



The Regional Support Unit wishes its readers a Very Happy New Year 2013

Major diseases situation in the Sub-region

Highly pathogenic avian influenza (HPAI) H5N1 outbreaks

Bangladesh

No outbreaks were officially reported from Bangladesh during January-February 2013.

Bhutan

In southern part of Kingdom of Bhutan, HPAI-H5N1 outbreak was reported among free ranging birds in southern Dangana and Sarpang districts in reporting period. Up to 18 January 2013 a total of 76 poultry died in the affected area. Trace-back investigations revealed that there were poultry deaths in the area from 14 January 2013, which were not reported immediately to the local veterinary authorities. The disease was confirmed through real-time PCR at the National Veterinary Laboratory, Thimphu on 16 January 2013 when four carcasses were positive to tests. Subsequently, the disease was confirmed by OIE Reference Laboratory at High Security Animal Diseases Laboratory (Bhopal, India) on 31 January 2013.

On 8 February 2013, outbreaks of HPAI-H5N1 were reported in Namkhaling, Pelrithang & Chuzargang, Gelephu, Chuzagang and Sarpang of the country and later reported to OIE (www.oie.int).

India

The last outbreak of HPAI-H5N1 was reported in a turkey unit of Central Poultry Development Organization, Hessarghatta, Bangalore on 25 October 2012. Subsequently, control and containment measures were adopted in affected area including post operation surveillance (POS). As there was no report of HPAI outbreak in India in intervening three-month time, India declared itself free of avian Influenza on 13 February 2013 and communicated to OIE (www.oie.int).

However, in the state of Bihar (adjoining West Bengal), a new HPAI-H5N1 outbreak was recorded on 27 February 2013 at Madhubani, Lanka Tola, district Purnea. Out of 7000 susceptible birds a total of 338 birds died in government owned Regional Poultry Farm. (www.dahd.nic.in)

A positive case of H5N1 virus was detected in a wild bird sample collected on 22 January from Chilika Wildlife division in Balugaon, Khordha of Odisha state. (www.dahd.nic.in).

Nepal

The first HPAI-H5N1 outbreak of 2013 was reported on 2 January at Kosheghari of Pokhara Sub Metro Polis-17 in Kaski district.

This was followed on 6 January by three successive outbreaks at Simpani of Pokhara Sub Metro Polis-1 in Kaski district; followed by two outbreaks at Batulechaur of Pokhara Sub Metro Polis-16 in Kaski district. Two more outbreaks were reported on 6 January in the same Kaski district at Sedibagar of Sarangkot-7 village. All the outbreaks in Kaski district were in intensively raised commercial broiler farms. On 8 January the location of outbreak shifted to outskirts of Kathmandu in chickens raised in backyard system at Manohara Phat of village Madhyapur Thimi-16 in Bhaktapur district. (source: www.oie.int)

Beginning 4 February, four outbreaks were reported from Kathmandu and one from Jhapa districts. (source: www.oie.int)

Nipah virus infection in Bangladesh

During January-February 2013, sixteen human Nipah cases were identified in Bangladesh among them 14 died (mortality rate 88%). These cases were from 11 districts (Gaibandha, Natore, Rajshahi, Naogaon, Rajbari, Pabna, Jhenaidah, Mymensingh, Nilphamari, Chittagong, Kurigram and Kustia). The age distribution of cases was 8 months to 55 years and among them 11 were male and 3 females. Incidentally the two alive patients were between the age of 7 months (male) and 3 years (female). (Source: www.iedcr.org)

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Overall situation of HPAI in South Asia (January 2012-February 2013)

The Regional Support Unit tried to summarize the HPAI situation (January 2012 to February 2013) in poultry and wild birds in the Indo-Gangetic plains sub-region of South Asia in maps and table below. Except for the months of May-June the disease/virus was detected in poultry or wild birds from one or the other country in this region. The H5N1 virus clade 2.3.2.1 remained unchanged during this period.

HPAI Outbreaks occurred in the SAARC region from January 2012 to February 2013

Country	State/Division /Zone	District	Sub-district/Block /Village	Unit	Start date	Type
Table 1. HPAI Outbreaks during January-February 2012						
Bangladesh	Dhaka	Dhaka	Demra	Farm	08/01/2012	CP
Bangladesh	Dhaka	Manikgonj	Shibalaya	Farm	10/01/2012	CP
Bangladesh	Rajshahi	Sirajgonj	Sirajgonj	Farm	19 /01/2012	CP
Bangladesh	Dhaka	Narayangonj	Araihazar	Farm	20/01/2012	CP
Bangladesh	Dhaka	Manikgonj	Jagir	Farm	30/01/2012	CP
Bangladesh	Dhaka	Tangail	Dhanbari	Farm	08/02/2012	CP
Bangladesh	Dhaka	Manikgonj	Manikgonj Sadar	Farm	13/02/2012	CP
Bangladesh	Chittagong	Feni	Dagonbhuian	Farm	15/02/2012	CP
Bangladesh	Dhaka	Gazipur	Jirani	Farm	19/02/2012	CP
Bangladesh	Rajshahi	Nawabgonj	Gomostapur	Farm	22/02/2012	CP
Bhutan	Chhukha	Chhukha	Bjabco	Village	08/01/2012	BYP
Bhutan	Chhukha	Chhukha	Chapcha	Farm	08/01/2012	BYP
Bhutan	Thimphu	Thimphu	Chang	Village	13/01/2012	BYP
Bhutan	Chhukha	Chhukha	Phuntsholing	Village	10/02/2012	BYP
Bhutan	Chhukha	Chhukha	Bongo	Farm	17/02/2012	BYP
India	Odisha	Khordha	Khordha	Village	03/01/2012	BYP
India	Meghalaya	East Garo Hills	William Nagar	Farm	04/01/2012	CP
India	Odisha	Mayurbhanj	Betnoti	Village	06/01/2012	BYP
India	Tripura	West Tripura	Lembucherra	Farm	16/01/2012	CP
India	Orissa	Khordha	Nayapalli	Farm	02/01/2012	CP
India	Maharashtra	Gondia	Sadak Arjuni	----	03/01/2012	Crow
India	Odisha	Mayurbhanj	Keranga	----	03/01/2012	Crow
India	Bihar	Gaya	Fatehpur	----	10/01/2012	Crow
Nepal	Bagmati	Kathmandu	Kathmandu Municip.	----	17/01/2012	Crow
Nepal	Mechi	Ilam/Panchthar	Ilam/Panchthar	Village	18/01/2012	BYP
Nepal	Koshi	Sunsari	Khanar	Farm	19/01/2012	CPL
Nepal	Koshi	Sunsari	Bajraha	Farm	31/01/2012	CPL
Nepal	Mechi	Jhapa	Arjundhara	Village	06/02/2012	BYP
Nepal	Mechi	Jhapa	Charpane	Farm	06/02/2012	CP
Nepal	Mechi	Jhapa	Pathamari	Village	06/02/2012	BYP
Nepal	Mechi	Jhapa	Tagandubba	Village	16/02/2012	BYP
Nepal	Mechi	Jhapa	Khumarkhod	Village	16/02/2012	BYP
Nepal	Koshi	Sunsari	Narsinghatappu	Village	26/02/2012	BYP

Table 2. HPAI Outbreaks during March- April 2012

Bangladesh	Dhaka	Dhaka	Khilkhet	Farm	02/03/2012	CP
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Country	State/Division /Zone	District	Sub-district/Block/Village	Unit	Start date	Type
Bangladesh	Khulna	Khulna	Dumuria	Farm	02/03/2012	CP
Bangladesh	Dhaka	Dhaka	Keranigonj	Farm	16/03/2012	CP
Bangladesh	Dhaka	Manikgonj	Saturia	Farm	16/03/2012	CP
Bangladesh	Dhaka	Dhaka	Dohar	Farm	17/03/2012	CP
Bangladesh	Dhaka	Dhaka	Savar	Farm	19/03/2012	CP
Bangladesh	Khulna	Jessore	Jessore	Farm	19/03/2012	CP
Bangladesh	Khulna	Khulna	Chhoto Baira	Farm	19/03/2012	CP
Bangladesh	Rajshahi	Pabna	Pabna Sadar	Farm	19/03/2012	CP
Bangladesh	Dhaka	Narayangonj	Bandar	Farm	19/03/2012	CP
Bangladesh	Dhaka	Rajbari	Pangsha	Farm	04/04/2012	CP
Bhutan	Chhukha	Chhukha	Sampheling	Village	19/03/2012	BYP
Bhutan	Mongar	Mongar	Gongdue	Village	19/03/2012	NA
India	Tripura	West Tripura	Mohanpur	Farm	19/03/2012	NA
India	Tripura	Gomati	Matarbari	Farm	19/03/2012	NA
Nepal	Mechi	Ilam	Phakpok	Village	05/03/2012	BYP
Nepal	Koshi	Panchthar	Phaktep			
Nepal	Koshi	Sunsari	Khanar	Farm	05/03/2012	CPL
Nepal	Bagmati	Kathmandu	Sheshnarayan	Farm	05/03/2012	CPL
Nepal	Bagmati	Lalitpur	Saibu	Farm	16/03/2012	CPL

Table 3. HPAI Outbreaks during July-August 2012

Nepal	Lalitpur	Sanchal		Farm	27/08/2012	CPL
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Table 4. HPAI Outbreaks during September-October 2012

India	Karnataka	Bangalore	Turkey Unit	Farm	12/10/2012	CP
Bhutan	Chhukha	Chhukha	Phuentsholing	Village	02/10/2012	BYP
Bangladesh	Dhaka	Gazipur	Kapasias	Farm	23/10/2012	CP
Nepal	Bhaktapur	Bode		Farm	06/10/2012	CP

Table 5. HPAI Outbreaks during November-December 2012

Nepal	Bagmati	Kathmandu	Ramkot	Farm	11/12/2012	CPP
Nepal	Bagmati	Dhading	Naubise	Farm	13/12/2012	CPL
Nepal	Bagmati	Kathmandu	Sitapaila	Farm	25/12/2012	CPL
Nepal	Bagmati	Nuwakot	Chaughada	Farm	30/12/2012	BYP
Bangladesh	Dhaka	Gazipur	Kaliakair	Farm	17/12/2012	CP

Table 6. HPAI Outbreaks during January-February 2013

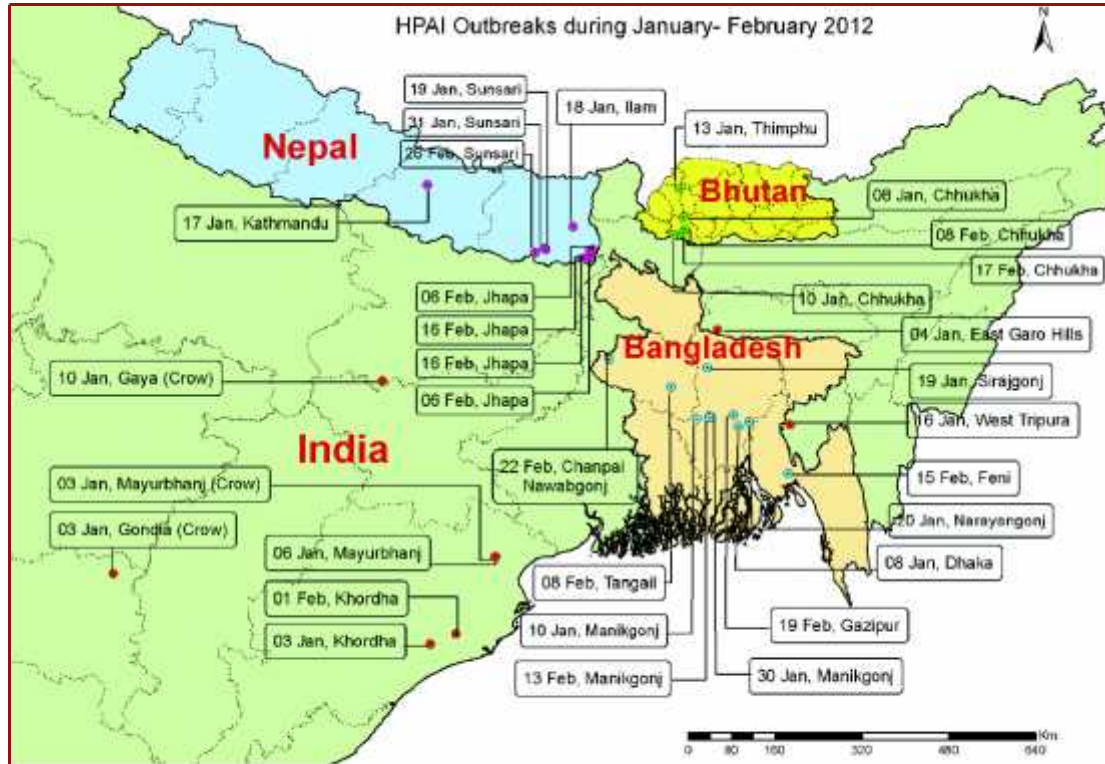
India	Odisha	Khordha	Balugaon	—	22/01/2013	Wild bird
Nepal	Gandaki	Kaski	Pokhara Sub Metro-17	Farm	02/01/2013	CP
Nepal	Gandaki	Kaski	Pokhara Sub Metro-2	Farm	06/01/2013	CP
Nepal	Gandaki	Kaski	Pokhara Sub Metro-3	Farm	06/01/2013	CP
Nepal	Gandaki	Kaski	Sarangkot-7	Farm	06/01/2013	CP
Nepal	Bagmati	Bhaktapur	Madhyapur Thimi	Village	08/01/2013	BYP
Nepal	Bagmati	Kathmandu	Jitpurphedi	Farm	04/02/2013	CP
Nepal	Bagmati	Kathmandu	Nayapati	Farm	04/02/2013	CP
Nepal	Mechi	Jhapa	Anarmani	Farm	04/02/2013	BYP
Nepal	Bagmati	Kathmandu	Manamaiju	Farm	04/02/2013	CP
Nepal	Bagmati	Kathmandu	Seti Devi	Farm	05/02/2013	CP
Bhutan	Sarpang	Sarpang	Gelephu	Village	14/01/2013	BYP

Legend: BYP: Backyard poultry, CP: Commercial poultry/broiler, CPL: Commercial poultry layer, CPP: Commercial poultry parent

Source: OIE

HPAI Outbreaks occurred in the SAARC region from January 2012 to February 2013

Map 1. HPAI Outbreaks during January-February 2012

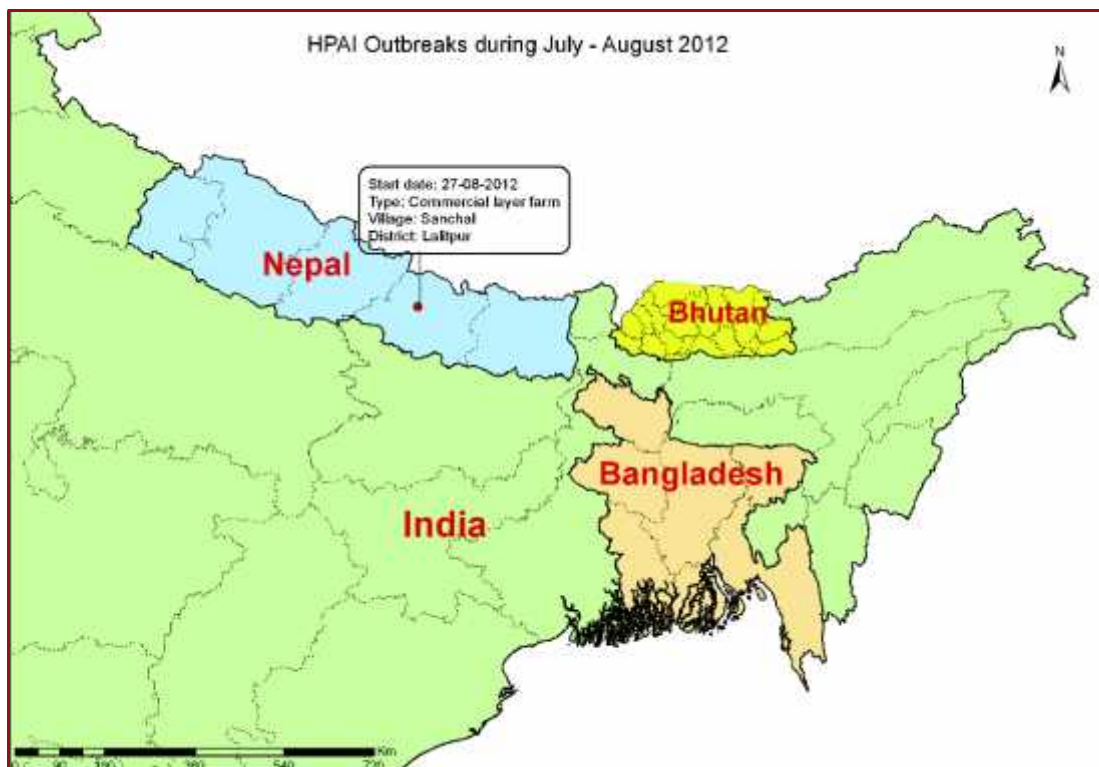


Map 2. HPAI Outbreaks during March-April 2012

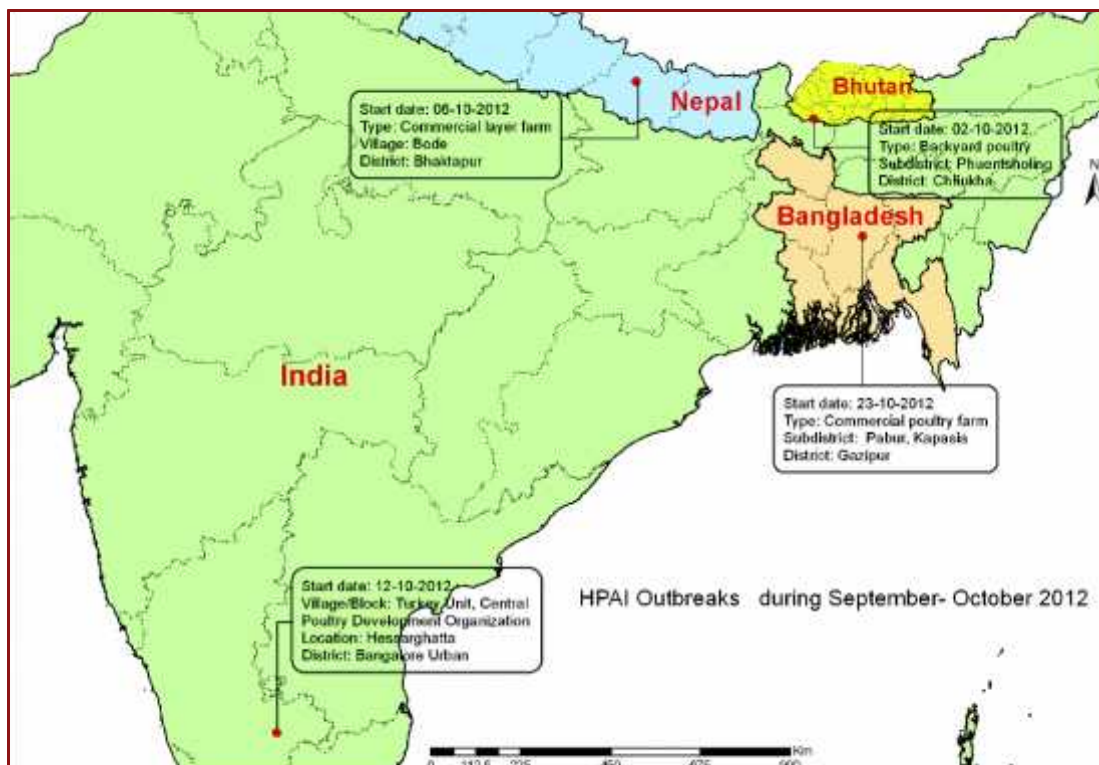


All maps have been prepared by Regional Support Unit/Regional Epidemiology Centre (South Asia), FAO, Nepal

Map 3. HPAI Outbreaks during July-August 2012

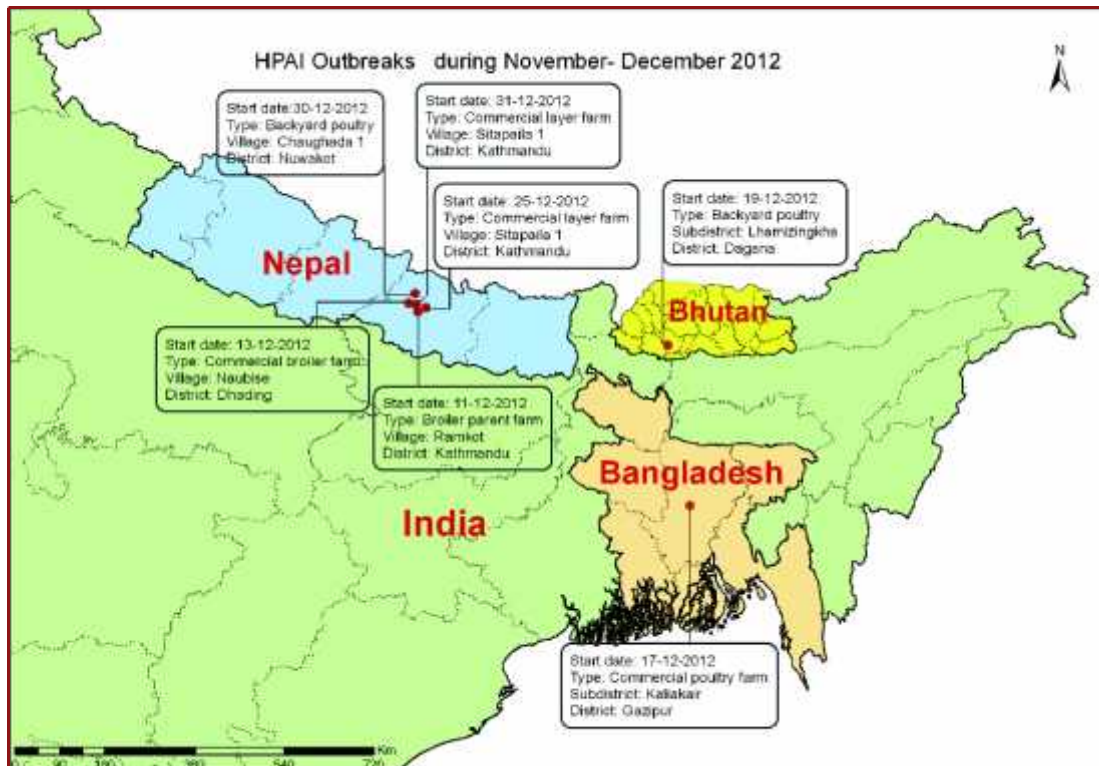


Map 4. HPAI Outbreaks during September-October 2012

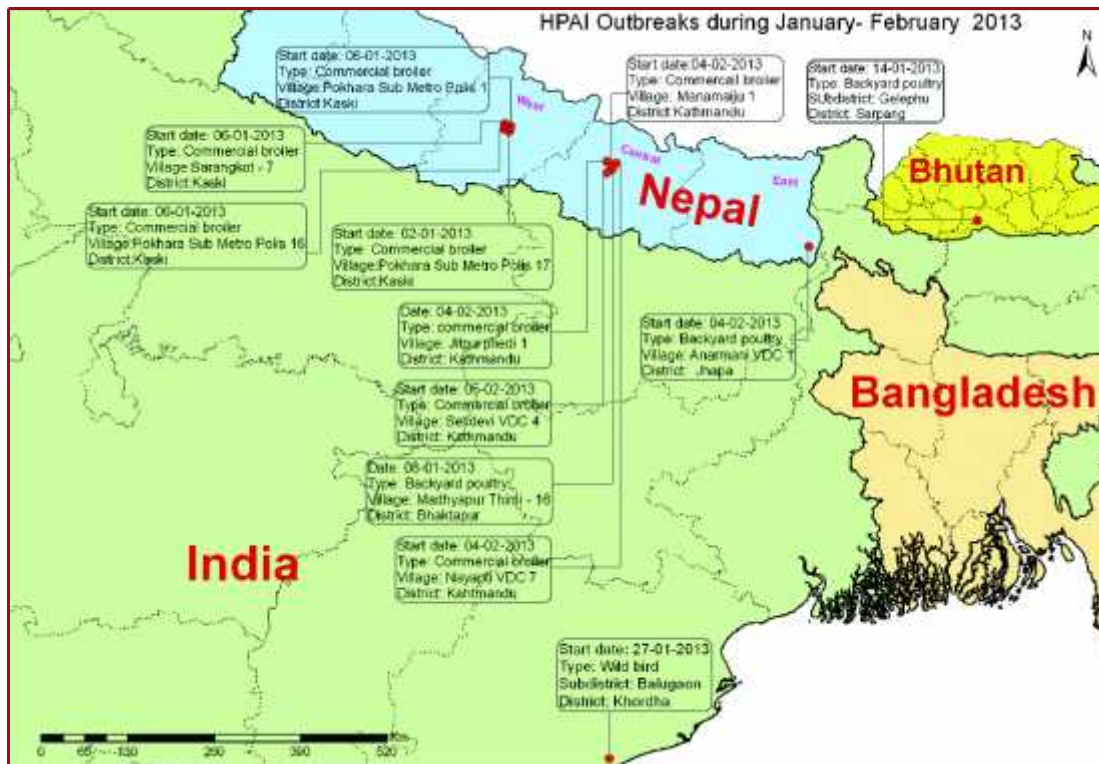


All maps have been prepared by Regional Support Unit/Regional Epidemiology Centre (South Asia), FAO, Nepal

Map 5. HPAI Outbreaks during November-December 2012



Map 6. HPAI Outbreaks during January-February 2013



All maps have been prepared by Regional Support Unit/Regional Epidemiology Centre (South Asia), FAO, Nepal

RSU Workshops and Meetings

Risk Analysis and Management Training, 7-11 January 2013, Kathmandu, Nepal

A regional training of trainers (ToT) workshop on disease risk analysis and management was conducted from 7-11 January 2013 in Kathmandu. With the technical support and guidance from EpiCentre, Institute of Veterinary, Animal and Biomedical Sciences, College of Sciences, Massey University, Palmerston North, New Zealand, the training programme attracted 19 participants from within RSU and from Member States. Prof Mark Stevenson and Prof Cord Heuer from Massey University facilitated the 5-day intensive training programme.

The purpose of the course was to provide training on risk analysis and risk management, with specific application to animals and animal products. The overall objective of the course was to develop human resource capacity within Member States to make science-based risk assessment and provide training to key persons in their countries.

Foot and Mouth Disease laboratory proficiency testing

The proficiency testing scheme was organized by Regional Support Unit under FAO-ECTAD Kathmandu for South Asian countries. The SAARC Regional Leading Diagnostic Laboratory (RLDL) on foot and mouth disease (FMD), Mukteswar, India initiated the laboratory proficiency testing in the South Asian countries. In December 2012, Dr Aniket Sanyal, National Consultant-Senior Scientific Officer visited the FMD and Transboundary Animal Diseases (TADs) Laboratory in Kathmandu, Nepal and trained the scientists in performance of various tests used in the proficiency testing. In January and February 2013, he visited national laboratories in Bhutan, Bangladesh and Sri Lanka for similar hands-on trainings for the scientists in the national laboratories of these countries. The training calendar is given below:

1. FMD and TADs Laboratory, Kathmandu, Nepal, 3-6 December 2012
2. National Centre for Animal Health (NCAH), Serbethang, Bhutan, 29 January-2 February 2013
3. Central Disease Investigation Laboratory (CDIL), Dhaka, Bangladesh, 3-6 February 2013
4. Veterinary Research Institute (VRI), Peradeniya, Sri Lanka, 19-21 February 2013

Liquid Phase Blocking ELISA was used in the proficiency testing programme. Test panels and test kits were earlier provided by the RLDL-FMD to all the countries in November 2012.

Regional Training Workshop on Differential Diagnosis of Avian Influenza and Newcastle Disease, 11-15 February 2013, Islamabad, Pakistan

To enhance the capacity of veterinarians to prevent, control and eradicate HPEDs in the region, a regional training workshop on "Differential Diagnosis of Avian Influenza and Newcastle Disease" was organised in Islamabad. National

Reference Laboratory for Poultry Disease (NRLPD), Islamabad, one among the three RLDLs and dealing with Avian Influenza in the SAARC region and RSU, organized the training workshop.

A total of eight delegates from Afghanistan, Maldives, Nepal, India and host Pakistan participated in the training. The training was structured such that the trainees would be able to make correct diagnosis of avian influenza and Newcastle disease by using the different diagnostic tests including Haemagglutination Inhibition test (HI), Haemagglutination Test (HA), Enzyme Linked Immunosorbent Assay (ELISA), Gel electrophoresis, and Real time Polymerase Chain reaction (RT-PCR). From RSU, Dr Muhammad Akram, Assistant REC coordinator participated the workshop.

Workshops and Meetings Attended National Workshop on Multi-Sectoral Collaboration on Zoonoses Prevention and Control, 9-10 January 2013, Bhutan

Dr Pasang Tshering, Regional Epidemiology Centre Coordinator participated in the National Workshop on multi-sectoral collaboration on zoonoses in Bhutan on 9-10 January 2013. The purpose of the workshop was to operationalize a One Health concept project for Bhutan through the establishment of a multi-sectoral collaboration and some action plans on zoonoses prevention and control. Dr. Pasang made two presentations and facilitated the group work on 'developing collaboration mechanism'. The key recommendations were formation of a core technical team of four people from Ministry of Health and Ministry of Agriculture and Forests with representatives from the other appropriate agencies to further work on the draft proposal developed during the workshop.

One Health Meeting, 17-19 January 2013, Kathmandu, Nepal

Dr Mohinder Oberoi and Dr Khadak Singh Bisht represented RSU in the two-day meeting titled "Feasibility of One Health initiative in Nepal for surveillance of emerging and re-emerging zoonotic diseases of public health importance". About sixty delegates participated in the workshop. The workshop was organized with the aim to bring together academia, researchers, scientists and policy-makers from the Government Ministries/Research Institutions/Universities/NGOs and INGOs in Nepal to discuss the expansion and sustainable establishment of a One Health Alliance in Nepal.

2nd International One Health Conference, Bangkok, Thailand

Dr Mohinder Oberoi, Dr Pasang Tshering and Dr Khadak Singh Bisht from RSU participated in the Prince Mahidol Award Conference (PMAC) 2013, the 1st Global Conference on Regional Disease Surveillance Networks, the 2nd International One Health Congress, and the Centennial Commemoration of the Rockefeller Foundation was held from 28 Jan - 2 Feb 2013 in Bangkok, Thailand. A World



United Against Infectious Diseases: Cross-Sectoral Solutions was the theme of the conference. The objectives of the conference were to foster cooperation and communication across various stakeholders, to review and share experiences among countries, to identify the human suffering and economic cost and to provide a platform for international, regional and national disease surveillance systems and networks. The conference was organized in two major sessions as pre-conference activities including side meetings on 28 and 29 January and field visit on 30 January 2013 followed by main conference activities from 31 January to 2 February 2013. About 966 registered participants from more than 73 countries participated during the conference, which was co-hosted by eight (8) different organizations with the support from other key partners.

RSU staff members attended various pre conference side meetings and workshops and field visit and five plenary sessions and various parallel sessions of the main conference. The 2013 PMAC conference proved to be one of the most significant assemblage of infectious disease experts in the world to advance the "One Health" agenda beyond the theoretical to the practical, and bringing much-needed attention to the policy and operational issues that ultimately determine the impact and success of cross-sectoral efforts.

7th Annual Regional ECTAD meeting, 27 February-1 March 2013, Bangkok, Thailand

ECTAD-RAP organized the seventh annual regional ECTAD meeting (AREM) from 27 February to 1 March 2013 in Bangkok. The meeting was attended by ECTAD team leaders and key technical and operations officers from Asia, Africa and FAO-HQ. All the RSU and REC staff from Kathmandu participated in the meeting.

The AREM was preceded by one-day workshop on Good Emergency Management Practice (GEMP). The concepts of GEMP were made to understand using an FAO tool: GEMP manual - "The Essentials" which are framed to provide a systematic approach to disease management in helping veterinary services to minimize the impact of disease outbreak. Participants were able to identify the five steps in Emergency Management: Prepare, Prevent, Detect, Respond and Recover exposed through six modules.

The Seventh AREM focused to review the H5N1 situation and the rapid spread and dominance of clade 2.3.2.1 and other circulating and interrelated clades in Asia, broaden the ECTAD agenda from HPAI to One Health and to discuss modality of operating under a new system in the backdrop of decentralisation effected in FAO and the overall synergy in FAO's corporate strategy. The endemicity of HPAI in certain countries in Asia and the emergence of the HPAI virus clade 2.3.2.1 in the region do not exclude the importance of HPAI as a potential pandemic threat, rather endemicity signals that a different and innovative approach is needed at the country and regional levels. The meeting also envisaged to

maintain the profile of FAO as a strong technical agency amongst the partners in addressing the global issue of high impact infectious diseases under the One Health approach.

RSU News

- Dr Ravi Dissanayake, Disease Information Data Expert, from RSU participated in a hands-on GIS training on spatial data analysis and disease risk modelling from 6-19 January 2013, at the Luttebiologique et Ecologiespatiale (LUBIES), Universite Libre de Bruxelles, Belgium. The main objectives of the visit were to collaborate with Dr Marius Gilbert-Spatial ecologist, and to carry out a study to understand the epidemiology of HPAI.
- Dr Pasang Tshering and Dr Khadak Singh Bisht extended support as resource persons to Training of Trainers (ToT) Programme on Outbreak Investigations in critical areas, held from 12-15 February 2013 in Guwahati, India.
- Mr Tareque Muhammad, SAARC Director visited RSU on 15 January 2013. During the meeting, he was apprised of activities conducted so far and work plan for 2013.



Mr Tareque Muhammad, SAARC Director (5th from the right), in RSU

Upcoming events

- 2nd Laboratory Directors' Networking Meeting and Quality Management Systems in SAARC countries, 12-13 March 2013, Colombo, Sri Lanka
- Training on 'Risk based Surveillance and understanding Disease Risk within Value Chains', 15 to 20 April 2013, Chandigarh, India
- Workshop on 'SAARC initiative for elimination of Human Rabies transmitted by Dogs', 14 to 16 May 2013, Dhaka, Bangladesh

