



Department of Agriculture, Fisheries and Forestry Australia



REGIONAL ANIMAL HEALTH INITIATIVES

Australia collaborates with many countries to improve the health of their livestock. Concerns expressed by international public health agencies about the potential impact of zoonotic diseases have led to increased public and official attention being given to animal disease control.

Australia is involved in regional animal health initiatives through aid and research activities. Aid activities are primarily resourced through the Australian Agency for International Development (AusAID), and research activities are primarily resourced through the Australian Centre for International Agricultural Research (ACIAR). In addition, Australia liaises directly with government agencies, veterinary associations and private organisations in collaborating countries.

Australia provides technical and financial assistance at global and regional levels by supporting the World Health Organization, the World Bank, the World Organisation for Animal Health (OIE), the Food and Agriculture Organization of the United Nations (FAO), the Secretariat of the Pacific Community and the Network of Aquaculture Centres in Asia–Pacific. Supporting international collaborators ensures that regional projects address animal health issues and requirements that are important for Australia as well as for the collaborating countries.

This chapter summarises Australia’s main areas of activity in terrestrial animal health through AusAID and ACIAR in the Asia–Pacific and African regions. Information on regional aquatic animal health initiatives is provided in Chapter 5.

9.1 Overseas aid

Australia works with the governments and people of developing countries to deliver aid where it is most needed and most effective. AusAID manages the majority of Australia’s overseas aid program,

which aims to assist developing countries to reduce poverty and achieve sustainable development in line with Australia's national interest.

In September 2000, member states of the United Nations, including Australia, agreed to work towards eliminating global poverty and hunger; to improve health, gender equality, education and environmental sustainability; and to create a global partnership for development. This commitment produced the eight Millennium Development Goals (MDGs), and Australian aid helps developing countries to achieve these goals. Achieving MDG1 (eradicate extreme hunger and poverty) requires attention to key drivers of economic growth, including rural productivity, private sector development and trade. The health MDGs are also a focus for Australian aid, and the Australian Government has released a National Security Statement that recognises the potential security threat posed by pandemic disease. In this context, animal health initiatives are highly relevant — since many devastating human diseases originate in animals, control of the disease in animals is fundamental to a comprehensive health security strategy. Animal disease control and capacity building can have major benefits to productivity at the farm level and may improve the trading potential of a developing country by increasing its capacity to meet trade-related sanitary requirements.

Most of Australia's aid is designed, delivered and assessed in consultation with collaborating countries' governments and other agencies to meet their most pressing development needs. AusAID takes a whole-of-government approach to development issues, and responds to challenges in the region by drawing on broad expertise in government, business, academia and the community.

Australia's aid program focuses on the Asia-Pacific region. Two-thirds of the world's poor — some 800

million people — live in this region, but they receive less than one-third of global aid. Australia also provides assistance to Africa, the Middle East, Latin America and the Caribbean. Australian aid to Africa has increased significantly in recent years and now represents around 5% of the aid program.

9.1.1 AusAID

Current AusAID projects that include animal health activities are described below.

Emerging infectious diseases in Asia

Since 2003, Australia has played a leading role in the response to pandemics and emerging infectious diseases (EIDs) by providing almost \$160 million to assist countries to combat these diseases. This includes the four-year Pandemics and Emerging Infectious Diseases Initiative, developed in response to the H5N1 avian influenza epidemic. Implementation of this \$100-million initiative was guided by the Pandemics and Emerging Infectious Diseases Strategy 2006–2010. A review of the initiative found that Australia, through its support to national governments, nongovernment organisations, and regional and multilateral institutions, had significantly improved the response to pandemics and EIDs in the region. Australia's contribution over the past few years has been part of a global response to diseases such as H5N1 avian influenza, and has resulted in better emergency response systems and solid building blocks for a long-term approach to the prevention and control of EIDs.

Achievements under the strategy include:

- development of national pandemic preparedness plans
- simulation exercises to test preparedness
- strengthened systems for early detection, surveillance, prevention and control of avian and human influenza
- stockpiled supplies of antiviral medication and personal protective equipment.

Ongoing activities that Australia has contributed to under the strategy include:

- the World Bank Multi-Donor Avian and Human Influenza Trust Fund, to assist the East Asia, Pacific and Africa regions
- the OIE project to strengthen veterinary services to combat avian influenza and other priority diseases in Southeast Asia, including regional veterinary laboratory networking



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- a program to strengthen community capacities in prevention, surveillance and response to highly pathogenic avian influenza (HPAI) in Cambodia, Laos, Burma and Vietnam
- the Secretariat of the Pacific Community Regional Influenza Pandemic Preparedness Project, to help build the capacity of Pacific island countries and territories
- a biosecurity strengthening project in Timor-Leste, implemented by the Timor-Leste Ministry of Agriculture and Fisheries and the FAO, to improve preparedness, prevention and response to avian influenza
- research on EIDs — Australia is partnering with Canada’s International Development Research Centre to increase local capacity to conduct research on EIDs in Southeast Asia using an ecohealth approach, which encourages positive environmental action that will enhance both health and welfare at the community level.⁸⁸

Australia has developed a new framework to respond to the threat of pandemics and EIDs, which will guide the Australian Government’s international development assistance over the next five years to 2015. Under the framework, Australia will assist partner countries in the Asia–Pacific region to translate gains in preventing, detecting and controlling diseases such as H5N1 avian influenza from the past four years into stronger systems for responding to EIDs. The framework incorporates lessons learned by Australia and other development partners in responding to severe acute respiratory syndrome and HPAI. These experiences point to the need to move from an emergency response to a longer term, systemic approach that will strengthen the capacity to deal with EIDs more broadly, rather than dealing with a single disease.

The framework has four areas of focus:

- promoting adherence to international standards of animal and human health
- strengthening systems for preventing, detecting and controlling EIDs, particularly at the community level
- responding to outbreaks of EIDs when they occur
- building an evidence base for the response to EIDs.

OIE Southeast Asia and China Foot-and-Mouth Disease Campaign

The Southeast Asia Foot-and-Mouth Disease Campaign (SEAFMD) was formally established in 1998, with

Thailand, Malaysia, the Philippines, Burma, Cambodia, the Lao People’s Democratic Republic and Vietnam as founding member countries. Under an agreement between the OIE and the Kingdom of Thailand, a Regional Coordination Unit (RCU) was established in Bangkok in 1997. The RCU has been funded mainly by AusAID, with in-kind assistance from the Thai Department of Livestock Production.

Although free from foot-and-mouth disease (FMD), Indonesia recognised the importance of understanding FMD in other parts of Southeast Asia and working with the SEAFMD to maintain its freedom status; Indonesia became a member in 1999. In 2010, the People’s Republic of China, Singapore and Brunei became members, considerably extending the program’s geographical coverage. The SEAFMD has been renamed the Southeast Asia and China Foot-and-Mouth Disease Campaign (SEACFMD).

The goals of the program are to control and eradicate FMD in member countries, to increase food security and to alleviate poverty among rural smallholder producers of livestock. With the assistance of governments and other stakeholders, the SEACFMD has led to significant improvements in areas such as risk analysis, outbreak investigations, laboratory and epidemiological networks and communication. Of particular note are improvements in the understanding of livestock movements, ‘hotspots’ and disease patterns in Southeast Asia, which have informed disease management options. These developments were taken into account in the new strategy that is detailed in the revised SEACFMD 2020 Roadmap, which provides guidance to achieving FMD freedom with vaccination by the year 2020, and also for maintaining the FMD status of countries and zones that are FMD free. The Australian Government Department of Agriculture, Fisheries and Forestry made a major contribution to the revision of the 2020 Roadmap during 2010.

The involvement of the People’s Republic of China, particularly Yunnan Province, has added a new dimension to FMD knowledge and control. Political commitment and the involvement of the Association of Southeast Asian Nations (ASEAN) remain strong, and industry and other stakeholders are increasingly engaging in the project. Importantly, the program complements a range of other projects, which improves the efficiency and effectiveness of SEACFMD.

Donors such as AusAID and the European Union have entrusted the RCU with managing a number of complementary projects dealing with capacity building, prevention and control of EIDs, and approaches to

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support public health. Given the increased range of activities of the RCU, the OIE signed a memorandum of understanding with the Government of Thailand in 2010 to formally establish a Sub Regional Representation in Bangkok. The SEACFMD now forms a discrete program within the Sub Regional Representation, with a supporting RCU.

Program for Strengthening Veterinary Services

The three-year Program for Strengthening Veterinary Services (PSVS), funded by AusAID and managed by the OIE, was initiated in late 2007. The program provides targeted support to the OIE Performance of Veterinary Services (PVS) pathway in Southeast Asian countries. The PVS pathway is a staged process for strengthening national veterinary services. It involves:

- PVS evaluation ('diagnosis')
- PVS gap analysis ('prescription')
- a suite of 'treatment' options, including strategic planning; donor/agency projects; and legislation, education and laboratory technical support
- PVS 'follow up' evaluation (several years later) to measure progress.

The process can then be started again, creating a cycle of continuous improvement.

In addition to PVS evaluation and gap analysis, the PSVS has supported the completion of veterinary services strategic plans using PVS inputs in 'model' Southeast Asian countries. This has included meetings of the President of the Subcommission for FMD in Southeast Asia and China, and the OIE subregional representative, with ministers responsible for animal health in many of the member countries; creation of dedicated working groups; stakeholder workshops; and economics and strategic planning consultancies.

A Vietnamese Veterinary Services Strategic Plan (Roadmap) has been drafted and submitted to the Vietnamese Parliament and the Prime Minister. It is based on a PSVS template that used the findings of the PVS gap analysis as the key input. After the roadmap has been considered by the parliament, the OIE intends to assist Vietnam with a donor roundtable to consider resourcing and implementation. The same process will be applied in the Philippines.

In 2010, the PSVS continued to support and strengthen veterinary services through Southeast Asian specialist workshops in animal health communications, veterinary legislation and governance, and HPAI laboratory diagnosis. A PSVS economic study on investing in

veterinary services in Southeast Asia will further support the advocacy component of the strategic plans, and the strengthening of veterinary services in general.

The PSVS has stimulated strong interest in the PVS pathway, which has been endorsed at high-level meetings of both ASEAN and the Global Framework for Transboundary Animal Diseases. Other Southeast Asian countries will be following the techniques used in Vietnam and the Philippines to make the most of the PVS pathway opportunity, with Burma, Indonesia and Cambodia next in line.

Sanitary and Phytosanitary Capacity Building Program

The Sanitary and Phytosanitary Capacity Building Program aimed to increase the capacity of ASEAN countries to meet international sanitary and phytosanitary (SPS) standards under the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures. This required boosting capability to describe and manage animal and plant health, and to implement SPS measures. With funding of \$4 million over four years, the program aimed to strengthen the technical, scientific and managerial capacities of regional and national agencies responsible for managing SPS matters.

The final two animal health activities supported by the program were completed in 2010. These two projects, commissioned in late 2009, targeted classical swine fever and porcine reproductive and respiratory syndrome in the lower Mekong region. Both diseases are important constraints on pig production in the region. The two projects were complementary and aimed to develop disease freedom strategies for adjacent provinces in Cambodia and Vietnam. The major outcomes of the projects were surveillance and vaccination plans and the development of zoning strategies. The program also provided resources for field implementation of the plans.

9.2 International animal health research

Australia funds international animal health research, mainly through ACIAR and a number of Australian universities. The overseas research activities of the major universities are listed in Appendix 4. ACIAR's research activities⁸⁹ on livestock are developed, commissioned and evaluated through two programs: Animal Health, and Livestock Production Systems. Research projects of between three and five years are funded to meet the research priorities of partner countries and Australia, and to have the widest possible impact. Animal

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health projects are linked with ongoing programs of AusAID and the Australian Government Department of Agriculture, Fisheries and Forestry.

9.2.1 ACIAR Animal Health program

The Animal Health program supports research organisations in Australia and partner countries to solve problems in animal production and health using a multidisciplinary approach. The program is focused on Indonesia, Cambodia, Laos and Papua New Guinea, with increasing emphasis on regional cooperation in the Mekong countries on livestock movement and transboundary disease control. New projects are developed on the basis of disease risks to animal and human health along existing and potential market value chains. The program currently has five subprograms, comprising the following projects in progress or under development.

Avian influenza in Indonesia

Avian influenza continues to be a major concern for poultry and human health. A cluster of projects provides some of the research required to assess risks to livestock and human health and to implement effective control programs. These include:

- epidemiology and control of avian influenza in ducks
- appropriate methods of disease surveillance for major transboundary diseases
- control and characterisation of HPAI strains in poultry
- biosecurity in nonindustrial commercial poultry production
- surveillance of HPAI under future control or eradication scenarios.

Policies and systems for better management of animal disease in Indonesia

Anthrax, brucellosis and rabies are important animal diseases that affect humans, and livestock movement causes the spread of avian influenza, classical swine fever and FMD. A cluster of projects is researching surveillance systems, control programs and risk analysis to support decentralised strategies, including:

- improving veterinary service delivery in a decentralised Indonesia
- livestock movement and managing disease in eastern Indonesia and eastern Australia.

Improving health and production of village pigs and cattle in Laos

Livestock diseases have a major impact on household income in upland Laos. Rapidly spreading viral diseases are particularly important, given the position of Laos as a major livestock transit route. A cluster of projects is assessing the risks of livestock movement, improving diagnosis and developing control strategies in the northern provinces, including:

- understanding livestock movement and the risk of spread of transboundary animal diseases
- using forage legumes for supplementing village pigs
- developing best practice health and husbandry of cattle and buffalo
- managing pig-associated zoonoses
- improving livelihoods through developing pig-based enterprises in upland Laos (including health, production and zoonoses)
- improving resource management and marketing systems for rural livelihoods in rain-fed southern Laos (including cattle health, production and marketing).

Income generation and better nutrition through agricultural diversification in Cambodia

Domestic and regional trade in cattle is gaining importance in Cambodian agriculture. An integrated program of cattle health and production projects is focused on the constraints of disease, poor reproductive management and inadequate nutrition. Projects include:

- developing best-practice cattle health and husbandry
- improving feeding systems for more efficient beef cattle production
- understanding livestock movement and the risk of spread of transboundary animal diseases.

Strengthening of surveillance systems to monitor and respond to livestock diseases in Papua New Guinea

Livestock and plant biosecurity are high priorities for Papua New Guinea. Veterinary services in Papua New Guinea are seeking new approaches to animal health control, but there are few qualified personnel and infrastructure is poor. Syndromic surveillance offers some opportunities to gather national data on disease outbreaks, and provides local opportunities for disease control as a way to increase production. Another project with a research component is focusing on the developing animal health surveillance systems in the Torres Strait islands.