INDONESIA REPORT FOR 2005

Additional information received from Dr Mathur Riady, Director General of Livestock Services, Ministry of Agriculture, Jakarta:

I. COMMENTS ON SELECTED OIE-LISTED DISEASES

Multiple species diseases

1. Anthrax

Anthrax is still reported to occur sporadically in West Sumatra, Jambi, DKI Jakarta, West Java, Central Java, West Nusa Tenggara, East Nusa Tenggara, South Sulawesi, Southeast Sulawesi and Central Sulawesi. The control program against the disease is implemented through vaccination in infected areas.

In 2005, the disease was reported in 9 animals.

2. Foot and mouth disease

Indonesia has gained freedom from foot and mouth disease (FMD) in 1986 and recognized by OIE in 1990. In order to maintain the free status of FMD, control programme implemented is mainly focused on surveillance, emergency preparedness and public awareness, prohibits any import of livestock, livestock products and antigens from countries infected with FMD.

FMD surveillance is conducted annually, focused in six provinces adjacent to neighboring countries located in Sumatra, Kalimantan and Sulawesi islands, and four provinces previously infected in Java island. In 2005, 1,000 serum samples were collected from ten provinces by provincial and district livestock services in collaboration with animal health laboratories. The samples were then sent to and tested at National Centre for Veterinary Biologics (Pusvetma) in Surabaya. All sera tested showed negative results.

In collaboration with Australia (ACIAR) a 3 year FMD surveillance project (2005-2008) is developed including revitalization PUSVETMA of National Laboratory for FMD Diagnoses.

Public awareness material for FMD had developed by a private sector in collaboration with DGLS. Using public figures, the material was then broadcasted through television for commercial public services.

3. Rabies

An outbreak of rabies with 4 affected dogs began in June 2003 in Ambon municipality, Maluku Province.

An intensive control program against rabies is implemented in all infected areas through mass vaccination and elimination of stray dogs. The control program was started in 1989 in Java and Kalimantan islands. The program was then extended to Sumatra and Sulawesi islands since 1994. It is expected that clinical cases of rabies can be reduced to zero in all infected areas. At present 22 out of 33 provinces are infected. Five provinces remain historically free of the disease (Riau Island, Bali, West Nusa Tenggara, Banten and Papua). East Java, Yogyakarta and Central Java were declared free of rabies in 1997. Since 2004, all provinces in Java island have been free from rabies.
4. Rinderpest

Surveillance of rinderpest is conducted by Disease Investigation Centers (DIC) and National Research Institute for Veterinary Science.

**Cattle diseases**

5. Bovine anaplasmosis

Typical clinical cases of anaplasmosis are found in cattle and some buffaloes in the provinces of West Sumatra, Riau, Jambi, West Java, Central Java, Yogyakarta, East Java, South Kalimantan and Southeast Sulawesi.

768 cases were reported in 2005.

6. Bovine babesiosis

Typical clinical cases of babesiosis in cattle and some buffaloes are found and reported in provinces of West Sumatra, Riau, Jambi, South Sulawesi, Southeast Sulawesi and Gorontalo.

133 cases were reported in 2005.

7. Bovine brucellosis

Some provinces in the country have been affected by the disease. Serological surveillances carried out in 1997 indicated a high prevalence (>2%) of brucellosis in West Timor and South Sulawesi. A low prevalence (<2%) was reported in new livestock development (transmigration) areas in Kalimantan and Sumatra islands. In Java, Brucellosis is reported only in dairy cattle, while in other islands it is mostly found in beef cattle. The control programme in high prevalence areas is conducted through vaccination and strict movement control of animals, whereas the test-and-slaughter method is applied in low prevalence areas. The government is now implementing a brucellosis eradication program by gradually eliminating the infection island-by-island or in localised areas.

In 2005, the reported number of cases of brucellosis was 147 positive reactors.

8. Bovine spongiform encephalopathy

Indonesia remained free from bovine spongiform encephalopathy (BSE) as indicated by the result of BSE surveillance done by seven DIC throughout the country. So far, not a single case of spongiform encephalopathy was found.

9. Haemorrhagic septicaemia

Haemorrhagic septicaemia (HS) is endemic in the country. The disease is mostly found in cattle and buffaloes. The control program aimed at reducing the seasonal incidence of HS is carried out by means of vaccination and antibiotic treatment of sick animals.

During the past three years the number of HS cases tends to increase. There were 2,930 positive animals reported in 2005.
10. **Infectious bovine rhinotracheitis / infectious pustular vulvovaginitis**

   Typical clinical cases of infectious bovine rhinotracheitis (IBR) are hardly ever observed in cattle in the field. The diagnosis is based on serological test of sera samples. The results indicate that IBR has spreaded to some provinces such as East Java, Central Java and West Java.

   In 2005, 4 cases were reported.

11. **Theileriosis**

   Theileriosis is observed in cattle in the field in some provinces of Nangru Aceh Darussalam, North Sumatra, West Sumatra, Riau, Jambi, Bengkulu, West Java, Central Java, Yogyakarta, East Java, East Kalimantan, South Sulawesi, and Southeast Sulawesi.

   In 2005, the number of positive animals reached 1,317 cases.

**Equine diseases**

12. **Surra** (*Trypanosoma evansi* )

   Typical clinical cases of surra in equine in the field are reported from provinces of Nangru Aceh Darussalam, North Sumatra, West Sumatra, Riau, Jambi, East Kalimantan, South Sulawesi, Southeast Sulawesi, West Nusa Tenggara and East Nusa Tenggara.

   In 2005, there were 20 cases of infected animals.

13. **Japanese encephalitis**

   Surveillance of Japanese encephalitis is conducted by DIC and National Research Institute for Veterinary Science.

**Swine diseases**

14. **Classical swine fever**

   During 2004, an outbreak of CSF occurred and killed about 1,050 pigs in Timika District, Papua Province. In 2005, 11 provinces are declared as infected areas, 9 provinces as suspected areas and 6 provinces remain free. The infected areas are North and West Sumatra, Riau, DKI Jakarta, Central Java, Bali, West Kalimantan, North and South Sulawesi, Jambi and East Nusa Tenggara. 3,240 CSF cases were reported.

**Avian diseases**

15. **Highly pathogenic avian influenza**

   An epizootic of highly pathogenic avian influenza (HPAI) began in January 2004 spreading to several provinces and causing the death of thousand heads of chickens. Diagnosis was established by clinical, epidemiological and pathological evidence and confirmed by laboratory examination. In order to control the disease, the Directorate General of Livestock Services (DGLS) published and distributed Guidelines for prevention, control and eradication of avian influenza. The guideline describes disease control and eradication strategy as well as the management measures involving improvement of biosecurity, depopulation of affected poultry both in infected areas, movement control of poultry, poultry products and farm waste, surveillance and tracing back, restocking, public awareness as well as monitoring and evaluation.
A mass vaccination campaign subjected only to backyard and small-scale farmers of any species (layer, broiler, indigenous chicken, duck, quail etc.). 300 million doses of AI vaccines locally produced have been provided and distributed using Indonesian Emergency Fund for controlling AI year 2004.

In 2005 Central Government provided IDR 107 billion (10.7 million USD) emergency funding for certain activities such as: training for 408 field veterinarians and 2,720 vaccinators, public awareness and promote farmers/producers/pet bird owners on improvement of bio-security and bio-safety awareness, depopulation and compensation, and intensive AI surveillance in the whole country by 7 Regional Veterinary Diagnostic lab’s, 1 Research Institute for Veterinary Science and 4 Faculties of Veterinary Medicine.

Depopulation to all infected farms through elimination of healthy poultry which are in contact with infected poultry. About the total of 7.2 million chickens has been culled and 1.17 million USD have been paid for compensation in 2004. While in 2005, the total of 0.3 million chickens were culled and 420,000 USD has been paid for compensation.

Intensive surveillance had been conducted in 2005 and total of 58,947 sera samples of chicken, 7,427 organs and swabs samples of chicken, and 456 sera samples of pigs were collected, examined and analysed.

In December 2005, Ministry of Agriculture in cooperation with FAO and international consultants has finalized National Strategic Plan for Progressive Control of HPAI in animals 2006-2008 which consists of 9 elements as follows Campaign Management, Enhancement of HPAI Control in Animals, Surveillance and Epidemiology, Laboratory Services, National Animal Quarantine Services, Legislation and Enforcement, Communications, Research and Development and Industry Restructuring.

In regards with Element 1 Campaign Management, the Minister of Agriculture on 1 March 2006 has established Campaign Management Unit in MoA with the task to establish Regional Units which is based in DIC’s and Provincial Units in order to ensure a direct command line from the central up to district level as well as to coordinate the implementation of activities within Element 2 up to 9.

In order to enhance control of AI, collaboration with FAO and international communities under FAO coordination is implemented covering:

1. The assistance of USA through FAO on “Project on Immediate Assistance for Strengthening Community-based Early Warning and Early Reaction to Avian Influenza Outbreaks” starting from October 2005 to September 2006 and extended up to March 2007 with the aim to strengthen capacity for early detection and early warning of HPAI outbreaks through community-based field surveillance and effective disease outbreak investigations, and to enhance the capacity for rapid and effective response to outbreaks of HPAI.

   Project structure covering:
   (1). Establishment of 4 (four) Local Disease Control Centre (LDCC) in Java island located at veterinary laboratory Cikole-Bandung, Malang, RIVS Bogor and DIC Wates, Yogyakarta,
   (2). Establishment of 3 (three) teams of participatory disease search (PDS) in each LDCC,
   (3). Establishment of 2 (two) teams of participatory disease response (PDR) in each LDCC,
   (4). Accurate and effective information flow among LDCC, Central (Directorate of Animal Health) and international through establishment of Campaign Management Unit (CMU) in Ministry of Agriculture.
2. **Bilateral Cooperation with Australia, Dutch, EU, Japan**

The bilateral cooperation covers various activities under the Elements of the National Strategic Plan among others Epidemiology, Pathogenesis and Control of HPAI in Ducks, Veterinary Laboratory Capacity Building, Socio economic impact, improvement of vaccine and diagnostic reagent, vaccine trial, improvement of DIC Medan, Lampung and VDAL and proposal to build a new DIC in West Java.

3. With the implementation of LDCC pilot program in cooperation with USA through FAO as mentioned above, it shows that there is significant improvement on early detection, early reporting and early response.

This approach is in line with National Strategic Plan particularly Element 1 Campaign Management, and since the pilot program has shown significant progress, therefore, this approach will be replicated throughout provinces in Indonesia.

Within the National Strategic Plan, activity under each element has been identified. The Government of Indonesia has provided funds from National Budget to support some activities however support from international communities is still required to enhance the implementation of the National Strategic Plan.

16. **Infectious bursal disease (Gumboro disease)**

Infectious bursal disease (IBD) predominantly occurs in commercial broiler and layer farms. The control program for the disease is conducted through sanitation, monitoring and surveillance as well as vaccination. Local isolates have been successfully obtained and are being used to produce vaccines in order to protect the chicken population in the country.

In 2005, 1,225 IBD cases were reported.

17. **Marek's disease**

The disease predominantly occurs in commercial broiler and layer farms.

The control program of the disease is conducted through sanitation, monitoring and surveillance as well as vaccination.

In 2005, two cases were reported.

18. **Newcastle disease**

Up to now, Newcastle disease (ND) is still the major problem among the list of poultry diseases found in the country. The disease is endemic throughout the country and causes high mortality particularly in indigenous chickens. The control programme for Newcastle disease is implemented by means of vaccination.

In 2005, 120,323 cases were reported.

19. **Pullorum disease**

Salmonellosis (*S. pullorum*) is still reported in the provinces of Aceh, North Sumatra, Bengkulu, Lampung, East Nusa Tenggara, South Sulawesi and Southeast Sulawesi.

In 2005, 59 cases were reported, mostly in indigenous chicken.
II. OTHER DISEASES

Cattle diseases

1. Jembrana disease

Jembrana disease occurs only in Indonesia and affects only Bali cattle (*Bos zondaicus*).

In the past, the disease occurred only in some districts in the province of Bali. Currently, it is found to have spread to the islands of Sumatra and part of Kalimantan in conjunction with the wide distribution of Bali cattle for the scheme of people transmigration.

It is found that the cause of the disease is a virus belonging to the family of *Retroviridae* and subfamily of *Lentiviridae*. Jembrana vaccine now is available.

In 2005 the disease was not reported.

2. Bovine virus diarrhoea

Bovine virus diarrhoea (BVD) is endemic in some provinces including Bali, West Nusa Tenggara, East Java, South Sulawesi, Southeast Sulawesi, Central Sulawesi, Bengkulu, Riau and Lampung.

In 2005, 732 cases were reported.

Others Exotic Diseases

Surveillance of exotic disease such as Nipah and Hendra are conducted by DIC and National Research Institute for Veterinary Science.