



Strengthening Cross Border Activities among *Bangladesh, India and Nepal* to Control Possible Cross-Border Spread of Highly Pathogenic Avian Influenza (HPAI)

Bulletin

INFORMATION

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Project Objectives

- The overall objective of the programme is to contribute to the elimination of the threat posed by HPAI due to cross-border activities in the Gangetic Plain subregion of South Asia.
- More specifically, the project will strengthen the capacity of the countries sharing an epidemiological environment in the Gangetic Plain subregion to deal with the risks and threat of HPAI posed by cross-border activities.

Contents	Page No.
Disease status in the sub-region	1
Activities undertaken	2
Brainstorming workshops to discuss the developed draft SOPs in India and Bangladesh.	3
District level meetings at Birantnagar (Nepal) and Siliguri, West Bengal (India) on advocacy, disease investigation, clinical symptoms and value chain mapping	3
Policy and Technical Committee(s) meeting at Pokhara (Nepal)	4
Upcoming project events	6

Disease status in the sub-region

The HPAI outbreaks in poultry were reported in the month of January 2010 in Bangladesh, West Bengal (India) and Nepal. In India, HPAI outbreaks returned to the areas, which had witnessed such outbreaks two years ago in 2008. In Bangladesh, it struck mainly in commercial farms in two districts and in Nepal it struck at the tourist town of Pokhara in Central region of the country.

New outbreaks in India:

Within three months, since India declared itself free from the notifiable Avian Influenza (H5N1) on 22nd October, 2009, the H5N1 struck again in Khargram and Burwan blocks of Murshidabad district of West Bengal in January 2010. Two years ago in January 2008, these two blocks, bordering Birbhum district witnessed the HPAI outbreaks, followed by large scale culling.

Department of Animal Husbandry, Dairying & Fisheries (DADF) of the Government of India, had notified Avian Influenza outbreak in Hazrabati and Nagar villages, in block Khargram of district Murshidabad on 14th January, 2010, where poultry at backyard farms started dying on 12th January. Within days of first notification two more epicentres surfaced in village Haripur Uttarpara and Ninur in the same block as well as in villages Badua, Kharjuna and Simulia in Burwan block, and accordingly notifications were issued.

Containment measures were initiated as per the action plan of DADF. To prevent the further spread of virus and to control it, the state government immediately deployed Rapid Response Teams (RRTs) to the affected areas for the action, which included epidemiological investigation; stamping out of all domestic poultry in an approximately

3-km-radius zone around the outbreak followed by compensation to the poultry owners; launching of an intensive surveillance campaign in a 10-km-radius zone in addition to closure of poultry markets and prohibition on sale and transportation of poultry products in the infected zone; and disinfection of premises after culling and sealing of premises where appropriate.

Till the end of January 2010, the Government of India notified four outbreaks in 12 villages in Khargram and Burwan blocks of Murshidabad district of West Bengal. During outbreak response about 1,49,500 birds were culled and about 18,000 eggs were destroyed in the affected areas. A three member Central RRT of Ministry of Health and Family Welfare of Government of India was stationed in the affected district along with state health authorities to initiate surveillance activities related with H5N1 infection among the targeted population. Adequate stock of Oseltamivir and personal protective equipment were made available to district authorities for necessary action and containment measures. Also, surveillance throughout the West Bengal was intensified to stop the spread of the disease.

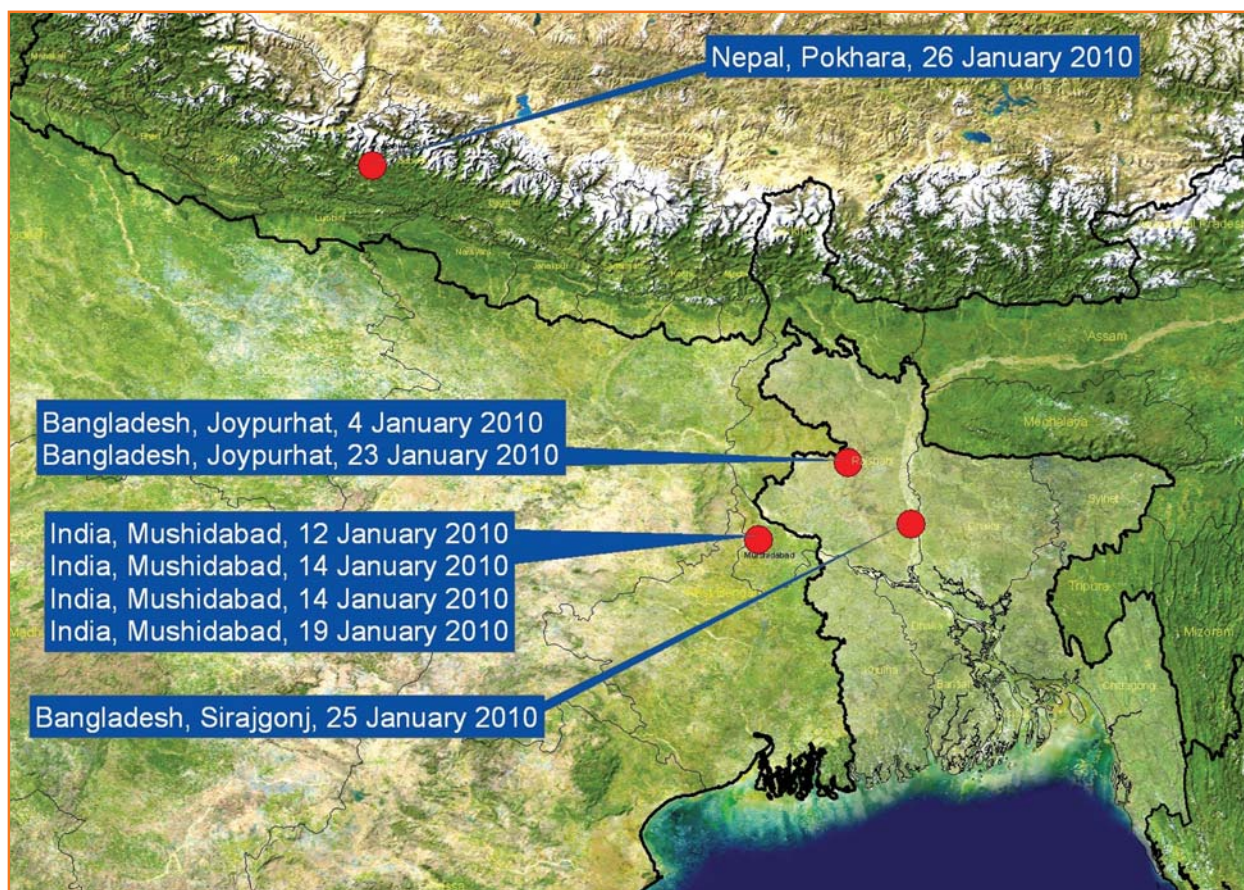
Results of surveillance and other relevant information on HPAI outbreaks are available on the Department of Animal Husbandry, Dairying and Fisheries, Government of India website at <http://www.dahd.nic.in>

New outbreaks in Bangladesh:

The Bangladesh government confirmed outbreaks of HPAI in poultry in Joypurhat and Sirajgonj districts in January 2010. The government notified the outbreaks to the World Organisation for Animal Health (OIE). The first outbreak was noticed on 4th January at a commercial farm at Khetlal Fakirpara, a sub-district in Joypurhat district in the north-

polymerase chain reaction (RT-PCR) test confirmed H5 virus in the dead birds numbering 153 on 31st January, followed by a Real Time-PCR test conducted by OIE Reference Laboratory at Veterinary Laboratory Agency (VLA), Weybridge, United Kingdom.

As per information provided to OIE by the Government of Nepal the source of infection was unknown/ inconclusive. The government immediately swung into action and started stamping out operations besides actions for poultry movement control inside the country; quarantine; disinfection of infected premises; dipping/spraying etc. The infected zone had the Seti river in the east, Pokhara airport in the west, southern parts of the Prithvi highway in the north and the Shangrila



Location of HPAI outbreaks in Bangladesh, India and Nepal

Map: Courtesy FAO, ECTAD Unit Dhaka, Bangladesh

west of the country, bordering West Bengal of India. The second outbreak was also at a commercial farm in the same sub-district on 23rd January, the location for the second outbreak was less than half a kilometer away from the first outbreak. The third outbreak took place on 25th January at Ranigram, Sirajgonj sadar sub-district of Sirajgonj district at a commercial farm.

The authorities immediately took action and destroyed the infected birds at the epicentre in all three outbreaks.

The last previously reported cases of HPAI in Bangladesh was in August 2009 at a commercial farm situated at Katroli, Doublemooring sub-district of Chittagong district.

New outbreak in Nepal:

Almost after a gap of a year HPAI struck in Nepal at Ward No. 7, Gharipatan area of Pokhara town in Kaski district, situated in Central Nepal. Outbreak started on 26th January among backyard ducks, chickens and at few commercial farms. The epicentre was a premise of a backyard poultry farmer. The reverse transcription-

chowk in the south. As part of stamping out operations, culling of 10,000-12,000 Birds were planned. Pokhara town is located about 250km away from the international border of India. Pokhara valley has eight subtropical lakes and Phewa lake is the largest lake of the valley and it forms part of the Pokhara town. These wetlands do attract migratory birds.

Activities undertaken

- ④ Brainstorming workshops to discuss the developed draft Standard Operating Procedures (SOPs) for emergency response to disease in high risk areas related to cross border trade, 4th December 2009, Shillong, India and 10th December 2009, Dhaka, Bangladesh
- ④ District level workshops at Biratnagar (Nepal) and Siliguri (India) in December 2009 and January 2010
- ④ Policy and Technical Committee(s) meeting at Pokhara (Nepal), on 28th -29th January 2010

Brain-storming workshops to discuss the developed draft SOPs for emergency response to disease in high risk areas related to cross border trade, 4th December 2009, Shillong, India and 10th December 2009, Dhaka, Bangladesh

- As a follow-up of the May 2009 Kathmandu workshop on development of SOPs for emergency response to disease in high risk areas related to cross-border trade, separate brainstorming workshops were organized in India and Bangladesh to further refine and discuss those SOPs. In the May 2009 workshop, nine SOPs were developed and it was decided then to discuss those in each of the country separately and feedback would be given to FAO to harmonize/coordinate the final draft. The final draft would then be distributed to member countries for implementation.



Group work in progress at SOPs Brain-storming Workshop at Shillong

- The India workshop held at Shillong, on 4th December 2009 was attended by 34 technical officers representing the Government of India's DADF, states of Arunachal Pradesh, Assam, Bihar, Jharkhand, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, West Bengal and consultants from Sub Regional ECTAD and FAO India. The Bangladesh workshop held at Dhaka on 10th December 2009 was attended by 38 technical officers representing Department of Livestock Services and districts Feni, Noakhali, Jamalpur, Sherpur, Sylhet, Habibganj, Mymensingh, Kurigram, Panchagarh, Netrakona, Rajshahi, Dinajpur, Nilphamari, Thakurgaon, Kushtia, Brahman Baria, Comilla, Maheshpur, Bagerhat, Chuadanga, Joypurhat, Jessore, Satkhira, Jheneidah, Chapinawabganj, Sunamganj and Maulvibazar. Besides, national participants, the workshop was attended by consultants from Sub Regional ECTAD, FAO Bangladesh and USAID Bangladesh.

- The meeting moderation, presentations and discussions were led by Sub-regional Manager ECTAD unit (SAARC), while group discussions were facilitated by the unit's epidemiology consultant. Participants gave their inputs/comments. The discussions of the various groups focused on improving the draft SOPs for clarity so that everyone involved, especially the veterinary technicians,

could understand them easily. The participants in India were apprised of the inputs of previous workshops held in Nepal and the participants of Bangladesh were apprised of the inputs from Nepal and India workshops. It was decided that the comments would be incorporated into the SOPs and presented at the next Technical Committee Meeting of the project to seek consensus.



Participants at SOPs Brain-storming Workshop at Dhaka, Bangladesh

District level workshop at Biratnagar, Nepal on 28th-29th December 2009 and at Siliguri, India on 14th-15th January 2010.

- Within the framework of the project OSRO/RAS/701/USA Phase II orientation/sensitization workshops are planned for district veterinary/livestock staff, NGOs, relevant private sector entities working in the area and media (print & electronic) at the selected bordering districts in high-risk corridors of Bangladesh, India and Nepal. The objective of these workshops is to better understand the poultry sector in the area and corresponding area across the border with emphasis on sensitization and capacity building of the staffs of the member countries to strengthen the HPAI control and prevention activities in the border areas. Objectives of these workshops include sensitization on advocacy related technical areas for better impact of risk and outbreak communication interventions; sensitization on clinical picture of HPAI; sensitization on district level findings of the poultry value chain mapping and poultry production/marketing systems; and also, provide technical guidance and training to veterinarians on investigation of HPAI outbreaks. A total 14 such workshops are planned including six in Bangladesh, seven in India and one in Nepal.



Advocacy group work facilitation at Siliguri (India) Workshop

- ④ The Nepal workshop was held over two days in Biratnagar (district Morang) on 28th-29th December 2009 with participants from Morang and Jhapa districts, the two high risk districts identified for interventions through the project. Jhapa district had experienced two outbreaks in early 2009. Altogether 75 persons participated in the workshop including field DLS staff, NGOs, poultry farmers, poultry association, media (both print and electronic) representatives, women's groups, Stop AI, Directorate of Animal Health, Kathmandu and World bank funded AI Control Project in Nepal, among others.
- ④ The Siliguri (Darjeeling district, West Bengal, India) workshop was held over two days on 14th-15th January 2010 with participants from the district, which is strategically located bordering Eastern region of Nepal. Siliguri is the biggest commercial town of North Bengal as well as it is having largest poultry market in the area and cater the poultry needs of four- five neighbouring districts as well as poultry demands of Bhutan, neighbouring state of Sikkim and also influence the cross-border poultry trade to Nepal. The Darjeeling district had a number of HPAI outbreaks in 2008 and 2009. Altogether about 100 persons participated in the workshop including state government and field Animal Resources Development Department (ARDD) staff, NGOs, poultry farmers, feed manufactures, women groups, self-help groups, representative from Sahastra Seema Bal (a para-military organisation deployed on Indo-Nepal border). Representatives of department of Health and Family Welfare and Forest also participated in the workshop. However, none of the media representative came as participant in the workshop, although they were invited by the district administration and covered the event.
- ④ In Biratnagar workshop, the ECTAD team experienced lack of advocacy/communication related knowledge among participants despite many interventions made in the past by various agencies. During the workshop it was felt that time allocated for the advocacy group work and discussions was not sufficient to do justification to the subject. Thus in next workshop at Siliguri more time was allocated to advocacy related group work and discussions. Overall, both the workshops clearly indicated that there is a tremendous gap among participants about the advocacy/communication interventions in the technical areas. ECTAD team assured the Biratnagar (Morang) and Jhapa participants that a separate 2-3 days workshop will be conducted for them on advocacy related areas.
- ④ In both the workshops, the concerned technical officers of respective districts presented the poultry related profile including existing marketing systems and bio-security measures at each district and past interventions (if any) made for the prevention and control of the HPAI. At Biratnagar ECTAD team presented poultry market profile of Jhapa and Morang districts and the pricing mechanism operating in the village markets, besides outcome of the poultry value chain study. In both workshops technical guidance and training for disease investigation for the veterinarians and veterinary technicians was outlined and group work was conducted. In Siliguri workshop technical participants including veterinarians were very keen to get knowledge on technical issues pertaining to virus, HPAI surveillance/sampling and related issues. Dr. Mohinder Oberoi, Sub-regional manager of ECTAD unit answered all the questions of the participants on technical areas.

- ④ **Workshop at Cooch Behar:** Another sensitization workshop at Cooch Behar district bordering Bangladesh was scheduled for 18th & 19th January, 2010. The sub-regional ECTAD team reached Cooch Behar in a day advance from Siliguri. As per plan on 17th January, the team members visited poultry market at Dinhata, a sub-divisional centre of the district, which witnessed HPAI outbreak in 2008 and considered as a high risk corridor under the cross-border project. Team members also held discussions with poultry traders and slaughterers on the sensitivities involved with HPAI and culling operations. Team members also visited the fenced/open Indo- Bangladesh border in Kalimati area and had a brief meeting with border security personnel to understand the gamut of cross-border trade 'through' the communities living at both sides of the border.

For organising the workshop at Cooch Behar, all preparations were completed in advance by the district administration and the ARDD staff. Invitation cards were distributed on behalf of District Magistrate and all elected representatives were invited for the first day of the workshop along with NGOs, representatives of media (print & electronic), other departments, women and youth groups etc. but, unfortunately, a prominent and popular former chief minister of West Bengal died on 17th January and state government announced mourning for two days. Thus, state government as well as district administration took the decision to postpone the workshop. Now it is likely that it may be held in the middle of March along with similar workshops in other districts of West Bengal and Bihar.

Policy and Technical Committee(s) meeting at Pokhara (Nepal), on 28th -29th January 2010

- ④ To control possible cross-border spread of HPAI, on periodic basis Technical and Policy Committee(s) meeting was planned for the high level government delegates from Bangladesh, Nepal and India. The meeting provides a platform to delegates from the member countries to discuss "Policy" and "Technical" issues related to HPAI control and prevention in the Indo-Gangetic plains. As a result such meetings help to better understand the disease situation, legislative framework and compensation issues in the participating countries. At Pokhara it was the second meeting on policy issues and third meeting on technical aspects related to HPAI in the sub-region with objectives to share the current HPAI situation in the region; share the progress made in the implementation of cross border project; find ways of strengthening cooperation through the Technical and Policy Level Committee(s); identify key issues for advocacy for control and prevention of HPAI; and present and agree on the inputs in SOPs developed for cross border related activities.
- ④ Eighteen participants representing all three countries and FAO attended the meeting, which was hosted by the Government of Nepal. The workshop was attended by the Secretaries of Ministry of Fisheries and Livestock, Bangladesh; Ministry of Agriculture and Cooperatives (MOAC), Nepal; Chief Veterinary Officer, India and the designated project counterparts from Bangladesh and Nepal. FAO consultants from Bangladesh, India, ECTAD/RAP and ECTAD Unit (SAARC) provided technical

and logistic support to the workshop. The USAID could not attend the meeting due to prior engagements of Regional Development Mission for Asia (RDMA) and its offices in Bangladesh and Nepal on those days.

Inaugural Session

On the first day, Dr. Mohinder Oberoi gave the welcome speech on behalf of the organizers and briefly explained the purpose of the meeting. He said that it was expected that the meeting will provide a common venue for the other neighbouring countries to meet and discuss cross border HPAI issues. He further, mentioned that the cross border trade is a major issue in South Asia as the countries in the region have long and porous borders allowing free movement of human and livestock with limited check points.

Dr Subhash Morzaria, ECTAD, Regional Manager, FAO Regional Office for Asia and the Pacific, Bangkok gave his brief remarks with introduction to ECTAD, its role in controlling the transboundary animal diseases (TADs) with focus to HPAI in the region and elsewhere. Dr Morzaria informed that the ECTAD is helping in building capacity of the member countries in dealing with HPAI in different areas including surveillance. He mentioned that various other types of diseases were emerging apart from HPAI which included both zoonotic as well as non-zoonotic and are causing great socio-economic losses. He concluded that the effort of a single country was not sufficient to control the diseases and stressed the need in building regional initiatives in taking corrective measures.

Dr Braja Kishor P Shaha, Secretary, Ministry of Agriculture and Cooperatives, Government of Nepal, welcomed the participants and thanked FAO for providing a forum to share the experiences of respective countries. Mr. Shah pointed out that all three countries, Bangladesh, India and Nepal share common borders, heritage and culture. He stressed on working in a collective way to solve the issue of HPAI through this unique cultural background.

Several technical papers were presented in the meeting. It started with first presentation on 'Status of HPAI in South Asia'. Dr Oberoi shared the available information/data on outbreaks occurring between January 2006 and January 2010. The presentation concluded that the virus appears to be entrenched in the sub-region with cyclical appearances; there was a need of detailed epidemiological investigation during the outbreaks and in the inter-outbreak periods; the isolation and characterization of virus from new outbreaks to determine any change in the characteristics of virus; and a regional approach was needed to combat the disease.

Dr. Oberoi presented the progress report of project for the period July 2009 to January 2010 highlighting the already undertaken activities and the upcoming events under the project's work plan. He mentioned that with the joining of new staff the activities have gained momentum however due to unscheduled postponement of activities and delays in providing clearances by the respective governments for undertaking activities are hampering the progress of the project.

Dr. David Castellan, Regional Epidemiologist, FAO RAP presented the findings, lessons and implications from HPAI H5N1 outbreaks in Assam, Sikkim and West Bengal states of India in 2008 and 2009. He informed that according to the records of the

Government of India, 6.5 million domestic poultry were culled at 68 epi-centres between January 2008 and May 2009. The overall socio-economic impact was tremendous, in some places income loss of 30% over three month period in 2008 until early 2009 was recorded. Dr Castellan concluded his presentation by presenting some steps which could be taken up in the short, medium and long term by the Government of India.

- d) Dr. Samar Kumar Ghosh, Assistant Director (Training), Department of Livestock Services (DLS), Bangladesh made the presentation on legislations related to animal production and health in Bangladesh. He focused on the main problem which is related to the absence of animal quarantine service in Bangladesh as envisaged in Animal and Animal Product Quarantine Act, 2005. In addition he mentioned there was lack of public awareness and tendency to ignore the provision of law. The situation was aggravated due to inadequacy of trained manpower, budget and infrastructure in the DLS. He recommended improving the capacity of DLS for enforcement of the Acts and continuous review of the Acts.
- e) Dr. Lal Krishna, Chief Veterinary Officer, Department of Animal Husbandry Dairying & Fisheries (DADF), India presented the paper on legislations related to animal production and health in India. He informed that veterinary services and legislative support in India relates to state jurisdiction thus prevention and control of animal diseases is within the purview of the State Governments, which are responsible for the provision of veterinary services through state veterinary hospitals, dispensaries and mobile veterinary clinics manned by veterinary graduates and paravets / stock assistants. He further informed about the newly enacted prevention and control of infectious and contagious diseases in animals Act, 2009 supersedes all previous acts and laws and has been adapted by all the States and Union Territories in India.
- f) Dr. Ram Krishna Khatiwada, Program Director, Directorate of Animal Health, MOAC, GON presented the legislations related to animal production and health in Nepal. He informed that the acts are taken as guiding regulations relating to animal production and health in Nepal and pointed out the gaps in the present legislations. It was reported that new acts are in the process of being promulgated, namely i) Veterinary Drug Act; ii) Animal Welfare Act (in process of approval), and iii) Animal Feed Act. He further



Participants at Pokhara meeting on 28th January 2010

suggested the need for reorganization in the prevailing acts.

- g) Mr. Jagmeet Uppal made the presentation on advocacy for control and prevention of HPAI and explained the elements of strategic communication and mentioned that it should be evidence based and result oriented. An elaborate discussion on the concept of risk communication for behaviour change and outbreak communication for immediate interventions were discussed. He emphasized that advocacy for the prevention and control of HPAI is a continuous process at multi level and such arrangements should be able to influence policy decisions and attitudes of various stake holders. He further said that it is a way to change public perception to risk posed by HPAI outbreaks and it should be able to help to 'act/ take-decisions' during under reaction (apathy) or during over-reaction (hyper) to HPAI related risk, especially during outbreaks. Following discussion on advocacy, he presented the role of social mobilization for prevention and control of HPAI. The presentation was followed by group discussion by policy and technical level personnel and group presentations.
- h) Dr. Lal Krishna, CVO, India made a presentation on the facilities available at OIE Reference Laboratory on HPAI, Bhopal and characteristics of circulating HPAI viruses in South Asia. It was reported that the current research at the laboratory related to: i) service projects; ii) surveillance of avian influenza; iii) institutional research projects; iv) studies on avian influenza with various sub-projects; and v) externally funded research projects. Dr. Lal also presented the summary of genetic analysis relating to HPAI virus in the region indicating clustering of Indian and Bangladesh isolates in the same cluster.
- i) Dr. Leo Loth, FAO Bangladesh dealt the regional issues on compensation. He presented the issues in deciding compensation. The cost of production in each country determines the compensation rate and there was little scope to harmonize the rates across borders however he suggested that the rates could be harmonized at SAARC level. He also questioned whether compensation for culling was an effective means to check the spread of infection from primary foci when movement controls are ineffective.
- j) A presentation on SOPs developed for cross border activities and discussed at country level in Bangladesh, India and Nepal was presented by Dr. Oberoi. He presented the summary of discussions held in the three countries in a series of brain storming workshops organized in 2009. It was reported that the document was being finalized and the proceedings with the final SOPs will be forwarded to the member countries for adoption and implementation.



Group work by Senior Officials at Pokhara Meeting

Concluding Session

The workshop was concluded by Dr Subhash Morzaria. He thanked the Government of Nepal for hosting the workshop, Governments of Bangladesh and India for sending their representatives, and the FAO Sub Regional ECTAD team for organizing the meeting smoothly. He mentioned that the investment in organizing the meeting is well paid as important issues are identified and discussed by the concerned governments in the region. He thanked the resource persons for presenting the working papers.

Dr. Morzaria thanked USAID for funding the program and emphasized that the resources are now dwindling and should be judiciously used in control of HPAI in the region. He further pointed that HPAI is a global issue and should be seen as a public good for which worldwide collaboration is required. Dr Morzaria mentioned on the need to enhance awareness and make the legislative measures strong for control of HPAI.

Dr. Oberoi on behalf of the ECTAD Unit (SAARC) thanked the participants for attending the meeting. Dr. Shaha, once again thanked all the participants of the meeting and the FAO for giving opportunity to the Government of Nepal in hosting this meeting.

Upcoming Events

- District level meetings in India and Bangladesh on advocacy, risk communication, poultry production systems, cross-border value chain mapping, disease investigation, February - April 2010
- Laboratory training on the use of Rapid Antigen Detection Kits, India, February - April 2010