



Major Diseases' Situation in South Asia (October - December 2016)

FOOT AND MOUTH DISEASE (FMD)

The SAARC countries are endemic for FMD. Following is the updates on FMD status presented by the countries during the 3rd regional FMD-PCP roadmap meeting held in Colombo, Sri Lanka from 14 to 16 December 2016:

Country	Number of outbreaks	Laboratory Diagnosis			
		National Laboratories		Sub-serotypes characterised	
		Number of samples submitted	Number of samples positive	Serotypes detected/circulating (No. or % of Samples)	
Afghanistan (2016)		159	122	O (84), Asia-1 (31), A (4), Unknown (5)	Serotype O ME-SA – PanAsia2 ^{ANT-10} ; Serotype A ASIA – Iran05 ^{FAR-11} ; Serotype Asia1 ASIA - Sindh08
Bangladesh				O, A and Asia 1	Type O (ME-SA)
Bhutan (2016)	16	22	22	O	
India (2015-2016)	106	671	463	O (449), A (11) and Asia-1 (3)	O/ME-SA/Ind2001d O/ME-SA/Pan Asia Asia-1 As/sub-lineage CII (Group VIII)
Nepal (2014 – 2016)	153			O	
Pakistan (2016)	1126			O (27.4%), A (16 %), Asia-1 (30.7%) and mixed type (2.4%)	
Sri Lanka (2016)	21			O	

PESTE DES PETITS RUMINANTS (PPR)

The SAARC countries are endemic for PPR except Sri Lanka which is historically free from PPR. None of the SAARC countries officially reported incidence of this disease during the reporting quarter (October- December 2016).

HIGHLY PATHOGENIC AVIAN INFLUENZA (HPAI)

India and Bhutan reported incidence of the HPAI to OIE during the period from October to December, 2016. The details of the outbreaks are as under:

Bhutan

According to the notification to OIE by Government of Bhutan, the highly pathogenic avian influenza (H5N1) outbreak was reported on 10 Oct 2016 in Alubari- Wangkha village under Bjacho geog in Chhukha. The outbreak occurred in a backyard poultry farm and resulted in death of 13 birds. The disease was confirmed by real time PCR at National Centre for Animal Health Laboratory, Serbithang and also at OIE Reference Laboratory in India.

India

HPAI (H5N1): The Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture & Farmers Welfare confirmed two outbreaks of HPAI (H5N1) on 28 December 2016 in Keranga, Odisha. The National Institute of High Security Animal Diseases (NIHSAD), Bhopal confirmed the presence of H5N1 virus by using RT-PCR and Real time RT-PCR on 25 December 2016 in the samples earlier submitted by the state department. The birds and crows were affected in the 1st and 2nd outbreaks respectively. Of the total 2242 susceptible birds 19 were affected in the first event and 23 crows were found dead in the second event. Besides culling of birds in affected villages, surveillance around them in a radius of up to 10 kilometres have been implemented as envisaged under current national HPAI control strategy.

HPAI (H5N8): Highly pathogenic avian influenza infections among wild and domestic birds due to H5N8 virus strain have been reported for the first time from India or the South Asia sub-continent between October and November 2016 in the states of Delhi, Kerala, Haryana, Punjab, Karnataka, and Madhya Pradesh. The trail of events is as under:

State	Locality	Date reported	Domestic/wild	Species
Delhi	Delhi	17/10/2016	Wild	Rosey Pelican, duck, painted stork
Kerala	Thakazy	19/10/2016	Domestic	ducks
Madhya Pradesh	Gwalior	21/10/2016	Wild	painted stork
Kerala	Ramkary	23/10/2016	Domestic	poultry?
Punjab	Damerheri, Rajpura, Patiala	23/10/2016	Wild	ducks
Haryana	Hisar	31/10/2016	Domestic	ducks
Karnataka	Itagi, Hospet, Bellary	05/11/2016	Domestic	ducks

Delhi and Madhya Pradesh: The National Institute for High Security Animal Diseases (NIHSAD), Bhopal, India, a OIE Regional Reference Laboratory, detected HPAI virus (H5N8) infection in wild birds in Delhi and Gwalior Zoos on 23 October 2016. Government of India issued H5N8 infection alert in wildlife and bird sanctuaries with necessary guidelines to the State Governments and the Zoo Authorities on control and

containment of the infection in zoo and other captive birds. Molecular characterization studies carried out subsequently by NIHSAD suggest that both the zoo bird virus isolates are 7:1 reassortant of the Tyva Republic and Uvs-Nuur Lake H5N8 viruses reported previously with different gene constellations. A median-joining network analysis indicated that, even though the contemporary H5N8 viruses isolated from wild birds in Qinghai Lake, Uvs-Nuur Lake and Tyva Republic are not the direct ancestors, closely related precursor gene pools are source of the H5N8 viruses that caused outbreaks in waterfowls at the two zoos in India (<http://dx.doi.org/10.3201/eid2304.161886>).

Kerala: Almost simultaneously, two confirmed outbreaks of HPAI (H5N8) were reported among ducks in two separate farms in Kerala state. More than 21131 birds maintained on these farms were destroyed while following current AI control policy. The first event started on 19 October which caused death of 100 birds on a farm in Thakazhy and culling of 14648 birds. The second event that began on 23 October affected 15 birds on a farm in Ramankary, and resulted in culling of 6,483 birds to contain the outbreak. Both events were confirmed for the presence of HPAI H5N8 virus on 24 October 2016. The source of the infection remained unknown.

Haryana: The HPAI virus (H5N8) has also been confirmed in ducks maintained in the Blue Bird Tourist Complex, Hisar, Haryana. The outbreak started on 31 October and was confirmed on 3 November 2016. Of the 958 susceptible birds, 14 birds died of H5N8 and remaining 944 birds were culled as per policy. The source of the infection remained unknown.

Punjab: The samples from two ducks found dead in an industrial unit's reservoir in Damenheri, Rajpura, Patiala, Punjab tested positive for highly pathogenic avian influenza (H5N8). The disease was detected on 23 October and confirmed on 25 October 2016. Of the 43 susceptible birds, 10 died of HPAI (H5N8) and remaining 33 birds were culled following national control policy. The source of the infection is unknown.

Karnataka: A fresh outbreak of HPAI (H5N8) was reported among domestic ducks in Itagi, Hospet, Bellary of Karnataka state on 05 November, 2016, which was eventually confirmed on 10 November, 2016. Of 1593 susceptible birds, 900 birds died of HPAI (H5N8) virus and the remaining 693 birds were culled. The source of the infection is unknown.

RABIES

Sporadic cases of rabies have been reported invariably by all the countries in South Asia. Bhutan has officially reported cases of rabies in Samtse Geog (Block) in Samtse Dzongkhag, Norbugang Geog in Sarpang Dzongkhag, Rangjung, Radhi and Orong Geogs Blocks Trashigang Dzongkhag.

Regional Meetings and Workshops

3RD FMD ROADMAP MEETING FOR SAARC MEMBER STATES, 14-16 DECEMBER 2016, COLOMBO, SRI LANKA

To align the global strategy for the control of foot-and-mouth diseases (FMD) in South Asia, the 3rd FMD Roadmap Meeting for SAARC Member States was organized by the Food and

Agriculture Organization of the United Nations (FAO) and the World Organization for Animal Health (OIE) in partnership with SAARC Secretariat from 14 to 16 December 2016 in Colombo, Sri Lanka. The three-day meeting had gathered delegates from 7 Member States of the SAARC region and reviewed the regional and individual country progresses made under the progressive control pathway (PCP) of FMD in the region. The objectives of the regional meeting were: to provide training on the PCP tool and on the implementation of the FMD global strategy at national level; to present the current FMD situation in the region including distribution and prevalence of virus types/strains/genepool vis-à-vis vaccine strains in use and to review the regional vaccine production and procurement capacity; to assess the SAARC Member States status of progress along the FMD Regional Roadmap previously defined; and, constitution of a Regional Advisory Group (RAG) under the SAARC Chief Veterinary Officers (CVOs) Forum to monitor and follow up the regional roadmap for FMD control.



Participants of the 3rd FMD Roadmap Meeting for SAARC Member States, Colombo

The meeting was composed of several technical sessions, e.g., introduction of PCP-FMD principles and implementation, sharing global FMD situation and regional roadmap, cross-border coordination for movement control, regional epidemiology and laboratory networks, and post-vaccination monitoring, and regional priorities. In addition, each country made a presentation on the status of FMD and the progress made in their control efforts.

During the meeting, it was agreed that RSU and SAARC shall continue their excellent coordination and facilitation role to better serve all members states in the region towards control of FMD and other priority diseases.

Around 35 participants attended the meeting, including 3 CVOs, FMD laboratory or epidemiological experts from seven SAARC countries (except Maldives), key technical experts of FAO, EU-FMD and OIE, laboratory experts from the FMD World Reference Lab in Pirbright, UK, and SAARC Regional Diagnostic Lab (RDL) in India, as well as additional local government officials from Sri Lanka.

SAARC SPECIAL SESSION ON AMR FROM 10-11 OCTOBER 2016, BANGKOK, THAILAND

SAARC Special Session on AMR was held in Bangkok upon recommendation of 5th SAARC CVO's meeting regarding developing a SAARC Call for Action for Antimicrobial Resistance.

Six of the eight SAARC MSs besides consultants/experts/representatives of FAO-RSU, FAO-RAP, OIE and SAARC Agriculture Centre (SAC) attended the meeting.



Participants of the SAARC Special Session on AMR, Bangkok

SAARC Secretariat, SAARC CVOs and FAO-APHCA stressed upon the importance of addressing the AMU/AMR, with special emphasis on South Asia, to implement the political declaration of the high-level Meeting of the United Nations General Assembly (UNGA) on 21 September 2016 and the directives of the Global Health Security Agenda (GHS). The meeting developed an action plan comprising of a set of doable initiatives with timelines between October, 2016 to September, 2017 considering the following four objectives of the FAO's Action Plan on AMR:

- Improve awareness and advocacy on AMR and related threats
- Develop capacity for surveillance and monitoring of AMR and AMU in food and agriculture
- Strengthen governance related to AMU in food and agriculture
- Promote good practices in food and agricultural systems and the prudent use of antimicrobials
- The implementing partners of this Action Plan are the SAARC CVOs, FAO, OIE, etc.

FAO APHCA/OIE REGIONAL WORKSHOP ON AMR, 12-13 OCTOBER 2016, BANGKOK, THAILAND



Group photo taken at FAO APHCA/OIE Regional Workshop on AMR, Bangkok

The FAO APHCA/OIE Regional Workshop on AMR in Asia Pacific was jointly organized by OIE Asia Pacific and FAO APHCA from 12-13 October, 2016. Forty-six participants including experts from USA, Netherlands, Japan and Republic of Korea and representatives from 20 countries and partner organizations attended the workshop.

The Pharma Industry sector represented by M/s Elanco gave the Industry's perspective on the issue of AMR and AMU. The meeting identified five actionable key areas on AMR for the Asian countries. The meeting furnished a set of recommendations which inter alia encouraged APHCA delegates to get involve in the development and implementation of national action plans on AMR besides supporting prudent use of antimicrobials in livestock production, sharing resources (information on policy and technical operations, surveillance data, best practices, and expertise) and capacity building initiatives. The meeting also encouraged the countries in the Asia Pacific region to adopt benchmarks for policy and regulatory frameworks from countries like USA, Netherlands, Japan and South Korea who have functional AMU/AMR policy and regulatory frameworks in place for planning future guidelines.

CONSULTATION WORKSHOP ON AMR SURVEILLANCE 24 – 25 NOVEMBER 2016, BANGKOK

A consultation meeting was organized by FAO-RAP to discuss and agree to the practical applications of the AMR surveillance plan, options and protocols to conduct surveillance and diagnosis. The experts from SAARC and ASEAN countries and the regional centers from FAO, US-CDC and private stakeholders attended the workshop. A discussion paper on AMR/AMU surveillance developed by a consultant in this regard was discussed at length and was agreed to further refine it following written inputs from the participants. Surveillance plan for monitoring of Salmonella, E-Coli, Enterococcus and Campylobacter in food animals while prioritizing at least one species was recommended to be considered for implementation by the regional countries. The quarterly targets for the countries were also set and agreed for the year 2017. The guidelines were agreed to be developed and piloted for various components of the surveillance system for AMR during 1st and 2nd quarter of 2017. Meanwhile collection of samples should be continued using both active and passive surveillance sampling protocol. The composition of advisory group on AMR and expectation from this group were discussed and agreed in the meeting.

WHO REGIONAL MEETING ON SCALING-UP CAPACITIES IN EMERGENCY RISK MANAGEMENT IN SEAR COUNTRIES, 29 NOVEMBER - 01 DECEMBER 2016, NEW DELHI, INDIA

The meeting aimed at sharing the status and progress made by WHO Health Emergency (WHE) programme and formulating recommendations and action plans both for the countries and the WHO-SEARO to scale up the emergency risk management preparedness and response in the region.



Participants of the WHO Regional Meeting, New Delhi

The meeting reviewed a range of topics including global health emergency situation, the International Health Regulation (IHR), causes of failures of current health systems, Interagency Standing Committee (IASC), WHO as an operational organization for health emergencies, World Bank Pandemic Emergency Financing Facility (PEF), Sustainable Development Goals (SDG), Climate Change and Paris Agreement, etc..

FAO-RSU gave an oral report in the meeting on FAO's role in One Health (OH) approach and how FAO is promoting cross-sectoral approaches to infectious disease management. A need for establishing institutions in the countries to develop a sustainable preparedness mechanism was proposed rather than adopting a reactionary approach in the event of disease emergencies. Institutionalization of an OH mechanism by establishing a Secretariat with ex-officio focal points to be seconded by key Ministries/Departments was proposed by RSU in the meeting.

National Level Meetings, Workshop & Trainings

KTC REAL TIME TRAINING COURSE ON FMD HELD IN KATHMANDU, NEPAL

FAO, European Commission for the Control of FMD (EU-FMD) and Department of Livestock Services Nepal jointly organized three KTC real time training courses on FMD during the last quarter of 2016 in Kathmandu Nepal. Each cohort consisted of 16 veterinarians belonging to Australia, France and government of Nepal and/or people from animal industry in the aforementioned countries. Each course comprising of five day including two field days was facilitated by the trainers from EUFMD. The training modules covered epidemiological investigation, clinical diagnosis, risk factors and economic impact of FMD in real-time FMD outbreak situation in Nepal.

REFRESHER TRAINING FOR VETERINARY LABORATORY TECHNICIANS 7 - 9 NOVEMBER 2016, BHUTAN

National centre for Animal Health, Serbithang organized a refresher training for veterinary laboratory technicians to keep synergy in developing diagnostic technology and its users. About 36 laboratory technician from across Bhutan associated with diagnostic laboratories were equipped with lab diagnostic skills and new knowledge.

OFFLU (OIE-FAO Global Network of Expertise on Animal Influenza) releases fresh guidelines and recommendations for HPAI surveillance (H5N8)

Although HPAI (H5N8) has been circulating in wild birds and later in poultry since 2014 and this strain has not incriminated any human so far but a group of AIV (H5N6) having the same reassortant clade of 2.3.4.4 has claimed certain human deaths besides affecting the wild birds, captive animals and poultry. The co-circulation of AI viruses has thus made epidemiology very complex to understand and the countries at risk are specifically urged to conduct the targeted AIV surveillance in wild life and share the findings immediately with the international community to offer appropriate response.

The details of the guidelines and recommendations on AI surveillance can be accessed under OFFLU and WHO Website at the links:

http://www.offlu.net/fileadmin/home/en/resource-centre/pdf/H5N8_OFFLU_Statement.pdf;

http://www.offlu.net/fileadmin/home/en/resource-centre/pdf/Eurasian_H5_RRT-PCR.pdf;

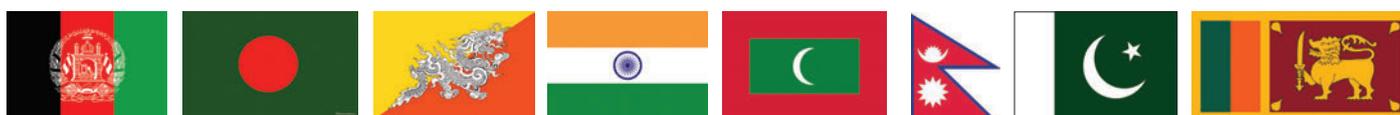
A brief report of RSU activities for 4th Quarter (October – December), 2016

During the 4th quarter of the year 2016, a number of key activities and events were planned, implemented and accomplished. These activities include regular meetings with SAARC secretariat to discuss the ongoing and future activities such as EpiNet Forum Meeting in India, CVO's meeting in Pakistan or Bhutan, PCP-FMD workshop for SAARC in Sri Lanka, PE training & Cross-border Meeting in Nepal; Review Meeting of the FAOR Office regarding Trust Fund and Annual Projects; Meeting with incoming DG-DLS, Nepal; preparation of new project proposals.

RSU-SAARC also supported technically and operationally in developing PPR national strategies for Bhutan and Nepal. The routine update of RSU website and publication of Weekly South Asia Animal Disease e-information and quarterly Information bulletin were planned and executed.

Upcoming events

- First SAARC EpiNet Forum Meeting, 27-28 February 2017, New Delhi, India.
- Cross Border Consultation Meeting among the Gangetic Plain Countries (Bangladesh, Bhutan, India, Nepal), 27-28 March, 2017, Kathmandu, Nepal



Food and Agriculture
Organization of the
United Nations



Japan
Fund for
Poverty
Reduction

RSU-SAARC

Food and Agriculture Organization of the United Nations
P.O. BOX 25, UN House, Pulchowk, Kathmandu, Nepal
Tel: +977-1-5535312, 5009074, 5009065
Fax: +977-1-5009074
Email: info@rsu-saarc.org
www.rsu-saarc.org