

Building research capacity

Ms Sharon Harvey, Education and Training Officer



AOP budgeted expenditure in 2006–07	\$3,560,000
Actual expenditure in 2006–07	\$4,132,093
Expenditure in 2005–06	\$2,856,008
Papua New Guinea	\$2,565,098
Proportion of total ACIAR expenditure 2006–07	7.1%

Through its training program ACIAR has a key priority to build the research capacity of agricultural research institutions in key partner countries by providing both discipline-specific and some broader training opportunities.

Key performance indicators	Performance 2006–07
Continued high quality of applicants for in-depth research management training in Australia	Forty-three applications for John Dillon Fellowships were received in 2006–07 and seven Fellows successfully complete the program in March–April 2007
At least two new cross-program training courses designed with new providers to meet identified demand from South-East Asia–Pacific countries	New courses in commercialisation and research business management and in pest resistance management for genetically modified crops were developed and delivered; courses in forestry research management and experimental data analysis were significantly revised.
Size of postgraduate (John Allwright Fellowship) program increased by at least 25%	In 2006–07, 61 new students were awarded postgraduate fellowships. There were eighty-nine students (65 active and 24 under contract to start) as at 30 June, 2007 compared with 44 active fellowships as of 30 June, 2006
Analysis of Australian and overseas (non–John Allwright Fellowship) students working on ACIAR projects shows that at least 50 successfully completed honours and postgraduate qualifications in association with ACIAR projects over the last four years	Over 100 non–John Allwright students completed honours and postgraduate study in association with ACIAR projects since 2003.

Project-specific training

ACIAR only supports training that relates directly to our projects. The training program focuses on specialised training activities provided through our postgraduate and research management fellowships and short courses targeting specific issues. Training opportunities arising as a component of ACIAR-funded projects are not included in the budget figures shown above. The majority

of training provided by ACIAR takes place within individual research projects through ‘on the job’ training, where either developing country scientists visit Australia or Australian specialists visit partner countries to work together. At its inception, each ACIAR project is designed to include capacity-building, through formal and informal training to enable project personnel from partner countries to engage in the full range of

activities. Formal courses may be built into the project; for example, to provide training in a particular research methodology or to develop social science research skills and often to develop essential skills in computing or scientific communication. Informal training varies according to the type of project, the ability of the project team and opportunities that arise.

Achievements

Training managed and funded by the ACIAR training program falls into four categories, the first representing by far the largest main expenditure:

- postgraduate fellowships (John Allwright Fellowship Scheme)
- research management training (John Dillon Memorial Fellowship)
- short-term cross-discipline training courses for developing country staff involved ACIAR projects
- training courses provided through the Crawford Fund for International Agricultural Research for project staff on ACIAR-funded projects.

Capacity building is important for all of our developing country partners, but especially so for ACIAR's newer, poorer partner countries. There is a particular emphasis on providing training for ACIAR project scientists from PNG, the Pacific Islands, poorer parts of Indonesia, East Timor, Cambodia, Vietnam and Lao PDR. ACIAR's cross-program training courses are presented by both public and private sector providers.

Postgraduate fellowships

John Allwright Fellowships are awarded to developing country project scientists who are actively involved in an ACIAR project. These Fellowships are awarded for study at Australian universities to undertake Postgraduate Diploma, Masters or PhD training, with the student's research project forming a discrete topic related to, but not part of, the existing ACIAR project. ACIAR supports a limited number of coursework

postgraduate degrees in situations where the partner institute requires development of a broader skill set rather than in-depth research training. While individual awardees benefit from the scheme, partner country institutions are the key targets. In 2007–08 fellowships will be available to ACIAR project scientists and economists who are citizens of PNG, the Pacific Island countries of Fiji, Samoa, Tonga, Solomon Islands and Vanuatu, East Timor, Indonesia, Vietnam, Cambodia, Lao PDR, Philippines, India, Bangladesh, Pakistan, western China and the Republic of South Africa.

In 2006–07, \$2.68 million was expended on the John Allwright Fellowship Scheme with 96 active fellowships during the year, representing 18 countries. During this time 16 fellows successfully completed their studies and 52 new candidates from Bhutan, Cambodia, China, East Timor, Fiji, Indonesia, Lao PDR, PNG, Philippines, South Africa, Tonga, and Vietnam commenced at 15 universities in Australia. ACIAR, with co-investment from AusAID, has taken measures to increase the size of the John Allwright Fellowship Scheme with the aim of supporting and maintaining up to 90 active fellowships during 2007–08. Each year a group of new Fellows spends a week visiting ACIAR headquarters and participate in training in science communication, writing research papers and networking. In 2007–08 two meetings will be held to cater for the increased number of Fellows.

Returnee small project awards

Small grants of up to \$10,000 are available for successful John Allwright Fellows, who have completed postgraduate studies and returned to relevant employment in their home country. The follow-on funding scheme provides for an activity which continues, or is related to, the research done within an ACIAR project associated with postgraduate work. These grants for former John Allwright Fellows are primarily aimed at developing small-scale research projects in the returnee's

institution, which may catalyse longer term support. In 2006–07 five small projects totalling \$43,883 were awarded. Since 2000, a total of 40 of these awards have been made.

John Allwright Alumni Association

Former John Allwright Fellows, who have completed their studies in Australia, are an important part of the ACIAR network, and many play valuable roles after returning to their home countries in maintaining strong linkages between Australian and partner country institutions. Several former Fellows now lead or play key roles in ACIAR projects and, in recent years, many have received returnee small project grants. ACIAR has formalised its relationships with its former Fellows, through the establishment of a 'John Allwright Alumni Association'. In 2006–07 alumni have assisted as tutors in the delivery of a number of ACIAR-sponsored in-country training courses. Alumni receive an electronic newsletter three times annually and attend major ACIAR events held in partner countries. They also contribute to the quality of information and its analysis in the external impact assessments that are commissioned by ACIAR.

John Dillon Memorial Fellowships

John Dillon Fellowships provide an opportunity for agricultural scientists and economists from ACIAR partner countries to develop leadership skills in the area of agricultural research management, agricultural policy and/or extension technologies. This is achieved through exposure to Australian agriculture across a range of best practice organisations involved in research, extension and/or policy-making. ACIAR has awarded 26 Fellowships since the program's inception in 2002. During February/March 2007, seven John Dillon Fellows (from Indonesia, Lao PDR, PNG, Philippines, South Africa and Vietnam) visited for approximately 5 weeks. Minister Downer met with them at Parliament House and presented each Fellow with a plaque.



Recipients of the John Dillon Memorial Fellowship Award, 2007

Australian Youth Ambassadors for Development

ACIAR continues to provide assignments for the AusAID-funded Australian Youth Ambassadors for Development program (AYAD), where young Australians spend a period of between 3 and 12 months assisting on a development activity in a partner country. Since 2000 there have been 40 Youth Ambassadors who have successfully completed assignments on ACIAR projects. During 2006–07 four new Youth Ambassadors left Australia to gain international experience working on ACIAR projects in developing countries. One is currently based in Bangladesh working as a volunteer entomologist; a second is working on the ACIAR support for market driven adaptive research program in Indonesia; and two others are on assignments in the Philippines: one is helping to advance the understanding of ecosystem processes of tree farms owned by small land holders and the other is working with the Philippines Landcare network to assist in developing a monitoring and evaluation system for their training activities.

ATSE Crawford Fund fellowships, training courses and master classes

In 2006–07, total funding through ACIAR was \$847,330 including management of an Australian Government allocation of \$690,000, as well as \$157,330 funding from ACIAR for joint training activities. The ATSE Crawford Fund also attracted contributions from state governments and the private sector. In 2006–07 the Crawford Fund conducted several short-term training activities associated with ACIAR projects, including Master Classes in Aquaculture Nutrition, Aquaculture and Poultry Feed Manufacturing and Landcare. Other training courses associated with ACIAR projects included:

- Training on computer simulation of in-store drying of grain in China July 2006 (The University of New South Wales)
- Collaborative curriculum developments in land and natural resource management in eastern Indonesia November 2006 (Charles Darwin University)
- Success with Lucerne in China March 2007 (South Australian Research and Development Institute)
- Scientific Writing Workshop for Cambodian Agricultural Scientists April 2007 (NSW Department of Primary Industries)
- Laboratory analysis of soil and plant material May 2007 (The University of Queensland);
- Qualitative methods and systems modelling in tropical forestry June 2007 (The University of Queensland).

These activities also helped ensure ACIAR research results were more widely applied in developing countries since, in some cases, they gave ACIAR project leaders the opportunity to instruct scientists from countries other than those where their projects are situated. The Crawford Fund also sponsors short-term training fellowships. In 2006–07 the Fund sponsored seven fellowships to enable members of ACIAR project teams to undertake training activities in Australia of up to 3 months.

Cross-program training

In 2005–06 ACIAR, in consultation with its partners, moved to a more focused and integrated program of activities for staff associated with active ACIAR projects rather than running short courses in isolation. Themes from 'assisting in the development of a modern agricultural R&D system' (Lao PDR and Cambodia), 'linking research to farmer application' (Indonesia and the Philippines), to 'participating in the international scientific community' (Vietnam) were continued in 2006–07. ACIAR will continue to give special priority during 2007–08 to the Mekong countries (Vietnam, Lao PDR, Cambodia), Indonesia, Philippines, East Timor and PNG.

In addition to the cross program training activities, a training course in research management for 18 Indonesian agricultural research and development managers involved in the ACIAR Smallholder Agribusiness Development Initiative (Support for Market-Driven Adaptive Research) program was held in Australia in June 2007. The broad themes the managers were exposed to covered organisational change, planning, monitoring and evaluation, collaboration between institutes and farmer input to research priority setting, and funding. The 2-week training course included site visits to best practice research management models and a formal management course at Mt Eliza Business School.

Cross-program training courses (4–21 days in duration) undertaken in 2006–07 included:

- *Application of Participatory Research and Extension*
In August 2006 ACIAR sponsored the attendance of six project scientists from India, Vietnam, Philippines, Lao PDR and Cambodia on this 12-day course held at IRRI, Los Baños, Philippines. Its main objective was to enhance participants' knowledge and skills in the effective application of participatory research and extension for accelerating the adoption of appropriate and improved rice and rice-based technologies.
- *Gender Mainstreaming in Agricultural Research for Development*
ACIAR sponsored six participants (three women and three men) from PNG, Vietnam, Indonesia and Pakistan on this training course delivered by the International Institute of Rural Reconstruction (IIRR), Silang, Cavite, Philippines from 14–25 August 2006. The course examined various efforts in gender mainstreaming at both the program/project and organisation levels and introduced a process on how gender can be mainstreamed within development organisations.
- *Research & Development Project Management and Commercialisation*
During 9–13 October 2006, 25 Philippine project scientists attended a 5-day training course in Manila on defining research projects and deliverables. The 5-day University of Melbourne course included topics on: working effectively with research project teams; effective collaborative research skills; maintaining research projects' commercialisation potential; and determining pathways to commercialisation for research projects. A second course for a further 25 Philippine project scientists was held in June 2007.
- *Writing scientific papers in English*
Following the success of this training course on scientific communication first delivered in Vietnam in January 2006, a

two-session workshop was conducted for 19 Indonesian scientists during September and November in Jakarta, Indonesia and again in Jakarta from 15–20 January 2007 and 11–16 February 2007 for a further 16 participants. The course aimed at having each participant complete a substantive document ready for publication in an international journal on completion of the course.

- *Genetically Modified Crops – Pest Resistance Management and Monitoring*
From 5–24 November 2006, ACIAR sponsored the participation of four female Vietnamese scientists in hands-on involvement with the Australian cotton insect resistance monitoring and research program during the Australian cotton season in Narrabri, NSW. The course was intended to provide direct exposure to the techniques and approaches employed in Australia to run a successful resistance management program. A second session of this course was held in Vietnam in June/July 2007.
- *Leadership Course for Asian Women in Agriculture R&D and Extension*
Following positive feedback from participants who attended this leadership training in November 2005, ACIAR sponsored a further five women from PNG, Indonesia, Solomon Islands and Vietnam to attend this course that took place at IRRI, Los Baños, Philippines, from 27 November to 8 December 2006. The course concentrated on developing work-related and personal leadership skills, and developing work plans integrating gender concerns into the R&D environment.
- *Experimental design, data analysis and interpretation*
The second and third in a series of courses on data management and analysis conducted by the University of Queensland was held in Lao PDR from 11–16 December 2006 and in Cambodia from 5–10 February 2007. The Lao PDR course, attended by 22 ACIAR project scientists (18 men and 4 women)

from ACIAR projects was well received by participants, although language differences were, at times, a challenge. In Cambodia, the course was held at the Cambodia Agricultural R&D Institute headquarters for 21 attendees, with a similar gender balance. A fourth six-day training workshop took place in Indonesia in late June 2007.

- *Financial and economic research methods for natural resource managers*
The course conducted by the University of Queensland, took place in Manila, Philippines, from 9–13 January 2007. The group included 18 participants, including from Indonesia (5), India (2), Philippines (9), Thailand (1) and Vietnam (1). This course aimed to provide managers with an understanding of 'tools' available for understanding the socioeconomic factors that contribute to successful management of natural resources. The primary focus was on financial and economic research methods.
- *Research Management for Foresters*
A research management workshop for the Indonesian Forestry Research and Development Agency (FORDA) was held in Indonesia during May 2007. Participants were Directors of FORDA research institutes and other senior staff. The workshop covered linkage of research into national policy and bridging research results into practice as a means of increasing impact.
- *Social and Community Dimensions of ACIAR projects*
This short course was held in PNG in April 2007, and again in Indonesia during July 2007. The goal of the training workshop was to increase participants' understanding, knowledge and skills to critically analyse the social and community dimensions of rural development, and enhance the social outcomes from ACIAR projects.