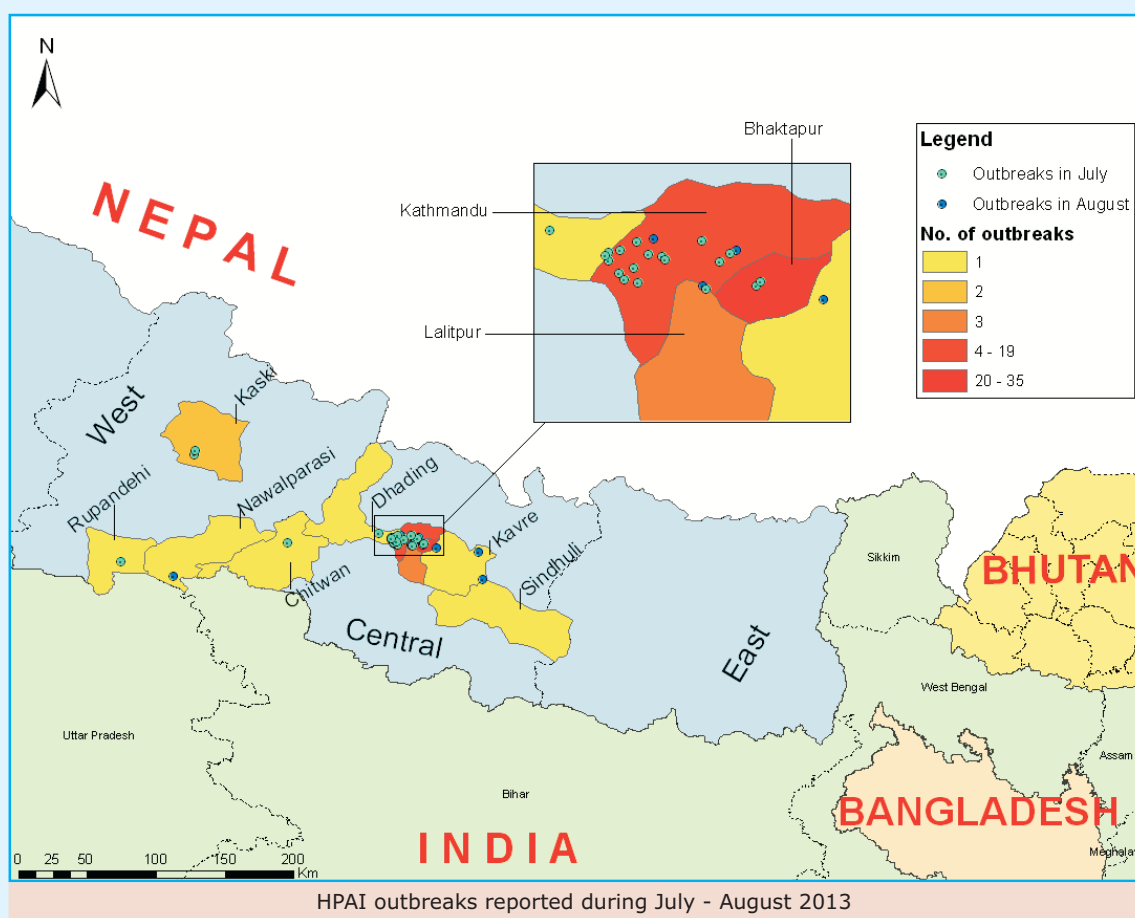


Major diseases situation in the Sub-region

The sub-region continued to record existing highly pathogenic diseases like highly pathogenic avian influenza (HPAI), anthrax and Crimean-Congo haemorrhagic fever (CCHF) in one or the other country. A series of HPAI H5N1 outbreaks were reported in Nepal during this period. CCHF was continued to be reported from Pakistan and India, as was anthrax in Bangladesh.

Overall situation of HPAI in South Asia (July-August 2013)

No new outbreak of HPAI was reported from Bangladesh and Bhutan. Bhutan submitted its final report to OIE on 15 August 2013 informing resolution of the outbreaks (www.oie.int). India during the period of July - August 2013 reported two outbreaks while series of outbreaks of HPAI were reported from Nepal.



India

The Government of India reported to OIE two outbreaks in August 2013. Both the outbreaks were detected in Chattisgarh district in Government and Veterinary College poultry farms at Jagdalpur and Durg, respectively. Chattisgarh is previously a non-infected state in India. Both the outbreaks started on 30 July.

The outbreaks were confirmed by the High Security Animal Disease Laboratory (OIE Reference Laboratory), Bhopal on the basis of real-time PCR, RT-PCR and virus isolation. (www.oie.int and www.dahd.nic.in)

Nepal

Department of Livestock Services of Nepal reported 43 HPAI H5N1 outbreaks during this period to OIE in its follow-up reports no. 10, 11 and 12.

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The reports contained outbreaks occurred at various poultry farms across Bagmati, Narayani, Gandaki, Lumbini and Janakpur zones of Nepal from 28 June to 9 August. Twenty three outbreaks and a cluster of 34 outbreaks were reported in July while seven outbreaks were reported in August. According to the reports, the affected population comprises of commercial broilers, layers and backyard poultry. Outbreaks were also reported in crow and Giriraj chickens. Poultry and poultry products were destroyed from the reported farms and areas. The cleaning and disinfection activities in the infected premise were completed. Intensive

surveillance activities are ongoing throughout the country. In response to the high number of outbreaks reported, the government declared Kathmandu and Bhaktapur districts as bird flu emergency zones and banned transport of poultry for a week to prevent further spread of the disease. The details of the reported outbreaks are provided in the map and table below (Table-1). Phylogenetic analysis show that H5N1 isolates from Jhapa, Chitwan, Kathmandu and Lalitpur are 99.7 to 100 % identical to each other and places them in a cluster with clade 2.3.2.1a H5N1 HPAI isolates from Nepal 2012 and 2013, Bangladesh 2011 and India 2011.

Table-1 HPAI (H5N1) outbreaks in Nepal reported to OIE between July and August 2013

SN	Zone	District	VDC/Municipality, wards and Village	Unit	Start date	Farm type
1	BAGMATI	Kathmandu	Gothatar	Farm	26 Jun	CL
2	BAGMATI	Kathmandu	Seuchatar 2	Farm	01 Jul	CL
3	BAGMATI	Kathmandu	Chauni, KMC 17	Farm	01 Jul	PBS & DOC
4	BAGMATI	Kathmandu	Pepsikola, KMC 35	Village	02 Jul	BYP
5	BAGMATI	Kathmandu	Gothatar 6	Farm	04 Jul	CB
6	BAGMATI	Kathmandu	Matatirtha 1	Farm	05 Jul	CB
7	BAGMATI	Kathmandu	Bhadbhanjyang	Farm	05 Jul	CB
8	BAGMATI	Kathmandu	Chabahil, KMC 7	Farm	13 Jul	BYP (Giriraja)
9	BAGMATI	Kathmandu	Ravi Bhavan, KMC 12	Wild bird	15 Jul	Crow (<i>Corvus splendens</i>)
10	BAGMATI	Kathmandu	Dahachowk 2	Farm	17 Jul	CL
11	BAGMATI	Lalitpur	Imadol 5	Farm	17 Jul	BYP
12	BAGMATI	Kathmandu	Kirtipur Municipality 15	Farm	19 Jul	CL
13	BAGMATI	Kathmandu	Thankot 2	Farm	19 Jul	CL
14	NARAYANI	Chitwan	Bharatpur Municipality, Shaktikhor	Fresh House	20 Jul	CL
15	BAGMATI	Kathmandu	Naubise 4	Farm	22 Jul	CB
16	GANDAKI	Kaski	Pokhara Municipality 16	Village	23 Jul	Birds in fresh house
17	BAGMATI	Kathmandu	Ramkot 8	Farm	23 Jul	CL
18	BAGMATI	Kathmandu	Mahadevsthan 2	Farm	23 Jul	BYP (Giriraj)
19	BAGMATI	Kathmandu	Satungal 6	Farm	23 Jul	PBS
20	BAGMATI	Bhaktapur	Sipadol 9	Farm	23 Jul	PBS & CB, CL and Chicks
21	GANDAKI	Kaski	Pokhara Municipality 17	Village	24 Jul	BYP
22	BAGMATI	Bhaktapur	*Cluster containing 34 outbreaks in 11 VDCs and 4 Wards of Municipality.	Farm	26 Jul	CB, CL and PBS
23	LUMBINI	Rupandehi	Chiliya 6	Farm	27 Jul	Broiler birds
24	BAGMATI	Kathmandu	Bhandbhanjyang 4	Farm	29 Jul	CL, CB
25	LUMBINI	Nawalparasi	Parsauni	Farm	02 Aug	CB, BYP
26	BAGMATI	Lalitpur	Chapagaun/ Jharuwarashi	Farm	02 Aug	PBS and DOC
27	BAGMATI	Lalitpur	Imadol 8	Farm	02 Aug	CL
28	JANAKPUR	Sindhuli	Nepathok, kusehwar Dumja 4	Farm	05 Aug	Culled layer birds (spent hens)
29	BAGMATI	Kathmandu	Ichangu Narayan	Farm	08 Aug	CB
30	BAGMATI	Kavre	Bikateshwar 2	Farm	08 Aug	PBS
31	BAGMATI	Kathmandu	Gothatar	Farm	09 Aug	CB

◆ KMC= Kathmandu Municipality , VDC= Village Development Committee; each VDC has 1-9 wards, Village = smallest unit in the VDC/Municipality, CB=Commercial broiler, CL=Commercial layer, DOC=day old chicks, PBS=parent broiler stock, BYP = Backyard poultry

* Bhaktapur Municipality Ward No. 1, 6, 12, 10 and Nakhel, Duwakot, Balkot, Chitapol, Jhaukel, Dadhikot, Tathali, Katunje, Chaling, Sudal, Bageshowri VDCs.

Bangladesh

Anthrax situation update

According to update provided by the Institute of Epidemiology, Disease Control and Research (IEDCR), Bangladesh, there were 287 confirmed human cases reported from 4 districts: Meherpur (51), Shrirajganj (23), Chuadanga (37) and Tangail (76). More information can be seen on the website of the Institute of Epidemiology, Disease Control and Research (IEDCR) (www.iedcr.org)

Pakistan

Crimean Congo hemorrhagic Fever (CCHF) in Pakistan

A total of 59 suspected, 37 confirmed CCHF cases and 10 deaths have been reported in year 2013. During July - August 2013, 24 suspected (16 in July and 8 in August), seven laboratory confirmed cases (5 in July and 2 in August) were reported. One death with CCHF was reported during July 2013. Approximately all the cases had contact history with animal trading/handling, tick bite, contact with patient, tannery worker, butcher/animal slaughtering and fresh animal skin. There is ongoing trade of animals and animal skins within Pakistan and between neighbouring countries (Afghanistan and Iran). Adapted from Weekly Bulletin: DEWS, Pakistan (<http://reliefweb.int/report/pakistan/weekly-epidemiological-bulletin-disease-early-warning-system-and-response-pakista-74>)

Current status of CCHF in India

In 2013, seven outbreaks have been reported from four districts of Gujarat (Amreli, Patan, Surendranagar and Patan) from July to August. In July 2013 samples were taken from Kariyana village of Amreli district where six human samples turned out to be positive out of which five persons died. During August 2013, 85 human samples were taken from districts Amreli, Patan and Kutch, of which 11 were positive with two deaths. The CCHF suspected cases were confirmed by National Institute of Virology (NIV), Pune by RT-PCR. Samples of ticks were also collected and sent to NIV. (Source: Presentation made by Dr SK Singh at Emerging Infectious Disease Meeting, October 2013, Colombo, Sri Lanka)

Sri Lanka

Leptospirosis update

During the first eight months of this year, Sri Lanka has recorded 2839 human Leptospirosis cases across the country. According to the Epidemiology unit, the highest number of cases have been reported in March and April. Anuradhapura, Ratnapura, Kalutara districts have been affected more than other districts in the country. (www.epid.gov.lk).

Workshops Conducted

Second Regional Epidemiology Networking (Epi Net) Workshop, 12 - 14 August, Paro, Bhutan

Dr Khadak Singh Bisht, RSU Assistant Coordinator and Dr Pasang Tshering, Coordinator Regional Epidemiology Centre and Mr Simon Boas, Emergency Programme Officer from Regional Support Unit travelled to Bhutan to organise and conduct the second regional epidemiology networking meeting, as part of the ongoing activities of the Regional Epidemiology Centre (REC). The workshop was attended by representatives from four SAARC countries (Bangladesh, Bhutan, India and Nepal) as well as the Government of Thailand, the WHO Bhutan, FAO Regional Office for Asia and Pacific, Bangkok and Dr. Somsak Pipoppinyo the FAO Representative for Nepal and Bhutan. The workshop was held in close collaboration with the Royal Government of Bhutan (RGOB). Presentations and discussions covered a wide variety of relevant topics, including information sharing mechanisms, the One Health approach implementation and GF-TADs framework, and how an Epidemiology Consortium could support a functional



Participants of 2nd Regional Epi Net workshop

regional epidemiology network. Participants developed draft Terms of Reference (TOR) for the SAARC Regional Epidemiology Network, and made recommendations to take this initiative forward over the next year.

Advocacy Meeting for Elimination of Rabies from SAARC Countries, 12 - 14 August, Dhaka, Bangladesh

The SAARC Secretariat, FAO and WHO jointly organized "Advocacy Meeting for Elimination of Rabies from SAARC Countries" in Dhaka, Bangladesh. The objectives of the meeting were to review rabies situation and control activities in the SAARC countries; to discuss and finalize "SAARC Rabies Elimination project" proposal for submission to the SAARC Development Fund (SDF) to eliminate Rabies by 2020; advocate dog rabies control as a social responsibility of animal health sector and cost effective way to prevent

rabies transmission to humans and domestic animals, and update on One Health initiatives in SAARC countries and discuss rabies elimination as a role model for operationalization of One Health. The Meeting was attended by human and animal health representatives of the SAARC Member States, representatives from FAO, WHO, OIE and other collaborative partners of SAARC. Dr Ravi Dissanayake, Disease Information Data Expert from RSU attended this meeting.

Following recommendations were made by the meeting;

- I. Relevant SAARC mechanisms are to consider rabies elimination in SAARC countries a high priority.
- II. Member States may consider using international standards, guidelines and recommendations for rabies control and elimination developed by WHO and OIE.
- III. Member States may identify an animal rabies laboratory in SAARC Region that fulfils the requirements for designation as OIE Reference Laboratory.
- IV. Member States may propose a resolution on rabies elimination at the World Health Assembly in 2014.
- V. Member States may commit to inter-sectoral collaboration in order to eliminate rabies using One Health approach.
- VI. Member States are encouraged to promote community participation and public-private partnership in rabies elimination.
- VII. Member States may adopt main strategic approach; advocacy, communication and social mobilization, dog bite management, mass dog vaccination to 70% of dog population and dog population management ensuring animal welfare - for elimination of rabies.
- VIII. Member States may record dog and livestock rabies data and report to the Regional Epidemiology Centre in SAARC Region and are encouraged to report to OIE.
- IX. All Member States are encouraged to make rabies a notifiable disease by human and animal health sectors, exchange information and develop innovative methods of rabies case reporting and recording.

Nepal Avian Influenza Vaccination Planning Workshop, 16-17 August, Kathmandu, Nepal

Regional Support Unit in response to a request made by



Group discussion at the avian influenza vaccination planning workshop

the Department of Livestock Services (DLS), Nepal organised an "Avian Influenza Vaccination Planning Workshop" in Kathmandu Nepal.

The first objective of the workshop was to assist country experts from government, industry and academia to arrive at evidence based planning for an appropriate vaccination policy and practice. The second objective was to apply and evaluate the vaccination planning tool in a country, which is not currently vaccinating but is considering vaccination as an additional disease control option. During the two day workshop, avian Influenza vaccination tool developed by FAO was extensively discussed by participants in groups, to assess the current country situation if vaccination was to be adopted or not.

The meeting was facilitated by Dr David Castellán, Senior Veterinary Epidemiologist and Dr Ken Inui, Laboratory Expert from FAO ECTAD Vietnam. Dr. Somsak Pipoppinyo, FAOR Nepal, Dr Lin Aung, WHO Representative, Nepal, Dr Nar Bahadur Rajwar, Director General, Department of Livestock Services, Mr Jaya Mukunda Khanal, Secretary, Ministry of Agriculture Development (MOAD), Mr. Tek Bahadur Thapa Gharti, Hon. Minister MOAD attended the inaugural session. Large number of participants representing the government, private sector, industry and academia actively participated in the meeting. The main impetus to consider vaccination against H5N1 included economic impact on poultry producers, the current epidemiology of HPAI at the national level, national food security and national policy on the use of vaccination for animal diseases. National and regional considerations were the most important aspects of context influencing the decision to vaccinate. Participants estimated that Nepal could achieve 42 percent of the necessary preparedness and planning criteria to ensure successful preparedness and planning to vaccinate against HPAI. Gaps were identified for follow up action in the following areas: Financial Resources, Enabling Mechanisms; Vaccine Quality and Selection; Surveillance and Monitoring; Vaccination Strategy; and Comprehensive Vaccination Programme.

Workshops and Meetings Attended

Bi-regional Meeting on the Asia Pacific Strategy for Emerging Diseases, 16-18 July, Kathmandu, Nepal

Bi-regional Meeting on the Asia Pacific Strategy for Emerging Diseases was held in Kathmandu Nepal. The workshop was organised by South - East Asia and Western Pacific regions of the World Health Organization (WHO). Dr Khadak Singh Bisht, RSU Assistant Coordinator and Dr Pasang Tshering, Coordinator Regional Epidemiology Center from Regional Support Unit, attended the workshop.

The overall objective of the meeting was "to strengthen

capacity of the Asia-Pacific Region to combat emerging infectious diseases (EIDs)". One of the major objective was to discuss the current situation on emerging infectious diseases and other public health events and emergencies in the Asia Pacific Region and ways to strengthen public health response.

New Project: FAO-TCP project on "Emergency Assistance for Surveillance of Influenza A(H7N9) Virus in Poultry and Animal Populations in South Asia - TCP/RAS/3407(E)"

On 31 March 2013, the authorities of the People's Republic of China first reported three human cases of infection with a novel influenza strain A(H7N9) in Eastern China in accordance with International Health Regulations to the World Health Organization. These cases suffered from severe pneumonia and all three died. Since then, the disease situation in humans has evolved with new cases being regularly reported from China. Reports suggest that many human cases have had direct or indirect contact with poultry prior to the onset of disease, including live bird market (LBM) visits, transportation, slaughtering and handling of poultry. To date there has been no evidence of sustained human to human transmission. The H7N9 virus is unique in that it does not cause any disease or apparent production loss in poultry population but has high infectivity for humans. Thus this low pathogenic influenza H7N9 has a significant potential to silently spread widely in poultry populations without being detected. This new influenza A(H7N9) is a true One Health emergency. Epidemiologically, asymptomatic infection in domestic poultry presents a significant danger of the virus spreading widely before it is detected, thus increasing public health risks. There is an immediate need to determine influenza A(H7N9) prevalence in poultry flocks, waterfowl, domestic pigeons and detect any avian influenza A(H7N9) infected poultry/birds that may be introduced through trade and along the poultry value chain.

Given the current understanding of the poultry value chains in Asia, it is now recognized that the influenza A(H7N9) virus presents an imminent and a significant danger to countries neighbouring China threatening human lives and jeopardising poultry industry in the region with significant negative impacts on livelihoods and food security. In South Asia, Bangladesh, Bhutan, India, Nepal, Pakistan (moderate-risk countries) are considered exposed to the incursion of the A(H7N9) virus.

In recognition of the significance of H7N9 in Asia, FAO has committed funds to support two regional Technical Cooperation Projects (TCP) entitled "Emergency Assistance for Surveillance of Influenza A(H7N9) Virus in Poultry and Animal Populations in South Asia - TCP/RAS/3407(E)" a parallel TCP is supported for South - East Asian countries. The overall objective of the

projects is to conduct a coordinated sub-regional surveillance and response to avian influenza A(H7N9) in poultry and other animal populations in high-risk countries in Southeast and South Asia. The immediate objective of the projects is to enable the targeted countries to better detect, control and respond to A (H7N9) influenza.

This regional project is an integral part of an overall Global Programme Framework and will provide support to countries in South Asia that are at moderate risk to strengthen regional coordination and facilitate cross border activities, while enhancing field and laboratory surveillance of low pathogenic avian influenza A (H7N9) in poultry populations and other animal populations.

The project will facilitate coordination of surveillance activities, support harmonization of protocols for risk analysis and risk management, will enhance the regional and country contingency planning and will foster information sharing within the South Asia region and across other regions, as part of the global surveillance effort. Additionally, the project will focus on analyzing and strengthening the market value chains with specific attention on the live-bird markets biosecurity and on the possibility to scale-up existing value chain models.

Upcoming events

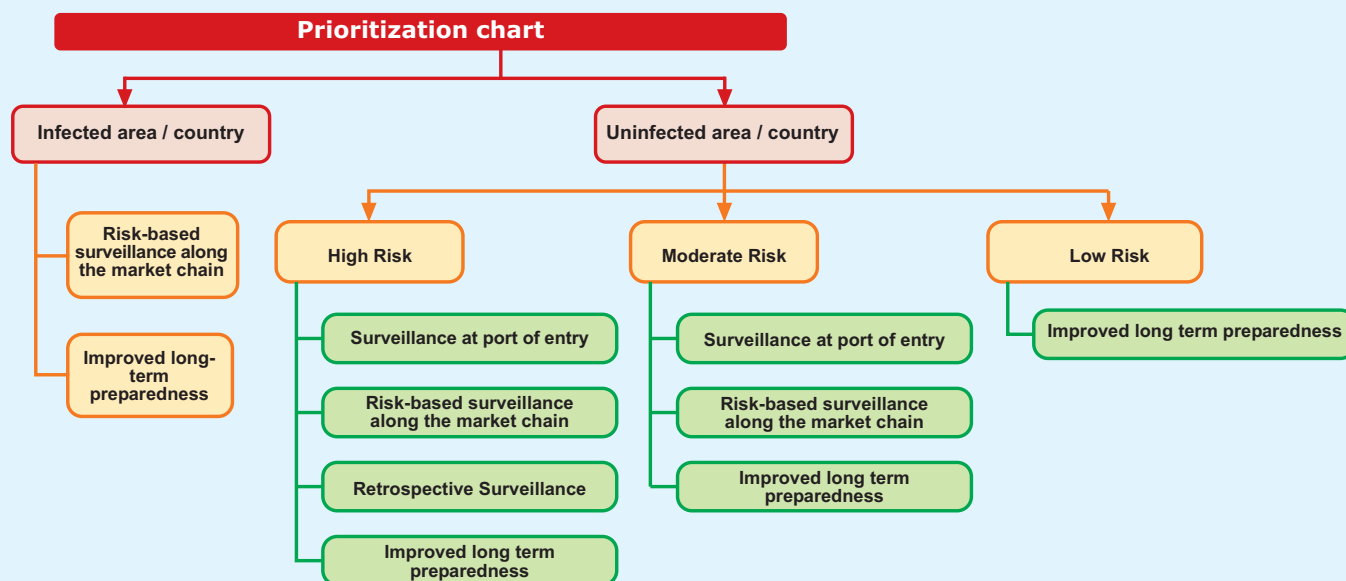
1. Regional 'Field epidemiology training programme for veterinarians' for the SAARC countries, 9 - 27 September 2013, Kathmandu, Nepal
2. Inception workshop for regional H7N9 TCPs, 16 - 18 September 2013, Bangkok, Thailand
3. Second regional workshop on progressive control pathway for foot and mouth diseases (PCP-FMD) for South Asian countries, 2 - 4 October 2013, Agra, India
4. Regional workshop on risk assessment of H7N9 and regional poultry supply chain in SAARC Countries, 18 - 20 December 2013, Bangkok, Thailand
5. Second regional workshop on progressive control for peste des petits ruminants (PPR) for South Asian countries, 19 - 20 December 2013, Kathmandu, Nepal





Eliminating Animal Health Risks

FAO/EMPRES guidelines for emergency risk-based surveillance for avian influenza A(H7N9)



Design process for risk-based surveillance along the market chain, based on a snowball sampling strategy



Regional Support Unit and Emergency Centre for Transboundary Animal Diseases for South Asia
 FAO, Kathmandu, Nepal

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