agriculture
WHO	:	World Health Organisation
WRL	:	World Reference Laboratory
WTO	:	World Trade Organisation

## **Introduction**

1. On the invitation of His Majesty's Government of Nepal, the 22nd Conference of the OIE Regional Commission for Asia, the Far East and Oceania was held in Kathmandu from 27 to 30 November 2001.
2. Sixty-three Delegates and Observers attended the Conference from twenty OIE Member Countries and three international or regional organisations. The speakers for the technical items also participated in the proceedings of the Conference. These were Dr Peter Daniels, Project Leader, Diagnosis and Epidemiology at the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australian Animal Health Laboratory, and Dr Laurence J. Gleeson, FMD Project Coordinator at the CSIRO Australian Animal Health Laboratory in Geelong, Australia. Dr Teruhide Fujita, Coordinator of the OIE Regional Representation for Asia and the Pacific, also participated in the Conference.

**Tuesday 27 November 2001**

## **Opening Ceremony**

3. Dr Neel Prakash Singh Karki, permanent Delegate of Nepal to the OIE, extended a warm welcome to the participants and wished them a pleasant stay in Nepal. He stated that the Nepalese government regards it as a great pleasure and honour to host the Conference in Kathmandu.
4. Dr Karki extended his thanks to the Director General of the OIE, Dr Bernard Vallat, and his staff in Paris for their assistance in providing guidance on the preparation of the conference, and to Dr Teruhide Fujita, Coordinator of the OIE Regional Representation for Asia and the Pacific, for his able support. He added that in Nepal, a large number of people have contributed time, effort and advice to make the organisation of the conference possible. In this respect, he paid special tribute to the Chief Guest, the Minister for Agriculture and Co-operatives, Mr Mahesh Acharya, for his keen interest and constant support, without which the success of the conference would have been compromised. Dr Karki also expressed his appreciation to the Secretary, Ministry of Agriculture and Cooperatives, Mr Ratneshwor Lal Kayastha, for his leadership, and to both the Ministries of Finance and Foreign Affairs that have responded so generously to every request. He specifically praised the work of Dr Shubh Narayan Mahato and his colleagues for their efficient and dedicated involvement with the conference arrangements. Dr Karki concluded by offering special thanks to all the Delegates for their participation and gave practical information on the arrangements of the conference.
5. Dr Gardner Murray, President of the OIE Regional Commission for Asia, the Far East and Oceania, welcomed all participants to the Conference. He expressed his appreciation, on behalf of the OIE, to the Government of Nepal and their colleagues in the Nepalese Animal Health Services for organising the meeting in such a professional manner and for the warm welcome extended to everyone.
6. The President of the Regional Commission recalled that there are many and significant challenges facing governments and animal health authorities. Over recent years, the impacts of diseases, such as foot and mouth disease, bovine spongiform encephalopathy and emerging zoonoses, such as the Nipah virus, have resulted in human tragedy, market destabilisation and a questioning of the role of government and value of scientific advice, at least in some parts of the world. The implications for animal production and health are significant.

7. Dr Murray emphasised that more than ever before, OIE leadership in these areas is critical. Such leadership needs to involve not only the development of international standards, but also exchange of information and improved linkages with multi-national organisations that have an interest in public health and food standards, for example, the World Health Organization and the joint WHO/FAO Codex Alimentarius Commission. He added that he favoured a multi-disciplinary approach in these critical matters and that the role of the veterinary community is crucial.
8. The President observed that the three diseases, FMD, BSE and Nipah virus, would be discussed by the Conference. In addition, a range of other extremely important animal health matters, which have regional and global relevance, namely rinderpest and arboviruses, would also be considered.
9. In conclusion, Dr Murray noted that the role of Regional Commissions is becoming more important. The Asia and Pacific Region is probably the most complex of all regions given the geographical spread, cultural and linguistic diversity. He added that due to the competencies and capacities that reside in the region, he believed that it can take a leadership role in providing formed views and advice to the OIE.
10. Dr Bernard Vallat, Director General of the OIE, expressed his pleasure in welcoming participants to the Conference, also on behalf of Dr Romano Marabelli, President of the OIE International Committee. The Director General expressed his sincere gratitude to His Majesty's Government of Nepal for its generosity in hosting the Conference, and to the Department of Livestock Services headed by Dr Neel Prakash Singh Karki that had made every effort to prepare the meeting.
11. The Director assured the participants of the implementation of the new Strategic Plan that includes mainly the following objectives: more involvement on the part of the OIE in zoonoses, food-borne diseases and animal welfare; more involvement in world zoosanitary information through new communication technologies and active investigation of sanitary data; more actions in the field through proposals from Regional Commissions and implementation by Regional Representations, and specific programmes; and better support to national Veterinary Services, in particular through official agreements with financial organisations, such as the World Bank.
12. Dr Vallat, however, recognised that livestock has been more rapidly and steadily developed in this Region than in other regions over the last decades, in the various forms of livestock production systems, including mixed farming systems and peri-urban production systems, in order to meet the strong demand on the part of the consumer for animal protein. In this respect, animal health, including zoonoses, has become increasingly important for Veterinary Services in contributing to the provision of food safety, as well as to sound livestock and agricultural development in the region.
13. The Director General recalled that the OIE has played the major role in collecting and disseminating animal disease information world-wide, strengthening Veterinary Services and promoting a global approach to disease control. The OIE's functions in establishing standards, guidelines and recommendations relating to animal disease control including zoonoses, and international trade in animals and animal products have been strengthened, in particular, following recognition by the World Trade Organization of the OIE as the standard-setting international organisation.
14. In respect of regional cooperation, Dr Vallat believed that coordination between the OIE Regional Commission and the OIE Regional Representation is important, and was pleased to note that both the President of the Regional Commission and the Coordinator for the Regional Representation under the OIE/Japan Trust Fund have maintained close contact with each other for their mutual interest.
15. Dr Vallat noted the technical items to be discussed during the Conference, namely, arboviruses and new strains of foot and mouth disease, observing that they are of particular importance for the region, as national Veterinary Services need to have effective disease prevention and control plans and measures to reduce negative effects on livestock production and management. An update on the situation with Nipah virus in Malaysia would also be reported and discussed during the meeting. With regard to rinderpest, another important disease in the region, the Director General specified that the OIE has worked together with the FAO in disease control and that the FAO's EMPRES

programme plans to participate in progressively controlling rinderpest on a global basis and finally to eradicate the disease by 2010.

16. Dr Vallat concluded that he hoped that the exchange of views on these important technical items as well as other institutional activities during the meeting, would facilitate effective disease control and agricultural/rural development and finally poverty reduction in the region through the OIE programmes.
17. Following the ceremonial lighting of the 'Panax', the Honourable Minister of Agriculture and Cooperatives of His Majesty's Government of Nepal, Mr Mahesh Acharya, welcomed participants to the Conference, held for the first time in Kathmandu.
18. The Minister observed that membership of the OIE has a special significance for Nepal, as it is a landlocked nation with long borders with its neighbouring countries, where trans-border movements of animals are common and at times difficult to control. It is thus important for Nepal to have a well organised Veterinary Service that meets internationally accepted norms. Only in this way, will its neighbouring states have the necessary guarantees that the animal health situation in Nepal is correctly regulated. On the other hand, the international forum that the OIE provides in an egalitarian manner gives Nepal access to reliable information on the animal health situation in those countries from which Nepal imports animals and animal products.
19. The Minister emphasised that Nepal recognises the importance of the OIE's role in safeguarding health in world trade. As a potential future member of the World Trade Organization, Nepal is committed to the process of harmonisation of regulations relating to trade in animals and animal products. While accepting the goal of unimpeded international trade in animals and their products, Nepal is conscious of the need to have internationally accepted regulations that will protect it against exposure to transmissible diseases.
20. A number of the diseases that feature in the OIE's List A diseases are still significant causes of loss in Nepal. Foot and mouth disease, peste des petits ruminants (PPR), Newcastle disease and classical swine fever may be cited as examples. Until recent years, rinderpest although not endemic was a cause of devastating losses during the periodic epizootics. Nepal, with the assistance of the European Union through the joint programme to strengthen Veterinary Services, has followed the OIE's pathway towards verifiable eradication of this problem. Progress to date has been very encouraging and Nepal looks forward to completing this process during the coming year. The Minister noted with interest that while rinderpest eradication was the major factor in bringing Nepal into the OIE community, it was this very disease that was the reason for the creation of the OIE in 1924. The guidance provided by the OIE through its specialist commissions, collaborating centres and reference laboratories has been critical to Nepal's progress along the road to rinderpest eradication and in confronting other epizootic diseases of national importance.
21. The OIE, as a focal point for regional collaboration in the control of epizootic diseases, will have a key role in any future regional developments to tackle diseases, such as foot and mouth disease, where animal movement and trade, both formal and informal, play such an important part in trans-boundary transmission.
22. The Minister added that peste des petits ruminants is a disease that has been increasingly recognised in Nepal. With the withdrawal of the rinderpest vaccine, the Veterinary Services, with the collaboration of CIRAD in France, have worked to develop PPR vaccine production capabilities. Initial results have been good and production facilities are now being upgraded.

23. With regard to swine production, which offers a means of economic enhancement of disadvantaged groups, the Ministry has successfully implemented a programme of cooperative swine production by women's groups. The role of the pig in harbouring the virus of Japanese encephalitis has brought negative influences to bear on these programmes, as well as threatening the more advanced commercial production units. It is particularly relevant to Nepal that the topics for discussion in this conference include both Japanese encephalitis and Nipah virus.
24. Asia remains a stronghold of rabies and its control continues to present significant challenges to the Nepalese authorities with regard to both animal and human health. The discussion of strategies for control and elimination of rabies in Asia will, therefore, be of significant interest to the Delegates.
25. The Minister concluded by commenting that the Ministry of Agriculture and Co-operatives, the Ministry responsible for animal health services and controls in Nepal, is convinced that the decision to hold this conference in Nepal will concentrate attention upon the importance and relevance of continued participation in this international body. He then declared the 22nd Conference of the OIE Regional Commission for Asia, the Far East and Oceania officially open.
26. The texts of the above speeches were distributed to the Delegates.

#### **Election of the Conference Committee**

27. Participants elected the following Conference Committee:

Chairperson:	Dr Neel Prakash Singh Karki (Nepal)
Vice-Chairperson:	Dr Didier Carton (New Caledonia)
Rapporteur General:	Dr Barry O'Neil (New Zealand)

#### **Adoption of the Provisional Agenda and Timetable**

28. Dr Karki took on the role of Conference Chairperson and the Provisional Agenda and Timetable were adopted.

#### **Designation of Chairpersons and Rapporteurs**

29. Chairpersons and Rapporteurs were selected for the technical items as follows:

Item I:	Dr Jose Molina (Philippines), Chairperson Dr Derek Belton (New Zealand), Rapporteur
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Item II:	Datuk Dr Noordin Mohd Nor (Malaysia), Chairperson Dr Wantanee Kalpravidh (Thailand), Rapporteur
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Animal health status:	Dr Didier Carton (New Caledonia), Chairperson Dr Hilda Loh (Singapore), Rapporteur
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#### **Animal health status of Member Countries in the region in 2001**

30. Dr Didier Carton, Chairperson of the Session, invited Delegates of Member Countries to report on any changes that had taken place recently regarding the animal health status of their countries. The animal health situation in the region can be summarised as follows, according to the written or verbal reports presented to the Conference.

## **List A diseases**

31. The following countries and territories reported the absence of all List A diseases during the first eight months of 2001: New Caledonia, New Zealand, Singapore, Vanuatu and Pacific Island Countries and Territories.

### **Foot and mouth disease**

32. On 19 September 2001, the OIE Foot and Mouth Disease and Other Epizootics Commission recognised that the Republic of Korea has regained its previous foot and mouth disease free status without vaccination.
33. Outbreaks of foot and mouth disease (FMD) caused by virus type O continued to be reported in the following countries: Bangladesh, Hong Kong (Special Administrative Region of the People's Republic of China), India, Iran, Laos, Malaysia (Peninsular), Mongolia, Myanmar, Nepal, Philippines, Sri Lanka, Taipei China, Thailand and Vietnam. Virus type A is present in India, Iran and Thailand, and virus type Asia 1 in India, Iran, Myanmar and Nepal. The disease was also reported in Bhutan, Cambodia and Pakistan, but no virus was typed.
34. In Malaysia (Peninsular), FMD was detected, upon arrival, in a herd of imported cattle on a barge at point of entry into the State of Kedah in May 2001. The cattle were quarantined in two separate locations and ring vaccination was implemented around the quarantine areas. In June 2001, one outbreak was reported in a cattle herd in the State of Selangor. The date of the last previously reported outbreak in this State was March 2000. In July 2001, four outbreaks of the disease were recorded in the State of Kelantan, where the disease had been absent since May 1998. A ring vaccination of local cattle was implemented within a 5-km radius of the outbreaks in Kelantan and Selangor States.
35. In Taipei China, three pigs were found to be infected through routine inspection in the pen of an abattoir in Taipei prefecture in February 2001. The pigs in the abattoir had been delivered from three pig farms located in the Nantou and Kaohsiung prefectures. The farms had full FMD vaccination records and no other FMD case was found by trace-back inspection. The three infected pigs were destroyed immediately when clinical signs were observed.
36. In 2001, the OIE recognised Mindanao Island in the southern part of the Philippines to be free from FMD. The application for OIE recognition of FMD free status in Central Island is under preparation.

### **Rinderpest**

37. Bhutan was declared free from rinderpest disease in the year 2000 by the OIE. Thailand has also been recognised as disease free since last May and is applying to the OIE to be recognised as a country free from infection.
38. The Representative from Iran reported that as vaccination against rinderpest had ended in four provinces in 1999, the country would be notifying the OIE on the basis of total freedom from the disease.
39. Pakistan reported that there have been no outbreaks since last year and that they are in the process of attaining provisional freedom.

### **Peste des petits ruminants**

40. Bangladesh, India, Iran, Iraq, Nepal and Pakistan reported the presence of peste des petits ruminants in their territories during the first part of 2001.

41. In Bangladesh, a noticeable increase in the incidence of outbreaks of peste des petits ruminants was detected in the west of the country, in February 2001. By March 2001, the disease had spread to the Rasjahi district of the Rasjahi division and to the Dhaka district of the Dhaka division. High morbidity and mortality were recorded.
42. In Nepal, there was a large outbreak of peste des petits ruminants this year in the northern districts. The outbreak was associated with seasonal movement of sheep and goats from the south to the north. Ring vaccination was carried out for control.

### **Bluetongue**

43. Australia reported the occurrence of bluetongue in 2001 (one outbreak in February 2001). The disease was caused by BLU serotype 16 in three sheep that died with clinical and pathological signs of the disease on a property in the Northern Territory (100 km south of Darwin), which is within the bluetongue virus endemic area. No further clinical cases of BLU serotype 16 have occurred within the Northern Territory since then.
44. India reported verbally during the conference that cases of bluetongue had been reported in the country.

### **Sheep pox and goat pox**

45. The disease continued to be reported in Bangladesh, India, Iran, Iraq, Nepal and Pakistan.

### **Classical swine fever**

46. The following countries reported the presence of classical swine fever during the first part of 2001: Hong Kong (Special Administrative Region of the People's Republic of China), India, Indonesia, Laos, Myanmar, Nepal, Russia, Taipei China, Thailand and Vietnam.

### **Highly pathogenic avian influenza**

47. In Hong Kong (Special Administrative Region of the People's Republic of China), an epizootic of highly pathogenic avian influenza occurred in multiple retail poultry markets in May 2001. Dead bird monitoring resulted in isolation of the H5N1 virus from 12 markets. Slaughtering of poultry in all live poultry markets and stalls was undertaken. No infected birds were detected on local farms or in the wholesale market.

### **Newcastle disease**

48. The following countries reported the presence of Newcastle disease on their territories during 2001: Bangladesh, Bhutan, Hong Kong (Special Administrative Region of the People's Republic of China), India, Indonesia, Iran, Iraq, Japan, the Republic of Korea, Malaysia (Peninsular), Myanmar, Nepal, Pakistan, Singapore, Sri Lanka, Taipei China and Vietnam.
49. In Japan, where the disease had been absent since May 2000, one outbreak was reported in a quail farm in Chiba prefecture in February 2001, three in hobby flocks in Ibaraki prefecture in March, two in April and one in May 2001. All susceptible birds kept in the flocks were destroyed. No epidemiological relationship between the farms was confirmed.
50. There have been no further outbreaks of virulent Newcastle disease (ND) in Australia since February 2000. The country has notified the OIE that the country is free from the disease, with vaccination being conducted on farms in the state of New South Wales.
51. In Singapore, where Newcastle disease has been absent since 1998, the disease occurred in a vaccinated flock in September 2001. Negligible mortalities were recorded.

## **List B diseases**

### **Bovine spongiform encephalopathy**

52. In Japan, bovine spongiform encephalopathy was diagnosed in September 2001 in a five-year-old Holstein cow kept on a dairy farm in Chiba prefecture. The farm was placed under supervision and all animals that were kept with the infected cow were traced. A second case has subsequently been found from slaughterhouse monitoring.

### **Rabies**

53. Indonesia reported an outbreak of dog rabies on the island of Flores, which had been free from the disease in the previous three years.

## **Other diseases**

### **Leptospirosis, *Angiostrongylus cantonensis* and *Trichinella papuae***

54. The Representative from the Secretariat of the Pacific Community (SPC) reported that zoonotic diseases continued to be of concern in the Pacific, particularly the emerging diseases leptospirosis, *Angiostrongylus cantonensis* and *Trichinella papuae*, which were the subject of a regional SPC project.

### **Nipah virus infection in Malaysia**

55. The Session Chairperson gave the floor to Datuk Dr Noordin Mohd Nor, Director General of the Department of Veterinary Service of Malaysia, and Dr Abd. Aziz Mangkat, Director of Epidemiology and Veterinary Medicine, who briefly reported on the latest developments of the Nipah virus in Malaysia.
56. Dr Mohd Nor informed participants that the Department of Veterinary Services Malaysia had undertaken abattoir and farm serological surveillance to establish the absence of Nipah virus infection in pigs. The abattoir surveillance was implemented from late 1999 to early 2000. A total of 414 (51.9%) farms were tested and 43 farms showed at least 1 positive to the ELISA test. The positive samples were submitted for SNT and found negative. A farm surveillance programme was undertaken from April to December 2000 to ensure that all pig farms were screened. Two farms were positive to SNT and the farms were depopulated. The outcome of the surveillance programme indicated a very low serological reactor rate, all of which were shown to be false positives, and the last clinical case was detected in May 1999.
57. Malaysia submitted an application to the OIE for declaration of freedom from Nipah virus infection. The application has been accepted and will be published in the OIE Bulletin in October 2001.
58. Dr Mangkat indicated that a routine active sero-surveillance programme through the sampling of pigs slaughtered in abattoirs is being carried out. The results showed that out of 3,209 samples tested, only 9 samples (0.28%) were positive by ELISA screening. However, none of these samples were positive by Absorbed ELISA. Through this modified ELISA test, the number of false positives samples sent for confirmatory SNT can be reduced.

## **Discussion**

59. In response to the Representative from Japan's question on how countries in the region could develop diagnostic capability for Nipah virus, Dr Daniels advised that the Australian Animal Health Laboratory (AAHL) was prepared to transfer its technology on ELISA (indirect and absorbed) for serological detection of the disease to countries on a formal inter-governmental arrangement. He recommended the utilisation of the absorbed ELISA, which reduced non-specific reactions to negligible levels in contrast to the indirect ELISA, which had a specificity of 98.5 per cent.
60. With regard to isolation of the virus, Dr Daniels cautioned that this should be carried out in biosafety level 4 (BSL4) facilities. However, presumptive diagnoses could be made using immunohistochemistry on formalinised tissues. For suspect cases, AAHL would be able to provide assistance if requests were made through the CVO of Australia. Dr Daniels referred Delegates to the FAO publication presently under preparation and in which procedures were described for the diagnosis of Nipah virus.
61. The Representative from Japan asked for the OIE'S comments regarding the standards for handling Nipah virus. The Director General, Dr Vallat, replied that Nipah virus was on the OIE's list of priorities.
62. The Representative from the Secretariat of the Pacific Community (SPC) enquired as to the value of screening of bat wildlife reservoirs. Dr Daniels replied that as work had shown Pteropus bats to be a reservoir of the virus, farmers should be aware of the potential risk of introduction of the virus from bats to the pig population.
63. The Representative from the Food and Agriculture Organization of the United Nations (FAO) asked for an explanation as to the absence of Nipah virus in pigs since 1999, in view of the fact that the virus is believed to have been in the fruit bat for a long time. The Delegate from Malaysia postulated that the epidemic resulted with a single cross-over of Nipah virus to pigs from bats that had been displaced from their natural habitat on Tioman island off the south-eastern coast of Peninsular Malaysia. It is suggested that haze arising from forest fires on the island of Borneo in 1995/1996 drove the bats towards the mainland where they were attracted to fruit orchards in the Perak state. Virus from the bats subsequently infected pigs in the proximity of the bat roosts. The subsequent spread of the epidemic was due to the interstate movement of pigs from the source farms in the Nipah area. Dr Mohd Nor further theorised that the bats had since returned to their original habitat on Tioman island.
64. The Delegate from New Caledonia wished to know if there was continuing surveillance of bats for Nipah virus and whether any human infections that occurred were attributable to transmission from bats. Dr Mohd Nor replied that the present sero-surveillance focussed on the pig population and did not include further testing of bats. He explained that all 265 human cases of Nipah virus infection had a history of contact with live pigs and, therefore, it was clearly established that infected pigs were the source of transmission to humans. There was no evidence of human to human transmission of the virus.

## **Rabies control in the sub-region**

65. Dr Teruhide Fujita, Coordinator of the OIE Regional Representation for Asia and the Pacific, based in Tokyo (Japan), reported on the 'WHO Consultation on Strategies for the Control and Elimination of Rabies in Asia', held in Geneva (Switzerland) from 17 to 20 July 2001, in which the OIE (Dr Y. Ozawa, Adviser to the OIE Regional Representation, Tokyo) was represented. The objectives of the consultation were to assess the current situation of rabies in Asia and to discuss strategies to prevent rabies in humans, control and eliminate rabies in humans and animals.

66. Dr Fujita indicated that approximately 90 per cent of all human rabies deaths are reported from Asia, where canine rabies is endemic and few if any effective animal control programmes are in place. Rabies is not a notifiable disease in many of the Asian countries where most of the deaths occur. Even though rabies is a vaccine-preventable disease (with a success rate of almost 100 per cent), and modern highly potent cell-culture rabies vaccines were developed over 20 years ago, crude nerve tissue vaccine is still administered to well over 1 million patients in Asia every year. Available epidemiological data indicate that 45-60 per cent of human rabies deaths occur in children, most of whom receive no or inappropriate post-exposure treatment.
67. The obstacles to rabies prevention in Asia include the fact that there is no surveillance system in place to collect epidemiological data, that accessibility of rabies vaccine is limited owing to the high cost and supply problems, and that effective health education programmes are lacking, resulting in a low degree of awareness of the disease burden and preventive measures. In addition, there is little or no political commitment by developing countries to invest in rabies control programmes. Despite these problems, in several countries/areas the existing methods for rabies prevention have been used to eliminate rabies in the past (i.e. Japan, peninsular Malaysia and Taipei China) and more recently, to reduce human rabies cases drastically (i.e. People's Republic of China, Thailand and Vietnam).
68. The tools necessary to overcome the problems associated with rabies prevention in Asia are currently available. For example, the cost of post-exposure treatment using cell-culture vaccines can be reduced through the use of intradermal regimens. Although a few countries have successfully replaced the use of nerve tissue vaccines, more countries need to be encouraged to do so. Rabies awareness has been increased in a few regions thanks to the support of the private sector and by using government-sponsored initiatives.
69. Dr Fujita pointed out that in spite of this increased awareness, the lack of political support in most countries has hindered the implementation of rabies control programmes and, therefore, rabies continues to cause unnecessary human deaths in Asia.
70. Recommendations made at the consultation and aimed at preventing human rabies in Asia included:
- reducing the cost of vaccination with cell-culture vaccines by using lower-dose intradermal post-exposure regimens;
  - increasing the supply of rabies biologicals through bulk transfer of vaccines, regional purchases and tariff reduction for the direct acquisition of modern rabies biologicals and the transfer of technology for vaccine and rabies immunoglobulin production to be transferred;
  - phasing out the use of vaccines of nerve-tissue origin;
  - encouraging the use of pre-exposure vaccination in children and other individuals at risk; and
  - continued research into alternative methods to increase the supply of rabies immunoglobulins.
71. It was also recommended that each country should implement a comprehensive national rabies control programme that should, at a minimum, include: the appointment of a person in the health ministry responsible for rabies control, the development of a national rabies surveillance system; the implementation of public education programmes; compulsory vaccination of domestic dogs; stray-dog control (by immunisation if feasible); and the discontinuation of the production and use of nerve-tissue vaccines.
72. In conclusion, Dr Fujita reported that it was considered crucial by the consultation to initiate a WHO/OIE-coordinated programme for rabies control and elimination. A key element of the first phase of the programme would be the collation and analysis of available data on human and animal mortality and of the disease burden of rabies in the relevant countries.

## **Discussion**

73. The Delegate from Nepal explained that although the World Health Organization (WHO) urged countries to replace the use of nerve tissue vaccines with tissue culture vaccines, countries such as Nepal, had to continue with the production and use of nerve tissue vaccines due to limited financial resources. He sought comments from the FAO on this issue. The Representative from the FAO responded that the FAO supported the WHO's recommendations on the use of rabies vaccines in humans and animals respectively.
74. A request was made by the Delegate from Nepal for the OIE to seek clarification from the WHO on the progress of development of a rabies vaccine for the oral immunisation of dogs. Although chemical sterilisation of dogs was promoted by the WHO to prevent the spread of rabies, it was still necessary to immunise sterilised dogs. In this context, the use of an effective oral vaccine applied through a suitable bait was an important tool in the control of rabies.
75. Dr Van Aarle from Intervet commented that the most efficacious rabies vaccines were tissue culture vaccines that were produced under Good Manufacturing Practice (GMP) guidelines. He agreed that it was important to complement the development of local production of such vaccines with the development of baits to suit the local conditions countries.
76. The Delegate from the Philippines informed the meeting that his country had implemented a national rabies eradication programme under the Department of health and Department of Agriculture. The Bureau of Animal Industry (BAI) was the national coordinating agency and had obtained assistance from the WHO on vaccine acquisition. However, the biggest problem BAI faced was the control of stray dogs.
77. A Representative from Nepal commented that the country had produced and used nerve tissue rabies vaccine in animals for 16 years. As the locally produced vaccine had good antigenicity (this has been validated by the Institut Pasteur, Paris), its use would be continued until resources were available to develop a tissue culture vaccine.

## **ITEM I**

### **Arboviruses, such as the Japanese encephalitis virus**

78. Dr Peter Daniels, speaker for this Technical Item, was introduced by Dr Jose Molina, Chairperson of the Session.
79. Dr Daniels introduced his presentation with an outline of the scope of the paper, and a description of the major groups of arboviruses. He recalled that arboviral diseases receive serious consideration as the emerging infectious diseases globally. In veterinary medicine there are both zoonotic agents and primarily animal pathogens warranting concern. Japanese encephalitis virus and West Nile virus are two zoonotic arboviral agents that have had a major impact globally in recent years, Japanese encephalitis in the Asia-Western Pacific area and West Nile in Europe, the Middle East and North America.
80. In addition to the material circulated, Dr Daniels cited the recent geographic expansion of bluetongue disease virus, and reviewed the serotypes of bluetongue virus recovered along a transect from India to Eastern Australia. The genetics of bluetongue viruses were reviewed, and the genetic relationships of bluetongue viruses recovered in the region were illustrated. From the genetic analysis of blue tongue viruses recovered in the North of Australia it was deduced that there had been several new bluetongue viruses introduced, and that there was persistence of one strain as a result of re-assortment of the genome.

81. The range of *Culicoides* vectors in countries in the region was shown, and it was speculated that the vector may influence pathogenicity of the virus. Dr Daniels noted that there is continuing biological pressure for movement of bluetongue viruses from west to east across the region, that incursions of new genotypes of bluetongue virus will continue to occur, and that any extension of the geographic range of *C. imicola* would be a major cause for concern.
82. The speaker pointed out that Member Countries of the OIE Regional Commission for Asia, the Far East and Oceania were surveyed by questionnaire to assess levels of concern and preparedness for these diseases within the region, as well as seeking information on other arboviral infections of domestic animals that may be recognised. Responses indicated varying levels of diagnostic capability and hence of specific information regarding the nominated viruses. There was widespread recognition of the public health implications of Japanese encephalitis. Bovine ephemeral fever was the most widely reported arboviral animal pathogen. Where Member Countries rate it a priority, there is particular scope for collaboration in development of common approaches to laboratory diagnosis of arboviral diseases and the systems of laboratory quality assurance to manage the diagnostic capability.
83. In conclusion, Dr Daniels commented that more generally, there is scope to discuss common approaches to emergency animal disease preparedness, including preparedness for zoonotic arboviral disease.

### **Discussion**

84. The Chairperson thanked Dr Daniels for his informative and interesting presentation and invited comments and questions from the participants.
85. The Delegate from New Zealand asked if there is any evidence of re-assortment of virus genotype in Orbiviruses other than bluetongue, and whether there was any evidence that genetic re-assortment led to an increase in virulence. Dr Daniels replied that there is potential for genetic re-assortment amongst all Orbiviruses, since these viruses are segmented, and there is potential to re-arrange the segments. The possibility that genetic re-assortment increases virulence has not been addressed and is an interesting area for further research.
86. The Representative from Iran asked if different mosquito vectors affected virulence of bluetongue virus. Dr Daniels replied that the determinants of virulence in bluetongue virus are unknown and definitely not related to serotype.
87. In reply to a question from the Representative from India about the place for live virus vaccines in the prevention of bluetongue disease outbreaks, Dr Daniels replied that vaccines can provide protection from disease, but that use of live virus vaccines has the potential to introduce new genes into an ecosystem. Waiting for winter to kill off the vector population may provide just as good a method of control.
88. The Coordinator of the OIE SEAFMD Regional Coordination Unit asked how far vectors (particularly *Culicoides imicola*) may carry bluetongue virus. Dr Daniels replied that insect vectors could carry the virus long distances in favourable conditions. *C. imicola* is widespread in Africa, and has extended its range into Europe, and through the Middle East to Pakistan and India. There is no evidence of *C. imicola* in Indonesia, but the precise eastern boundary of distribution is unknown.
89. The Representative from India commented that spraying vectors to control spread of bluetongue virus was effective.
90. Dr Roeder (FAO EMPRES - GREP Secretary) asked whether bluetongue seropositive animals are a trade risk. Dr Daniels replied that this is not the case and that it is the period of viremia that is important. Viremia lasts two to three weeks in sheep and cattle, and seems to be shorter in sheep. Sixty days or more after infection, animals are unlikely to be viremic.

91. The Representative from India sought clarification on the possibility of carrier animals of bluetongue virus. Dr Daniels replied that there was no evidence of the carrier state amongst animal infected with bluetongue virus.
92. Dr Van Aarle (Intervet) commented that spatial modelling is a difficult term that is not always well understood. What is important is the analysis of outbreaks using computer models, using this information to predict the behaviour of future outbreaks of disease and predict the effects of control strategies such as vaccination and stamping out.
93. A Representative from India questioned whether seropositive animals may shed virus in semen, and expressed concern that semen may be an important route of virus shedding. Dr Daniels recalled that the OIE *Code* chapter on bluetongue deals with the risk of virus shedding in semen. Dr Vallat further commented that the OIE International Animal Health Code Commission had reached a compromise view to use 100 days post infection as the risk period for bluetongue viremia, as the basis for managing bluetongue risk in the trade of live animals and semen.
94. Dr Roeder commented that it is important to understand the difference between predictive risk mapping and modelling, and stochastic state transition modelling. Dr Roeder's view is that stochastic state transition models have not yet been developed to the point that they mirror real life and cited the debate on the value of models in predicting the recent FMD outbreak in the United Kingdom. Whilst a great proponent of disease modelling, Dr Roeder is not a proponent of current models' usefulness in predicting outbreak behaviour.
95. The Delegate from New Zealand asked what the likelihood is of West Nile establishing in this region, and what likelihood is that if it were present, it would be misdiagnosed. Dr Daniels replied that West Nile is already in Pakistan and India, that the US strain arose in the Middle East, and that it was hard to predict whether the US strain would appear in the region and cause disease. He added that West Nile is easily misdiagnosed, especially if you do not have the laboratory capacity to identify the virus, and that he was not sure that avian deaths, which are observed amongst crows in the United States of America, would occur in the region.
96. In response to an enquiry from a Representative from Nepal concerning the role of bats in the transmission and maintenance of Japanese encephalitis, Dr Daniels replied that this has not been studied in great detail. The Japanese have isolated the virus from bats, but bats do not appear to play a major role in the transmission or maintenance of Japanese encephalitis.
97. The Session Chairperson concluded by thanking all the participants, and then requested a small group composed of the speaker Dr Daniels, Dr Manoj Kumar Saha (India), Dr Maghsoud Jamdar (Iran), Dr Derek Belton (New Zealand) and Dr Peter Roeder (FAO) to draft a Recommendation on this technical item.

#### **Network of Aquaculture Centres in Asia-Pacific (NACA)**

98. Dr Murray, President of the Regional Commission, tabled a report on the Provisional Meeting of the Asia Regional Advisory Group on Aquatic Animal Health, together with a summary paper on reporting of aquatic animal diseases to both the OIE and NACA. He explained the role and functions of NACA and in particular the activities of the Advisory Group on Aquatic Animal Health, on which the OIE is represented. He added that NACA had reported some inconsistencies in disease reporting between the OIE and NACA.
99. The Conference noted the reports and the inconsistency in aquatic disease reporting, and agreed that this issue be submitted to the OIE Fish Diseases Commission for consideration and reporting, as appropriate to the International Committee meeting in May 2002.

## **BSE diagnostics**

100. Dr Robert Tanaka, Representative from the United States of America, foreshadowed the possibility of the United States Department of Agriculture providing some funds to support a course in BSE diagnostics at a Regional Laboratory during 2002. He would advise Delegates of proposals at a later date. He provided a form for Delegates to express interest in participating. The United States Department of Agriculture (USDA) would be working with the OIE and FAO to develop the workshop.

**Wednesday 28 November 2001**

## **ITEM II**

### **New strains of foot and mouth disease virus in the region (surveillance, eradication and prevention)**

101. The Chairperson of the Session, Datuk Dr Noordin Mohd Nor, briefly introduced the speaker for this Technical Item, Dr Laurence Gleeson.
102. Dr Gleeson commenced his presentation by reviewing the recent information of FMD in the region that a number of new viruses have been detected in the region during the last ten years. The new FMD strains included the pig adapted strain of type O, Pan-Asia topotype of type O, South-East Asia type A and West Asia type A virus. The incursion of new strains was mostly related to the movement pattern of livestock in the region. However, the precise origin of these viruses is unknown.
103. Dr Gleeson commented that a total of thirteen countries responded to the questionnaire on this item that was circulated by the OIE. These countries were classified on the basis of the history of FMD outbreaks over the past five years: FMD is endemic, FMD outbreaks are sporadic, FMD outbreaks have rarely occurred and FMD outbreaks have not occurred.
104. The speaker remarked that the 'real time' picture of the FMD situation across the whole region is generally incomplete, as the surveillance systems in place are not uniformly reactive or comprehensive. Reports of the World Reference Laboratory (WRL) for FMD and the OIE over the last five years indicate that a number of new strains of FMD have been detected in the region. He observed that some of the conclusions presented in his report are also derived from this historical information and official reports, as well as anecdotal evidence and personal experience working with animal health services in the region. In the past seven years, new strains of FMD have been detected in the Philippines, Taipei China, Vietnam, Laos, Cambodia, Myanmar, South Korea, East Russia, Japan, Malaysia, the People's Republic of China and Thailand. The majority of these outbreaks have been caused by the so-called Pan-Asia strain of FMD. Much of the understanding of the regional epidemiology of FMD has arisen from studies at the WRL, but this understanding could be improved by a more co-ordinated effort by Member Countries to submit field specimens to the WRL.
105. Dr Gleeson suggested possible options for preventing the spread of new strains of FMD in the region, including monitoring of disease outbreaks and investigation of unusual events, as well as submission of samples to reference laboratories. Timely reporting of the presence of new strains to regional networks was recommended to reduce the risk of disease spread.
106. In conclusion, Dr Gleeson underlined the fact that new strains of FMD have emerged in the region in the last ten years and have caused outbreaks in countries that have been free from FMD for long periods. In addition, one strain has spread widely beyond the region and has caused severe problems in South Africa and Europe.

Not all countries in the region have the resources to effectively control FMD, but the risks posed to the international animal production environment would be lessened if greater attention was paid to disease surveillance in particular. This improved surveillance could be linked to the application of bilateral measures to reduce risks associated with trade in animals and animal products. It is expected that such co-ordinated activity should have a significant impact in reducing the incidence of FMD in the region.

### **Discussion**

107. The Session Chairperson thanked Dr Gleeson for his comprehensive and informative presentation and opened the floor for discussion.
108. The Delegate from the Philippines informed the conference that Mindanao Island in the southern part of the country has been recognised to be free from FMD by the OIE in the year 2001. In addition, the application for OIE recognition of FMD free status in Central Island is under preparation. Dr Vallat commented that an updated map of FMD free countries and zones has already been published on the current OIE Web site.
109. In reply to a request from the Delegate of Bhutan for more information on the current knowledge and status of FMD wildlife, since there was evidence of FMD spreading from wildlife to pig farms in his country, the OIE Director General stated that the OIE is able to provide technical support through OIE specialists on wildlife.
110. The Delegate from Bhutan further expressed the difficulty they encountered in the submission of samples to the World Reference Laboratory (WRL) for FMD, particularly regarding the expenditure involved. To reduce expenditure, he wondered whether in the future it would be possible to submit samples to the Regional Reference Laboratory (RRL) in Pakchong, Thailand. The Delegate from Thailand responded that the RRL is expected to give services primarily to the countries in South-East Asia. However, such services can also be provided to other countries in Asia on request, provided that the biosecurity system for the laboratory is fully installed.
111. The Representative from Iran informed the participants on the FMD control measures implemented in his country and also confirmed that Iran regularly submits samples to the WRL even with the financial difficulties that this creates.
112. Dr Roeder, Representative from the FAO, complimented Dr Gleeson on his outstanding performance in steering the coordination activities of FMD control in South-East Asia from 1997 to 2001. He also suggested that funding for sample submission to WRL should be available for the countries in the region. In addition, maximising the number of samples to be submitted to WRL was also recommended. Dr Gleeson explained that provision for financial support to Member Countries in South-East Asia to submit samples to WRL is a part of SEAFMD activities.
113. Dr Vallat expressed his agreement in supporting Member Countries to obtain resources for sample submission to WRL and confirmed that the OIE will provide support in collaboration with the FAO.
114. In reply to a query from a Representative from Nepal as to why FMD type C virus has disappeared from the region during the last five years, Dr Gleeson said that its disappearance was also observed in other parts of the world. However, the reason for this is unknown.
115. The Representative further requested the conference to consider the regional approach on FMD vaccine production, particularly on the vaccine quality aspect, as vaccination activity is a major component for FMD control. Dr Gleeson suggested that the OIE International Standard on Vaccines be used as a guideline for vaccine selection and quality control.
116. Dr Kihm agreed on the importance of vaccination activity, particularly when animal movement control is not possible. He further suggested that quality assurance at the manufacturer should be

considered, although it is important to establish a vaccine quality control unit in a country to consider vaccine quality for import purposes.

117. The Representative from India enquired whether the removal of type C virus from FMD polyvalent vaccine should be considered to reduce the cost of production, providing type C virus had disappeared from the region. Dr Gleeson responded that the quality of FMD surveillance in the area previously reported as having the type C outbreak should be evaluated before making such a decision. This suggestion was supported by Dr Roeder who stated that type C virus may still circulate in some parts of the world. He also stressed that caution should be carried out before making the decision to remove type C virus from vaccine production.
118. Dr Kihm agreed with regard to type C existence. However, type C virus has been removed from the vaccine bank for Switzerland, due to a reduced possibility of introducing it into the territory mentioned.
119. Dr Nordin Nor suggested that risk assessment be conducted to support the decision for removal of type C virus from vaccine production.
120. The Delegate from Bhutan enquired whether the establishment of the OIE FMD Sub-Commission similar to the one for South-East Asia is possible for other regions, such as South Asia. Dr Gleeson suggested the steps to be taken to initiate such a regional approach, including the establishment of a working group among Member Countries, followed by a formal group supported by the OIE Regional Representation in Tokyo. However, financial support is crucial to maintain the coordinating activities in FMD control in the region.
121. The following group was proposed to assist the speaker, Dr Laurence Gleeson, in drafting a recommendation on this subject: Dr J.B. Gurung (Bhutan), Dr B.S. Rajpurohit (India), Dr M.K. Saha (India), Dr D.K. Singh (India), Dr S.N. Mahato (Nepal), Dr Alexander Panin (Russia) and Dr Peter Roeder (FAO).

#### **Old World screwworm fly (OWSWF)**

122. Dr Nordin Nor discussed the outcome of an international conference held in Canberra, Australia, two weeks' ago to consider prevention, management and eradication methods of Old World screwworm fly (OWSWF) as well as developments in research.
123. He advised that an existing small facility was available in Malaysia that could be used for research. Resources would be needed and this raised the prospects of a regional programme. He asked Dr Murray to elaborate.
124. Dr Murray said the facility in Kluang, Malaysia, had been jointly established by Malaysia and Australia. Very valuable research had been carried out in areas, such as on feeding systems and colony rearing and maintenance. Most importantly, the Sterile Insect Technique had been demonstrated to work in field trials.
125. Dr Murray believed a coordinated approach to the maintenance of the facility and management of research programmes would be of great value to the region.
126. The meeting agreed to forward relevant papers to the FMD and Other Epizootics Commission, so that after due consideration, it could provide recommendations to the OIE International Committee in May 2002.

### **Presentations by international and regional organisations**

127. Dr Karki, Conference Chairperson, invited presentations from international and regional organisations.

#### **Food and Agriculture Organization of the United Nations**

128. Dr Peter Roeder, the FAO representative, gave a brief overview of some of the animal health initiatives of the FAO in Asia and the rest of the world.
129. Dr Roeder indicated that FAO's interest in animal health goes well beyond rinderpest and includes rabies, FMD, hog cholera and African swine fever. He added that the FAO also had an interest in veterinary public health, including BSE, tuberculosis and brucellosis.

#### **Secretariat of the Pacific Community**

130. Dr Stephen Angus, Veterinary Epidemiologist, Regional Animal Health Service of the Secretariat of the Pacific Community (SPC), gave a brief background on the Secretariat and the 22 Pacific Island Countries and Territories that are members.
131. He commented that since only two SPC members are Member Countries of the OIE (New Caledonia and Vanuatu), it was important that the SPC had been an observer in the OIE since 1996. Both share the same goal of increasing the quality and quantity of animal health data in the region. The activities of the SPC in animal health include supporting the Veterinary Services of member countries, surveillance, and emergency contingency planning. The SPC also has an interest in zoonosis and Dr Angus mentioned the problem that some Pacific Island Countries are having with leptospirosis.
132. In conclusion, Dr Angus mentioned the favourable status of Pacific Island Countries and Territories with respect to BSE.

#### **United States Department of Agriculture (USDA)**

133. Dr Robert Tanaka, Representative from the United States of America, gave a brief overview of some of the technical bilateral cooperation activities that the United States Department of Agriculture (USDA) has undertaken in Korea, Thailand and the Philippines.
134. Dr Tanaka mentioned that if there are countries in the area that require technical assistance, they could contact him with their requests.

#### **Rinderpest eradication: prospects and constraints**

135. Dr Peter Roeder, Animal Health Officer (Virology) and Secretary to the Global Rinderpest Eradication Programme (GREP) of the FAO, was invited by the Conference Chairperson to give a short presentation on rinderpest eradication: prospects and constraints.
136. Dr Roeder observed that the absence of rinderpest from recent emergencies and disasters is remarkable and is a direct consequence of the reducing global threat from this disease, as a result of a concerted internationally-coordinated effort for its eradication. Formerly, this disease used to devastate the livelihoods of millions of farmers. Its effects covered all elements of agriculture; even as recently as the 1950s, Thailand was forced to seek food aid as a result of rinderpest constraining rice production. Now there is a very real prospect that rinderpest can be eradicated within the next few years - the first time that a major disease of livestock has been totally eliminated from the world. This will be a major achievement for the veterinary profession, safeguarding the livelihoods of millions of families world-wide, enhancing food security, facilitating trade and helping to alleviate poverty, especially in the rural areas where the majority of people subsist in developing countries.

137. Dr Roeder pointed out that, today, there is growing confidence that rinderpest survives in just three reservoirs. In Africa, these involve extensive pastoral systems in southern Sudan and southern Somalia, each comprising, at present, less than a million cattle. In Asia, the last remaining reservoir is in the Indus River buffalo tract of southern Pakistan. The way ahead is clear and calls for a new approach in which annual mass vaccination campaigns must cease and be replaced by intensive surveillance to disclose areas of virus infection, which are then eliminated by intensive, focussed vaccination ('immunosterilisation').
138. Dr Roeder informed participants that the Global Rinderpest Eradication Programme (GREP) is working with the OIE with the aim of developing a system to accelerate the process of accrediting rinderpest freedom without compromising standards. The GREP Pathway proposed aims to incorporate all countries within regional and global systems of verification. Ecological zones based on homogeneously-mixing livestock populations will form the basis for coordinated serosurveillance. The precise details have to be defined and funding for regional operations secured. The OIE/GREP Pathway is not designed to replace the OIE Pathway; it is complementary to it. For global eradication to be confirmed and announced in 2010, it is critical that no more rinderpest should occur by the end of 2002. The process of proving the world free from rinderpest cannot commence until there is a reasonable assurance that the last reservoir of rinderpest infection has been eliminated.
139. Dr Roeder commented that the related problems of wildlife rinderpest and 'mild' rinderpest in cattle lead some to doubt if eradication is feasible in Africa, yet experience shows that wildlife does not maintain infection separately from cattle - they do not form a reservoir - and 'mild rinderpest' can be eradicated if a dynamic approach is adopted to control. The only other serious constraint to eradication results from a creeping lack of commitment to eradication as the impact of rinderpest decreases. Funding shortfalls threaten the eradication process.
140. In conclusion, Dr Roeder emphasised that renewed commitment to the goal of rinderpest eradication could bring rapid success. Failure will risk returning to the former situation of repeated pandemics devastating livestock production, trade, food security and the livelihoods of millions of people.

### **Discussion**

141. Dr Murray asked what level of investment has gone into rinderpest eradication over the last ten years. Dr Roeder believed that 200 million US dollars would have been spent over this time.
142. In reply to a query from Dr Gleeson regarding the situation with wildlife reservoirs, Dr Roeder summarised that in no outbreak had wildlife been incriminated to date as a persisting reservoir of infection.
143. The Session Chairperson thanked Dr Roeder for his interesting presentation.

### **Date, venue and agenda items for the 23rd Conference of the OIE Regional Commission for Asia, the Far East and Oceania**

144. The Conference Chairperson asked Delegates present if one of their countries wished to host the 23rd Conference of the Regional Commission for Asia, the Far East and Oceania. On behalf of the Government of his country, the Delegate from New Caledonia invited the Regional Commission to hold its next Conference in his country during the first week of November 2003. This was unanimously supported and applauded by the participants. The Conference Chairperson thanked New Caledonia for offering to host the 23rd Conference.
145. Topics for agenda items would be discussed at the meeting of the OIE International Committee in May 2002.

### **Activities of the OIE Regional Representation for Asia and the Pacific**

146. Dr Teruhide Fujita, Coordinator of the OIE Regional Representation for Asia and the Pacific, based in Tokyo (Japan), briefly reviewed the activities of the Regional Representation for 2001, implemented under the OIE/Japan Trust Fund Project.
147. The Coordinator listed some of the meetings organised or co-organised by the Representation and his participation in the meetings of other organisations. He mentioned that the activities of the Regional Coordination Unit for FMD Control in South-East Asia (RCU) were also supported directly or indirectly through the activities of the Regional Representation in Tokyo. Dr Fujita then listed the missions he had undertaken in the region.
148. Dr Fujita recalled that the OIE *Regional Epidemiology Yearbook* (2000), three issues of the OIE *Quarterly Epidemiology Reports*, the OIE *Regional Aquatic Animal Disease Yearbook* (2000) and *FMD Monthly Reports* were published during the year. This information is available on the Web site of the Regional Representation. The Coordinator added that a new section entitled 'Current Topics' had been added to the Web site, which summarises the outcome of meetings organised under the OIE/Japan Trust Fund Programme.

### **Activities of the Foot and Mouth Disease Sub-Commission**

149. Dr Gardner Murray, President of the OIE Regional Commission for Asia, the Far East and Oceania, gave a brief overview of the history of the FMD Sub-Commission and its activities during 2001.
150. Dr Murray recalled that the OIE Sub-Commission for Foot and Mouth Disease in South-East Asia was established in 1994 by seven countries in the Region – Myanmar, Laos, Cambodia, Vietnam, Philippines, Thailand and Malaysia – to coordinate the SEAFMD Campaign. Indonesia, although free from FMD, recently requested membership of the Sub-Commission in view of the risks of reintroduction of the disease.
151. The key findings of an external evaluation of the SEAFMD Campaign conducted in 1999 were that although the overall SEAFMD pathways, objectives and programme framework were soundly based, SEAFMD could be strengthened by introducing strategies that clearly recognised that countries were at different stages of development and had different priorities and needs. The requirements for success included a multi-disciplinary approach, strengthening the engagement of stakeholders, programme planning and the enlistment of support from government Ministers in the Region. Such activities would supplement technical scientific issues, such as diagnosis, surveillance, epidemiology, livestock movement controls and the like.
152. The President briefly outlined the key issues of the Regional Sub-Commission meeting, held in Yangon (Myanmar) from 26 February to 2 March 2001, including a strategic plan for the years 2001 – 2004. Key points included:
  - ASEAN and OIE support for the continuation of the SEAFMD Campaign based on the four strategic directions recommended by the independent evaluation.
  - ASEAN countries will assume responsibility for the SEAFMD in 2004.

- The Director General of the OIE will initiate a process so that the current President for the Regional Commission of Asia, the Far East and Oceania assume the position of President of the SEAFMD Sub-Commission.
  - The 2001-2004 Business Plan be approved subject to a number of key amendments including articulation of measurable outputs, the establishment of an FMD control zone and introducing the idea of sustainability of the project in 2004.
  - The OIE establishes the mechanism whereby Member Countries will be requested to provide financial support for the SEAFMD programme, equivalent to 10 per cent of their representative OIE contribution.
153. Dr Murray added that a key recommendation of the meeting was that an application for funding to the Australian Agency for International Development (AusAID) to support the Regional Coordination Unit in Bangkok be progressed with some urgency. These issues were also discussed in some detail during the OIE General Session in Paris during May 2001.
154. With regard to recent developments, Dr Murray observed that resources have been made available by AusAID to support the Regional Coordination Unit in Thailand for a further three years, the Thai Government continuing to provide support staff and facilities. He added that the OIE signed an agreement with AusAID in September 2001, which sets the framework and conditions for the Australian contributions. Dr John Edwards has been nominated as Regional Coordinator for the next three years and took up his position in November 2001.
155. The President on behalf of the Regional Commission thanked Dr Laurence Gleeson for the excellent work he had undertaken as Regional Coordinator for the last four years.
156. Dr Murray subsequently introduced and welcomed Dr John Edwards, the new Regional Coordinator.
157. Dr Edwards then gave an overview of the key programme elements and the main activities of the Regional Coordination Unit. He indicated that his immediate priorities were to visit Member Countries, work on communications, plan for the 8th Sub-Commission meeting to be held in Malaysia from 4 to 8 March 2002, and develop regionalisation and zoning initiatives.
158. In conclusion, Dr Murray proposed that a recommendation be prepared by the Conference:
- That the Regional Commission submit to the OIE International Committee a recommendation that SEAFMD Member Countries will provide additional financial support to the programme in the amount of 10 per cent of their representative OIE contribution.

### **Discussion**

159. Dr Vallat then presented a proposal that the current President for the Regional Commission of Asia, the Far East and Oceania assume the position of President of the SEAFMD Sub-Commission.
160. Participants supported the suggested recommendation:

The Regional Commission, in accordance with the proposal of the Foot and Mouth Disease Sub-Commission, which was drawn up during its last meeting in Yangon (Myanmar), wishes the current President of the Regional Commission for Asia, the Far East and Oceania to be designated as President of the FMD Sub-Commission by the President of the OIE Foot and Mouth Disease and Other Epizootics Commission, in line with Article 3 paragraph 2 of the Terms of Reference and Internal Rules of the FMD Sub-Commission.

### **Presentation and discussion of Draft Recommendations Nos 1, 2, 3 and 4**

161. Draft Recommendations Nos 1, 2, 3 and 4 on the two Technical Items of the Conference and other relevant topics to the region were presented to the participants and put forward for discussion and adoption. Several Delegates called for minor changes to be made before adoption.

#### **Bhutan's proposed withdrawal of membership**

162. The Director General of the OIE, Dr Bernard Vallat, informed participants that the OIE Central Bureau had received official notification from the Government of Bhutan announcing its country's intention to withdraw its membership of the OIE, as Bhutan had become a member of the Animal Production and Health Commission for Asia and the Pacific (APHCA).
163. The President of the Regional Commission expressed his sadness with this development. He indicated his belief that APHCA and the OIE have different roles.
164. The Delegate of Bhutan indicated that the EU rinderpest project enabled them to enter the OIE, but now they have reviewed the technical and economic benefits of OIE membership. As Bhutan is not involved in livestock trade, the government decided that membership was not warranted. The Delegate said that he would take the outcome of the Kathmandu conference back to his government and it was possible that this, along with the reduction in fees, may enable a reconsideration of this decision.
165. The Director General stated that Bhutan's contribution will be reduced by 50% for 2002 and subsequent years, in line with its inclusion in the United Nations list of LDC countries.
166. The meeting noted the excellent contribution that Bhutan has made to the OIE throughout the period of its membership.
167. The vast improvement in the animal disease and public health status in Bhutan will be further enhanced by the information sharing and solidarity that comes with ongoing membership of the OIE. The OIE is the standard setting organisation for animal health and zoonoses recognised by the World Trade Organization (WTO). In addition, the OIE is working closely with Codex Alimentarius and the World Health Organization (WHO) on the control of zoonotic diseases and the related food safety risks.
168. The OIE Regional Commission for Asia, the Far East and Oceania thus strongly encouraged the Delegate of Bhutan to report back to the Bhutan government the unanimous view of the meeting that Bhutan retains active membership of the OIE.

**Thursday 29 November 2001**

#### **Field trip**

169. Participants found the field trip organised by the host country to traditional Nepalese farms near Nagarkot and livestock industries at Bhaktapur to be of great interest, and also enjoyed the visit to the Himalayan ranges and historical places. They extended their sincere thanks to the organisers for their kind hospitality.

**Friday 30 November 2001**

**Adoption of the Draft Final Report and Recommendations**

170. The Conference approved Recommendations Nos 1, 2, 3 and 4. The Draft Final Report was adopted pending certain amendments.

**Closing Ceremony**

171. Dr Bernard Vallat extended his congratulations to all participants for the successful completion of the Conference and thanked them for the valuable collaboration and active participation in discussions during the meeting. He added that the conference could not have been successfully completed without the dedication of His Majesty's Government of Nepal, and notably Dr Neel P.S. Karki and his colleagues, and extended his thanks for their hard work before and during the Conference. Dr Vallat also thanked Dr Karki for his kind involvement as Conference Chairperson in leading the meeting so effectively, as well as Dr Shubh N. Mahato and all other Members of the Conference Committee.
172. The Director General noted that many important technical issues were discussed during the meeting, which are all relevant to animal health improvement in the region, and stressed the importance of the Recommendations made by the Conference. As cases of bovine spongiform encephalopathy (BSE) recently occurred in Japan, the first case in Asia, animal diseases in some remote areas, in this case in Europe and particularly in the United Kingdom, are no longer exotic diseases of a particular area or region. He recalled that we are already in an internationally borderless era with expanded international trade in animals and animal products. In this context, timely and transparent animal disease information and international and regional collaboration is necessary to strengthen livestock development in each country/territory.
173. Dr Vallat concluded that he looked forward to meeting the participants again in Paris in May 2002 on the occasion of the OIE General Session and also at the 23rd Conference of the OIE Regional Commission in New Caledonia in 2003.
174. Dr Gardner Murray extended his thanks to the Government of Nepal and to Dr Karki for their warm hospitality. He said that not only had the week been successful from a scientific/technical point of view, but also participants had the opportunity to experience some of the wonderful culture of Nepal.
175. The President of the Regional Commission thanked Dr Didier Carton for the opportunity to host the next Regional Commission meeting in New Caledonia in 2003. In saying this, he notified participants that Dr Carton would shortly be taking up a post with the European Union in Brussels. He thanked Dr Carton on behalf of the Regional Commission for his assistance to the OIE over the past ten years.
176. Dr Murray noted that there were many important messages for the Delegates to take home and consider. Some of the most important veterinary public health issues confronting the world had been discussed. He added that certain recommendations prepared by the Conference would provide significant input in the development of international standards. Dr Murray then referred to the South East Asia FMD campaign and reflected that it was the only solely OIE held programme. He congratulated campaign members for their efforts and, in particular, thanked and complimented Dr Laurie Gleeson for his outstanding work as the OIE Regional Coordinator for the four years on behalf of the OIE. In conclusion, Dr Murray thanked all participants for their contribution. He wished them a safe return to their home country and looked forward to meeting them again in 2002.

177. Dr Neel P.S. Karki, Delegate of the host country, commented on the four days of hard work and interesting discussions that were coming to an end. He extended his thanks to the Director General and staff of the OIE and the bureau of the Regional Commission for their support in the organisation of the conference. His special thanks went to the speakers of all scientific presentations, as well as to the Rapporteur General, the Vice-Chairperson, the various Chairpersons and Rapporteurs of the different sessions and to all the Delegates and observers present. Dr Karki also expressed his appreciation to the representatives of the FAO, SPC and USDA for their participation in the conference.
178. Finally, Dr Karki underlined the success of the one-day BSE meeting, held within the framework of the OIE/Japan Trust Fund Programme, and thanked Dr Teruhide Fujita for his valuable efforts in preparing this meeting. Dr Karki concluded by wishing everyone a safe trip home.
179. In bringing this Conference to a close, the Secretary to the Ministry of Agriculture and Co-operatives of His Majesty's Government of Nepal, Mr Ratneswar Lal Kayastha, said that he was mindful of the enthusiasm and efforts that had been brought together to enable this conference to produce the successful outcome that it had so evidently achieved.
180. The Secretary observed that a conference such as this one, encompassing a wide range of topics of significant importance to the countries of this region within the time-frame of a very few days, had to remain focused on the critical points in order to achieve concrete results. The quality of the draft report and its recommendations is evidence of the dedication of the participants and the brilliance of the scientific discussion that has taken place. He congratulated all the participants on their support and collaboration in bringing this about. He added that the successful realisation of this conference has owed much to the efforts of those in the background who have worked tirelessly in the preparation and organisation of the programme and associated arrangements, and extended his thanks to the organisers and committee members and to all those who had made this possible.
181. One of the first aims of the OIE was to promote and coordinate research into the surveillance and control of animal diseases throughout the world. The Regional Commission for Asia, the Far East and Oceania brings together Delegates representing an enormous area of the globe. It includes small landlocked countries such as Nepal, even smaller island states, as well as some of the most heavily populated nations in the world. The OIE's structure gives each Member Country an equal voice and it is all the more incredible that, with these diverse backgrounds and interests, participants have been able to steer the conference towards a unity of mind in deciding upon priorities and harmonised methodologies in animal disease control in the region.
182. The Secretary emphasised that, in addition to the traditional trade routes for animals and their products, the facilities of air travel and a general opening up of world trade has placed even greater challenges before those charged with limiting trans-boundary disease transmission. The goal is to protect ourselves from the introduction of exotic diseases while respecting the norms for facilitating a level playing field for trade in animals and their products. This will only be reached through continued discussion and interaction. The forum provided by the OIE through this conference makes a small but significant step in this direction.
183. The Secretary noted that the conference has brought the Member Countries up to date with developments in the animal health situation of the participating Member Countries, divulged the activities of some important OIE Commissions, while at the same time providing, through the scientific programme, essential information on diseases of importance to the region.
184. Mr Kayastha also commented that the discussions on the problems related to arboviruses were of keen interest to the Nepalese participants, as their country has been much concerned over the increasing incidence of Japanese encephalitis.

185. Following the significant progress made in the region in the control and eradication of rinderpest, Nepal is increasingly turning its attention to other major economically important diseases. Amongst these, foot and mouth disease control is a priority. It is strongly felt that a regional approach is essential for containment of this infectious disease and Nepal favours the establishment of an organisation similar to the OIE SEAFMD Programme for the SAARC region. The Secretary underlined the opinion expressed by representatives of his country that an initiative for its establishment could come from the OIE and FAO.
186. The Secretary added that the other major threat that his country is encountering relates to peste des petits ruminants (PPR). This disease is already well entrenched in Nepal and some of its immediate neighbouring countries and, as such, poses a threat to other countries encompassed by this OIE Regional Commission. He again stressed that a regional approach is essential for control of this disease and that the support of the OIE in promoting standards and harmonised guidelines for surveillance and control, and the technical support of international agencies, such as the FAO, is vital in ensuring the success of such a programme.
187. The Secretary observed that notwithstanding the scientific programme of this conference, he felt sure that the reinforcing of personal contacts facilitated by the conference plays an important role in continued interactions in related fields. Certainly Nepal benefits immensely from collaboration in the area of manpower development and training from its interactions with other countries in the region.
188. In conclusion, the Secretary hoped that the participants' stay in Nepal has been not only fruitful in terms of scientific collaboration, but also in gaining some insight into the country and culture of Nepal. Although Nepal is not a large country, it does encompass a tremendous diversity of terrain, from the flat lowlands of the Terai to several of the highest mountains in the world. Its peoples and their traditions are equally diverse. He wished all participants a safe journey back home and officially declared the 22nd Conference of the OIE Regional Commission for Asia, the Far East and Oceania closed at 11.30 a.m.

### **MOTION OF THANKS**

The OIE Regional Commission for Asia, the Far East and Oceania, the Director General of the OIE, members of Delegations, observers and representatives of countries and international organisations, wish to express their gratitude to the Government of Nepal, the Host Country of the 22nd Conference of the Regional Commission, for the excellent welcome accorded to the participants and for all facilities made available to them during their stay in Kathmandu from 27 to 30 November 2001.

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**OIE Sub-Commission for Foot and Mouth Disease in South-East Asia**

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22nd Conference  
of the  
OIE Regional Commission for Asia, the Far East and Oceania

Kathmandu (Nepal), 27-30 November 2001

Recommendation No. 1: Arboviruses of veterinary significance

Recommendation No. 2: New strains of FMD in the region: surveillance, control, eradication and prevention

Recommendation No. 3: OIE categorisation of animal diseases

Recommendation No. 4: Sustainability of the SEAFMD programme

Recommendation No. 1

**Arboviruses of veterinary significance**

CONSIDERING THAT

Arboviruses are prominent among the emerging infectious disease agents globally,

There is an increasing threat of arboviral diseases to human and animal health in the region,

Arboviruses have a significant impact on trade,

Arboviral diseases are under reported in most of the Member Countries,

Collaboration for the development of common approaches for arboviral disease surveillance and laboratory diagnosis is needed for the Member Countries of the region,

THE OIE COMMISSION FOR ASIA, THE FAR EAST AND OCEANIA  
RECOMMENDS THAT

1. Member Countries note the pattern of world-wide expansion in the distribution of significant arboviral diseases, such as bluetongue, Rift Valley fever, West Nile and Japanese encephalitis.
2. Member Countries adopt the principle that preparedness for emerging arboviral disease threats includes:
  - a surveillance capability and a strategy to apply that capability. Surveillance may include one or more of: monitoring for changing disease patterns, monitoring vector populations or sampling of animals for laboratory tests,
  - a capability for laboratory diagnosis of arboviruses for surveillance activities and diagnosis,
  - a plan and a corresponding capability for an appropriate method and level of response. In the case of zoonotic diseases, this should involve close consultation with public health authorities.
3. Where laboratories in Member Countries support a laboratory test, they maintain it under a quality assurance programme and identify other laboratories with a similar capability to investigate the possibility of sharing of samples as a means of external proficiency testing.
4. Member Countries collaborate to develop regionally co-ordinated networks to monitor trends in the spatial and temporal occurrence of arboviruses and their vectors using GIS technology. In doing this, the OIE should provide leadership and seek the support of other international agencies and donors.
5. Member Countries note that the OIE *International Animal Health Code* chapter on zoning/regionalisation has been recently revised and would be relevant to arboviral diseases, and support the need for further work to complement the work being carried out on compartmentalisation.
6. The OIE consider including West Nile disease in the list of notifiable diseases.

(Adopted by the OIE Regional Commission for Asia, the Far East and Oceania on 30 November 2001)

## Recommendation No. 2

### **New strains of FMD in the region: surveillance, control, eradication and prevention**

#### CONSIDERING THAT

Trade in animals and products of animal origin is important to stimulate economic growth and human well-being in the region,

Formal and informal trade in agricultural products, and in particular animals and products of animal origin, is increasing due to greater economic interdependence,

FMD is disseminated in the region mostly by informal trade in animals and products of animal origin,

A number of new strains of FMD have emerged in the Asian region in recent years, and have spread widely both within and beyond the region,

The OIE SEAFMD programme has been established to promote the progressive control and elimination of FMD in South-East Asia,

Serotype C virus has not been detected recently in the region,

New ELISA tests based on non structural proteins of FMD virus shows potential for use in FMD surveillance programmes,

#### THE OIE COMMISSION FOR ASIA, THE FAR EAST AND OCEANIA RECOMMENDS THAT

1. The OIE continues to promote standards and harmonised guidelines for FMD surveillance and epidemiological investigations in the region.
2. The OIE Member Countries increase efforts to conduct FMD surveillance and timely epidemiological investigations of FMD outbreaks using the harmonised guidelines promoted by the OIE.
3. Member Countries submit regularly to the OIE/Regional Reference Laboratories sufficient FMD samples to effectively monitor circulating virus strains. Reference Laboratories should communicate their findings to the World Reference Laboratories for FMD in particular at Pirbright, United Kingdom.
4. Member Countries develop bilateral and/or multi-lateral agreements and procedures as appropriate to reduce the risk of dissemination of FMD by the movement of animals and products of animal origin across international borders.
5. The use of modified live virus and formalin inactivated vaccines against FMD be discontinued.
6. The OIE and the FAO collaborate, in particular within the next International Meeting with donors in 2002, to establish programmes that:
  - ensure control of FMD in at least all the infected countries of the whole region, including countries that are members of SAARC;
  - ensure full sustainability of SEAFMD current programme;

- support a risk assessment concerning the relevance of including serotype C in FMD vaccines for routine use.
7. The OIE gives, as quickly as possible, an opinion to Member Countries concerning the new ELISA tests based on non structural proteins of FMD virus.

(Adopted by the OIE Regional Commission for Asia, the Far East and Oceania on 30 November 2001)

Recommendation No. 3

**OIE categorisation of animal diseases**

CONSIDERING

That one of the main objectives of the OIE is 'to inform Governments of the occurrence of animal diseases, changes in their distribution world-wide and means of controlling them',

That the current OIE categorisation of animal diseases into Lists A and B has not been reviewed recently and therefore shows certain inconsistencies,

That the current OIE categorisation of animal diseases should be more flexible and facilitate the inclusion of new emerging animal diseases of significant epidemiological importance,

The need to take into account the growing importance of the potential zoonotic consequences of many animal diseases and the need for consistency of approach in the long term with the *International Aquatic Animal Health Code* and the interface with wildlife diseases,

THE OIE REGIONAL COMMISSION FOR ASIA, THE FAR EAST AND OCEANIA  
RECOMMENDS THAT

1. The OIE change the current categorisation of animal diseases from Lists A and B to a classification of significant animal diseases with two new categories based on the epidemiological characteristics of a particular animal disease as follows:
  - a) animal diseases of immediate notification (within 24 hours) due to their rapid spread (high epidemiological significance);
  - b) animal diseases of periodic notification (on a monthly basis and, where appropriate, at least annually), based on lesser epidemiological significance.
2. The inclusion of any animal disease in a particular category shall be based on the aetiological and epidemiological characteristics of the disease and its potential for dangerous, rapid and widespread dissemination (directly or through vectors). The zoonotic potential of the disease should also be taken into account.
3. The OIE, as a scientific reference body, categorise significant animal diseases using the criteria detailed in point 1 above and promote awareness among OIE Member Countries of this approach and its principal purpose, which is to promote the dissemination of timely and quality information for the purposes of safe trade between countries and disease control strategies within countries.
4. This recommendation be examined by the Administrative Commission of the OIE in order to determine the most appropriate manner to effect the necessary change.
5. The OIE continue to develop and strengthen its disease databases and provide Member Countries with access to these to enable them to obtain up-to-date and quality information on animal health status world-wide.

(Adopted by the OIE Regional Commission for Asia, the Far East and Oceania on 30 November 2001)

Recommendation No. 4

**Sustainability of the SEAFMD programme**

CONSIDERING

The recommendations of the Seventh Meeting of the OIE Sub-Commission for Foot and Mouth Disease in South-East Asia (Yangon, Myanmar, 26 February - 3 March 2001) that :

- There have been significant achievements in the SEAFMD programme,
- The SEAFMD programme will provide a model for other regional disease control programmes,
- The SEAFMD programme needs additional resources to develop these activities,
- The ASEAN countries will assume full responsibility for SEAFMD in 2004,

THE OIE REGIONAL COMMISSION FOR ASIA, THE FAR EAST AND OCEANIA  
RECOMMENDS THAT

1. Each Member Country of the SEAFMD Sub-Commission be encouraged to contribute to the sustainability of the SEAFMD programme by taking an official decision for a national financial contribution to the programme.
2. At a first stage, the OIE establish a mechanism whereby SEAFMD Member Countries be requested to provide additional financial support to the SEAFMD programme, equivalent to 10 per cent of their respective OIE annual contributions.
3. The Director General be responsible for the execution of the present recommendation, including its presentation to relevant Member Countries.

(Adopted by the OIE Regional Commission for Asia, the Far East and Oceania on 30 November 2001)