## **East Timor AusAID Mosquito Project**

Bill Pettit & Peter Whelan, MEB

In September 2006 the Northern Territory (NT) Department of Health and Community Services (DHCS) commenced an AusAID funded project in collaboration with the East Timor Ministry of Health (MoH) in the area of mosquito control and surveillance. The project will receive AusAID funding of \$1,032,000 over the next 3+ years. DHCS, through the Medical Entomology Branch (MEB) and Health Policy branch, will work with the MoH to increase the capacity of the MoH to carry out effective mosquito surveillance and control programs so that the incidence of mosquito-borne disease in East Timor can be reduced.

The DHCS staff directly involved in the project are Peter Whelan (Director MEB) and Sally Matthews (Senior Policy Officer Health Policy) as joint Project Managers, and Bill Pettit (MEB) as the full-time Medical Entomologist/Technical Advisor. The Director of Health Policy will be involved in the project as a member of the project Partnership Steering Committee.

The DHCS has had an involvement in the area of mosquito control in Timor during the past 15 years. This involvement has been in the form of brief visits to Timor to carry out baseline mosquito surveillance and to provide advice on mosquito control.

The key outputs of the 3 year project will be to:

- ensure that essential equipment and chemicals are available for training purposes;
- increase the skills of mosquito control and surveillance officers in East Timor;
- provide assistance to develop and implement effective operational protocols for mosquito surveillance and control;
- provide assistance to improve community education on prevention of mosquito borne disease; and
- provide assistance to improve the collection and analysis of data in relation to mosquito surveillance and mosquito borne disease.

During the first year the project activities will be centred on dengue surveillance and control in Dili, East Timor's capital. The project will:

• develop and trial protocols for mosquito

- surveillance and control;
- train MoH staff; and
- assist in the development and delivery of community awareness programs.

As a first part of the program:

- 2 MoH officers from East Timor will attend the mosquito surveillance and control course in Perth, WA:
- NT MEB Officers will provide assistance at the Perth course.

The project will also involve MoH officers undertaking training in Darwin, and in East Timor and include:

- a dengue control pilot program to be undertaken in Dili;
- training and protocol implementation to extend to other mosquito vectors and include regional centres and health staff in East Timor's other 12 districts outside Dili in years 2 and 3.

Improved mosquito surveillance and control programs are desperately needed in East Timor. Approximately 20-25% of consultations in East Timor's health facilities are either directly related to, or are compounded by mosquito-borne disease (dengue, malaria, Japanese encephalitis, filariasis and chikungunya). A dengue epidemic between January and April 2005 resulted in 933 reported cases of dengue fever or dengue haemorrhagic fever, and 37 deaths.

There is a clear need for the development and implementation of training programs for East Timor health staff on mosquito surveillance and control. A number of international non-government organisations are already present in East Timor addressing the issues of treatment and care of people suffering mosquito borne diseases. The DHCS will complement their work by focussing on the surveillance and control of the vector mosquitoes of these diseases.

## Reference

1. East Timor Ministry of Health (2005), *National mosquito-borne disease control strategy* (Draft). version 11/2005.