

STRENGTHENING TIES WITH AUSTRALIAN VOLUNTEERS INTERNATIONAL ▶



ADOPTING THE RESULTS OF ACIAR RESEARCH: A STUDY

MEASURING THE BENEFITS

Each year about 40 ACIAR-supported projects are completed, with research outcomes that can result in real benefits to farmers, policy makers and developing countries.

Many of these outcomes receive widespread dissemination and result in adoption, sometimes through new projects, through existing extension networks or through word of mouth.

ACIAR commissions independent assessments of projects with evidence of accrued benefits – these assessments use a benefit:cost ratio to measure economic returns.

But not all projects can be assessed in this way. In 2003-04 ACIAR increased its investment in assessing project benefits by seeking to review the adoption of the outcomes of all projects with outlays of \$400,000 or more. The first group of projects examined were those concluding in the 1999-2000 financial year.

The leaders of this group of projects visited the countries where the research was undertaken to gather and collate data on the adoption of project outputs. The results of these studies are published in a new publication *Adoption of ACIAR project outputs: Studies of projects completed in 1999-2000*.

Through these studies a clearer picture of the factors that have affected adoption have

emerged, with positive factors such as:

- ▶ Government or commercial enterprises being willing to share risks;
- ▶ the value of trained scientists who can continue the work and act as champions for the research;
- ▶ appropriate and extensive training of end-users;
- ▶ research organisations with stable and limited staff turnover;
- ▶ good personal relations that create trust between researchers and decision-makers; and
- ▶ results that contribute directly to developing practical applications.

Factors such as:

- ▶ Limited field trials and demonstrations to prove the effectiveness of a new approach;
- ▶ legislative uncertainty surrounding further application or development;
- ▶ complex models or results that require extensive training before use; and
- ▶ a time lag that occurs between the results being implemented and change occurring; limit or inhibit the effectiveness of the results being adopted.

Several of the projects assessed have delivered strong outcomes.

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A new Memorandum of Understanding between ACIAR and Australian Volunteers International (AVI) was signed at ACIAR on Thursday 14 October 2004.

ACIAR Director Mr Peter Core and AVI Chief Executive Officer Ms Fifer formally signed the MoU at a ceremony at ACIAR House.

Speaking at the signing, Peter Core welcomed the new agreement as a re-strengthening of the ties between organisations and the strong alignment between missions. ACIAR has sponsored volunteers on projects since 1992. Currently there are seven AVI volunteers working in several countries on ACIAR projects.

Australian Volunteers International is Australia's largest and most experienced international volunteer sending agency, recruiting, preparing and supporting hundreds of Australians who volunteer to live, work and learn alongside people of other cultures in developing countries.

AVI is part of a network of Australian and global volunteer sending agencies connecting communities and people at home and across the planet. It aims at creating a peaceful and just world through greater cross-cultural understanding. It is built on an ethos of partnership, teamwork and consultation.

Renewed ties: Dimity Fifer, CEO of AVI, and Peter Core, Director of ACIAR, sign the new Memorandum of Understanding.

LAO AGRICULTURE VICE-MINISTER VISITS AUSTRALIA AND ACIAR

TOUR OF RESEARCH CENTRES

The Lao PDR Vice-Minister for Agriculture and Forestry, Dr Ty Phommasack, visited ACIAR when in Australia in the week of 15-19 November. Officials from the Lao Department of Agriculture and the National Forestry Research Institute accompanied the Vice-Minister.

The Lao delegation visited ACIAR for briefings on Monday and Tuesday before flying to Melbourne. There they saw the Australian Animal Health Laboratory and regional research centres.

The delegation moved on to Brisbane to visit the Queensland Department of Primary Industries and Fisheries,

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FELLOWSHIP WINNER BEGINS RUST RESEARCH

GEORGIAN SCIENTIST ARRIVES IN SYDNEY

The winner of the 2004 Vavilov-Frankel Fellowship, Tamriko Jinjikhadze, has started her Australian research into the identification of new sources of rust resistance.

Ms Jinjikhadze, a scientist from Georgia, has been involved in an ACIAR project collecting valuable germplasm in the Central Asian region. Many varieties of widely grown cereal crops originated in these areas, and ACIAR has been working with ICARDA to collect, conserve and preserve as much of this storehouse of wild cereals as possible.

Ms Jinjikhadze will spend six months at the University of Sydney's Plant Breeding Institute at Cobbity where she will evaluate *Triticum timopheevii*, a species of wheat found in Georgia, against known races of rusts in Australia.

Ms Jinjikhadze will study the molecular basis of resistance to rust diseases in *T. timopheevii*.

Her work, which will contribute to finishing her PhD, is regarded as significant for both her home country, Georgia, where rust diseases have a serious impact on yields, and Australia.

Ms Jinjikhadze is based at the Georgian Institute of Farming's Plant Genetics Resource Centre, and has taken part in germplasm collecting expeditions in central Asia and the Caucasus part-funded by ACIAR.

She believes that *T. timopheevii* offers significant potential as a donor of new genetic variation. *T. timopheevii* is a tetraploid wheat endemic to Georgia and is a known source of genes determining resistance to many diseases.

Ms Jinjikhadze intends to initiate a selection and crossing program to incorporate new sources of resistance into Georgian cultivars.

Her fellowship is supported by the Australian Grains Research and Development Corporation and Pioneer Hi-Bred International Inc.

The Vavilov-Frankel Fellowships were established in 1989 by the International Plant Genetic Resources Institute (IPGRI), to commemorate the contributions made to plant science by Nikolai Ivanovich Vavilov, of Russia and Australia's Sir Otto Frankel, a pioneering chief of CSIRO Plant Industry.

MS JINJIKHADZE HAS BEEN INVOLVED IN AN ACIAR PROJECT COLLECTING VALUABLE GERmplasm IN THE CENTRAL ASIAN REGION. MANY VARIETIES OF WIDELY GROWN CEREAL CROPS ORIGINATED IN THESE AREAS.

PHOTO: BRAD COLLIS





The Lao Vice-Minister for Agriculture: (front row, centre) and his delegation at ACIAR house.

and to discuss the ACIAR-supported low-chill fruit project, introducing temperate stone fruits to the Mekong region. The Vice-Minister and his party also spent time at the University of Queensland.

Book Review

LANDCARE IN THE PHILIPPINES – STORIES OF PEOPLE AND PLACES

Mary Johnson, Director, Secretariat for International Landcare

Despite the best intentions of the scientists, funding donors and extension providers, food and water security continues to represent an area of increasing world concern.

The challenge for many stakeholders, be they government, researchers, funding donors, project managers and importantly communities, is how to achieve productive and sustainable agriculture in harmony with natural resource management.

What is needed in varying proportions is a highly complex mix of appropriate funding, resources, timing, passion and energy, commitment, technical knowledge and luck. What typically receives less consideration are the elements of community empowerment and engagement.

Not so the Philippines, where over the past decade a movement has evolved which empowers and supports at grass roots level to provide rapid, inexpensive and appropriate information for the farming community. This movement, Philippine Landcare, also enables the development of knowledge and skills and encourages mutually beneficial partnerships.

Philippine Landcare has evolved quite separately from Australian Landcare. It was the ACIAR project, in collaboration with Philippine partners, which advanced Philippine Landcare and brought together a diverse group

NEW PROJECTS

ADP/2002/105 – Economic and market analysis of the live reef fish food trade in Asia-Pacific

ASEM/2003/012 – Improving the marketing system for maize and soybeans in Cambodia

AS2/2002/078 – Improved beef production in central Vietnam

AS2/2002/104 – Increasing milk production from cattle in Tibet

CIM/2003/066 – Enhancing the adoption of improved cassava production and utilisation systems in Indonesia and East Timor

CP/2004/001 – TaroPest: a computer-based information and diagnostics package for taro pests of the South Pacific

LWR/2003/026 – Water allocation in the Krishna River Basin to improve water productivity in agriculture

PHT/2002/086 – Improving postharvest quality of temperate fruits in Vietnam and Australia

SMCN/2002/032 – Integrated manure nutrient management in soybean/wheat cropping systems on vertisols in Madhya Pradesh and Queensland

PROJECT VARIATIONS

ACIAR projects may be varied to extend the time to completion, to increase the budget available, or both. Project variations and extensions are undertaken following a review process of the project, that involves both internal and external review phases.

ASEM/2001/055 – Improving yields and economic viability of peanut production in Papua New Guinea and Australia using integrated management and modelling approaches

ASEM/2002/014 – Improving productivity and the participation of youth and women in the Papua New Guinea cocoa, coconut and oil palm industries

CIM/1996/025 – Physiological and genetic approaches for the development of waterlogging tolerance in wheat on sodic/alkaline and neutral soils in India and Australia

CIM/1999/072 – Oilseed Brassica improvement in China, India and Australia

CIM/2000/160 – Seeds of Life – East Timor

CIM/2001/039 – Integrated management of Botrytis Grey Mould of chickpea in Bangladesh and Australia

CIM/2001/049 – Development of PRSV-P resistant papaya genotypes by introgression of genes from wild Carica species

CP/2001/068 – Technical support for regional plant genetic resources development in the Pacific

CTE/2000/164 – Rehabilitation of the Agriculture Faculty of the National University of East Timor

PHT/1997/094 – Management of postharvest diseases of sub-tropical and tropical fruit using their natural resistance mechanisms

SMCN/2000/114 – Evaluating biofumigation for soil-borne disease management in tropical vegetable production

SMCN/2002/073 – Efficient nutrient use in rice production in Vietnam achieved using inoculant biofertilisers

NEW PUBLICATIONS PROCEEDINGS

Control of Newcastle Disease and Duck Plague in Village Poultry

These proceedings cover the papers presented at a workshop in Vietnam. The major areas of research have involved thermostable vaccines to control Newcastle Disease in flocks of village chickens and development of an improved vaccine to control duck plague.

J. Meers, P.B. Spradbrow and Tran Dinh Tu (eds). ACIAR Proceedings 117, 87pp. Price \$15.00 (plus postage and handling).

Improving the Management of Irrigation Schemes in Vietnam

Contains the main findings of a project carried out in Vietnam which focused on the operation and management of publicly managed irrigation systems. These findings formed the basis for the development of a management improvement model for irrigation systems in Vietnam which is also applicable to other systems throughout Asia.

H.M. Malano, Biju A. George and B. Davidson (eds) 2004. ACIAR Proceedings 118, 72pp. Price \$18.00 (plus postage and handling).

Agriproduct Supply-Chain Management in Developing Countries

Progressing beyond self-sufficiency, whether at the farm or national level, requires the capacity for reliable production and profitable marketing of products sought by consumers. The need is especially acute for small, remote and resource-poor communities. The papers in this proceedings were presented at a workshop in Bali in August 2003. Many of them report on work carried out in ACIAR projects.

G.I. Johnson and P.J. Hofman (eds). ACIAR Proceedings 119. Price \$20.00 (plus postage and handling).

Spiny lobster ecology and exploitation in the South China Sea region

Tropical spiny lobsters, particularly the ornate lobster *Panulirus ornatus*, are a valuable resource for most countries bordering the South China Sea. The papers in this proceedings were presented at a workshop in Vietnam in July 2004. The workshop brought together oceanographers, lobster biologists and lobster aquaculture researchers with an interest in the sustainability of the South China Sea spiny lobster stocks.

Kevin C. Williams (ed.) ACIAR Proceedings 120. Price \$18.00 (plus postage and handling).

MONOGRAPHS

Landcare in the Philippines – Stories of People and Places

This publication contains a wide perspective of individual stories about the development of Landcare in the Philippines, richly illustrated with over 170 colour photos and maps. The 40 story-tellers include Landcare pioneers, farmers, facilitators, government representatives and community groups.

The book is a valuable reference for anyone involved in rural community development in developed or developing countries.

Jenni Metcalfe (ed).

ACIAR Monograph 112. Price \$45.00 (plus postage and handling).

IMPACT ASSESSMENT SERIES

Acacia Hybrids in Vietnam.

ACIAR Impact Assessment Series 27, Author: Marten van Bueren

Water and Nitrogen Management in Wheat-Maize Production on the North China Plain. ACIAR Impact Assessment Series 28, Author: David Harris

Impact Assessment of Research on the Biology and Management of Coconut Crabs on Vanuatu. ACIAR Impact Assessment Series 29, Author: Bob Lindner

The impact assessment series reports are freely available as pdf files at www.aciar.gov.au

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of people and organisations (including farmers and researchers, educators and trainers, local government officials and barangay members) to tackle the problems of soil and water degradation and to devise better agricultural systems.

The genesis of Philippine Landcare began on the southern island of Mindanao in the municipality of Claveria, Misamis Oriental. *Landcare in the Philippines – Stories of People and Places* describes the evolution and extent of Landcare as it unfolds through a series of narratives, which document the progress of the participating villagers and communities. These stories have been collected from many of the participating Landcarers including farmers, facilitators, researchers, NGOs, municipal government officers and local leaders.

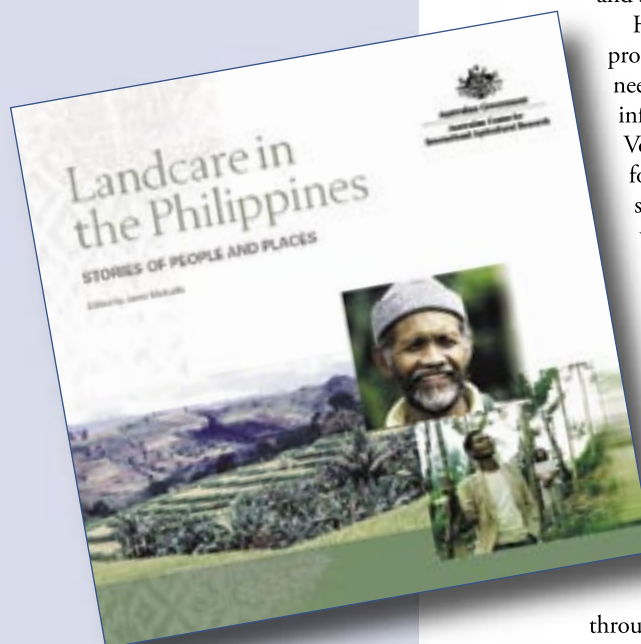
The original project coordinated by ACIAR helped to develop Philippine Landcare by providing technical support and by training and supporting local facilitators.

However, as the project progressed ACIAR found it needed a two-way flow of information to succeed. Noel Vock, an ACIAR project leader, found that "the training and sharing of experiences is very much two-way, with Australian project staff learning as much from the Filipinos as they learnt from us". Together the participants have been extraordinarily successful in creating a solid base for further growth of the Landcare movement. This book provides inspiring examples of what can be achieved

through true partnerships.

Landcare in the Philippines describes in detail how specific projects were created and developed at the local level. For example, from central Mindanao, Gerardo Boy reports how the Landcare movement has increased the options for upland farmers by helping them to make clear and informed choices about their crops and farming systems. The detail of these initiatives provides important information for researchers and educators who need to translate their work into practical and relevant applications for farming communities.

Perhaps the most poignant comments were made in the preface by Basilio Decano: "Before Landcare we were fairly content with the way we did our farming. We ate a little, sold a little and that's about it. But with Landcare I was able to dream bigger than before. I know now that I have a legacy to give my children that will not be stolen or burnt down. I feel more secure as a result."





ACIAR STAFF RECOGNISED FOR LONG-STANDING CONTRIBUTIONS

Unique contribution:
Dr Tony Fischer.

PHOTO: BRAD COLLIS

AWARDS FOR OUTSTANDING SERVICE TO AGRICULTURE

Dr Paul Ferrar, recently retired as ACIAR's Crop Protection Research Program Manager, and Dr Tony Fischer, now Program Adviser for South Asia, were recently recognised with separate awards for outstanding contributions to agriculture.

Paul received the Medal for the Mission of Agriculture and Rural Development in recognition of his contribution to agricultural and rural development in Vietnam, presented by the Vietnamese Ambassador, Mr Le Xuan Lieu on behalf of the Socialist Republic of Vietnam.

The medal recognises Paul's role, through his work as Crop Protection Research Program Manager for ACIAR, in building up scientific capacity and delivering practical benefits to farmers in Vietnam.

The Ambassador, in presenting the Medal, cited Paul's role in coordinating the ACIAR project that introduced new tomato varieties to Vietnam.

Paul, speaking at the presentation ceremony, referred to research that had introduced fruit fly controls to Vietnam, using a spot-spray protein bait, as a notable achievement. In trials conducted on peaches cultivated by the H'Mong hill tribes in Moc Chau, in Vietnam's north, losses caused by fruit flies have been reduced from 100 percent of the crop to just three percent.

For Tony Fischer, the journey from research agronomist to winner of the Australian Society of Agronomy's CM Donald Medal has seen the combination of the two main themes of his career – increasing wheat and other crop yields and delivering these benefits to farmers

in developing and developed countries through international agricultural research linkages.

At the forefront of this research is more than a decade working for the International Maize and Wheat Improvement Center (CIMMYT) in Mexico. From 1995 Tony has worked for ACIAR, focusing on crop and soil management and more recently as an adviser on ACIAR's work in South Asia.

Through this work, firstly as a Crop Physiologist and later as Director of the Wheat Program, Tony has made a significant contribution to the research and practice of agriculture.

The awarding of the CM Donald medal, at the recent Fourth International Crop Science Congress held in Brisbane, recognises Tony's unique contribution to agriculture in Australia throughout his career.



Role recognised: Paul Ferrar receives his award from Vietnam's ambassador Le Xuan Lieu.

Medal for ex-Director

Former ACIAR Director Dr Bob Clements was awarded the 2004 Farrer Memorial Medal, in recognition of his distinguished service in agricultural science in Australia.

The Farrer Memorial Medal was established in 1911 to perpetuate the memory of William Farrer, the pioneering Australian wheat breeder.

The Chairman of the Farrer Memorial Trust, Dr Richard Sheldrake praised Dr Clements' contribution to Australian agriculture. "The Medal recognises the significant impact of Dr Clements' work in agronomy and plant breeding. The focus of his work has helped boost the viability of livestock industries in northern Australia through developing improved pasture species and identifying sustainable management systems."

Dr Clements stepped down as Director of ACIAR in July 2002 and has since taken on the role of Executive Director of the ATSE Crawford Fund.

The medal will be awarded in a ceremony early next year.

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ADOPTING THE RESULTS OF ACIAR RESEARCH: A STUDY (CONTINUED)

SOCIOECONOMIC AND AGRIBUSINESS DEVELOPMENTS IN THE CHINESE CATTLE AND BEEF INDUSTRY

Changes in the Chinese cattle sector in recent years have been substantial. By analysing these changes the project aimed to identify relevant policy issues for industry officials in China. Improved linkages between many layers of the Chinese and Australian beef industries resulted from project collaboration.

For the Chinese beef industry gains in efficiency and improved project design, along with increases in Australian investment in the industry, are likely to result in annual returns in the vicinity of \$30 million a year.



Moving ahead: China's beef industry gains from linkages.

INTEGRATED CONTROL OF CITRUS PESTS

Environmentally friendly: IPM can help reduce the incidence of citrus pests.

Sustainable control of insect pests on citrus trees, through Integrated Pest Management (IPM) by refining existing strategies and changing the controls used, has proved that cheaper and more user and environmentally friendly options can be effective.

As a result of this work high-quality mineral oils are being marketed for use in IPM strategies built around project results. This represents a first for both Vietnam and China, with some uptake underway in Thailand. The use of mineral oils is replacing synthetic pesticides, reducing risks to farmers.

Estimates put the adoption of such methods resulting from the project at 20 percent of households involved in citrus production in China and Vietnam. Farmers in China's Zhejiang province are saving between 400 to 600 Yuan per hectare per year. In Thailand the extension of project results is beginning to reach citrus producers, delivered through a good extension network.



The complete adoption study is available through the ACIAR website at www.aciar.gov.au