Food and Agriculture Organization of the United Nations

Regional Support Unit for South Asian Association for Regional Cooperation (RSU-SAARC)

Information Bulletin

Major Diseases Situation in South Asia (October-December 2015)

Foot and Mouth Disease (FMD)

FMD is an endemic disease in the sub-region and several countries have experienced new outbreaks. Some countries have shared outbreak data and reports with our Regional Support Unit. We would like to thank National Centre for Animal Health, and Department of Livestock, Ministry of Agriculture and Forests, Bhutan, (http://www.ncah.gov.bt/) for sharing outbreak reports with us in line with the recommendation of previous CVOs` meetings.

Bhutan

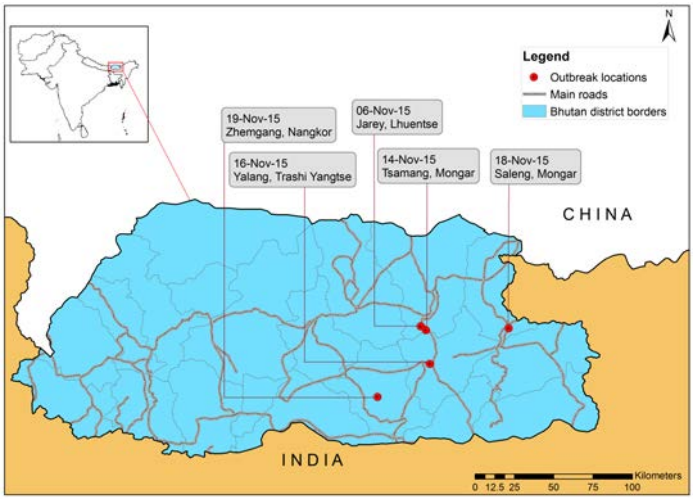
FMD outbreaks were reported in Lhuentse, Mongar and Trashiyangtse Dzongkhags (districts). During the reporting period , the first outbreak was reported in Jarey geog (block) under Lhuntse Dzongkhag (District) on 6 November 2015 in the migrating cattle herds from Bumthang Dzongkhag. It was most likely that the 5 herds migrating from Ura geog under Bumthang Dzongkhag were carrying the virus as Tang and Ura geogs of the Dzongkhag had reported the disease in July 2015. The disease was reported after weeks' time of the 140 heads of cattle migrating near the village. Nearly 80% of the animals came down with the disease with case fatality of 0.71%. On 14 November 2015 the outbreak was reported from the same Geog where three herds were affected with an apparent morbidity of 73.3% but no case fatality was reported. Jarey geog has 1097 susceptible cattle population.

On 14 November 2015 another outbreak was reported from Tsamang Geog under Mongar dzongkhag, which is just adjacent to Jarey Geog of Lhuentse Dzongkhag. The source of the disease is suspected to be from the animals affected in Jarey geog. Alert was sounded for the other neigbouring geogs of Tsakaling, Challi, Tsamang and Mongar geogs under Mongar Dzongkhag and Umchey, Ladrong and Pam of Jarey geog, Autso and Metsho geogs under Lhuentse Dzongkhag respectively.

On 24 November 2015 a suspected outbreak of FMD was reported from Yallang geog under Trashiyangtse Dzongkhag although the primary case was reported to have been observed on 16 November. The geog is located at the far north-east of the country close to neighbouring Indian States of Arunachal Pradesh. An apparent morbidity of 36.4% was observed and the source of the virus was suspected to be from the neighbouring Tawang district of the State of Arunachal Pradesh, India where the disease had been reported earlier. Another suspected case of the outbreak was also reported from Nangkor geog under Zhemgang Dzongkhag on 19 November. No other details are available.

The FMDV serotypes 'O' was involved in the outbreaks from Lhuenste and Mongar Dzongkhags and the sample from TrashiYangtse yet to be typed.

Following control measures were implemented: Ring vaccination in the high risk zones, movement restriction of animals in and out of affected areas, interim ban on the trading of livestock products such as beef, pork, cheese and butter, isolation of the infected animals, awareness program on the disease, screening of the animals for NSP antibody, and treatment of affected animals. Map depicts outbreak locations and road network.



Peste des petits ruminants (PPR)

PPR remain as an endemic disease in Afghanistan, Bangladesh, India and Nepal. Preventive vaccination is being carried out annually against PPR in the region. Bhutan has last reported PPR outbreaks in 2014 after its first appearance in 2010. Maldives has recorded an outbreak in imported goats only in 2009. Sri Lanka has never recorded PPR but clinical surveillance is in place for PPR and no vaccination is carried out against the disease.

Highly Pathogenic Avian Influenza (HPAI)

The sub-region remains free of H5N1 HPAI since August 2015. There were no any HPAI outbreaks officially reported from India since the last outbreak recorded on 24 April 2015 at Thorrur, Hayathnagar, Rangareddy, and Andra Pradesh. This outbreak was resolved on 30 July 2015 and officially notified to OIE. Bhutan last reported an HPAI outbreak on 3 April 2015 which subsided by end of the same month. Bangladesh and Nepal have not recorded any outbreaks during this year. No new outbreak of HPAI was reported from any other country in the region. Sri Lanka and Maldives have never recorded HPAI outbreak to date and maintain HPAI free status. HPAI outbreaks reported in the region from 2005-2015 is shown in the table. (Source: WAHIS/OIE). After 2012, number of HPAI outbreaks reported has decreased considerably in the sub-region.

Year	Afghanistan	Bangladesh	Bhutan	India	Maldives	Pakistan	Nepal	Sri Lanka
2005								
2006	13			7		12		
2007	9	62		1		38		
2008		220		70		1		
2009		31					2	
2010		30	5	5			8	
2011		167		4			13	
2012		22	14	12			210	
2013		2		3				
2014				7			1	
2015			1	5				
Total outbreaks	22	534	20	114	0	51	234	0

Message from New RSU Coordinator for SAARC

Dr Santanu Bandyopadhyay

South Asia, comprising 8 countries, viz, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, is an unique blend of diverse geography, climate, culture, ethnicity, language etc. But one common denominator is that livestock contribute substantially to the national GDPs of most of these countries, except in Maldives, where captured fisheries is a major agricultural and livelihood activity. Livestock rearing is an important and often the only livelihood option, particularly for the marginal or landless rural population including the transhumant and nomadic tribes spread across the region. However the traditional practice of livestock rearing combined with low input production system prevailing among these section of the livestock farmers, Trans-boundary Animal Diseases (TAD), e.g., FMD, PPR, Avian Influenza, Anthrax, etc., cause huge economic losses to the livestock sector in the region.

In some parts of the region, livestock and human density per unit area is highest in the world, which has added to the threat of zoonosis including emergence of new pathogens in the human-animal interface. Therefore control of TADs is absolutely essential for sustaining livestock-based livelihood option as well as to ensure food security for the people of this region and to prevent any threat to the public health. Unfortunately, TADs are not possible to control in any of the countries in the region with a solo effort as most countries, except Sri Lanka and Maldives, share common boundaries between them and informal trade of livestock or its products exists through many of these borders. It is also known that the TADs do not recognize geographical boundaries. With the present day frequent and fast movement of man, livestock, food and other materials, risk of transmission of highly pathogenic agents across borders and even to distant island countries has increased several folds. Global experience has shown that the TADs are best controlled through regional harmonized approach, which brings in a win-win situation for each country in the region. Global eradication of rinderpest,, the most dreaded livestock disease ever to exist in South Asia, was successful only through well-coordinated regional and global efforts. Realizing that the control of the major TADs including those having zoonotic potential will require establishment of network between the countries of South Asia particularly in epidemiology and diagnosis of these diseases, FAO has promoted the establishment of the Regional Support Unit in the South Asian Sub-region. The existence of a vibrant regional cooperation platform in the form of SAARC has made the functioning of the RSU possible and worthwhile. Over the last five years, the RSU has contributed significantly in the management of TADs in the region, particularly in the preparedness and prevention of highly pathogenic avian influenza by strengthening strategies for disease control, human resources, laboratory capacity, information sharing and in overall trust building for control of the major TADs prevailing in the region. With these installed capacities in the region, it is now the time to consolidate the efforts in order to support the countries for step-wise improvement in the progressive control pathways, for two major TADs, e.g., FMD and PPR, keeping in line with the global pathways. Also a constant and collective vigil will require to be maintained against emerging threats of economic or zoonotic importance, e.g., avian influenza, rabies, swine fever/ PRRS etc.

The current all-encompassing project of the RSU, entitled, "Regional Capacity Development for Regional Cooperation on Food Security through Control of TADs in South Asia", which has been launched in August 2015 in partnership with the SAARC and Asian Development Bank, will ensure that the efforts of the past several years on disease monitoring and control through regional approach will not go in vain and will be sustained. The project also envisages to encourage the member countries in general and SAARC in particular, to sustain the activities of the RSU through the own initiatives of the member countries. The RSU here in close collaboration with SAARC will always be ready to provide technical back-stopping to the Member-countries and help in bringing the key stakeholders in the region under one platform for information and experience sharing through effective networking. In this endeavor, I and my team in RSU look forward to the active cooperation from the Member countries with the full assurance that the trust they have established with the RSU through the cooperative spirit of SAARC, will be fully honoured and served.

My best wishes to all the stakeholders of the region associated with the monitoring and control of important TADS for a very **Happy New Year**.

New Staff

RSU Coordinator: Dr Santanu Bandyopadhyay

Dr Santanu Bandyopadhyay is a virologist and holds a Ph.D in Animal Virology from Cambridge University, England. Apart from his contribution in R&D of important Trans-boundary animal diseases in South Asia, he was the Animal Husbandry Commissioner of the Government of India from 2004-2009. He has worked for FAO as Senior Technical Coordinator and Team Leader of FAO ECTAD in Hanoi, Vietnam between 2009 to 2012. Prior to joining as the RSU Coordinator, he was a Member of the Agricultural Scientists Recruitment Board of the Indian Council of Agricultural Research of the Ministry of Agriculture, Government of India.

National Operations and Finance Officer: Ms Mamata Chaudhary

Mamata Chaudhary has joined as a National Operations and Finance Office under *FAO/ADB/SAARC supported project*. She has a BBA and a MBA degree from Nepal. She worked as a Procurement Officer in National Healthcare P. Ltd during 2005 - 2008, followed by Procurement and Admin. Specialist in Chemonics International during 2008-2010. Then worked as Admin and Finance Officer in IDE Nepal (2010-2014) and UNDP/LRP.

Meetings and Workshops

Second Regional Meeting to Support and Sustain Veterinary Epidemiology Capacity, Thailand

The second regional meeting to support and sustain veterinary epidemiology capacity was held in Bangkok from 11-13 November 2015. The objectives of the meeting were to: review progress in human resource and institutional epidemiology capacity development at country and regional level, share experiences and lessons learned from countries, the sub-regions (ASEAN and SAARC), and the region, identify specific opportunities to apply these lessons and discuss ways forward for building functional national and regional epidemiology capacities and networks. The meeting was attended by approximately 70 participants including Chief Veterinary Officers, senior technical staff from South, Southeast, and East Asian countries as well as key stakeholders especially FAO, USAID, OIE, regional organizations and academic institutes. Khadak Singh Bisht, RSU Assistant Coordinator and Pasang Tshering, REC Coordinator attended the meeting and actively engaged in the discussion on how to sustain and support veterinary epidemiology capacity development in the region.

The outcomes of the meeting included six recommendations to support veterinary epidemiology capacity building within the region. A number of strategies were shared and discussed to help participants achieve these objectives based on the successful experiences of others. The recommendations were:

-To continue to support applications of capacities that have been developed and to publicize the impacts of veterinary epidemiology capacity development, including publications works from veterinary epidemiology capacity building programs in local and international journals.

-To continue to strengthen veterinary epidemiology capacities based on competencies and skills through a harmonized approach, engaging stakeholders including academia and private sector.

-To continue to strengthen coordination among countries and partners to ensure efficient uses of resources and alignment with existing strategies.

-To support evidence-based veterinary epidemiology capacity development at all levels using available tools, such as Veterinary Epidemiology Mapping Tool (EMT), and to share results.

-To continue to advocate with decision-makers to enhance opportunities and incentives for trained personnel.

-To foster collaboration between sub-regions (ASEAN and SAARC) to share experiences, information, and resources to improve veterinary epidemiology capacity in the region.

A side-line meeting was organized with the CVOs of SAARC countries, SAARC Director, staff representing FAO RAP and RSU-SAARC to discuss recommendations of the above meeting for the way forward and other regional and project related issues.. After a short opening remark by the SAARC Director, the current Chair of SAARC CVOs, Dr Keshav Premy took over the session.

The main recommendations from the meeting included; that the Member States followed up on the six recommendations from the meeting to 'Support and Sustain Veterinary Epidemiology Capacity' particularly on supporting evidence-based epidemiology capacity development using available tool such as Veterinary Epidemiology Mapping Tool (EMT); and inclusion of veterinary epidemiology in the curricula of academia and tertiary veterinary training centres/institutions and conducting of advocacy activities with decision-makers to enhance opportunities and incentives for trained personnel. The other recommendations included follow up on the realization of the 'SAARC Working Group on SAARC Animal Health and Disease' decided during the earlier CVO meeting and SAARC Secretariat to explore for additional funding for some project activities in view of the limited budget available under the current project. The third SAARC EpiNet meeting proposed by the project was well received by the participants and assured full support from the Member States. The SAARC Secretariat was to facilitate the circulation of the recommendations under the signature of the current SAARC CVO to all CVOs in the region.

Regional Technical Consultation on Zoonotic Influenza Surveillance in Asia, Thailand

ECTAD (Emergency Centre for Transboundary Animal Diseases) office of the FAO Regional Office for Asia Pacific organized the meeting on Regional Technical Consultation on Zoonotic Influenza Surveillance in Asia from 23 - 25 November 2015 in Bangkok, Thailand. Approximately 45 participants attended the meeting from global, regional, country offices of FAO and observers and other resource persons. The aim of this workshop was to discuss zoonotic influenza activities envisaged under EPT -2 in order to ensure regional harmonization and alignment. This workshop provided a platform to share experiences on surveillance activities at national and regional levels, and to discuss systematic and integrated approach to surveillance. The meeting also discussed and agreed on the objectives of the overall surveillance such as 1) Early detection and response 2) Identification of risks of introduction and spread to plan for progressive control and monitoring and evaluation of control strategies 3) Identification of emergence of potentially high-impact and zoonotic influenza viruses 4) Demonstration of disease freedom 5) Monitoring vaccination program and vaccine efficacy. Khadak Singh Bisht, Assistant RSU Coordinator attended this workshop to represent ECTAD Nepal.

Validation workshop on One Health Strategy Framework Nepal

A workshop to validate One Health Strategy Framework for Nepal was jointly organized by Department of Livestock Services, Department of Health Services of the Government of Nepal and ECTAD /RSU-SAARC and FAO Nepal on 20 November 2015. The key objectives of the workshop were i) to discuss draft One Health Strategy among inter and multi-sectorial stakeholders and validate for governmental approval; ii) to recommend the way forward for the implementation of the One Health Strategy in Nepal. The participants involving the secretaries and officers from the Ministry of Agriculture Development and Ministry of Health and Population, representatives from the Ministry of Forest and Soil Conservation, FAO, WHO and various other NGOs and INGOs acknowledged the need for 'One Health' initiative in Nepal.

The workshop validated "One Health Strategy Framework for Nepal" and recommended for the following actions for the timely approval and implementation of One Health Strategy in Nepal:

- Advocate for a One Health approach through all stakeholders in relevant sectors.

- Establish a database of organizations/institutions/individuals for the collaborative approach on one health activities in Nepal.
- Support, encourage and establish a network among government, non-government, academia and other organizations concerned on one health issues in animal health, human health, environment and wildlife sectors.
- Identify and nominate the focal point for one health in respective directorate/departments.
- Sensitize the government on the necessity of validating one health strategy through further workshops and meetings.
- Identified DAH/EDCD for taking initiatives for the amendment of the document and approval process of the One Health Strategy as per the prevailing legal provisions.
- Recognized WHO, FAO, USAID, EU, One Health Asia Program, NZFHRC as the possible development partners for supporting the approval of the One Health Strategy and recommended to seek further support from their side for harmonizing the one health strategy as per international standard and its implementation in scientific approach.
- Work to design a plan of action for the approval and implementation of the strategy.

Seated from left, WHO Representative, Secretary Ministry of Agriculture Development, Secretary Ministry of Health and Population and FAO Representative, Director General Department of Livestock Services, Nepal (not in the picture) at the meeting .

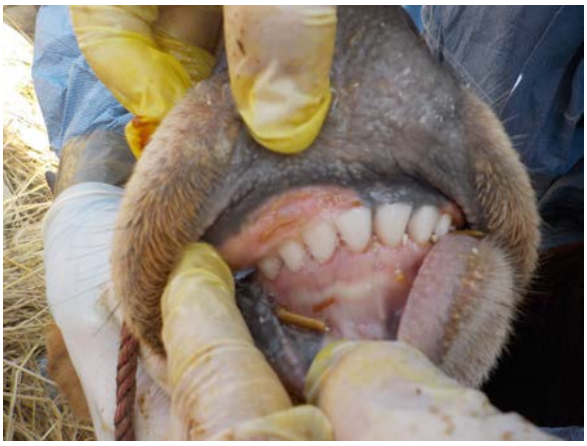
EU-FMD Funded Real-time FMD Training in Nepal

Two real-time training courses on Foot and Mouth Disease (FMD) were conducted in Kathmandu from 30th November to 11th December 2015. These two trainings were organized by the European Commission for the Control of *Foot-and-Mouth Disease (*EU-FMD) and the FAO RSU/ECTAD Nepal team, with the collaboration of Department of Livestock Services (DLS) of the Government of Nepal. The training courses were financially supported by the Department of Agriculture of the Government of Australia.

Facilitated by four international FMD experts and one national consultant, the training courses consisted of classroom lectures, interactive discussions on introduction, pathogenesis, laboratory diagnosis, biosecurity and the investigation of FMD in the field, followed by epidemiological survey in the outbreak area. In total, 25 international and ten national participants were trained. The participants were basically veterinarians and livestock industry personnel from Nepal, Australia and New Zealand.

During the field exercise, the trainees also got opportunities to exchange the knowledge about the animal health problems and the farming system with the local farmers. Moreover, the advice on the care and treatment of the sick animals by the trainees were well received by the livestock owners.

Trainees examining for FMD lesions in Cattle during the training



Ruptured oral vesicles of cattle

National Workshop on Progressive Control Pathway for FMD (PCP-FMD) in Nepal

A two-day workshop on Progressive Control Pathway for FMD (PCP-FMD) organized by FAO RSU/ECTAD team and the Department of Livestock Services (DLS), Nepal was successfully concluded in Kathmandu on 15 December 2015, following the two real-time trainings on FMD. The workshop was participated by 24 government officers, laboratories and directorate under DLS and four experts from FAO and EU-FMD. The workshop successfully finalized key activities to the National FMD Control Strategy of Nepal for 2016.

The Progressive Control Pathway (PCP) is the approach developed by an FAO team for classifying country progress in FMD risk management. In this approach there are criteria for describing the FMD risk management position of countries that are not-free of FMD. It has led to a tool that can be applied to measure (and communicate) country progress within regional roadmaps, and aims at starting countries along a pathway of activities from measuring risk to risk management, covering the stages before they could apply for recognition of disease freedom. (Source: FAO). More information on PCP-FMD can be accessed from:
http://www.fao.org/ag/againfo/commissions/eufmd/

Regional Support Unit for SAARC and FAO ECTAD country office for Nepal wish all our stakeholders a

Very Happy New Year 2016

Up Coming Events

- Regional Epidemiology Networking Meeting (SAARC EpiNet), 2-3 February 2016, Kathmandu, Nepal
- Annual Regional ECTAD Meeting, 14-18 March 2016, Bangkok, Thailand
- PPR Road Map Meeting for SAARC, 11-12 April 2016, Kathmandu, Nepal
- SAARC CVOs Meeting, 13-15 April 2016, Kathmandu, Nepal

Food and Agriculture Organization of the United Nations

SAARC

ADB

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