

ORIGINAL IN SPANISH



## **PROCEEDINGS**

**FAO Meeting to strengthen actions on the prevention  
and early detection of High Pathogenic Avian  
Influenza (HPAI) (Asiatic H5N1) in Latin  
America and the Caribbean**

*30 - 31 October 2007, Santiago, Chile*

**Food and Agriculture Organization of the United Nations  
FAO Regional Office for Latin America and the Caribbean**

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## ABBREVIATIONS

ALA	Latin American Poultry Association
CAN	Andean Nations Community
CARICOM	Caribbean Community
CARIBVET	Caribbean Animal Health Network
CIRAD	Agricultural Research Center for International Development
CVP	Permanent Veterinary Committee of South Cone
ECTAD	Emergency Center for Transboundary Animal Diseases
FAO	Food and Agriculture Organization of the United Nations
FAO/RLC	Regional Office for Latin America and the Caribbean
GF-TADs	Global Framework for the Progressive Control of Transboundary Animal Diseases
GLEWS	Global Early Warning System for Animal Disease including Zoonoses
HPAI	Highly Pathogenic Avian Influenza
IADB	Inter-American Development Bank
ICG	International Coordination Group for HPAI
IICA	Inter-American Institute for Cooperation on Agriculture
INTA	National Institute of Plant Protection and Animal Health technologies
LAC	Latin America and the Caribbean
NAAHC	North American Animal Health Committee
NGOs	Non Governmental Organization
OIE	World Organization for Animal health
OIRSA	Regional International Organization of Plant Protection and Animal Health
OVS	Official Veterinary Services
PAHO	Pan-American Health Organization
PANAFTOSA	Pan American Center on Foot and Mouth Disease
PREA	Cooperation Programme to Support the Free Trade of Poultry and Products
PVS	Performance, Vision and Strategy
SAG	Agriculture and Livestock Services of Chile
SPS	Sanitary and Phytosanitary Measurement
TADs	Transboundary Animal Diseases
TCEO	Emergency Operations Service of FAO
TCP	Technical Cooperation Projects
USDA	United States Department of Agriculture
USAID	United States Agency for International Development
WAHID	World Animal Health Information Database Interface
WCS	Wildlife Conservation Society
WHO	World Health Organization

## 1. BACKGROUND

During the last decade, the economic and social importance of the poultry industry have increased in the Latin American and Caribbean Region, providing the population with meat and eggs of high quality and protein at a low cost, making these products the most frequently consumed form of animal protein in the Region; it is therefore fundamental to maintain a good health and quality conditions in the poultry production systems, at national and regional levels.

As of October 2007, the American Continent is free from HPAI, H5N1 (Asiatic), disease that has spread worldwide since 2003, demonstrating that it is one of the most important transboundary animal diseases (TADs), being established as a sanitary emergency in Asia, Middle East, Africa and Europe, a reality which has caused many losses in poultry production<sup>1</sup>, affecting international poultry trade and its products, causing problems in food security and increase the unemployment rate in the affected countries. This is the reason why the HPAI is a real threat to the American Continent and to other Regions which have not yet been affected by this disease.

Although the H5N1-HPAI, is not actually in the Region, other viral subtypes of HPAI were present in Mexico during 1994 (H5N2), Chile in 2002 (H7N3), Canada (H7N3) and the United States (H5N2) in 2004, providing substantial merit to the real possibility that these subtypes of pathogenic agents can affect the poultry populations in the Region, but also the capacity of some countries to detect, control and eradicate the diseases.

Due to this international epizootic emergency caused by the HPAI, in February 2006, many countries have requested to FAO's technical assistance, in order to prevent the introduction of the disease. In response to these requests, during April 2006, The FAO Director General, approved four regional emergency projects for an amount of USD 2 million, focused on the early detection of HPAI in the sub - Regions of the Caribbean (TCP/RLA/3103), Central America (TCP/RLA/3104), Andean Countries (TCP/RLA/3105) and South Cone (TCP/RLA/3106).

<http://www.rlc.fao.org/es/prioridades/transfon/aviar/proyectos.html>.

These projects were coordinated by the FAO, Emergency Center for Transboundary Animal Diseases (ECTAD), including the participation of the Official Veterinary Services (OVS) in the 33 countries involved, the Regional Office for Latin America and the Caribbean (FAO/RLC) as well as regional animal health organizations within the FAO/OIE Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs)

<http://www.rlc.fao.org/es/prioridades/transfron/>.

## 2. OBJECTIVES OF THE MEETING

1. To review the information on the activities carried out in the framework of the technical assistance projects between FAO and the beneficiary governments in the implementation of the early detection system, prevention and immediate response to facing the disease in the Region.
2. To define future activities to be established for the HPAI prevention in the national, sub-regional and regional levels.

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<sup>1</sup> The FAO economic studies, estimated that only in Southeast Asia the losses of poultry sector was as 10,000 million dollars and the systematic culling in Africa has been additional 60 million dollars for the local farmers. In the poultry industry until August 26, 2007, had been notified 5,222 outbreaks in 44 countries.

3. To establish coordination and cooperation channels as well as regional communications between the different sectors related to the prevention and/or control of this TAD.

### **3. PROGRAMME OF ACTIVITIES**

The programme was developed according to the proposed schedule described in the attached agenda (Annex 1). Prior to the meeting, participants received a Technical Background Note in order to have detailed information of the event and to prepare a short verbal presentation covering the following issues: i) evaluation of the project, ii) Avian Influenza activities which should be considered in each of their countries that must be followed-up iii) budget assigned by the veterinary services for follow-up AI activities.

### **4. INTRODUCTION**

The meeting was held in Santiago, Chile, at the Crowne Plaza Hotel, in the Prieto Salon. The event started on Tuesday, October 30, 2007 at 9.20 in the morning with the activities of the FAO Meeting to strengthen actions on prevention and early detection of Highly Pathogenic Avian Influence (HPAI) (Asiatic H5N1) in Latin America and the Caribbean”, after concluding the registration of 26 participants coming from the following 33 beneficiary countries of the project: Antigua and Barbuda, Argentina, Barbados, Bolivia, Belize, Brazil, Costa Rica, Colombia, Cuba, Chile, Ecuador, El Salvador, Guatemala, Grenada, Honduras, Jamaica, Mexico, Panama, Paraguay, Peru, Dominican Republic, Saint Kitts and Nevis, St. Vincent and the Grenadines, Saint Lucia, Suriname and Venezuela, as well as the following international organizations: OIE (World Organization for Animal Health), OIRSA (Regional International Organization of Plant Protection and Animal Health), USDA (United States Department of Agriculture), CIRAD (France Agriculture Research Center for International Development), IICA (Inter American Institute for Cooperation on Agriculture) PAHO-WHO (Pan-American Health Organization) and PANAFTOSA (Pan-American Centre on Foot and Mouth Disease) as well as ALA (Latin American Poultry Association) representatives and Poultry Producers Association from Colombia, Costa Rica, Peru and Chile (participant’s names detailed in Annex 2).

The meeting was inaugurated by Mr. José Graziano da Silva, FAO Regional Representative for Latin America and the Caribbean and Mr. Claudio Ternicier, Chief of the Livestock Protection Division, Chilean Agriculture and Livestock Service (SAG). Later the Working Agenda was approved as well as the designation of Mr. Claudio Ternicier as President of the Meeting, and Mr. Leopoldo del Barrio as Rapporteur.

### **5. EXPOSITIONS AND ACTIVITIES CARRIED OUT**

- 1) The description of the HPAI global situation and the role of FAO in the battle against the disease was presented by Dr. Tito Díaz, Senior Animal Production and Health Officer, (FAO/RLC), who described the behavior of the virus since its beginning in 1997 and up to date; its dissemination in the world and its direct link with the husbandry methodologies and commercialization of poultry in Asia, together with the role that the migratory wild birds may have had in the spread of the disease as well as other means of disease dispersion. He also made an analysis of the activities that FAO has initiated at a global level to support countries in the prevention, control and eradication of the disease, working with donors as well as FAO’s funds, and also made a description of the activities which are not yet implemented and need to be strengthened at a global level.

- 2) Dr. Moisés Vargas Terán, Animal Health Officer, (FAO/RLC) made a description of FAO activities in Latin America and the Caribbean (LAC) related to the disease prevention oriented to: a) the development of animal health regional policies focused towards the disease, b) technical assistance to the countries, c) coordination with regional animal health organizations and, d) search for resources to finance the continuity of the activities in the prevention of the HPAI in LAC, as well as to outline the relationship between the epidemic disease and how the emergency projects were developed for the early detection of the HPAI in Latin America and the Caribbean, indicating the objectives and activities consider in these projects.
- 3) Dr. Juan García García, Consultant-HPAI, International Expert and Projects Coordinator presented a summary of the activities carried out in the four regional projects and their results indicating: organizational and operational methodologies implemented; training activities carried out in the area of laboratory diagnosis; the management and the collection of samples and sample shipment procedures, as well as establish procedures for laboratories handling samples; handling and sampling of poultry and wild birds; the communication and information strategy. Moreover, Dr. García introduced the technical documents elaborated by the project consultants such as manuals for the prevention and control of HPAI (H5N1-Asiatic) and the elaboration of contingency plans; compensation mechanisms and regional strategy on communication and information, among other documents, as well as a description of the actions implemented to establish four sub-regional AI diagnosis support laboratories.
- 4) Dr. Héctor Campos López, Consultant-Contingency Plans Expert made a description on the methodology of work used for the evaluation of national AI contingency plans and programmes in each of the beneficiary countries of the projects, describing the elaboration process for the manual dedicated to prepare prevention and contingency plans for HPAI. Highlighted were the main challenges for the countries including: the surveillance implementation actions, prevention, communication and preparation for unexpected emergencies also including continuous educational programmes for professional and technical personnel.
- 5) Dr. Christian Mathieu, Consultant-Laboratory Diagnosis Expert referred to the activities and perspectives existing in the region regarding the laboratory diagnosis for HPAI, describing the training activities done during the projects implementation and explaining the selection mechanisms to identify the four supporting sub - regional laboratories located in Barbados (Caribbean), Guatemala (Central America) Colombia (Andean Countries) and Brazil (South Cone) as well as the specialists network in diagnosis created by the participation of the professionals trained in these activities. Remarks were made on the need to continually update diagnostic methodologies for governmental and private sector diagnostic professional personnel.
- 6) Dr. Jorge Hernández, Consultant-Epidemiologist Expert, described the most important elements considered in the formulation, implementation and evaluation of risk surveillance epidemiological systems for the early detection of the HPAI, including: identification of the disease and the population involved, design and sample size determination, collection, analysis and interpretation of data. Additionally, Dr. Hernández explained that due to the great differences existing between the countries in the region, regarding the poultry industry and the OVS, each country should seek to adapt the general guidelines to its local conditions, considering the availability of resources.
- 7) Concerning FAO and INTA (National Institute for Technology in Agriculture and Livestock, Argentina) Agreement to develop an Epidemiological Information System for HPAI in Latin America and the Caribbean, Dr. Sergio Duffy, INTA's Senior Officer took the floor to explain the relationship of the activities, from the creation and distribution of a survey to the countries, to knowing the state of advancement with which GIS (Geographical Information

Systems) can calculate a system design that implies the level of HPAI epidemiological surveillance, based on the risk to support the early detection of the disease in case this occurs, improving its efficiency in cost/benefit terms, and identifying and recognizing the areas with major risk for HPAI introduction and dissemination.

- 8) The “Regional Strategy in Communication and Information for HPAI prevention in Latin America and the Caribbean” was presented by Lic. Cecilia Ballesteros, Consultant-Communication Expert, who described the communication model used in the projects as a participative and inclusive one for all the areas related to the problem, appealing with the certainty that the only way to prevent and prepare the population for rapid action in outbreaks, will be that all the people involved assume their responsibility in the actions aimed to reduced the global threat of a pandemic, stabilization of poultry production, strengthening the regional/international poultry products trade and to improve the level of food security in the livelihood of the rural sectors. Furthermore, Ms. Ballesteros presented the results as to the validation of this strategy and the information materials distributed in the communication workshops carried out in each Sub Region.
- 9) The possible vaccination strategies to HPAI prevention and control in the American Continent, taken into account FAO/OIE technical recommendations, was presented by Dr. Juan García García, indicating the advantages and disadvantages of vaccination against Avian Influenza and its connotation in the requirements of the OIE for the determination of a differential sanitary status. During the exposition Dr. García showed examples in which countries affected by the disease obtained the eradication using the vaccination as tool. Due to the actual instability of viral subtypes present in the field, the formulation of a vaccine maybe a possibility, if this characteristic is taken into consideration, emphasizing the need to rely on valid and effective diagnosis techniques to be able to recognize vaccinated poultry from the infected ones.
- 10) Regarding complementary HPAI actions carried out by International Organizations were as follows:
  - a) IICA, through Dr. Ana Marissa Cordero, presented the actions it has implemented to prevent the disease via supporting the immediate response before an emergency occurs, preventing the introduction of diseases and maintaining the human and animal population healthy, for which the IICA strategy has been to strengthen the veterinary services through the application of the OIE/PVS system (Performance, Vision and Strategy), promoting the participation of the private sector through the publication of technical magazines and a web site and the communication risk through the validation of audiovisual materials such as videos and a radio series utilizing the FAO publication on prevention and control of HPAI in the small scale poultry in Latin America and the Caribbean.
  - b) The role of the OIE regarding HPAI, was presented by Dr. José Joaquín Oreamuno, who made a brief of the actions, rules and committees that have a relation to the poultry diseases in the OIE and its role at global level regarding this and other animal diseases.
  - c) OIRSA was represented by Dr. Mara González, who presented a summary with the prevention activities that OIRSA has carried out in relation to the HPAI in the Central American region through PREA (Cooperation Programme to Support the Free Trade of Poultry as well as Poultry Products) and supporting the FAO emergency project activities for the early detection of the HPAI in Central America (TCP/RLA/3104).
  - d) PAHO - PANAFTOSA, through Dr. José Naranjo, presented the role and activities of the Veterinary Public Health Programme on Avian Influenza, which is based on the joint participation and coordination with other international organizations, in technical cooperation activities in order that the countries can count on established/operational

- programmes on avian influenza, as a fundamental component for the preparation of plans for the possibility of pandemic influenza and as a means to the promotion of food security and quality assessment.
- e) Dr. Karen Sliter, Regional Director of USDA for Latin America presented the activities of the Department to prevent the HPAI at a global level and specifically in the American Continent, making known the International Coordination Group for Highly Pathogenic Avian Influenza (ICG), which was created to canalize the USDA international assistance in the world campaign against HPAI (H5N1).
  - f) The CIRAD and CARIVET (Animal Health Network of the Caribbean) activities, was presented by Dr. Thierry Lefrançois, who made a summary of CARIVET activities in animal health in the Caribbean Region, citing its main activities and priorities; Dr. Lefrançois also referred to the work group on AI, which members are all representatives of the Caribbean countries. This group is directed to the development and harmonization of the epidemiological surveillance procedures and the preparation of prevention and contingency plans and programs in the Region. Moreover he mentioned the list of training activities and protocols carried out to date by CIRAD.
- 11) The FAO Technical Cooperation Program: A tool that reacts to the needs of the member states was presented by Ms. Admira Mara, Emergency Operations Officer (FAO/TCEO), who give a summary on the creation of the Technical Cooperation Programme in 1976 and of how this support is given to the countries which request it; emphasizing that this is a flexible and participative programme. She stressed that FAO is actually supporting more than 90 projects on Avian Influenza all over the world, with a budget of more than 100 million dollars. She explained the performance and structure of the policies (platforms) ECTAD (Emergency Centre for Transboundary Animal Diseases), GLEWS (Global Early Warning System), through which they support and implement the cooperation towards the affected and at-risk countries.
  - 12) Dr. Claus Köbrich, Consultant Economist and Animal Health Expert, described the compensation mechanisms proposed for a sanitary emergency in HPAI, pointing out that the basis of these mechanisms are: to reduce the patrimonial risk produced and promote the notification. To obtain this, there should be a legal framework that considers the value and public objective, procedures and financial mechanisms. From the completed study it was concluded that the 19 countries that have a compensation mechanism from the 33 in Latin America and the Caribbean, have made compensation mechanisms with the aim to restore a destroyed good, but not to favor the disease notification. Therefore, it is necessary to incorporate the compensation as an important part of the prevention, control and eradication strategy of HPAI. This requires a greater legislative effort, in terms of modifying the existing legislation as well as creating new laws or rules in the Latin American and Caribbean countries.
  - 13) The Avian Influenza socio-economic impact in the Region was presented by Dr. Macarena Vidal, Director of the School of Veterinary Medicine, Universidad Mayor in Chile. Dr. Vidal presented an analysis of the SPS (Sanitary and Phytosanitary Measurement Agreement) related to the HPAI and indicated that the countries in the region should base their rules on international standards in order not to use them as unjustified barriers. Furthermore, she analyzed the socio-economic situation of the Region and the economic impact that a HPAI incident could have for the population, challenges for the Region, indicated the existing differences between the various animal health systems of the countries in the prevention of HPAI outbreaks and the ones which should to the fore to minimize the impact when the disease appears in the Region. Consequently it was recommended to invest in animal health systems, implying a high benefit-cost relation. BID Studies regarding the HPAI estimated an impact in Latin America (considering 21 countries that represent 96% of the total product of the Region) indicate that the expected costs of an HPAI outbreak could be in excess of 1,632 million dollars.

- 14) Dr. Ariel Mendes, President of ALA presented the Prevention and Contingency Plans Developed in Brazil for Avian Influenza and Newcastle Diseases. In this report, the actions to be taken by the Federal Government, State Governments and private sector to prevent outbreaks of these diseases in Brazil were detailed. He concluded that it should be taken into account that HPAI can change a successful activity into a catastrophe if certain measures are not taken to prevent the introduction of the virus into the countries and that the private sector should assist the government and the international organizations in the designation of efficient sanitary defense policies and in their capability to guarantee the quality of the poultry production and exports.
- 15) In the final presentation on the Avian Influenza regional projects, Dr. Moisés Vargas Terán, FAO/RLC, presented a regional strategy proposal as well as an action plan for the preparation of a rapid response regarding the HPAI, indicating that it is fundamental to begin an action plan in which the general objective is to continue the regional efforts in the preparation of a rapid response in preparation to the presence of HPAI, the aim of which is that the 33 participant countries could benefit by improving the prevention methods and eventual control of the HPAI and the plan of action rest on a strategy based in the agreement and cooperation of the country governments, through the national veterinary services, public health services, private sectors and cooperation with global and regional animal health organizations. This strategy would be directed to begin with the immediate procedures for the prevention and control of the disease in the following aspects: i) strengthening the alert capacity and prevention of the HPIA; ii) strengthening of the control and improvement of the diagnostic capacity and epidemiologic directed surveillance; iii) preparation of the control programmes for HPAI and iv) communication and information for the population.

## **6. MEETING CONSIDERATIONS AND GENERAL RECOMMENDATIONS**

### **WHEREAS:**

1. FAO provided strong management and leadership during execution of the four subregional emergency technical assistance projects on HPAI in the region, without the presence of the disease being detected.
2. FAO acknowledges the logistic support provided by OIE, CAN and OIRSA during implementation and execution of the four FAO technical cooperation projects, in terms of accommodating the projects' regional coordination units and their respective leaders.
3. The American continent is free of HPAI Asiatic strain H5N1.
4. In Latin America and the Caribbean, poultry production is extremely important for social, economic and food-security reasons.
5. Poultry meat and eggs are the forms of animal protein most consumed by the lower-income population groups, and since in 2006, the Inter-American Development Bank (IADB) predicted losses of US\$ 1.632 billion should HPAI enter the region.
6. Private poultry activity in Latin America and the Caribbean is one of the best organized and most buoyant segments of the region's livestock sector.
7. The heterogeneity of the countries comprising the continent's various sub-regions, particularly in the Caribbean, generates major asymmetries in the socioeconomic, cultural and geographic domains, and also among poultry production systems.

8. The progress made in poultry industry in the areas of technology and management methods, in several countries, contrasts with the scant development displayed by others in the region.
9. The identification of any avian influenza (AI) virus, in its H5 and H7 strains, must be immediately notified.
10. HPAI (Asian H5N1) is a transboundary animal disease that can easily spread to become an endemic problem that is hard to eradicate and has serious economic and public-health repercussions.
11. The ongoing expansion of the HPAI H5N1 epizooty which began in Asia in 2003, has now affected 60 countries in three continents.
12. HPAI surveillance on the American Continent has increased over the last few years; the H7N3 strain has been detected in Canada, and low-pathogenic H5N1 has been found in the United States.
13. The experience of Mexico, Guatemala and El Salvador in using vaccines against H5N2 strains of AI, prove the need to count on vaccines before an outbreak of HPAI in the region.
14. Countries benefiting from FAO technical assistance projects agree that it is better to prevent transboundary animal diseases than control their outbreaks, given the latter's high cost-benefit ratio.
15. Veterinary services in Barbados, Brazil, Colombia, Cuba, Guatemala and Panama have indicated their interest in setting up subregional and/or regional reference laboratories for HPAI.
16. The existence of the Global Framework for the Progressive Control of Transboundary Animal Diseases (GF-TADs) promoted by FAO/OIE (with participation from the following organizations specializing in animal health: WHO, OIRSA, CAN, CARICOM, CVP, IICA and NAAHC) provides a platform to support Latin American and Caribbean countries.

**THE PARTICIPANTS IN THE MEETING RECOMMEND THAT:**

1. FAO should be congratulated on its work and achievements during implementation of the technical assistance projects, following 18 months of continuous activity in 33 Latin American and Caribbean countries, in which 90% of the expected results were achieved. The latter include having strengthened areas relating to contingency planning, epidemiological surveillance, monitoring of avian diseases, analysis of health data, laboratory diagnostics, control methods and communication and information. As a result, training was provided to a large number of professional workers in the aforementioned disciplines.
2. FAO should serve as the international animal health organization that coordinates activities and efforts undertaken by individual countries and other international organizations and regional institutions, with the aim of avoiding a duplication of efforts in the prevention and early detection of the disease.
3. With technical assistance from FAO and other international organizations, capacities should be consolidated in terms of surveillance, diagnosis, rapid emergency response and restoration of the productive chain following a possible outbreak of HPAI in the 33 Latin American and Caribbean countries.

4. Given the asymmetry displayed by animal health capacities in the Caribbean subregion, and to strengthen animal health activities, including those relating to HPAI, FAO should appoint a full-time animal health officer for that subregion.
5. In conjunction with international organizations and ALA, countries should encourage the development of animal production and health programmes, by applying good practices and ensuring product safety and quality, as well as environmental protection, especially in small producer systems.
6. Countries that display greater productive and health development in the poultry sector should invoke the south-south cooperation modality between and within countries that require support, given the lower development level of their poultry industry.
7. The private poultry sector in Latin America and the Caribbean should strengthen its participation and links with official veterinary services to promote and support national and regional HPAI prevention strategies.
8. All national governments in the region should make funds available in their political and budgetary agendas to implement HPAI prevention and control activities.
9. All countries of Latin America and the Caribbean, with support from international organizations, including OIE, should finalize or request evaluations of their national veterinary services.
10. International organizations, including FAO, WHO and CIRAD, should strengthen direct assistance to countries with the purpose of improving or establishing national HPAI contingency plans, especially in the Caribbean subregion.
11. FAO, IICA, and global financing agencies such as the World Bank and IADB, should strengthen technical assistance on socioeconomic issues and support the urgent development of national plans for compensation (indemnification) and restoration of the productive chain following an outbreak. They should also endeavour to obtain funds for this purpose.
12. The countries (public and private sector) and the international animal health organizations should help develop national biosecurity standards in the various poultry production systems.
13. In conjunction with international organizations, each country's national contingency plans should be evaluated and tested through nationwide simulations, both on a distance basis and involving personal participation.
14. With assistance from international organizations, countries should obtain the information needed to undertake effective HPAI risk analysis, which should be updated at least every six months.
15. In conjunction with other international organizations, FAO should strengthen technical assistance and training to improve surveillance for HPAI prevention, using an active and targeted epidemiological surveillance system in accordance with completed risk studies. At the same time, the veterinary services should improve information systems and traceability by increasing the registration of poultry producers, farms and conducting livestock censuses.
16. FAO and OIE should organize seminars, workshops and specialist meetings on HPAI disease laboratory diagnostics in an attempt to continue to harmonize and standardize procedures using the diagnostic protocols according to the modification issued by

- OIE/FAO reference laboratories. Arisen from the technological advance and the genetic changes of the HPAI virus.
17. FAO, international organizations and other institutions such as USDA or USAID, should provide advanced training courses on the epidemiology of HPAI (H5N1), at all technical levels of national veterinary services. Special attention should be paid to active surveillance, monitoring programmes, immunization campaigns and control programmes.
  18. Together with international organizations and the WCS (Wildlife Conservation Society) among others, FAO should provide training courses on ornithological issues related to HPAI (recognition of migratory species, procedures of capture, management of birds, sample preservation and shipment methods from laboratory) among wild birds, whether living in the wild or in captivity.
  19. International organizations, WCS and other institutions with concerns regarding ornithological issues related to HPAI should conduct national epidemiological studies among wild birds in three or four countries of the Caribbean, Central American, Andean and Southern Cone subregions.
  20. With assistance derived from international organizations, the public and private sectors in individual countries should compile and document data on wild bird movements resulting from their trade, or other movements involving wild species.
  21. With assistance from FAO, WHO and other international organizations, countries should prepare or update a national map containing data on migratory birds and the distribution of poultry, to guide and target epidemiological surveillance on the basis of risk and possible control activities.
  22. FAO should provide technical assistance to help countries intergrate their national information systems with the epidemiological data system developed by FAO and INTA and, at the same time, provide distance and attendance-based training on the system, to analyse the information obtained and prepare reports.
  23. FAO, WHO, OIE and other international organizations should provide training on the interdisciplinary aspects of risk communication needed during an outbreak of the disease, and on the necessary analytical development required for risk management.
  24. FAO and other international organizations should help national laboratories improve their infrastructure and equipment, including inventories and budgeting.
  25. Countries should take steps to establish one or more subregional or regional referral laboratories for HPAI diagnosis, in accordance with OIE/FAO standards on the subject.
  26. International organizations, including FAO, should continue to support countries in the standardization, authorization, harmonization and establishment of molecular diagnostic techniques (both virological and serological) for the purpose of diagnosing the disease.
  27. WHO, USDA and FAO should continue to provide advanced certification courses for the collection, storage and mailing of HPAI-suspect samples, pursuant to the requirements of the International Air Transport Association (IATA).
  28. FAO and other international organizations should support annual inter-laboratory meetings with application of proficiency test on diagnostic techniques of relevance to HPAI, in the laboratories of countries in the region with capability for this.

29. In partnership with FAO and other international organizations, the public and private sectors in individual countries should provide personal protective equipment for in preparation for HPAI control and containment programmes.
30. FAO and other international organizations should provide training to personnel operating mobile culling and disinfection units.
31. FAO and other international organizations should provide technical assistance for the development of immunization strategies and a national plan for emergency HPAI immunization.
32. Official Veterinary Services in the region in conjunction with vaccine manufacturers must cooperate to find the best alternative (with regard to the prevention of and inhibition of the spread of HPAI), to ensure availability of the biologicals in the necessary quantity and quality at the time of disease outbreaks in the region. The possibility of establishing a regional vaccines bank should also be considered.
33. FAO, WHO, PAHO and other international organizations should help countries formulate a national communication plan, and provide technical assistance on all aspects of communication, particularly in terms of: (1) raising public awareness with various target audiences; (2) improving communication in crisis situations; (3) increasing coordination between the various government ministries involved, and between the central and provincial levels.
34. International organizations, including FAO, should help countries develop suitable communication tools using local languages, via testing the comprehension of their content, and by targeting prevention messages and other communication tools towards poultry producers and consumers and the public at large.
35. Countries should translate FAO documents and other publications on HPAI into local languages.
36. With the assistance of international organizations, countries should prepare and distribute surveillance and biosecurity manuals targeting poultry producers, rural families, veterinarians and other stakeholders in the poultry productive chain.
37. Countries and international organizations should disseminate information on HPAI through local and regional internet sites dealing with this issue.
38. In conjunction with FAO, IICA and other international organizations, countries should provide nationwide training on good poultry practices and biosecurity principles on farms, specifically targeting farmers, producers, employees, veterinarians and other personnel involved in poultry production and trade.
39. With assistance from international organizations, countries should establish and promote the regional exchange of epidemiological information on the disease, including the situation specific information in relation to other diseases, information on outbreaks, control measures and how to improve early detection systems, including technical information and technology transfer.
40. With regard to AI prevention and outbreak response, countries in conjunction with FAO and other international organizations should establish communication platforms for non-governmental organizations (NGOs).
41. FAO and OIE should convene a meeting of GF-TADs with all participating international organizations, to seek ways of improving their efficiency and operations, to the benefit of member countries.

42. To follow up the idea of investing in prevention work, countries should approve the plan of action for the prevention and control of HPAI, as presented by FAO for development over the next 90 days, which includes the following: (a) finalization and submission of project technical documents; (b) preparation of a monthly regional HPAI bulletin; (c) relaunch of national communication programmes (public-private partnership); (d) maintenance of networks of diagnostics, communication and surveillance professionals; (e) preparation of four project documents to implement the recommendations arising from the meeting; (f) submission of project documents for consideration by the countries and international organizations; (g) promotion of project financing in conjunction with international organizations; (h) maintenance of a communication link with veterinary service chiefs for the purpose of reporting progress achieved; and (i) reformulation of the strategy to be pursued, in consultation with the 33 participating countries, once funding has been obtained for at least one of the projects.

## **7. MEETING CLOSURE**

At the Prieto Salon of Crowne Plaza Hotel, Santiago, Chile, the President of the Meeting Mr. Claudio Ternicier, closed the event on Wednesday 31 October 2007 at 18.15 hours, after a few words of address by Mr. Ariel Mendes, ALA. The President thanked FAO for good performance in the execution and implementation of these projects and requested the participants and representatives of the countries to join efforts in continuing working together in the prevention and control of the HPAI in the Continent.

## ANNEX 1

## AGENDA

The International Meeting will be held on October 30<sup>th</sup> - 31<sup>st</sup>, 2007 at the facilities of the Hotel Crowne Plaza, Santiago, located in Av. Libertador Bernardo. O'Higgins 136, Santiago, Chile.

Tuesday, October 30, 2007			
ISSUE	TIME	ACTIVITY	RESPONSIBLE PERSON
1	08:30 – 09:00	Registration of participants	Organization team
2	09:00 – 09:20	Opening Ceremony	Dr. Jose Graziano da Silva, FAO Regional Representative for Latin America and the Caribbean
3	09:20 – 10:20	Global situation of the highly pathogenic avian influenza H5N1 (Asian) epizootic and the role of FAO	Dr. Tito Díaz (FAO/RLC)
4	10:20 – 10:50	FAO intervention in activities towards the prevention and control of HPAI in Latin America and the Caribbean	Dr. Moisés Vargas-Terán (FAO/RLC)
	10:50 – 11:10	Coffee Break	
5	11:10– 11:40	Briefing of activities implemented by the four regional projects and their products	Dr. Juan García García (FAO/RLC)
6	11:40 – 12:20	HPAI prevention and contingency programmes in America; a regional challenge	Dr. Héctor Campos (FAO/RLC))
7	12:20 – 13:00	Current situation and perspectives of HPAI diagnosis in the region through regional support laboratories for Latin America and the Caribbean	Dr. Christian Mathieu (FAO/RLC)
	13:00 – 14:00	Lunch	
8	14:00 - 14:40	Methodology systems for surveillance and early alert including risk analysis aspects of HPAI	Dr. Jorge Hernandez (FAO/RLC)
9	14:40 – 15:30	Geographical information system for epidemiological purposes to survey HPAI in Latin America and the Caribbean; coordination among countries	Dr. Sergio Duffy (INTA)
10	15:30 – 16:00	Regional communication strategy for the prevention of HPAI	Lic. Cecilia Ballesteros (FAO/RLC)
	16:00 – 16:30	Coffee Break and review of panels with posters and messages developed by the communication and information teams of the projects	
11	16:30 – 17:00	FAO/OIE vaccination strategy for the prevention and control of HPAI in the American Continent; advantages and disadvantages	Dr. Juan Garcia Garcia (FAO/RLC)
12	17:00 - 19:00	Complementary interventions conducted by: PAHO/PANAFTOSA, IICA, OIE, USDA, CAN, OIRSA, USAID, CARICOM and CIRAD, to prevent HPAI in Latin America and the Caribbean	OIE, USDA, CAN, PAHO, OIRSA, USAID, CARICOM and CIRAD
	19:00 – 21:30	Welcome cocktail	
Wednesday, October 31, 2007			
ISSUE	TIME	ACTIVITY	RESPONSIBLE PERSON
13	09:00 – 09:20	Welcome to the second day meetings and review of first day activities	Organization team
14	09:20 – 10:00	FAO Technical Cooperation Programme: a response tool for the needs of member states	Ms. Admira Mara (FAO/TCEO)
15	10:00 – 10:40	Presentation of the proposed compensation mechanisms to respond in the event of an HPAI	Dr. Claus Köbrich (FAO/RLC)

		sanitary emergency	
	10:40 – 11:00	Coffee Break	
16	11:00 – 11:40	Socio-economical impact of avian influenza; challenges for the region	Dra. Macarena Vidal (U Mayor)
17	11:40 – 12:30	Financing mechanisms for the animal health sector in Latin America and the Caribbean	WB, IADB, USDA, USAID, countries, producers
	12:30 – 14:00	Lunch	
18	14:10 - 14:40	Proposal of a regional strategy and action plan for the preparation and early response against HPAI	Dr. Moises Vargas-Teran (FAO/RLC)
19	14:40 - 15:20	Discussion forum for present activities and future actions	Discussion panel
	15:20 – 16:00	Coffee Break	
20	16:00 – 16:30	Agreements and recommendations	Discussion panel
21	16:30 – 17:00	Closing ceremony	Dr. Jose Graziano da Silva, FAO Regional Representative for Latin America and the Caribbean

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