



Australian Government

AusAID

The Australian Indonesian Partnership

**Emerging Infectious Diseases Program
Indonesia
Animal Health Component**

Scoping Mission Report

August 2009

Table of Contents

Terms and Abbreviations.....	2
Executive Summary.....	3
Section 1: Introduction.....	4
Section 2: Background.....	5
Section 3: Key Outcomes.....	6
3.1 Gol Commitment and Priorities.....	6
3.2 Proposed Components of a New Program.....	7
3.3 Current and Planned Donor Assistance.....	8
3.4 Program Scope and Management Options.....	10
Section 4: Key Recommendations.....	11
Annexes.....	12
Annex 1 Itinerary.....	12
Annex 2 People consulted.....	13

Terms and Abbreviations

AAHL	Australian Animal Health Laboratory
ACIAR	Australian Centre for International Agricultural Research
AQIS	Australian Quarantine and Inspection Service
AusAID	Australian Agency for International Development
BAPPEDA	Provincial Planning Bureau
CBAIC	Community Based Avian Influenza Control Project
CSIRO	Commonwealth Scientific and Industrial Research Organization
DAFF	Department of Agriculture, Fisheries and Forestry
DGLS	Directorate General of Livestock Services
EID	Emerging Infectious Disease
FAO	UN Food and Agriculture Organization
GOA	Government of Australia
GOI	Government of Indonesia
H5N1; H1N1	Sub-types of Influenza A virus
IDP	Indonesia Dutch Partnership
ILRI	International Livestock Research Institute
JICA	Japanese International Cooperation Agency
MOA	Ministry of Agriculture
NGO	Non-Government Organisation
OIE	World Organisation for Animal Health
PDSR	Participatory Disease Surveillance and Response
USAID	United States Assistance for International Development
USDA	United States Department of Agriculture
VBEC	Village Biosecurity, Education and Communication project
WHO	World Health Organization

Executive Summary

1. *Australia is committed to continuing its support for Indonesia in combating the threat from Emerging Infectious Diseases after its current program of support is completed in June 2010. It is also committed to ensuring that any new program addresses the priorities of the government and, where feasible, is implemented through government agencies.*
2. *With the increased understanding of the endemicity of avian influenza, it is widely believed that avian influenza disease control activities should transition from an emergency to a development approach and that development cooperation should focus on a wider emerging infectious disease and systems improvement agenda.*
3. *There was a clear indication of support both at the national and provincial level for a continuation of AusAID's support for emerging infectious disease prevention and control activities. This was tempered, however, by a desire for more senior Government of Indonesia involvement in decision making and a move in emphasis to a wider systems strengthening approach.*
4. *Support for Government to Government engagement was clearly expressed.*
5. *An outline of a possible program of support with four core components is shown below:*
 - *Strengthening structure, function and coordination of Indonesian animal health and quarantine services nationally;*
 - *Improving planning and management of disease control including strengthening epidemiology capacity and laboratory services;*
 - *Support for regional, provincial and district animal health services in Eastern Indonesia; and*
 - *Prevention and control of avian influenza in South and West Sulawesi.*
6. *To date, AusAID's main implementing partner has been the UN Food and Agriculture Organization (FAO) which manages a large, co-funded avian influenza control program. This program has had both a short term emergency focus and a high level of operational involvement from international advisors. USAID has been the dominant donor in this partnership with AusAID taking a secondary role.*
7. *Four options for program scope and management are presented, two of which, involving a comprehensive program of support with different management options, are regarded as most deserving of further consideration.*
8. *The following recommendations were made:*
 - (i) *AusAID should proceed with design of a new program of support, to commence in July 2010. This should commence with a project design mission in October.*
 - (ii) *A comprehensive program of support is recommended, including elements of veterinary services strengthening, improved planning and management for disease control, support to decentralised veterinary services in Eastern Indonesia and avian influenza control in South Sulawesi.*
 - (iii) *Any new program should have a strong bilateral Government to Government focus with the Australian Department of Agriculture, Forestry and Fisheries taking a lead role in managing the activities. The extent to which this may impact current implementing arrangements through FAO needs to be explored further.*

Section 1: Introduction

Key Point 1: Australia is committed to continuing its support for Indonesia in combating the threat from Emerging Infectious Diseases after its current program of support is completed in June 2010. It is also committed to ensuring that any new program addresses the priorities of the government and is implemented through government agencies.

Australia was one of the first countries to support the Government of Indonesia (GOI) in its response to the avian influenza threat, committing over A\$30 million in assistance for pandemics and emerging infectious diseases in three phases since early 2004. The current AusAID program is worth A\$18.5 million and is due to be completed by June 30, 2010.

Australia is committed to further assistance to the GOI to respond to the threat from Emerging Infectious Diseases (EIDs) and has given "in principle" approval for a new program of support to commence in July 2010. Before committing funds, however, the Government of Australia (GOA) wishes to further explore options for a new program to ensure that it is both effective and addresses the priorities of the GOI and GOA.

To assist in this, a two step design process was proposed. The first stage, the subject of this report, was a Pre-design Scoping mission for the animal health component which had the purpose of:

- a) Confirming GOI commitment (at all levels) to continuing Australian support for EIDs and proposed areas of assistance;
- b) Exploring management options and recommending an effective management arrangement for the Program;
- c) Reviewing planned donor bilateral and regional commitments to inform the design team and ensure that any areas of possible duplication are identified and addressed.

The design team was also asked to identify any constraints that they believed could significantly affect the future effectiveness of the program. In addition, it was asked to explore in depth with GOI counterparts the extent to which the current structure and activities of the program are appropriate and whether the GOI had other priorities or changes in focus which it would like addressed by a full design team.

It is proposed that, subject to positive findings of the scoping mission and agreement by both Governments, a full design mission will be undertaken in October, covering both the human health and the animal health components¹.

The scoping mission comprised Dr Tony Forman, a veterinary consultant with a large experience in EIDs, Dr Lynleigh Evans the AusAID Emerging Infectious Diseases Coordinator, and Yoshiko Siswoko, the EID program Officer. The team undertook intensive consultation and discussion with key GOI counterparts, Donors and implementing agencies both in Jakarta and South Sulawesi (Annex 2).

¹ The human health component, which is implemented through WHO, is much less complex and there was no identified need to include it in the Scoping Mission.

Section 2: Background

Key Point 2: With the increased understanding of the endemicity of avian influenza, it is widely believed that avian influenza disease control activities should transition from an emergency to a development approach and that development cooperation should focus on a wider emerging infectious disease and systems improvement agenda.

Australia was one of the first countries to provide assistance to Indonesia. Early support was directed at preventing and managing human cases of avian influenza. Over time, the focus of the program gradually changed to concentrate more on the animal health response. It now comprises technical assistance and capacity building activities at the national level and a program of assistance aimed at supporting the local disease control infrastructures and controlling the disease in poultry in South and West Sulawesi. Details of the current program can be found in the discussion paper which is attached as a separate document.

The implementation partners for the current program have been diverse and have comprised the multilateral Agency, FAO; Whole of Government partners and an international Non Government Organisation (NGO). Activities have been coordinated through the EID Coordinator. The key agencies have been:

- FAO which has implemented a comprehensive program for avian influenza prevention and control, led by USAID with the support of AusAID and Japan.
- Commonwealth Scientific and Industrial Research Organization (CSIRO) through the Australian Animal Health Laboratory (AAHL) for strengthening veterinary laboratory diagnostic services, particularly in relation to avian influenza diagnosis and virus characterisation and also in interlaboratory proficiency testing for quality assurance;
- Department of Agriculture, Fisheries and Forestry (DAFF) through the Australian Quarantine and Inspection Service (AQIS) which has supported capacity building of the Indonesian national Animal Quarantine Service, particularly in the area of risk analysis;
- Australian Centre for International Agricultural Research (ACIAR) for improving biosecurity in poultry production through engagement with commercial industry in Sulawesi and support for rabies control in Bali; ACIAR also has several research projects for EIDs which are separately funded; and
- CHF International, an NGO which has implemented the market program in Sulawesi.

When the original activities were developed, avian influenza was considered an international and national emergency and a large infrastructure was established in parallel to the normal DGLS systems to try to eradicate the disease. For various reasons² these efforts have had limited success and it is now accepted that the disease is endemic - no longer warranting emergency measures - and that sustained progress in avian influenza control is dependent on risk reduction measures which will involve progressive changes at many levels over years or decades. It is likely that the most productive approach to donor support for avian influenza control is by engagement at a modest level over a period of years, as part of a larger EID program, rather than expecting short term gains with intensive engagement. This aligns with the AusAID approach of transition from emergency to development modality and a broadening of the scope of assistance to veterinary services as a whole.

² E.g. Weakness in veterinary service capacities, poor engagement between regulatory veterinary services and the commercial poultry industry, the nature of the industry with most production being undertaken in small commercial units and the village environment and the sheer size of the poultry population.

Section 3: Key Outcomes

3.1 *Gol* Commitment and Priorities

Key Point 3: There was a clear indication of support both at the national and provincial level for a continuation of AusAID's support for emerging infectious disease prevention and control activities. This was tempered, however, by a desire for more senior Government of Indonesia involvement in decision making and a move in emphasis to a wider systems strengthening approach.

Key Point 4: Support for Government to Government engagement was clearly expressed.

Overall there was commitment to the continued funding by Australia in the area of EIDs with a general consensus that all activities should expand to a wider EID agenda. Notwithstanding, it became apparent that, in some areas, there was concern about the management structures which were established in parallel with existing GOI structures and a lack of involvement by senior GOI officials in Jakarta and Makassar in decision making. This particularly related to the PDSR and other programs co-funded with USAID and implemented through FAO. In general, the desire was for a move away from the heavily international agency managed program for avian influenza prevention and control to a modality of technical assistance to a DGLS managed program to strengthen the government services overall.

At the national level, the program was supported by the Director-General of Livestock Services and the Director of Animal Health, expressing the need for capacity building in the veterinary services and strengthening of the regulatory service structures and functions, including the existing disease information system (SIKHNAS). A preference was indicated for direct Government to Government implementation of a program and improved forward planning consistent with transitioning from the emergency implementation mode.

The two capacity building activities in Quarantine and Laboratory Strengthening received strong support although it should be understood that the focus of both projects was on short term training rather than systems strengthening. The enthusiasm of the Indonesian Animal Quarantine Agency for a continuation of the support provided by the Australian Quarantine and Inspection Service (AQIS) was demonstrated with the presentation of a proposed project outline to the team. It was clear that in both these areas the teams were working closely and appropriately with local counterparts.

The provincial livestock services in South and West Sulawesi are key partners for the current AusAID-assisted, FAO-implemented avian influenza program in South and West Sulawesi. While there have been some implementation constraints and delays, there was clear support for continuing assistance from AusAID generally consistent with the current workplan of engaging village poultry producers through participatory disease surveillance and response (PDSR) and a village biosecurity, education and communication (VBEC) activity, working with commercial poultry producers through producer associations and disease surveillance and poultry movement management by identifying appropriate action points along the market chain. Transition of PDSR to a sustainable and broader regulatory veterinary service delivery approach integrated into routine structures was clearly supported.

In Makassar, the City Planning Bureau (BAPPEDA) indicated their need for continuing support in renovating poultry slaughtering and retail market facilities, currently assisted by AusAID through the NGO, CHF International. The issues are complex, encompassing socio-economic considerations for market stakeholders but having important implications both for the transmission of avian influenza to poultry and the prevention of human infection with the avian influenza virus and broader food hygiene improvement.

3.2 Proposed Components of a New Program

Key point 5: An outline of a possible program of support with four core components is shown below:

- *Strengthening structure, function and coordination of Indonesian animal health and quarantine services nationally;*
- *Improving planning and management of disease control including strengthening epidemiology capacity and laboratory services;*
- *Support for regional, provincial and district animal health services in Eastern Indonesia; and*
- *Prevention and control of avian influenza in South and West Sulawesi.*

If a full program of support were to proceed, the proposed key elements of appropriate assistance would broadly follow the current areas of assistance, with a stronger emphasis on veterinary service strengthening and broadening of scope from avian influenza to capacity to detect and respond to emerging infectious (zoonotic) diseases (EIDs). There should be a much greater recognition that activities must be led by the Indonesian Government, with Australian support being by way of technical assistance and advice, and funding support that is directed primarily toward development initiatives rather than regular operational activities. Suggested key components are outlined below.

PROGRAM GOAL: To strengthen the effectiveness of Indonesian animal health and quarantine services by improving the structure, function and coordination of activities at all levels of the decentralised Government environment.

Component 1 – Strengthening structure, function and coordination of Indonesian animal health and quarantine services nationally

Objective 1: To develop, and commence implementation of, a roadmap for the national decentralised animal health service with an effective structure and clear roles and responsibilities for national, provincial and district animal health services delineated and endorsed.

Support would be provided to the Ministry of Agriculture to improve the structure and the delivery of services. The activities would be informed by the recommendations coming from the 2007 evaluation of the Indonesian veterinary services³ and would include dialogue with the World Organisation for Animal Health (OIE). It would include consideration of the position of the veterinary service within the Ministry of Agriculture (MOA) and its role in the development and implementation of national animal health programs. It would also seek to develop effective arrangements for the delivery of Animal Health Service and Animal Quarantine Agency responsibilities and functions as part of the integrated national veterinary service. It is envisaged that technical coordination of the decentralised animal health services and information flow to DGLS would be addressed by embedding the emergency structures established for avian influenza control into the line management structures at national, regional, provincial and district levels. Support would be provided to animal quarantine services to improve policy development and operation of barrier control.

Component 2 – Improving planning and management of disease control by strengthening epidemiology capacity and laboratory services

Objective 2: To transition the Disease Surveillance Subdirectorates into an effective disease information and analysis unit which is collating national disease reports, planning and implementing appropriate and targeted epidemiological investigations and is supported by an effective national laboratory network.

This would provide support for improved capacity for epidemiological analysis and strategic disease

³ An Evaluation of the Veterinary Services of Indonesia. A report of the findings of the OIE Evaluation Team. April-May 2007.

control planning in the Directorate of Animal Health, including the capturing of disease surveillance data for international reporting. It would also involve continuing support for strengthening veterinary laboratory services at the level of national reference laboratories and currently existing disease investigation centres. There would also be continuing support to further develop applied epidemiology capacity at disease investigation centres.

Component 3 – Support to Regional, Provincial and District animal health services in Eastern Indonesia

Objective 3: To fully integrate current avian influenza prevention and control activities into local provincial and district Dinas structures and, when appropriate, extend this integration to implementing any outcomes of Components 1 and 2.

This component would continue and expand on the work currently being undertaken in Sulawesi, broadening the scope from avian influenza prevention and control to strengthening capacity for EID detection and response. It would involve transitioning of current PDSR activities to targeted active surveillance directed at addressing specific disease information needs, village reporting of disease incidence by a process that will be informed by the current VBEC activities and management of outbreak responses at the district level. It would also include targeted investigations and epidemiological analysis together with strategic planning for improved disease control.

The component would be expanded to other regions of Eastern Indonesia on the basis of its success and acceptance.

Component 4 – Prevention and control of avian influenza in South Sulawesi

Objective 4: To reduce the number of outbreaks of avian influenza in South and West Sulawesi by reducing the risk of disease transmission along the poultry market chain.

The avian influenza control program in South Sulawesi would continue to be a significant part of the Program and would include:

- improved biosecurity of poultry production, particularly in small commercial production units;
- improved veterinary hygiene along the market chain, including slaughterhouses and retail markets; to manage avian influenza transmission and concurrently minimise human exposure to H5N1 virus and improve food hygiene; and
- community education to avoid exposure to H5N1 virus and to limit the risk of avian influenza introduction and transmission in poultry in the village environment.

3.3 Current and Planned Donor Assistance

Key Point 6: To date, AusAID's main implementing partner has been the UN Food and Agriculture Organization (FAO) which manages a large, co-funded avian influenza control program. This program has had both a short term emergency focus and a high level of operational involvement from international advisors. USAID has been the dominant donor in this partnership with AusAID taking a secondary role.

In Indonesia, donors have taken a major role both in guiding the direction and implementation of programs. A summary of activities to date has been documented in a Discussion Paper⁴. This section therefore emphasises the planned future activities of the donors visited and possible areas where a

⁴ The *Australian Indonesian Partnership Emerging Infectious Diseases Program Indonesia - Discussion Paper*, is available as a separate document

conflicting approach or duplication could be envisaged.

USAID provides support for a large program of emergency activities for avian influenza prevention and control. Implementation is mainly through FAO and through a US consulting company, Development Alternatives International, which manages a project for Community-Based Avian Influenza Control (CBAIC). It also supports research conducted by the CGIAR International Livestock Research Institute (ILRI). Indications given by USAID were that their intention is to continue support for the CBAIC project, but with expansion from avian influenza to encompass a broad range of livestock diseases. The current Avian and Pandemic Influenza program, implemented by FAO is likely to continue with its focus on influenza (including H5N1 and H1N1) prevention and control. Globally, a new Avian and Pandemic Influenza and Zoonotic Disease Program, alleged to be in the order of USD 500 million is being developed with cooperative agreements to be contracted out for planning (PREPARE), surveillance (PREDICT), laboratory support (IDENTIFY), response to outbreaks (RESPOND) and communications and behaviour change (PREVENT). While not currently active in Indonesia, in due course the country may be targeted by this program. It is clear that the USAID engagement in support for emerging infectious disease prevention and control in Indonesia will continue to be substantial.

It is understood that the FAO-implemented program, largely supported by USAID (about USD 15 million annually) and AusAID (about USD 2.7 million annually), will continue with its major focus on avian influenza prevention and control but plans are underway to make significant changes to its PDSR program, particularly in relation to districts taking over financial responsibility for the activities. FAO and USAID are envisaging that there will be stronger engagement of government services with the commercial poultry industry and it also plans to assist with a major initiative to develop a sustainable national veterinary service. This will involve support for development of a National Veterinary Strategy, with particular attention to mechanisms for management of activities of national importance from the national to the provincial and district levels and for the transmission of information along that chain of management. While the overall concept is expected to be endorsed in the near future, details have not yet been elaborated or endorsed.

AusAID has always been a supporting partner in these activities with limited capacity to influence decisions. FAO sees this supporting role continuing with the main contribution of AusAID in the program being the provision of technical assistance at the national level (particularly the Disease Control Chief Technical Advisor and the Senior Epidemiologist) and the implementation of support for provincial and district livestock services in South and West Sulawesi.

Smaller contributions from other partners include those of ACIAR, the Indonesia Dutch Partnership (IDP), USDA, the Japanese International Cooperation Agency (JICA) and the Japanese Embassy through the Japan Trust Fund. There has been good cooperation with these partners over the last few years and it is not envisaged that this will change to any extent. USDA will continue to provide capacity building through training initiatives, especially for improved biosecurity of poultry production. IDP will focus on monitoring vaccine efficacy and disease control and the provincial and district level and JICA's engagement will be primarily in support of three Disease Investigation Centres in Java. The Japan Trust Fund support will be for short-term assistance with avian influenza control in Bali.

3.4 Program Scope and Management Options

Key point 8: Four options for program scope and management are presented, two of which, involving a comprehensive program of support with different management options, are regarded as most deserving of further consideration. A final decision may depend on whether the Governments of Indonesia and Australia wish AusAID to continue implementing part of its program through FAO or would prefer it to develop an integrated program through an Australian Whole of Government partner.

Considering the GOI priorities, planned donor support, proposed Program components and issues outlined in the preceding sections, there are several options described below for a Program scope and associated management options. The first two options are believed to be the most worthy of further consideration.

Option 1: A comprehensive, integrated program of support implemented through a Whole of Government managing agent

This would have significant benefits. It would enable AusAID's support to be implemented as an integrated program with a primarily development approach. A full-time presence of management and technical staff in-country would ensure timely implementation and continuing backup between specific missions and these staff would have overall responsibility for all aspects of program implementation. Recognising the complementarity of separate components of the assistance, it would ensure appropriate integration of activities and communication between the agencies involved.

One drawback would be the possibility of segregation between the AusAID and the FAO-implemented programs in areas such as veterinary services structuring and capacity building. This could represent a significant challenge for coordination and avoidance of duplication of efforts. On the other hand, it would provide greater visibility of the AusAID support and greater access of GOA personnel to their GOI counterparts.

AusAID has expressed support for a management option through a Whole of Government managing agent. Interest in this has been expressed by the Department of Agriculture, Fisheries and Forestry (DAFF) and they are proposed as an appropriate agency, with their interest in maintaining and strengthening links with the Indonesian national animal health and quarantine services. Their capacity and proposed management structure needs to be explored further.

Option 2: A comprehensive program implemented partly through FAO and partly through a Whole of Government managing agent

It would be envisaged that AusAID funding would continue to fund the FAO-implemented program. This funding would be only loosely tied but would include support for the field program in Sulawesi.

A separate smaller program could be developed through support to DAFF, AQIS, ACIAR and CSIRO for implementation of specific projects in specialized areas of quarantine support, targeted research and laboratory support, to implement the Program components described in Section 3.2 above. A person seconded through DAFF could coordinate activities and also directly support the Director of Animal Health.

Option 3: Partial withdrawal from the EID Program with separate implementation of existing Whole of Government components

Given the apparent risk of overlap in USAID plans for EID support and those proposed in Section 3.3 above, and given the identified risk of slow progress in avian influenza control efforts, AusAID could withdraw support from the FAO-implemented program. On the other hand, there are good arguments for continuing support to the key bilateral relationships that have been developed through AQIS, ACIAR and

CSIRO. It would enable a continuing dialogue to be maintained between government agencies in Australia and Indonesia and the prospect of future program expansion, if appropriate. At this level of engagement, it is likely that a Whole of Government managing agent would not be necessary and that each agency could manage their projects separately with oversight from AusAID post Jakarta.

DGLS indicated that it is seeking a greater level of support from AusAID and a higher level of Government to Government engagement than this option presents.

Option 4: Complete withdrawal from the EID program

While there are reservations about the extent to which AusAID can provide effective assistance over and above the substantial support available from other donors, the three specialized Australian agencies are contributing well appreciated and effective support, with excellent Australian visibility. It would be unfortunate to withdraw from these areas of support and would likely be regarded as an unreasonably negative decision by Indonesia authorities and the international community.

Section 4: Key Recommendations

Recommendation 1. AusAID should proceed with design of a new program of support, to commence in July 2010. This should commence with the design mission planned for October.

Recommendation 2. A comprehensive program of support is recommended, including elements of veterinary services strengthening, support epidemiology capacity and laboratory services, support to decentralised veterinary services in Eastern Indonesia and avian influenza control in South Sulawesi.

Recommendation 3. Any new program should have a strong bilateral Government to Government focus with the Australian Department of Agriculture, Forestry and Fisheries taking a lead role in managing the activities. The extent to which this replaces the current implementing arrangements through FAO needs to be explored further.

Annexes

Annex 1 Itinerary

Date	Activity
Mon 17 August	Arrive at Jakarta, hotel check in (TF) Meeting with Lynleigh Evans- Briefing
Tue 18 August	Meeting with Ministry of Agriculture - DG Livestock Services Meeting with Ministry of Agriculture - Director of Animal Health Meeting with Ministry of Agriculture - Head of Sub-directorate of Disease Surveillance Meeting with Counsellor Health - AusAID Travel to Makasar
Wed 19 August	Meeting with CHF team in Makasar Meeting with Bappeda City of Makasar Meeting with PD. Pasar Makasar City Meeting with DIC Maros Meeting with FAO Team in Makasar
Thu 20 August	Meeting with Dinas Livestock South Sulawesi and Head Sub dinas Animal Health South Sulawesi Meeting with Head Sub dinas Animal Health South Sulawesi and LDCC Makasar Meeting with FKMP (Poultry Industry Association) Meeting with other poultry industry entrepreneur
Fri 21 August	Meeting with Director of Animal Quarantine Agency and team Meeting with USAID Meeting with FAO Avian Influenza Program Team
Sat 22 August	Writing day
Sun 23 August	Writing day
Mon 24 August	Meeting with AusAID Meeting with JICA Meeting with USDA Meeting with World Bank
Tue 25 August	Meeting with Ministry of Agriculture – Director of Animal Health and team
Wed 26 August	Meeting and teleconference with GOA personnel - Aide Memoire
Thu 27 August	Attend Avian Influenza Donor Liaison Meeting Finalise report TF depart for Australia
Fri 28 August	TF arrive at home location

Annex 2 People consulted

Name	Position/Agency
Government of Indonesia	
Dr. Tjeppey D. Sudjana	Director General of Livestock Services
Dr. Agus Wiyono	Director of Animal Health
Drh. Bagoes Poermadjaya	Head of Sub-directorate Surveillance, Directorate of Animal Health
Drh Mulyanto MM	Director of Animal Quarantine
Drh Syafril Daulay	Animal Quarantine Agency
Drh. Moch. Arief Cahyono	Animal Quarantine Agency
Drh. Mira Hartati	Animal Quarantine Agency
H.M.Anis Kama SH, M. Si,MH	Head of Bappeda Makasar City
Ir. H. Muh. Syaiful Saleh, MSi	Head of Dinas Marine and Food Security Makasar City
Dr. Hj. A. Naisyah T. Azikin MKes	Head of Dinas Health Makasar City
Drs. H. A. Kadir Halid	Director of PD Pasar Makasar City (Market company owned by city municipal)
H.M. Anwar Saadam MBA	Director Operations PD Pasar Makasar City
Djamaluddin Yusuf MM	General PD Pasar Makasar City
Asawi M Dadi SH	General PD Pasar Makasar City
M. Cahyadi C.SH	Public Affair PD PASar Makasar City
Drh. Mulfihanah	DIC Maros
Drh. Hadi Purnama Wirawan	DIC Maros
Drh. Ferra Hendrawati	DIC Maros
Drh. Tannguh Dictiona	DIC Maros
Drh. Zakaria	DIC Maros
Ir. Muhammad Arifin	Head of Dinas Livestock Services South Sulawesi Province
Drh. Kafil Azis	Head of Sub-dinas Animal Health South Sulawesi Province
Drh. Nurlina Saking	Head of LDCC Makasar
Poultry Industry in Makasar	
Drh Wahyu Suhaji	Chairman of FKMP South Sulawesi
Ir Suparwo	FKMP-Layer farmer
Drh Maryono	FKMP farmer
Drh. Suhartono	FKAMP- Jaffa (commercial poultry Industry)
Dani	PT Satwa Indo Timur (commercial poultry industry)
Project Staff	
Drh. Djafar Muhammad	FAO South Sulawesi - IBCP
Nurdahlia Lairing	FAO South Sulawesi - VBEC
Emma Watkins	Resident Coordinator Avian Influenza Program, FAO South Sulawesi
Kerry Mulqueen	FAO Makasar- IBCP
Kerri Amos	CHF International Makasar – Healthy Markets
Junardi Mulete	CHF International Makasar – Healthy Markets
Ahmar Djailil	CHF International Makasar – Healthy Markets
James Mc Grane	FAO Indonesia – Team Leader, Avian Influenza Program
Steve Leenhouts	FAO Indonesia – M+E Specialist
Steve Angus	FAO Indonesia – Chief Technical Advisor, Disease Control
Ron Thornton	FAO Indonesia – Senior Epidemiologist
Mary Young	FAO Indonesia – Coordinator, World Bank Project
Donors	
Kendra Chittenden	USAID Avian and pandemic influenza Program Coordinator
Artha Camelia	USAID Avian and pandemic influenza Program Assistant
Hidetaka Funo	JICA- Livestock Development Policy Advisor
Percy W. Hawkes DVM	USDA Indonesia – Head of Avian Influenza Program
Shobha Shetty	World Bank Avian and Human Influenza Facility Manager
Ivo Classen	Indonesia Dutch Partnership - Advisor