1. Country and Sector Background

Avian Influenza: Outbreaks of highly pathogenic avian influenza (HPAI) caused by the H5N1 subtype of influenza A, were first recognized in Hong Kong in 1997. Since late 2003, this subtype has been spreading at an alarming rate, from East Asia to Central Asia, and now to the Middle East, Europe, Africa, and South Asia. In addition to its impact on animal health, with millions of domestic poultry having died or been destroyed worldwide, H5N1 has been causing severe human disease. The rapidly expanding area in which HPAI has been discovered and the escalating number of human infections have raised concerns worldwide over the possible evolution of the next influenza pandemic and its disastrous consequences.

Nepal’s risk status: Nepal is a landlocked Himalayan country of 24 million people. The country has so far not had any cases of HPAI in either avians or humans. However, the country is at high risk, with the disease already recorded in China to the north and in India to the south. The limited border controls with China and India on animal and human population flow increases the potential for spread of infection to Nepal. In addition, Nepal is on two routes for migratory birds, which are known to be carriers of the disease. The ability to detect avian influenza in the country is severely handicapped due to access problems related to Nepal’s rugged terrain and widespread security problems.

Poultry sector and veterinary services: There are an estimated 22 million chickens and 408,000 ducks in Nepal. The poultry industry employs roughly 400,000 people, and provides livelihood to millions of households. Poultry farming takes place within two systems: 45 percent of (hybrid) birds are found in a few large commercial farms located in peri-urban areas. The remainder consists of backyard units of indigenous fowl and ducks in roughly half of the rural households across Nepal. While most of the commercial farms have good bio-security arrangements in place, poultry meat marketing is traditional and unorganized, i.e. sold, transported, and butchered
in the open air, with no disposal mechanism for waste material. There is a well-knit veterinary infrastructure with 76 veterinary hospitals, 999 livestock service centres, 178 veterinary officers, 10,000 para-veterinary staff and 10,000 village animal health workers. Despite security problems, veterinary officers are usually able to function in rural areas. There is considerable experience in the control of many livestock diseases. However, there is no experience with culling and disposal of chicken and related compensation to farmers. Bio-security protocols, ring-fencing and foreign border quarantine are under implementation, and there is now a ban on imports of poultry from India as a result of the recent outbreaks of avian influenza in that country. The Ministry of Agriculture and Cooperatives (MoAC) is already suffering from capacity constraints for the testing of suspicious birds (1800 have been tested thus far). Checking of trans-border movements of animals is a daunting task because of remoteness of the borders from the capital, insufficient check-posts, and traditional free movement of animals and people between India and Nepal.

**Human health:** A public health service delivery system is reasonably well established in Nepal with the Ministry of Health and Population (MOHP) at the center, five regional health directorates, regional and zonal hospitals and district level hospitals. All 75 districts have district health offices, and district hospitals with an outreach network of 188 primary health care centers, 698 village health posts and 3,219 sub health posts. However, the health system is constrained by quality of care and access, issues that are being addressed within the Nepal Health Sector Program. With respect to a possible pandemic, this system will be required to: (a) detect and characterize human influenza outbreaks promptly through surveillance mechanisms within the existing system for disease control and epidemic management; (b) be prepared to diagnose and treat large numbers of people with influenza and its complications; (c) implement a communication strategy to inform the public on the progress of avian influenza, its risks and threats, methods of self-protection against infection, sources of treatment, and; (d) ensure inter-sectoral and inter-governmental coordination in preparing for, and responding to, the threat of avian influenza and its possible spill-over to the human population.

**National Preparedness Plan:** MoAC and MoHP are aware of the potential risk of avian flu. The Government of Nepal (GON) set up an inter-sectoral Task Force under the chairmanship of the Director-General of Health Services to coordinate Nepal’s response to avian influenza and its potential for human infections. In early 2006, the Task Force prepared a National Avian Influenza and Influenza Pandemic Preparedness and Response Plan (NAIIPPRP) with assistance from the World Health Organization (WHO) and the Food and Agriculture Organization (FAO). This plan was formally endorsed by the GON. After preparing the plan, the Task Force was dismantled and the coordination function now resides under a sub-committee of the National Disaster Management Committee. The Plan provides a strong basis on which to detect and combat possible outbreaks, and outlines the institutional mechanisms for doing so. The Plan is also candid about what capacity and resource constraints exist.

2. Objectives

The overall objectives of the Project are to minimize the threat posed by HPAI to humans in Nepal by (1) controlling such infections among birds, especially domestic poultry and (2) preparing for, controlling, and responding to possible human infections, especially an influenza
epidemic and related emergencies. Though the objectives are specific to HPAI, the interventions are expected to contribute to the control of other zoonotic diseases and other types of infectious diseases, in terms of building overall response capacity. These objectives will be achieved through three types of interventions: (i) prevention; (ii) preparedness and planning; and (iii) response and containment. If these types of interventions achieve their goals, the proposed project will reduce the burden of disease in animals, the consequent economic losses, the risk of human infection and the loss of productivity attributable to human infections in Nepal and limit the risk of HPAI to other countries.

3. Rationale for Bank Involvement

First, the growing pandemic risk, and the need for a coordinated international response provides a global public goods argument for Bank involvement. Second, with its experience elsewhere, the Bank is well placed to field multi-sectoral teams to tackle the technical, social, economic, and regulatory dimensions of the problem on a country-by-country basis. Third, while agencies such as WHO and FAO have the technical expertise to assist their respective line departments in Government, the Bank has a comparative advantage in working with the Ministry of Finance and the National Planning Commission -- critical in any inter-sectoral activity such as preparedness for and response to avian influenza. Finally, despite donor interest from many sides, Nepal’s NAIIPPRP is currently unfunded, and a considerable financing gap is likely to remain without World Bank participation.

4. Description

(a) **Animal Health:** This component will support national prevention and control strategies and will finance activities for: (i) enhancing avian influenza prevention and preparedness; (ii) strengthening of veterinary services, disease surveillance, diagnostic capacity and applied research; and (iii) strengthening avian influenza control programs and outbreak containment plans, including improving bio-security in poultry production and trade. This component will also provide resources for a Compensation Fund to assist poultry owners for loss of assets caused by mandatory culling of their birds. The component would be implemented by the Department of Livestock (DoLS) in MoAC and, where appropriate, through non-governmental implementing partners.

(b) **Human Health:** This component aims to prevent a human influenza epidemic caused by HPAI, and in case this cannot be prevented, reduce its impact, through: (i) year-round surveillance; (ii) building laboratory capacity to enable effective and accurate diagnosis /case-detection as part of the overall public health system response; (iii) prevention and containment activities including social distance measures and the use of vaccines where appropriate; (iv) effective curative interventions should human disease occur, including standardized case management and anti-viral drugs where appropriate. It will support activities for training health workers in the public and private sector on diagnosing and treating potential cases of HPAI, and counselling patients and their families. It would help improve public health program planning and coordinating, strengthen the national public health surveillance system and enhance the health system capacity to deal with the threat of HPAI and related emergencies in a prompt and effective manner. This component will be implemented in close coordination with the Nepal
Health Sector Program, which includes strong donor harmonization, specific sector reforms and results-based programming. The component would be implemented by the Department of Health Services (DoHS) in MoHP (within which different units are responsible for different sub-components) and, where appropriate, through non-governmental implementing partners.

(c) **Public Awareness and Information:** This component is designed to safeguard human health, in particular for extension staff, animal health workers, poultry producers and their families, by improving public awareness and information on avian influenza issues. Information and communication activities are aimed at increasing the attention and commitment of Government, the private sector and civil society organizations and to raise awareness, and understanding among the general population about the risk and potential impact of a pandemic, methods of self-protection against infection, and sources of treatment. Communication efforts would also be targeted to poultry farmers on ways of recognizing the signs and symptoms of bird flu, safe methods of disposing of infected birds, and steps to protect themselves and their families. This component will be jointly implemented by DoLS and DoHS, but will adhere to a single communication strategy and will be coordinated by the Project’s steering committee.

(d) **Implementation Support and Monitoring and Evaluation:** This component will support the strengthening of public agencies for the coordination and management of the Project. There will be no formal Project Implementation Unit, but staff within DoLS and DoHS would be assigned (and trained) to a support team to handle key functions such including financial management, procurement, and monitoring and evaluation of Project activities.

5. Financing

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<th>Source:</th>
<th>($m.)</th>
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<tr>
<td>INTERNATIONAL DEVELOPMENT ASSOCIATION</td>
<td>18</td>
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<tr>
<td><strong>Total</strong></td>
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6. Implementation

The Project would fall under the umbrella of the National Disaster Relief Central Coordination Committee (NDRCCC) which is chaired by the Ministry of Home Affairs. The NDRCCC activates only in the case of outbreak of disaster. During non-outbreak periods, an Avian Influenza Technical Sub-Committee to be chaired jointly by the Secretaries for MoHP and MoAC has been created. There will be two main implementing agencies –DoLS and DoHS. The Animal Health component (implemented by DoLS) and Human Health component (implemented by DoHS) would be treated as two separate sub-projects for the purpose of administrative and financial management requirements. Each will implement the components on communication and implementation, and monitoring and evaluation. Two designated accounts would be created, two project implementation progress reports would be required, and two separate audit reports would be required. However, they are part of one integrated plan and the activities and workplans of the two components will be closely coordinated by the Avian Flu Technical Sub-Committee, which would also serve as the Steering Committee for the Project.

7. Lessons Learned from Past Operations in the Sector
The World Bank has now in place an Adaptable Program Loan to finance the Global Program for Avian Influenza and Human Pandemic Preparedness and Response (GPAI), which can rapidly support country-specific preparedness using guidelines for accelerated project processing. The current project proposal is consistent with, and follows the format of, the GPAI guidelines for project processing.

8. Safeguard Policies (including public consultation)

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<tbody>
<tr>
<td>Environmental Assessment <strong>(OP/BP 4.01)</strong></td>
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<td>Projects on International Waterways <strong>(OP/BP 7.50)</strong></td>
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9. List of Factual Technical Documents


10. Contact point

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*By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas*
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