Global efforts continue to work towards ensuring a world capable of preventing, detecting and responding to animal and public health risks attributable to zoonoses and animal diseases. At the 7th International Ministerial Conference on Animal and Pandemic Influenza (IMCAPI) held in Hanoi, Viet Nam, 19-21 April 2010, approximately 500 representatives from over 70 countries met to reaffirm global commitment to addressing these issues.

Drawing on achievements and experiences of the past five years, the Fifth Global Progress Report was produced to support these discussions and to provide a record of key outcomes from IMCAPI. This synopsis presents a summary of key findings and recommendations.

**H5N1 Highly Pathogenic Avian Influenza (HPAI)**

H5N1 HPAI remains a threat to both animal and public health. It impedes healthy poultry production, which in turn impacts the livelihoods of millions of people. It is a disease that – though rare, has a high case fatality rate in humans. Along with other animal influenza viruses (such as subtypes H2, H5, H6, H7 and H9) it is a potential pandemic influenza threat. A network of systems to improve surveillance, and an ongoing analysis of threats posed by influenza and other emerging viruses are both essential for limiting the national and global risks posed by these threats.

Despite an intensive and generally successful effort to control the spread of H5N1 HPAI, the virus continues to circulate and is entrenched in domestic poultry in parts of Bangladesh, China, Egypt, Indonesia and Viet Nam. Other countries continue to be affected sporadically with poultry outbreaks reported recently in Bhutan, Cambodia, India, Israel, Lao PDR, Myanmar, Nepal and Romania. Since 2003, there have been over 499 confirmed human cases and 295 deaths reported in 15 countries. Almost all human cases have occurred in countries where the H5N1 viruses were detected in wild birds or poultry, and there is a close correlation between seasonal occurrences of H5N1 in poultry and incidence of human cases. While the overall number of reported outbreaks and countries affected has declined dramatically since 2006, the situation remains dynamic and continues to evolve with an increase being observed in 2010. The number of confirmed human cases of H5N1 Avian Influenza (AI) in 2009 was almost double that of 2008.

There has been significant progress in efforts to improve biosecurity in poultry production systems and vigilance for disease outbreaks within animal health systems. This helps explain the decline in the number of affected countries since 2006. Most countries have improved surveillance capacity and countries have reported significant animal health events promptly to the OIE World Animal Health Information System (WAHIS). The sharing of information between FAO/OIE laboratories, namely through the OIE/FAO Network of Expertise on Animal Influenza (OFFLU) has continued to improve, along with early warning systems and the implementation of the International Health Regulations (IHR) 2005. This has led to better capacity for detection, assessment, notification and response to public health threats.

Despite these achievements, much needs to be done to bring veterinary services up to standard in many countries and to improve biosecurity in poultry production chains. Animal health legislation is often outdated and inadequate, and too little funding is available for veterinary staff, operating costs and laboratory diagnostics. The quality of communication to the general public about the risks associated with H5N1 HPAI and other diseases with pandemic potential is highly variable, and needs sustained investment within countries and at the regional level. OIE’s standards and programmes for improving veterinary services are helping to redress such problems, but it is clear that if investments in animal health systems are not sufficient, the risk of further disease outbreaks will greatly increase. A standardized indicator-based system for the quantitative analysis of progress is urgently needed.
Policy makers increasingly recognize that a high proportion of infectious diseases in humans come from animals, that these zoonotic diseases have high economic costs (especially for countries that export livestock and meat products), and that outbreaks that do occur – such as SARS, H5N1 HPAI and pandemic influenza A (H1N1) 2009 – have major political, economic and health consequences. They appreciate that the threats are likely to increase in frequency and magnitude over the coming decades. During the past three years they have called for science-based decision-making to minimize potential economic and trade impacts on affected countries and maximize trans-sectoral and multidisciplinary working to address disease threats that emerge at the animal-human-ecosystem interface. During the last two years several countries have started to implement such One Health approaches.

The key challenge – now – is to turn promising beginnings of stronger cross-sector working into institutionalized, sustained and holistic approaches. Most countries have still to develop in-country institutional frameworks to tackle the root causes of disease emergence, to respond to diseases as they emerge, and to maintain public and political interest in the face of ever-changing perceptions and needs.

**Pandemic preparedness**

The response to pandemic (H1N1) 2009 has revealed substantial world-wide progress with pandemic preparedness between 2005 and the present day, as reported at previous International Ministerial Conferences. Most countries have recently developed and/or updated pandemic preparedness plans. The expansion and strengthening of international partnerships for pandemic preparedness has continued and new partnerships have been established. Civil society, private entities, militaries, research groups and different sectors of government are increasingly involved in enhancing awareness of disease spread and preparedness for future outbreaks. These partnerships have had a significant impact on hygiene and continuity planning within service providers, schools, community centres and residential institutions. They have underlined the value of effective trans-sector, multicountry and coordinated working, based on trust and supported by effective communications.

Continued global vigilance for infectious disease outbreaks and pandemics is of critical importance for health security and well-being. To this end, disease surveillance systems have been strengthened and in many countries integrated across the human and animal health sectors. Increased emphasis is being given to reliable and rapid forecasting, with surveillance and early warning systems that predict disease emergence through a better understanding of drivers. Some countries seek ways to mainstream and strengthen pandemic preparedness by integrating it within multihazard disaster planning and the Hyogo Framework for Action (2005). The best preparedness plans involve a range of sectors and services and collaboration with civil society organizations and the private sector, and ensure that the needs and interests of vulnerable groups, such as refugees and migrants, are adequately covered. Regular simulation exercises help to strengthen readiness, test planning assumptions and establish resource needs.

**International financing of Avian and Pandemic Influenza action**

The World Bank’s analysis of contributions by bilateral and multilateral donors indicates that between 2005 and end-December 2009, US$4.3 billion in pledges was reported, against which US$3.9 billion has been committed (of which US$2.7 billion has been disbursed). Approximately 40 percent (US$1,560 million) of committed funds went directly to support country programmes and 29 percent (US$1,140 million) supported country efforts and global functions through international organizations.

New commitments for countries have increased in the past year (after a gradual decline since the peak in late 2005/early 2006); composition of financing has changed with loans becoming the dominant form of assistance. There has been an increase in the proportion of funds contributing to human public health systems and pandemic preparedness, with a reduction in the proportion directed to avian influenza and other animal health issues. This reflects the international response to challenges posed by pandemic (H1N1) 2009.

Long-term funding for the strengthening of animal health services and combating the drivers of animal diseases, including those with pandemic potential, is still of vital importance.
**Sustaining the momentum and incentives for continued action**

The report demonstrates the strong worldwide momentum behind the effort to tackle H5N1 HPAI, to strengthen capacity to fight disease threats at the animal-human-ecosystem interface and to prepare for pandemics. Governments, international organizations, private enterprises and civil society increasingly appreciate the challenge of sustaining the momentum.

There is a continuing need – within all countries – to engage community groups, work closely with private entities, establish public-private partnerships, and ensure that animal and human health services are compliant with IHR and OIE standards. The institutional arrangements and legislative frameworks that support these efforts must be kept under continuous review to ensure whole of society trans-sectoral action, and integration of pandemic specific actions into multihazard disaster planning.

The support provided to national entities through regional political groups (e.g. ASEAN, APEC and the African Union) and international agencies, through research networks and results-focused collaborations, also continues to be invaluable.

A significant outcome of the April 2010 IMCAPI was the adoption of the ‘Hanoi Declaration’, which reaffirms the importance of international and regional cooperation, national political commitment and intersectoral collaboration (See Fifth Global Progress Report, July 2010, Annexes 3 and 4). It also emphasizes the importance of timely and transparent communication and capacity building for health systems capable of addressing emerging threats and ensuring effective pandemic readiness and response across different sectors. The Declaration calls for increased efforts to strengthen early detection of, and preparedness for, future pandemic events through cross-sectoral understanding with a focus on least developed countries, vulnerable groups and the role of local communities.

**The way forward: A Framework for Sustaining Momentum**

The report presents a Framework for Sustaining Momentum (Synopsis, page 4; Fifth Global Progress Report, Chapter 6) which was agreed by delegates at the April 2010 IMCAPI. The Framework offers three streams of work that need sustained attention by national, regional and global authorities despite the inevitable waning of public interest in pandemic-related issues.

The three work streams are (a) prevention and control of HPAI, (b) adoption of One Health approaches, and (c) readiness for response to influenza pandemics. For each, the Framework envisages two expected outcomes and identifies the actions which contribute to these expected outcomes. It identifies the incentives and institutional arrangements needed to sustain momentum, highlights systems for monitoring progress, and spells out investment priorities – particularly to support institutions and systems in the least developed countries.

To realize these goals, policy makers are moving away from tackling avian and pandemic influenza through emergency projects or special initiatives. Instead they aim for longer term capacity building through pursuit of effective strategies within existing programmes, and the mainstreaming of pandemic readiness skills. The right incentives to achieve this transformation need to be identified and used, backed with strategic political and financial support, novel institutional arrangements, and easily applied monitoring systems.
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<thead>
<tr>
<th>EXPECTED OUTCOMES</th>
<th>KEY AREAS FOR ACTION</th>
<th>REVIEWING PROGRESS AND NEEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stream 1: Prevent and Control H5N1 Highly Pathogenic Avian Influenza</td>
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<td></td>
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</tbody>
</table>
| **Expected Outcome 1:** Progressive control of H5N1 HPAI – with the goal of eventual elimination (and ultimate eradication) from domestic animal populations | • National goal setting (goals, objectives, modus operandi, timelines) – particularly in highly impacted countries  
• Maintaining and strengthening vigilance and detection systems – in all countries  
• Promoting healthy poultry production and trade – in all countries | Using and developing further as needed the indicators based on OIE standards  
Establish a broader set of indicators in partnership with the private sector to assess progress and evaluate biosecurity levels for sustainable, healthy poultry production in an expanding and diversifying industry setting |
| **Expected Outcome 2:** Maintain vigilance for H5N1 HPAI and other influenza viruses that have pathogenic potential in humans | | |
| Stream 2: Ensure that control and response systems can tackle a broad range of emerging and existing disease threats through operating a One Health approach | | |
| **Expected Outcome 3:** Reduce the likelihood that infectious diseases like H1N1 emerge at the animal-human-ecosystem interface through evidence-based work on drivers of disease emergence | • Developing multisector surveillance  
• Putting prevention high on the agenda and taking a multisector approach to addressing the root causes of disease emergence  
• Drawing attention to the true cost of existing diseases with particular support for the most vulnerable and marginalized people  
• Promoting multisectoral solutions to amend, improve and strengthen the systems already in place for existing diseases  
• Learning to work as one – making multisector, multidisciplinary work a reality | Develop core indicators of progress for governance, inter-sectoral collaboration and community engagement to assist with tracking of progress and regular identification of priority areas for additional action |
| **Expected Outcome 4:** Build systems to limit the impact of diseases emerging at the animal-human-ecosystem interface: the One Health approach | | |
| Stream 3: Being ready to detect, assess and respond to influenza pandemics | | |
| **Expected Outcome 5:** Realize standards set out within the IHR 2005 and the OIE international standards through developing local, national and global capacities for responding to pandemics | • Optimizing learning from pandemic (H1N1) 2009 and continued research and evaluation of pharmaceutical and non-pharmaceutical interventions  
• Building capacity to assess and predict situations  
• Enhancing cross-sector decision making and strengthening preparedness beyond the health sector with explicit commitment for vulnerable populations  
• Improving communications about risks and actions needed  
• Strengthening the response capacity of all systems and integrating pandemic preparedness into multihazard disaster planning | Monitor core requirements of the IHR, Hyogo Framework for Action and OIE international standards  
Establish a composite or new set of matrices, based on lessons learnt, to allow tracking of progress and review of critical areas into the future |
| **Expected Outcome 6:** Incorporate capacity for multisector and inter-country pandemic responses within multihazard disaster preparedness and response strategies | | |

ANIMAL AND PANDEMIC INFLUENZA