

a project to study Avian Influenza and Newcastle disease in developing countries

http://avian-influenza.cirad.fr

PROJECT

This project develops epidemiological, virological and ecological research axes around wild and domestic birds in 6 countries in Africa and Asia (Ethiopia, Madagascar, Mali, Mauritania, Vietnam, and Zimbabwe)

Two viral diseases are more specifically targeted: Avian Influenza (AI) and Newcastle disease (ND). These two diseases have a worldwide distribution and are characterized by the same clinical signs when considering highly pathogenic strains, being highly contagious and having heavy mortality rates as well as important economical losses as a consequence.

HPAI (Highly Pathogenic Avian Influenza) H5N1 Asian lineage virus was first detected on poultry in Asia in 1996 and reached Europe and Africa between 2005 and 2006.

Today 387 human cases have been reported worldwide, 60% leading to death. (WHO World Health Organization).

THREE OBJECTIVES

The GRIPAVI project encompasses three objectives aiming at better understanding AI and ND:

- Study virus transmission between wild and domestic birds as well as viral persistence pathways in infected countries
- Model virus spread
- Analyze control and surveillance methods used today in order to recommend measures increasing their effectiveness

BUDGET

3 600 000€ funded by the French Ministry of Foreign Affairs.

PROJECT DURATION

36 months of field and laboratory studies.

WORLD PARTNERS

National partners:

CNERV (Mauritanie), FOFIFA (Madagascar), LCV (Mali), NAHDIC (Ethiopie), NIVR (Vietnam),

NUST (Zimbabwe). **Support partners:**

CIRDES (Burkina Faso), EISMV (Senegal), OVI (Afrique du sud), AFSSA (France), INRA (France), Institut Pasteur (France), FAO, ILRI, OIE.

GRIPAVI, funded by the French Ministry of Foreign Affairs, is a research programme implemented by CIRAD, coordinator of the project, in collaboration with scientific teams from developing countries.

Six countries for six different study framework.

- 1- Ethiopia and its Rift valley: Smallholder farming systems and traditional commercial organisation
- 2 The high plateau of Madagascar and its large rice field: A meeting place for migratory and domestics species.
- 3 Mali and its inner Niger delta: A zone of wintering of wild birds and of traditional hunting for commercial
- 4 Mauritania and its "banc d'Arguin": wintering zone for millions of seabirds, in particular palaearctic waders.
- 5 Viet Nam: intensive breeding systems with multispecies farms; where avian influenza is endemic, and where a vaccination strategy is in place.
- 6 Zimbabwe and the lake Chivero/Manyame ecosystem: A place of strong sanitary interaction between wild, domestic, traditional and industrial compartments.











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