

RESEARCH IN PROGRESS

Livestock movement and managing disease

Description: Livestock movement and managing disease in Eastern Indonesia and Eastern Australia.

(2007 to 2011) Collaborator with University of Sydney

Funding : Australian Centre for International Agricultural Research.

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Objectives:

Management of animal and animal product movement is an essential component of control programs for trans-boundary animal diseases (TAD). This project is focusing on critical trans-boundary diseases (highly pathogenic avian influenza (HPAI) and classical swine fever (CSF) in eastern Indonesia and foot and mouth disease (FMD) and CSF in eastern Australia.

It will strengthen capacity for effective disease control by identifying livestock trade patterns that are high risk for disease transmission and by supporting formulation and pilot implementation of policy designed to restrict, manage and/or monitor these livestock movements.

In Indonesia the project is hosted by the Disease Investigation Centre (DIC) Denpasar with project activities in Bali/ Lombok conducted in collaboration with Udayana University and University of Mataram. Guidance on market and social research is provided by University of New England and Charles Sturt University, on HPAI by Murdoch University, and on policy development by NSW DPI.

Methodology and key findings

A study of movement of kampong chicken and duck from backyard farms to customers through individual collectors and vendors operating in villages and traditional markets was conducted. Further investigation of formal poultry movement at nine markets in Bali and eight markets in Lombok showed low levels of biosecurity practiced by collectors and vendors and increased volumes of chickens and ducks traded during religious celebrations and festivals.

Investigation of informal poultry movement provided indicative information on types and numbers of poultry illegally entering Bali, the entry points and the economic and cultural drivers for this trade. Evidence of a structured system for illegal poultry movement into Lombok was not found. Village-to-village movement of poultry within island was documented for both Bali and Lombok, and these movements for kampong chickens and ducks were predominately within subdistrict.



Above : Poultry market in Bali

Outputs

Four reports, two draft journal papers, training workshop for NGOs staff to conduct pig movement survey, hosting of Indonesian researcher to ILWS.

Outcomes

This project is influencing policy on TAD control by 1) Identifying animal movements that pose most risk for TAD transmission, 2) Enabling application of risk management to decisions about reduction of risk associated with these movements.

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