Convención sobre la conservación de las especies migratorias de animales silvestres

Secretaría administrada por el Programa de las Naciones Unidas para el Medio Ambiente

CMS

PNUMA

31ª reunión del Comité Permanente

Bonn, 28-29 de septiembre de 2006

CMS/StC31/9
Punto 9.e del orden del dia

AVANCES DE LAS DECISIONES DE LA COP8: GRUPO DE TRABAJO CIENTÍFICO SOBRE LA GRIPE AVIAR (Res. 8.27)

Introducción

1. En agosto de 2005, los temores relativos al posible papel de las aves migratorias en la transmisión del subtipo altamente patógeno del virus H5N1 de la gripe aviar (HPAI), llevaron a la Secretaría CMS, en estrecha cooperación con la Secretaría AEWA, a establecer un Grupo Científico dedicado a la gripe aviar y las aves silvestres. El Grupo fue creado con el propósito de promover que los esfuerzos efectuados a escala internacional para contener HPAI tomasen en cuenta información crucial sobre las especies migratorias y sobre otros aspectos ambientales. Forman parte del mismo, al presente, representantes de la CMS, AEWA, la Convención Ramsar, la CDB, Wetlands International, Birdlife International, International Council for Game and Wildlife Conservation (CIC), la Wildlife Conservation Society (WCS) y la Sociedad Zoológica de Londres- Zoological Society of London (ZSL), junto con el PNUMA, la FAO, la OMS y la Organización mundial para la salud animal (OIE), que participan como observadores.

2. Desde su creación, el Grupo ha concentrado sus esfuerzos para contar con toda la asesoría científica que resulte posible obtener relativa al impacto sobre la conservación provocado por la propagación de H5N1, evaluando el papel de las aves migratorias como vectores del virus, y proporcionando asesoría sobre las causas primeras de la epidemia, así como sobre las medidas técnicamente idóneas para combatirla y para desarrollar las capacidades de detección inicial rápida. La información y las declaraciones han sido ampliamente difundidas bajo la forma de comunicados de prensa con el fin de incrementar el conocimiento, a escala internacional, de los efectos de HPAI sobre la fauna silvestre, asesorar sobre las opciones disponibles, y contrarrestar, donde haga falta, las declaraciones sin fundamento de los medios de difusión sobre el papel de las especies migratorias en la propagación del virus.

3. En gran parte como resultado de los trabajos del Grupo, las Conferencias sucesivas de las Partes (COPs) al Acuerdo sobre las aves acuáticas de África y Eurasia, de la Convención Ramsar y de la misma CMS, celebradas en octubre y noviembre de 2005, aprobaron resoluciones que tratan en detalle el problema de la gripe aviar. Las mismas apoyan con insistencia la acción constante del Grupo y, en particular, la Resolución 8.27 de la CMS solicita que "*El Secretario Ejecutivo confirme el papel de liderazgo de la Convención en el Grupo científico sobre la gripe aviar mediante la designación de representantes idóneos del Consejo Científico y de la Secretaría.*".

Novedades desde la octava Reunión de la Conferencia de las Partes

4. Desde la celebración de la COP8 el número de miembros y de observadores del Grupo Científico se ha incrementado hasta alcanzar la cifra actual de trece participantes. El más reciente, la Convención sobre la Diversidad biológica (CDB) ingresó al Grupo en marzo de 2006. El Grupo funciona principalmente mediante contactos por correo electrónico y se reúne periódicamente por teleconferencia. Se han celebrado cuatro teleconferencias desde la COP8.

5. Además de su labor regular, el Grupo desempeñó un papel crucial en la organización de un Seminario científico sobre la gripe aviar, el medio ambiente y las aves migratorias que reunieron conjuntamente la CMS, AEWA y la División de alerta y evaluación rápidas del PNUMA (PNUMA/DEWA) en la sede de las Naciones Unidas en Nairobi, Kenya, el 10 y el 11 de abril de 2006[1], donde el Grupo se desempeñó como Comité Científico y de planificación del evento. Los representantes de los miembros y los observadores individuales fueron quienes efectuaron las contribuciones de fondo más importantes al Seminario, que reunió a más de cincuenta participantes, entre los que se contaban expertos en virología, epidemiología, salud humana y animal, producción avícola, ecología y migración, con el fin de identificar las acciones de seguimiento aconsejables y de efectuar recomendaciones para la aplicación efectiva de las disposiciones de las resoluciones ya mencionadas de AEWA, RAMSAR y la CMS. El Seminario examinó asimismo los últimos trabajos científicos relativos a la evolución y propagación del linaje asiático HPAI H5N1, así como a su impacto sobre las aves silvestres y otras, y debatió aspectos relacionados con el peligro de una transmisión ulterior y con las estrategias eficaces para la disminución de los riesgos inherentes. Se están dando los últimos toques a las actas del Seminario y las mismas están disponibles durante la reunión del Cometé Permanente en CD-ROM.

6. El Seminario acordó un juego de Conclusiones y Recomendaciones, que figuran en el Anexo 1 del presente documento y reconoció que el Grupo Científico constituye el principal mecanismo para promover la aplicación de las recomendaciones, tanto con las organizaciones y organismos participantes, como con otros interesados, cuando resulta necesario y apropiado.

Aplicación de las recomendaciones del Seminario sobre la gripe aviar y futuro desarrollo del Grupo Científico.

7. Se aplican ya algunas de las recomendaciones del Seminario y, en particular, se ha preparado, en estrecha consulta con los miembros y observadores del Grupo Científico, un folleto sobre la gripe aviar y las aves silvestres basado, en gran medida, en las conclusiones y recomendaciones del Seminario y que se propone reflejar, de manera precisa y equilibrada, el papel de las aves silvestres en la difusión del virus HPAI H5N1 en relación con el de otros mecanismos conocidos, y presentar recomendaciones sobre las medidas para reducir el peligro de una extensión ulterior, y sobre las necesidades urgentes de investigación para salvar deficiencias críticas en los conocimientos sobre el tema.

8. Empero, el Seminario reconoció que, con el fin de salvaguardar el enfoque profesional del Grupo Científico, se requieren recursos adicionales, en especial el nombramiento de un coordinador para el Grupo, con dedicación exclusiva, por un período inicial de doce meses

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El Seminario fue copatrocinado por FAO, Departamento del Ambiente, Alimentación y Asuntos Rurales del Reino Unido (DEFRA – la División Internacional de la Salud Animal), la División de Cooperación Regional de UNEP (UNEP/DRC), la División de UNEP de Convenciones Ambientales (UNEP/diciembre) y Vogelbescherming Nederland (Partner de BirdLife de los Países Bajos) El Seminario ha recibido también apoyo de BirdLife Internacional, la Comisión Curopea, el Consejo Internacional para la Conservación de la Fauna (CIC), el Comité Conjunto de la Conservación de la Naturaleza del Reino Unido, la Secretaría de la Convención de la Diversidad Biológica, Wetlands International, la Organización de Mundo para la Salud Animal (OIE)

9. Como medida interina, y con el fin de mantener el desarrollo de las actividades del Grupo Científico por encima del nivel mínimo, por el momento, la CMS, conjuntamente con AEWA, han nombrado un coordinador con dedicación parcial por un periodo de cuatro meses.

10. Un proyecto que parece fundamental para reforzar las capacidades del Grupo Científico con el fin de que pueda cumplir con las recomendaciones del Seminario consiste en desarrollar un sitio y un portal en la red sobre la Gripe aviar, la fauna silvestre y el medio ambiente (AIWEb). Varias recomendaciones del Seminario se centran en la necesidad de recoger y dar a conocer información correcta sobre la dinámica y la extensión de AI en la fauna silvestre y de lanzar campañas de información pública a escala nacional e internacional. Las medidas requeridas se verían facilitadas mediante el desarrollo de un instrumento de información y comunicación basado en la red. Al respecto, se ha concebido AIWEb para que funcione como centro de distribución de la información del "Grupo científico sobre la gripe aviar y las aves silvestres" en la red mundial (WWW), y para que ofrezca una plataforma pública para el intercambio de información y la comunicación de novedades y de temas de actualidad referidos a AI y las aves migratorias.

11. Los demás miembros y los observadores del Grupo Científico prestaron su consentimiento inicial para el desarrollo de dicha plataforma en la red, y la CMS y AEWA prepararon una propuesta de proyecto para AIWEb que desde entonces ha sido utilizada por la CMS y AEWA en sus esfuerzos para recaudar los fondos necesarios para desarrollar la iniciativa. La propuesta de proyecto se adjunta a este documento en el Anexo 2.

12. Si bien por el momento no se dispone de una confirmación definitiva de ayuda financiera, en respuesta a los esfuerzos de recaudación de fondos; la CMS y AEWA vienen utilizando sus propios recursos limitados y se sirven de la labor de su propio personal para desarrollar el sistema AIWEb existente y las páginas de contenido básico para el Grupo Científico. En colaboración con la División de comunicaciones y de información pública del PNUMA (PNUMA/DCPI), se ha establecido la estructura de AIWEb de modo que los aspectos iniciales del sitio en la red estarán disponibles en el URL www.aiweb.info antes de fin de mes.

13. Pero para poder convertirse a la larga en un recurso efectivo, al día y de utilidad para el Grupo Científico AIWEb requerirá mantenimiento frecuente. La idea es que el eventual coordinador para el Grupo Científico devenga el principal responsable de AIWEb, manteniendo y estimulando su utilización efectiva por parte de los miembros del Grupo Científico. Al respecto, la CMS ha enviado recientemente una carta a los responsables financieros de todas las organizaciones asociadas en el Grupo Científico para solicitarles contribuciones financieras para AIWEb y para sufragar el cargo de coordinador del Grupo Científico.

Acción solicitada:

Se invita al Comité Permanente a:

(a) Tomar nota de las novedades vinculadas con la aplicación de la Res. 8.27, en particular las concernientes al papel de la Secretaría de la CMS en su carácter de líder del Grupo Científico sobre la gripe aviar y las aves silvestres, y confirmar el apoyo del Comité para que continúen sus actividades al respecto

(b) Alentar a las Partes y a otros donantes a que proporcionen apoyo financiero para el ulterior desarrollo de AIWEb y para su gestión por parte de un coordinador del Grupo Científico.

ANNEX 1
(English only)

Convention on the Conservation of Migratory Species of Wild Animals

Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA)

Scientific Seminar on Avian Influenza, the Environment and Migratory Birds

UNEP HQ, Gigiri, Nairobi, Kenya
10-11 April 2006

Conclusions and Recommendations

Short Version

MEETING GOAL

To address migratory bird populations and environmental aspects in the current Asian lineage Highly Pathogenic Avian Influenza (HPAI) virus subtypeH5N1 epidemic.

BACKGROUND

Sound scientific information, including an understanding of the environment and migratory bird populations, is a necessity for understanding the HPAI H5N1 epidemic.

HPAI H5N1 is an avian virus. Humans and other mammals are currently aberrant hosts.

RECENT ADVANCES

H5N1 is considered to have been spread between countries by a number of different known vectors, including the movement of live poultry and its by-products, legal and illegal trade in birds, equipment associated with these respective industries, movement of people, and migrating waterbirds.

The current situation is unique in that the ecology and epidemiology of Asian lineage HPAI H5N1 differs from that observed for previous Avian Influenza Viruses (AIVs). In the present epidemic disease occurs in a wide range of species that include poultry, wild birds, humans and other mammals.

RECOMMENDATIONS

Surveillance and Early Warning System

Early detection is essential for the control or eradication of Asian lineage HPAI H5N1.

FAO, OIE, and WHO – Global Livestock Early Warning and Response System (GLEWS). It has the potential to be enhanced (and must be) to also track the spread of HPAI H5N1 in populations of wild birds. The integration of The Global Avian Influenza Network for Surveillance (GAINS) into this EWS is encouraged.

This system must be rapid, transparent, and have local, national and international levels.

Risk Assessment

All countries should undertake risk assessments which should be transparent, structured, science-based and make use of all available knowledge.

Research Needs

We need to increase research on various aspects of the epidemiology and ecology of H5N1 in wild bird populations and the environment. These include:

1. Prevalence of H5N1 in various wild bird populations.
2. Analysis of existing ringing and monitoring data and implementation of targeted work to increase understanding of migratory systems.
3. Ecology of virus in the environment.
4. Natural mortality rates in wild bird populations.
5. Wild bird susceptibility to H5N1 among high risk species.
6. Effective measures to reduce spread of H5N1 between wild birds and poultry.

Other Short and long Term Needs

We must collate data available on trade issues to fully understand the epidemiology of the disease.

The development of compensation policies for agricultural losses and for impacts on protected areas must be proactively established.

We need to effectively communicate with the media, and ultimately educate the public and policy makers using facts.

Interplay between the agriculture, animal (domestic and wildlife) health, human health, ecosystem health, and socio-cultural factors should be emphasized.

Maintaining and developing collaborative approaches to address the multiple and complex issues raised by the international spread of HPAI H5N1 will prove to be critical to long-term success.

Resources are required to strengthen and broaden the Scientific Task Force on Avian Influenza and Wild Birds to carry forward these recommendations.

Extended version

INTRODUCTION

In mid-2005, concerns about the role of migratory birds as potential vectors of the Asian lineage Highly Pathogenic Avian Influenza (HPAI) virus subtype H5N1, which was spreading north-westwards from its origins in East and South-east Asia, led the UNEP Convention on Migratory Species (CMS) to establish a Scientific Task Force on Avian Influenza and Wild Birds. The Scientific Task Force on Avian Influenza, which was established in August 2005, now comprises 13 members and observers, including UN bodies, wildlife treaties and specialist non-governmental organisations and institutions. The Task Force aims to obtain the best scientific advice on the conservation impact of the spread of HPAI H5N1, assessing the role of migratory birds as vectors of the virus, and issuing advice on the root causes of the epidemic as well as technically sound measures to combat it and develop early warning expertise.

Largely as a result of the Task Force's work, successive Conferences of the Parties (COPs) to the African-Eurasian Waterbird Agreement, the Ramsar Convention on wetlands and CMS, held between October-November 2005, passed detailed Resolutions on avian influenza. More recently the Convention on Biological Diversity held a brainstorming meeting on the impacts of avian influenza on wildlife in Brazil in March 2006 prior to its eighth Conference of the Parties, which subsequently adopted a decision on the subject.

The Seminar on Avian Influenza, Wild Birds and the Environment has been convened by CMS, AEWA and UNEP in April 2006 in Nairobi, Kenya, with the main purpose of identifying follow up actions and make recommendations for the practical implementation of the provisions of the above-mentioned Resolutions. It has also reviewed the latest scientific studies concerning the evolution and spread of Asian lineage HPAI H5N1, its impacts on wild birds and the wider environment. The seminar discussed issues related to the risk of further transmission and to effective risk mitigation strategies.

The Seminar recalled the conclusions of the Contracting Parties to the African-Eurasian Waterbird Agreement (AEWA)[1], the Ramsar Convention on wetlands[2], and the Convention on Migratory Species (CMS)[3] that Highly Pathogenic Avian Influenza (HPAI) H5N1 is considered to have been spread between countries by a number of different known vectors, including the movement of live poultry and its by-products, legal and illegal trade in wild or captive birds, movement of people, and migrating waterbirds. The relative significance of these different modes of spread has varied and evidence of causal links is weak or lacking in many cases.

The Seminar considered that this statement still accurately reflects the current situation, noting also that recent events have highlighted situations where more than one vector can combine to spread HPAI.

The current situation is unique in that the ecology and epidemiology of Asian lineage HPAI H5N1 differs from that observed for previous Avian Influenza Viruses (AIVs) and has now caused disease in a wide range of species, not only of birds but also of mammals.

Recent events have highlighted the significant impacts the spread of this virus has had on livelihoods of rural populations, with negative consequences both for food security and economies especially in developing countries.

Overall the establishment and maintenance of high standards of poultry biosecurity remains central to the reduction of risk of infection of poultry by HPAI H5N1. It is important that national veterinary services are upgraded to OIE standards.

SURVEILLANCE, EARLY WARNING AND RISK ASSESSMENTS

Early detection is essential for the control or eradication of Asian lineage HPAI H5N1.

In response to the spread of HPAI H5N1, the responses of the Food and Agriculture Organisation (FAO), the World Organisation for Animal Health (OIE) and the World Health Organisation (WHO), have been considerable, notably through the publication in May 2005 of a *Global Strategy for the Progressive Control of Highly Pathogenic Avian Influenza*, and its implementation, *inter alia*, through regional programmes of *Emergency Assistance for Early Detection and Prevention of Avian Influenza*. FAO, OIE and WHO have developed an integrated early warning system (Global Livestock Early Warning and Response System to Major Transboundary Diseases - GLEWS) which includes already available information from both official and unofficial sources. It has the potential to be enhanced more comprehensively to track the spread of HPAI H5N1 in populations of wild birds. It is clearly crucial to build on existing

[1] AEWA MoP3: Resolution 3.18. Avian Influenza. Dakar, Senegal. http://www.unep-aewa.org/meetings/en/mop/mop3_docs/final_resolutions_pdf/res3_18_avian_influenza.pdf

[2] Ramsar CoP9: Resolution IX.23. Highly pathogenic avian influenza and its consequences for wetland and waterbird conservation and wise use. Kampala, Uganda. http://www.ramsar.org/res/key_res_ix_23_e.pdf

[3] CMS CoP8: Resolution 8.27. Migratory species and highly pathogenic avian influenza. Nairobi, Kenya. http://www.cms.int/bodies/COP/cop8/documents/proceedings/pdf/eng/CP8Res_8_27_Avian_Influenza_eng.pdf

activities to more fully consider disease surveillance in wild bird populations, since adequate surveillance for HPAI H5N1 in populations of both wild bird and poultry, and the rapid reporting of infection, remains central to international and national control strategies.

Surveillance programmes, operating at various scales, should be developed as a matter of priority through building upon and enhancing existing activities. They should always have clearly defined objectives and their development should incorporate the results of risk assessments that have established likely species at higher risk of carrying HPAI H5N1, as well as the best strategic design (optimal selection of sampling sites) and methods of sampling these species. If infection rates in wild bird populations are low, then surveillance will need to be carefully targeted with adequate sample sizes (and locations) so as to ensure adequate detection sensitivity. National programmes of surveillance should be planned jointly by ornithologists working together with veterinary experts.

Given that national results are of high relevance in the wider international context is important that reporting of results is rapid, very much more rapid than at present - with rapid sharing of data between countries and collaborating organisations.

The development of global early warning systems (EWS), which incorporate the results of national and international surveillance programmes should have the following attributes:

- be web-based so as to allow the rapid dissemination of open-access data and information deriving from surveillance systems;
- should allow for integration of surveillance results with geographical and other data sets so as to facilitate integrated responses and risk management;
- should fully report associated meta-data that would allow full analysis and interpretation of results in order to decide on accurate response (*inter alia*, information on type of surveillance (active or passive) and locations of sampling locations); and
- facilitate the timely and effective management of risks identified as a result of early warning. This implies clear warning triggers and targeted reporting.

The development of the Global Avian Influenza Network for Surveillance (GAINS) as an international initiative (and NEWFLUBIRD in western Eurasia and Africa as a possible regional component of GAINS) clearly would fully incorporate these requirements and their development should be encouraged.

There is a need for developing and implementing more comprehensive and integrated surveillance and early warning systems for avian influenza. Current EWS address specific aspects of AI be that the epidemiological, human, wildlife or ecological aspects of the disease. More comprehensive EWS would also serve as a reliable base for risk assessments. In this regard, it was noted that the mandate of UNEP's Division for Early Warning and Assessment suggests that it might productively contribute to the development and implementation of comprehensive early warning systems, in particular for the incorporation of environmental data and information, linking environmental aspects to risk assessments, and promoting institutional and technical related capacity building for monitoring and early warning-particularly in developing countries.

Support for the implementation of effective EWS is even more necessary in developing countries given the lack of resources, both human and financial, that might be available for such purpose.

In addition to the international level reporting of HPAI (*i.e.* of notifiable diseases to OIE), there is an imperative to ensure that both active and passive surveillance and reporting, at the local level is standardised, efficient, transparent and appropriate to the local needs. The National and Regional hubs to co-ordinate this need should be identified *e.g.* African and European Unions

and Regional Economic Groupings - *e.g.* COMESA in Africa and ASEAN in Southeast Asia.

There are surveillance systems that have been developed to rapidly gather disease information and ensure rapid response. An example is ARIS (Animal Resources Information System) in Africa - a flexible country surveillance reporting system through African Union-Inter-African Bureau of Animal Resources, which provides capacity for automatic reporting to OIE to avoid duplication of effort.

Participatory international initiatives should ensure coordination with regional and national existing monitoring and early warning processes and systems to increase the reliability of warnings and follow-up response actions.

We envisage that the proposed integrated and comprehensive surveillance and early warning systems should have a scientific base to avoid the use of *ad hoc* or anecdotal reporting systems which cannot be objectively assessed or interpreted.

Risk assessments

All countries should undertake risk assessments which should be transparent, structured, science-based and make use of all available knowledge. The communication of web-links to national or other assessments via a single clearing house mechanism would be helpful.

There is a general need to strengthening HPAI field surveillance in wild birds and especially in developing countries. To this end the further building of national capacity to develop and implement field programmes for AIV surveillance would be assisted through the development of training courses and relevant capacity building, especially involving international collaborations with existing centres of expertise. The programme of Technical Co-operation Programmes on avian influenza and wild bird surveillance in Africa, Middle East and Central Europe initiated by FAO has been an extremely helpful response, and the Seminar encourages FAO to further develop and co-ordinate wildlife surveillance activities for AI and funding of this crucial activity, including expanding capacity development into Asia.

Similarly, there is an important need to develop the capacity of veterinary services world wide to aid field responses to outbreaks. The need to enhance the capacity of human health services, especially in developing countries, in anticipation of an avian influenza pandemic was noted, whilst recalling that human health aspects lie outside the mandate of the Scientific Task Force on Avian Influenza and Wild Birds.

Maximum information should be routinely gathered from each outbreak of HPAI H5N1 in both wild and domestic birds on the ecological and epidemiological aspects so as to enhance epidemiological understanding. This would be facilitated by including ecological expertise in the early response missions so as to collect a broad range of contextual information such as species present. To this end, there is an immediate need for surveillance for AIVs in the vicinity of past and current HPAI outbreaks so as to establish actual infection levels in wild birds using these areas. This will build understanding of the ecology of the virus.

Data and information needs

Best practice guidance on the practicalities of how to plan and undertake AIV field surveillance is urgently needed, and should be translated and widely disseminated.

Better, contemporary and international analysis of existing waterbird ringing and count data is needed so as to synthesis summary information on the routes and timing of waterbird migration systems, especially of poorly known intra-African migrants, Asia-Pacific and Neotropical flyways. The results of these studies and other relevant data should be made more readily available through the production of flyway atlases, ideally published on the internet so as to enhance the

accessibility of this information.

Targeted international ringing, colour-ringing and satellite telemetry programmes for selection of waterbird species likely to be at higher risk of carrying HPAI H5N1 so as to improve the scope of relevant dataset would be valuable.

Regional waterbird conservation initiatives have the potential to valuably stimulate better co-ordinated studies of migratory waterbirds in flyways and regions where information on bird movements is relatively poor. For example, activities of the Asia-Pacific Migratory Waterbird Conservation Strategy in establishing a specific Working Group on Migratory Waterbirds and AI have potential to further develop the collection of data and information from Asian-Pacific flyways.

The international collation of waterbird count data by the International Waterbird Census in seasons other than January would valuably enhance international capacity to analyse waterbird movements and flyway systems and allow for gathering or mortality information at additional periods of the year.

The collection and reporting of information on, and samples from, birds (both wild and domestic) should always be referable to at least species level. Latin names derived from a defined taxonomic reference should always be used in the reporting of data. For waterbirds, taxonomy and population identification should follow Wetlands International's *Waterbird Population Estimates*. Photographs should routinely be taken which can then subsequently identified or reconfirmed by specialists. Teams capturing wild birds for AIV sampling should include both veterinarians and ornithologists capable of identifying the species caught.

As an important component of the development of risk assessments there is a need for better consolidated information on national and international trade in poultry and poultry products. Efforts should be made to obtain accurate data on the volume of such trade from the poultry industry. Similarly information on the volume of international trade in wild birds should be sought from the Convention on International Trade in Endangered Species (CITES), TRAFFIC, and other relevant sources of data and information.

Research requirements

The establishment of national programmes to establish baselines and monitor trends in natural mortality levels in waterbirds would better allow the identification of unusually high mortality.

The establishment of long-term surveillance programmes for AIVs at strategically important 'mixing' (and/or staging areas) on flyways is a strategic priority.

PRIORITY SHORT TERM NEEDS

The effective containment of HPAI H5N1 outbreaks depends critically on rapid reporting and control measures. Experience has shown that reporting can be significantly encouraged through the establishment of compensation mechanisms to defray the extent of economic losses resulting from control programmes, especially in developing countries. However, although desirable, payment of compensation can raise complex issues. Seminar participants recognised and acknowledged the importance of this issue and further encouraged the activities of FAO to facilitate the development of national compensation policies, where their application may be useful and appropriate.

Wetland protected areas play a vital role in bird and biodiversity conservation, as well as public education and environmental communication. When these areas depend on visitor revenue, their

long-term future can be severely compromised by either unnecessary closure as a result of H5N1 concerns, or reduced visitor numbers due to public misconceptions.

The Seminar urged governments to:

- avoid prescribing closure of wetland protected area except where absolutely necessitated by a continuing H5N1 outbreak. Wholescale reserve closure serves very limited disease control and is highly detrimental to conservation;
- communicate to the public that it continues to be entirely safe to visit wetland protected areas, in the absence of an H5N1 outbreak at the site; and
- work with site management and veterinary authorities to ensure regular and effective site monitoring, to ensure rapid detection of any potential H5N1 outbreak.

Data and information needs

There is need for international synthesis of information concerning migration phenology for example which species arrive in which country in which month? Whilst there is much (scattered) national information this has never been collated internationally other than for a few species. This has policy relevance in terms of identifying high risk periods.

Research requirements

There is an urgent need for research on the behaviour and ecology of migratory and non-migratory species living in close association with man and which might thus provide a 'bridge' for the transmission of HPAI from waterbirds to poultry. Such research should aim to developing practical guidance on ways and means of reducing this risk.

Field studies are needed to clarify exposure pathways to develop practical guidance on effective means of reducing transmission between wild waterbirds and domestic poultry and thus enhancing biosecurity - especially suitable for use in developing countries (for example in village poultry situations).

Communication, education and awareness of public and policy-makers

In 2005, Contracting Parties to the African-Eurasian Waterbird Agreement, the Ramsar Convention on wetlands, and the Convention on Migratory Species noted that there was no justification for killing birds as a supposed control measure for HPAI and strongly supported *"the recommendations of WHO, FAO and OIE that attempts to eliminate HPAI in wild bird populations through lethal responses such as culling is not feasible and should not be attempted, not least since it may exacerbate the problem by causing further dispersion of infected birds."*

Further, Contracting Parties to the Ramsar Convention emphasised *"that destruction or substantive modification of wetland habitats with the objective of reducing contact between domesticated and wild birds does not amount to wise use as urged by Article 3.1 of the Convention, and also may exacerbate the problem by causing further dispersion of infected birds."*

The Seminar was especially concerned to hear that some countries have adopted policies to control wild birds, and noted that there is not a single example of a disease of both livestock and wildlife being controlled successfully by the killing of wildlife in an attempt to eradicate disease reservoirs. **Organisations represented on the Scientific Task Force on Avian Influenza and Wild Birds are asked, as a matter of urgency, to work with the countries concerned to develop awareness that policies of wild bird control or wetland habitat destruction are likely to be ineffective and may exacerbate the situation by spreading HPAI H5N1.**

The spread of HPAI H5N1 is of public concern, yet there remains widespread public

misunderstanding of the issue in many countries, including circulation of misinformation. This creates political pressure for ill-advised and disproportionate policies such as the culling of wild birds and the destruction of wetland habitats. Conservation organisations scientists and veterinary services should actively work with media to enhance the accuracy of reporting on this issue. This should include the development of much more effective communication strategies to give policy makers, stakeholders and the general public more balanced information on real levels of risk and appropriate responses.

The current situation gives an important opportunity to communicate important messages regarding sustainable development, especially with respect to the interface of agriculture, human health, wildlife health, ecosystem health and sociology.

As a matter of urgency, it would be valuable to collate best advice and develop guidelines on potential responses to be undertaken in the event of HPAI H5N1 detection in wild birds for use by land managers and veterinary services. This might usefully be disseminated via a web-based clearing house mechanism.

LONGER TERM NEEDS

It is a priority to build programmes of sustainable financial and other support for the range of short-term programmes that have or will be developed in response to the spread of HPAI H5N1.

The degradation of the health of ecosystems as documented by the Millennium Ecosystem Assessment and a review presented to the Seminar, and especially in the decline in extent and condition of wetlands, has had a role in the evolution and spread of HPAI H5N1. It has created the conditions where there is closer contact and mixing between people, domestic poultry (including ducks), and wild waterbirds. This encourages cross-infection with the potential of causing genetic changes which may result in higher viral pathogencity. Reducing the opportunities for such contacts through preventing further loss of wetlands, improving mechanisms for the maintenance and wise use of wetlands is an important long-term requirement. To this end it would be valuable to develop and disseminate practical guidance, *inter alia* in collaboration with the Ramsar Convention. It would also be desirable in collaboration with FAO to develop and disseminate practical guidance in restructuring agricultural production systems with the goal of reducing stress on the environment and risks to human health. Agro-ecosystem health is viewed as a key to sustainable human health and well-being.

Data and information needs

Better information is needed on those cultural practices that have the potential to either help or hinder the control of HPAI H5N1 and the potential to modify inherently risky behaviour by humans.

COLLABORATION AND CO-OPERATION

Maintaining and developing collaborative approaches to addressing the multiple and complex issues raised by the international spread of HPAI H5N1 will prove to be critical to long-term success. To affect successful solutions, collaborative partnerships will need to be fully integrated involving the range of necessary ornithological, wildlife, and wetland management expertise together with those traditionally responsible for public health and zoonoses, including veterinary, agricultural, virological, epidemiological, and medical expertise. Partnerships are needed at multiple scales, including international, national and local (the latter especially in the context of responses to HPAI H5N1 outbreaks).

The continued close working and collaboration of the organisations and international agencies represented on the Scientific Task Force on Avian Influenza remains essential.

Data and information needs

There is a need for better integration of existing data on trade in poultry and other birds in the context of epidemiological modelling at various scales.

The establishment of a web-based clearing-house mechanism which would provide a single source of information on the spread of HPAI H5N1, including surveillance results, is urgently needed.

NEXT STEPS

The Seminar asked the Scientific Task Force on Avian Influenza, as a matter of urgency, to promote the implementation of these conclusions and recommendations both within participating organisations and agencies, and with others as necessary and appropriate.

The seminar asked CMS to review the Terms of Reference, membership and name of the Scientific Task Force on Avian Influenza and consider future priorities for the activity of this liaison group. The review should consider also potential co-operation with other organisations that might support the activities of the Task Force.

In order to maintain a professional approach by the Scientific Task Force, additional resources are urgently needed. As a minimum, the Task Force should aim to appoint a full-time Task Force co-ordinator for an initial period of 12 months. Task Force members and observers, other Seminar participants and Governments are invited to provide funding or in-kind support for this, and,if possible, further resources in support of Task Force activities beyond the minimum level.

A review of the work of the Scientific Task Force on Avian Influenza, including a summary of these conclusions and recommendations should be transmitted to the UN Special Co-ordinator for Avian Influenza.

11 April 2006

Annex 2
(English only)

Project proposal

Development of Avian Influenza, Wildlife and the Environment (AIWEb) website and portal

1. An interagency taskforce to study and advice on AI and migratory birds

In mid-2005, concerns about the role of migratory birds as potential vectors of the Asian lineage Highly Pathogenic Avian Influenza virus subtype H5N1, which was spreading north-westwards from its origins in East and South-east Asia, led the UNEP Convention on Migratory Species (CMS) to establish a Scientific Task Force on Avian Influenza and Wild Birds. The Scientific Task Force on Avian Influenza, which was established in August 2005, now comprises 13 members and observers, including UN bodies, wildlife treaties and specialist non-governmental organizations and institutions.

List of members (in alphabetical order):

1. **AEWA**, the UNEP African-Eurasian Waterbird Agreement
2. **Birdlife International**
3. **CBD**, the UNEP Convention on Biological Diversity
4. **CIC-WILDLIFE** , the International Council for Game and Wildlife Conservation
5. **CMS**, the UNEP Convention on Migratory Species of Wild Animals
6. **Ramsar,** the Ramsar Convention on Wetlands
7. **Wetlands International**
8. **WCS,** the Wildlife Conservation Society
9. The **Zoological Society of London**

List of observers (in alphabetical order):

1. **FAO**, the UN Food and Agriculture Organization
2. **OIE**, the World Organization for Animal Eealth
3. **UNEP**, the United Nations Environment Programme
4. **WHO**, the World Health Organization

The Task Force aims to obtain the best scientific advice on the conservation impact of the spread of HPAI H5N1, assessing the role of migratory birds as vectors of the virus, and issuing advice The TF has had and active an pro-active role in disseminating sound scientific information to avoid overreaction by decision/ policy makers that could be detrimental for conservation of species and their habitats.

Largely as a result of the Task Force's work, successive Conferences of the Parties (COPs) to the African-Eurasian Waterbirds Agreement, the Ramsar Convention on Wetlands and CMS, held between October-November 2005, passed detailed Resolutions on avian influenza. More recently the Convention on Biological Diversity held a brainstorming meeting on the impacts of avian influenza on wildlife in Brazil in March 2006 prior to its eighth Conference of the Parties, which subsequently adopted a decision on the subject.

In this context, a Seminar on Avian Influenza, Wild Birds and the Environment was convened by CMS, AEWA and UNEP/DEWA in April 2006 in Nairobi, Kenya, with the main purpose of identifying follow up actions and make recommendations for the practical implementation of the provisions of the above-mentioned Resolutions. It has also reviewed the latest scientific studies concerning the evolution and spread of Asian lineage HPAI H5N1, its impacts on wild birds and the wider environment. The seminar discussed issues related to the risk of further transmission and to effective risk mitigation strategies.

2. Recommendation of the AI seminar: the need for more accurate information and public awareness

A series of recommendations of the AI seminar in Nairobi focuses on the need for accurate information on the dynamics and spread of the diseases in wildlife and for public awareness campaigns at the national and international levels. Any of the actions required would be facilitated by the development of web-based information and communication tool. In particular the seminar had the following recommendations which directly or indirectly refer and invite the development of a web-base information mechanism and for its support and funding:

- Given that national results are of high relevance in the wider international context is important that reporting of results is rapid, very much more rapid than at present — with rapid sharing of data between countries and collaborating organisations;
- The development of global early warning systems (EWS), which incorporate the results of national and international surveillance programmes should be web-based so as to allow the rapid dissemination of open-access data and information deriving from surveillance systems in order to facilitate the timely and effective management of risks identified as a result of early warning. This implies clear warning triggers and targeted reporting.
- There is a need to effectively communicate with the media, and ultimately educate the public and policy makers using facts. In particular, best practice guidance on the practicalities of how to plan and undertake AIV field surveillance is urgently needed, and should be translated and widely disseminated.
- The results of technical and scientific studies and other relevant data should be made more readily available through the production of flyway atlases, ideally published on the internet so as to enhance the accessibility of this information.
- There is need for international synthesis of information concerning migration phenology for example, which species arrive in which country in which month? Whilst there is

much (scattered) national information this has never been collated internationally other than for a few species. This has policy relevance in terms of identifying high risk periods.

- As a matter of urgency, it would be valuable to collate best advice and develop guidelines on potential responses to be undertaken in the event of HPAI H5N1 detection in wild birds for use by land managers and veterinary services. This might usefully be disseminated via a web-based clearing-house mechanism.
- The establishment of a web-based clearing-house mechanism, which would provide a single source of information on the spread of HPAI H5N1, including surveillance results, is urgently needed.
- The development of much more effective communication strategies to give policy makers, stakeholders and the general public more balanced information on real levels of risk and appropriate responses is urgently needed.
- In order to maintain a professional approach by the Scientific Task Force, additional resources are urgently needed. As a minimum, the Task Force should aim to appoint a full-time Task Force co-ordinator for an initial period of 12 months. Task Force members and observers, other Seminar participants and Governments are invited to provide funding or in-kind support for this, and if possible, further resources in support of Task Force activities beyond the minimum level.

3. Development of the AIWEb and relevant information material

In light of the above, the development of a web based mechanism for the collection, synthesis, sharing of information on Avian Influenza, Wildlife and Environment is urgently needed.

AIWEb will feature the following components:

- **Pages for the Media**: Containing latest news and information on the spread, impact on the environment, and conservation concerns. Relevant TF media releases will be regularly posted here.
- **Pages for Policy Makers**: Containing guidance, information on specific UN and international programmes, meetings of the taskforce and results. It will also contain the brochure on AI , Wild birds and the Environment for download and distribution.
- **Pages for Scientists**: containing results of latest scientific studies.
- **TF Pages**: these will be interactive and contain discussion forums, in order to allow for on-line meetings and exchanges of the TF.
- **AI Clearing-House Mechanism**: it will include relevant databases; surveillance results and a link to existing Early Warning Systems and to relevant organisations.

Technical requirements and a preliminary development plan for the project over a period of 1 year are listed in the Annex.

4. Cost estimate

Type of activity	Description of activity	Cost (USD)	Comments
	Webpages		
Design	Design of main web-pages	5,000	
Mngmt	Technical management	In kind	UNEP /DCPI
Technical	Collation and synthesis of information	12,000	Consultancies
	Total	**17,000**	
	Clearing-House mechanism		
Technical	Creation of database	15,000	Consultancies
Maintenance	Uploading of results	---	See maintenance above
Manag.	Coordinator/manager	43,200	Senior consultant, 9 days per month, 1 year, 400 UDS
	Total	**58,200**	
	Brochure on AI		
Design	Design and layout of flyer	1,500	Based on other CMS brochures
Production	Printing of 5,000 copies (6 pages color print)	800	"
Images	10 images	2,000	200 USD each
Staff	Coordination of production/content	2,400	1 month full time
	Total	**6,700**	
	Grand total	**81,900**	

ANNEX: AIWEb Production and Development Plan

General Overview:

AIWEb will be the main communication space and central information dissemination point for the members of the "Scientific Task Force on Avian Influenza and Wild Birds" on the World Wide Web (WWW). It will provide a virtual (web-based) platform through which information exchange and communication on current & emerging topics relating to "AI & Migratory Birds" will be facilitated and encouraged amongst the members of the TF. It will also be the public "virtual face" of the TF - consolidating and sharing the TF knowledge and information on AI & Migratory Birds and making it accessible on a global scale.

The goals of the AIWEb website are:

- distribute and disseminate substantive information on Avian Influenza & the Environment with a particular focus on AI & Migratory Birds;
- offer a global and more comprehensive perspective (involving input from several related organisations/experts) on AI and Migratory Birds;
- raise awareness and educate different stakeholders on the role of Migratory Birds in the current spread of AI (media, policy makers, general public etc);
- provide a medium through which to maintain and consolidate UNEP/CMS's effort in bringing together the TF and sharing its specialized knowledge and information to the global community.

In this sense AIWEb will be both:

a. a web-based communication platform for the members of the TF
b. a central clearing-house mechanism for relevant information on AI & Migratory Birds (selected and carefully organized & presented links to relevant information/resources on AI & Migratory Birds)

Design & Production:

As the AI TF is a loose cooperation agreement between different stakeholders and organizations, AIWEb will have to be designed and set up in a way that it gives all members equal access and editing control of content. Although the resource will be developed and hosted by UNEP it must also reflect the open "forum/dialogue" character of the TF in its design (CI) and content - spreading and giving "ownership" of AIWEb to all its members. This will be the only way to ensure an active contribution to AIWEb by all its members/experts.

AIWEb will be designed, hosted and technically managed/maintained by the Internet Unit of UNEP/DCPI. The idea is to use the in-house expertise and resources of this specialized UNEP Division/Unit for the production and technical maintenance of this project. This will also ensure that AIWEb will adhere to all web-publishing standards and requirements set forth by the division in its "Guidelines for UNEP Websites". Working with UNEP/DCPI also promises AIWEb to result in a high degree of usability, performance, consistency, and design and will ensure that AIWEb will be in line with UNEP corporate identity/design. (while also being sensitive to the special "identity needs & nature" of the AI TF mentioned above).

UNEP/CMS will be taking the lead in the production and planning of the AIWEb project in close cooperation with all members of the TF and the implementing Unit of UNEP/DCPI. The project will follow the "phased approach/structure" outlined in Annex D of the above mentioned UNEP guidelines for website project development. Each TF member organization will identify their AIWEb focal point(s) (administrator/contributor) who will be able to contribute to both the production and long-term maintenance (content delivery) of AIWEb and will have the necessary authority to do so. (leading scientist/expert/representative etc.) All static content, site structure and design concepts will be provided to UNEP/DCPI by UNEP/CMS in close cooperation with and in full agreement of all members of the AI TF. Furthermore, all members of the TF will be given the opportunity to review and edit all static content in the final testing phase of the project prior to the public launch of AIWEb.

Preliminary Site Structure and Content

AIWEb will consist of:

- 1 Entry/Gateway page (introducing AIWEb, the TF and its members (logos))
- A backend system which will allow for de-centralized content production/editing and publishing
- A "current topics" page (dynamic content) where the AI TF will respond to "emerging issues/findings/research questions" and give qualified TF responses to the media/public (reacting to new AI findings in wild bird populations etc) with an automated archiving system for old responses (news)
- A Forum for TF Members (public and/or private?)
- Several static content pages with well presented background type information on AI & Migratory Birds, existing and planned EWS, background information on all TF members, etc.
- A link resources page - well researched and structured collection of links to relevant & good information resources on AI & Migratory Birds
- Possibility of including maps (produced with the possible assistance of DEWA? – this still needs to be clarified)

Technical Requirements:

AIWEb should adhere to the web standards and specifications of the World Wide Web Consortium (W3C) and those set forth by the Internet Unit of UNEP/DCPI. Particular attention should be paid to global accessibility of the site (size/loading time, browser compatibility, screen size etc) and it should be designed in a way to enable the possible (and easy) expansion /translation of the site into other languages. (in case resources for translation of content become available).

Back end programming needs:

Content Management System (CMS)
- Allowing multiple user access (password protected) for all current and future AI Task Force members and top level admin control by the appointed TF coordinator
- Content Production/Workflow & Editing System allowing content to be produced and checked/approved by multiple levels/admins before publication

Automated current Topics/News page with archiving system
Web Forum
Web-based Feedback / Question Form