Report of a Review of the Australian Centre for International Agricultural Research

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Australian Centre for International Agricultural Research November 1998

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This report represents the views of an independent team commissioned to review the organisational performance of the Australian Centre for International Agricultural Research (ACIAR). The report should not be taken to represent the views of ACIAR itself.
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Cover photographs: Mekong River and town scene near the My Thuan ferry, Tien Giang Province, Vietnam

Chair ACIAR Board of Management

Dear Professor Garnaut

I have much pleasure in submitting the report from the external review of ACIAR that was commissioned by the ACIAR Board of Management. The report was completed within the timeframe and budget as requested.

You will note in the report that the review team members were greatly encouraged by the high level of support which ACIAR receives from a very wide cross-section of the Australian and overseas country agricultural research, extension and policy agencies. The outstanding success of the highly regarded partnership model reflects well on the competence and commitment of ACIAR staff, the Board of Management and the Policy Advisory Council.

The essential thrust of the recommendations in our report is to ensure that ACIAR maintains its well-deserved leadership role in international agricultural aid-related research by repositioning itself for the challenges of the next decade. The Review team members were unanimous in their desire to provide constructive advice to enhance ACIAR's capability to continue to play a significant role in promoting food security, alleviating rural poverty and sustaining natural agricultural resources in developing countries while at the same time delivering benefit to the Australian community.

Although we were given six discrete terms of reference we elected to structure the report in a format which followed the logic of our deliberations rather than address each term of reference in separate sections. However, we believe that all of the issues listed in the briefing document supplied to us have been carefully considered.

The review process was remarkably troublefree which was due in no small part to the willing assistance we received from the Director, Dr Bob Clements, and his ACIAR colleagues both within Australia and overseas. Special mention needs to be made of the outstanding contribution made by Dr Christine Moore not only in facilitating many of the administrative arrangements but also for the daunting task of so efficiently converting the recommendations and observations of the review team into elegant text.

Our conclusions were greatly assisted by the many thoughtful and constructive comments we received in written and oral form from a large number of people who had been participants in, or recipients of, ACIAR-sponsored projects or who simply had an interest in the activities of ACIAR.

I was grateful to have the opportunity of working with Professor Gelia Castillo and Dr Bob Dun on this review. It was an enjoyable and rewarding task and we commend the report for consideration by the ACIAR Board of Management.

Our best wishes for continued success.

Yours sincerely

Malcolm E Nairn (Chairman, Review team) October 1998

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The Review team wishes to acknowledge the ACIAR Board of Management, Policy Advisory Council members, the ACIAR Director and staff for their support and input to the review. In particular the Review team gratefully acknowledges the assistance of ACIAR's country managers in coordinating submissions from their countries and organising the Review team's visits.

The Review team extends special thanks to all those who wrote to, or met, the Review team. The written contributions and personal contact were extremely valuable, and particularly impressive given the breadth of countries and participating institutions represented.

The opportunities provided to the Review team to interact frequently with the members of the committee established to review the agriculture sector of the Australian aid program, and with the members of the ACIAR training review team, were appreciated.

PART 1: THE REVIEW

1.1 Terms of Reference

The ACIAR Board of Management commissioned Professor Malcolm E Nairn AM FTSE (Chair), Professor Gelia T Castillo and Dr Robert B Dun AM FTSE to undertake an independent external review of ACIAR in the period May–October 1998 with the following terms of reference:

- (A) To evaluate:
- 1. the impact and relevance of research supported by ACIAR in raising incomes, reducing poverty and managing natural resources for agriculture in developing countries;
- 2. the benefit to Australia of ACIAR's activities;
- 3. ACIAR's interaction and collaboration with other research organisations, agricultural policy makers, relevant Government Departments (and agencies) and other competitive R&D (research and development) funders in Australia and partner countries;
- 4. the effectiveness of, and opportunities for improvement in, processes for:
 - determining the geographic location of research
 - formulating research priorities
 - determining the scope of the overall research portfolio and research programs
 - selecting, designing and appraising new research projects and terminating old ones
 - managing projects
 - monitoring and evaluating the quality and impact of research
 - stimulating adoption of technology from ACIAR's projects
 - implementing its training program;
- 5. the effectiveness of ACIAR's external communication and information management activities;
- 6. the effectiveness of ACIAR's structures, governance and management of its human resources, finances and research support services.
- (B) To report in writing to the Board of Management of ACIAR by 31 October 1998.

The Review team was asked to assess performance, identify weaknesses and suggest strategies for improvement, but not to be prescriptive about research goals and priorities.

1.2 Membership of the Review team

Emeritus Professor Mal Nairn was Vice-Chancellor of the Northern Territory University from 1989 to 1996. His career has spanned more than 30 years in the field of veterinary science, including a period as Dean of the School of Veterinary Studies at Murdoch University. He was a member of the first ACIAR Board of Management and Policy Advisory Council. He recently chaired a major review into Australia's quarantine services and is Chairman of the Quarantine and Exports Advisory Council.

Professor Gelia Castillo is a specialist in the fields of rural development and the social dimensions of agriculture and health. She is currently University Professor at the University of the Philippines at Los Baños. She has a long history of contribution to international agricultural research centres, including membership of a number of Boards of the centres.

Dr Bob Dun is Director-General of the Secretariat of the Pacific Community (SPC), prior to which he was Director-General of AIDAB (now AusAID). His early career was in animal genetics and research management .

Dr Christine Moore, Manager Policy and Secretariat in ACIAR, was Secretary to the Review team throughout the review process.

1.3 Origin and context of the review

This review is the third external review of ACIAR that has been conducted. In 1987 ACIAR commissioned a 'mid-term review', the 'term' referred to being the Centre's life span from 1982–94 prescribed by the ACIAR Act by virtue of a 'sunset' clause in the Act. ACIAR was subsequently reviewed in 1992 by the Joint Committee on Foreign Affairs, Defence and Trade (JCFADT) of the Australian Parliament. This review was the primary input to the 'sunset review' of ACIAR required under the Act. The positive outcome of the JCFADT review led to an enhanced mandate and the removal of the sunset clause in the Act. The review also produced suggestions for improvement in ACIAR's program and operating procedures which have set the context for ACIAR's operations and programs since then.

ACIAR's functions, as defined in the *Australian Centre for International Agricultural Research Act 1982*, amended after the sunset review, are:

- (a) to formulate programs and policies with respect to agricultural research for either or both of the following purposes:
 - (i) identifying agricultural problems of developing countries;
 - (ii) finding solutions to agricultural problems of developing countries;
- (b) to commission agricultural research by persons or institutions (whether the research is to be conducted in Australia or overseas) in accordance with such programs and policies;
- (c) to communicate to persons and institutions the results of such agricultural research;
- (d) to establish and fund training schemes related to its research programs;

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(e) to conduct and fund development activities related to its research programs; and

(f) to fund international agricultural research centres.

In performing these functions the Act requires ACIAR to have regard to the need for persons or institutions in developing countries to share in that research. The Act does not allow ACIAR to carry out research on its own behalf.

As an Australian government statutory authority, ACIAR also has in place arrangements by which corporate performance is monitored against objectives. This occurs primarily through the Centre's Annual Report to Parliament, through internal and external audit processes, and through regular monitoring of corporate and program performance by the Board of Management.

In 1996 the Australian Government commissioned Mr Paul Simons, Ms Gaye Hart and Professor Cliff Walsh to undertake an independent review of the Australian aid program. Their report, and the Government's response, confirmed ACIAR's ongoing role as the primary facilitator and funder of agricultural research and development (R&D) within the context of the aid program. The Simons Review recommended a focus in the aid program on the reduction of poverty through sustainable economic and social development. The Government accepted this in principle, agreeing that the objective of the Australian aid program would be 'to advance Australia's national interest by assisting developing countries to reduce poverty and achieve sustainable development.'

In relation to ACIAR, the Simons Review recommended that, 'in recognition of the returns to international agricultural research, funding for the Australian Centre for International Agricultural Research should be at least maintained in real terms. ACIAR should examine the focus of its activities, in the light of this [Simons Review] report, to ensure that it continues to give priority to poverty reduction through sustainable development and to the application of its research through extension activities. ACIAR staff should be more directly and consistently involved in agricultural aid policy formation and strong links should be developed between ACIAR, AusAID and the agricultural advisers contracted to the aid program'.²

In its response to the Simons Review, the Government, noting the high returns to developing countries from agricultural research and development, recognised the quality of ACIAR's programs and their contributions to development, and endorsed ACIAR's primary goals of reducing poverty, enhancing food security and conserving and rehabilitating the natural resource base for agriculture in developing countries as set down in ACIAR's Corporate Plan 1997–2001.

Importantly, the Government noted that Australia's expenditure on agriculture and rural development in the aid program had been declining over the previous decade, yet recognised that this sector was critical in alleviating poverty and in achieving sustainable development in developing countries. It proposed that AusAID and ACIAR undertake a review of the agricultural sector of the aid program to ensure that Australia's policies and priorities were effective, noting that this joint review would also help strengthen the interaction between ACIAR and AusAID to improve the effectiveness of agricultural development outcomes.

Against this background of the Simons Review recommendations and the Government's support for ACIAR's role, and its functions as set out in the Act, the Centre's Board of Management felt that it was both timely and appropriate to seek independent and formal evaluation of the Centre's performance and the extent to which both the broad direction and functioning of ACIAR were effective and efficient. The Board was also cognisant of the period that had elapsed since the sunset review and the desirability of independent formal review of statutory authorities at regular intervals.

The review of the agriculture sector, coordinated by AusAID, proceeded quite independently of, though parallel to, this Board-commissioned review of ACIAR's performance. The Review team understands that ACIAR was involved with AusAID in determining the process and terms of reference for the agriculture sector review, and was represented on the agriculture review steering committee and the advisory group to the review (the latter through the ACIAR Director).

The two Review teams resolved to meet frequently and to exchange views throughout the review period. Three meetings of the two teams, or members of it, were held in Canberra, together with telephone contact, and the ACIAR Review team is grateful for the insights and perceptions that this afforded.

1.4 Review process

Submissions to the review were called for by advertisement in *The Australian* newspaper on 23 and 27 May 1998. In addition, the Review team wrote to ACIAR's key stakeholders in Australia (related Commonwealth and state departments, agencies and industry bodies, CSIRO divisions, university research administrators and heads of department, non-government organisations), to Directors-General of the international agricultural research centres, and to the key ministries, agencies and universities in partner countries.

The Review team then held the following meetings to consider submissions and solicit comment on ACIAR's program and management.

23–24 July	Canberra	ACIAR Board of Management		
		ACIAR senior managers		
		Agriculture Sector Review team		
5 August	gust Canberra ACIAR Board of Management			
6–10 August	Philippines	Agencies and institutions in Manila and Los Baños		
1 September	Canberra	ACIAR Training Review team (through the Secretary)		
14 September	Brisbane	Agencies and institutions in Brisbane		
15–16 September	Canberra	ACIAR Board of Management		
		ACIAR Director		
		AusAID senior management		
		Agriculture Sector Review team		
		ACIAR Training Review team		
24–25 September Thailand Ag		Agencies and institutions in Bangkok		
26–30 September Vietnam Agencies and institut		Agencies and institutions in		
		Ho Chi Minh City, Can Tho and Hanoi		
14 October Canberra Agriculture Sector Review team (three		Agriculture Sector Review team (through the Secretary)		

The agencies and institutions represented at these meetings are detailed in section 1.6.

1.5 Submissions

Following the call by advertisement and personalised letter for submissions, a total of 135 formal submissions was received. In addition a number of papers describing ACIAR's collaboration were presented to the Review team at the time of its visits to institutions both in Australia and overseas.

The origin of submissions can be summarised as follows:

	University	Government	Other	Totals
		agency		
Australia	33	21	14	68
China	1	6		7
Gambia			1	1
India	4	7	1	12
Indonesia	1	2		3
Kenya			1	1
Laos			1	1
Malaysia	1	1		2
Nepal	1			1
Philippines	1	6		7
Sri Lanka	1			1
Thailand	5	6		11
Vietnam	1	4		5
International Agricultural			15	15
Research Centres				
Totals	49	53	33	135

A full list of the submissions is at Appendix 1.

1.6 Discussions and meetings

In addition to submissions, the Review team had wide exposure to the views of government representatives and current and former ACIAR project leaders through meetings involving researchers and administrators from the following organisations.

Australia

- Queensland Department of Primary Industries
- CSIRO Tropical Agriculture
- University of Queensland
- Australian Agency for International Development (AusAID)
- ACIAR Board of Management
- ACIAR Research Program Managers and senior corporate staff
- ACIAR training review team

Philippines

- Acting Secretary of Agriculture Dr William Dar (Policy Advisory Council member)
- Dr Cielito Habito, former Director-General of the National Economic and Development Authority (and former Policy Advisory Council member)
- Department of Agriculture/Bureau of Agricultural Research

- Philippine Council for Agriculture, Forestry and Resources Research and Development
- Philippine Council for Aquatic and Marine Research and Development
- University of the Philippines at Los Baños:
 - Institute of Plant Breeding
 - National Institute of Molecular Biology and Biotechnology
 - Institute of Biological Sciences
 - Department of Plant Pathology
 - College of Economics and Management
- Department of Science and Technology:
 - Forest Products Research and Development Institute
- Bureau of Animal Industry
- SEAMEO Regional Center for Graduate Study and Research in Agriculture (SEARCA)
- International Centre for Living and Aquatic Resources Management (ICLARM)
- International Rice Research Institute (IRRI)

Thailand

- Dr Ananta Daladom, Director-General, Department of Agriculture (Policy Advisory Council member)
- Department of Agriculture
- Department of Technical and Economic Cooperation
- Royal Forest Department
- Land Development Department
- Office of Agricultural Economics
- Department of Fisheries
- Department of Livestock Development
- Kasetsart University:
 - Faculty of Economics
 - Department of Plant Pathology
 - National Centre of Genetic Engineering and Biotechnology
- National Biological Control Research Centre
- Thailand Institute of Scientific and Technological Research
- International Board for Soil Research and Management (IBSRAM)
- Food and Agriculture Organisation of the United Nations (FAO)
- AusAID First Secretary Mr Michael Pilbrow

Vietnam

- Prof Dr Ngo The Dan, Vice-Minister for Agriculture and Rural Development
- Professor Vo-tong Xuan, Mekong Delta Farming Systems Research and Development Institute, Can Tho University (Policy Advisory Council member)
- Ministry of Agriculture and Rural Development:
 - Department of Science Technology and Product Quality
 - National Institute of Animal Husbandry
 - Forest Science Institute of Vietnam
 - National Institute of Plant Protection and Biological Control Research Centre
- National Veterinary Company (NAVETCO) Veterinary Research Centre

- Can Tho University:
 - Dr Tran Thuong Tuan, Rector
 - Mekong Delta Farming Systems Research and Development Institute
- Vietnam National University of Ho Chi Minh City:
 - College of Agriculture and Forestry
- Institute of Agricultural Science of South Vietnam
- University of Agriculture and Forestry
- Australian Ambassador to Vietnam, Mr Michael Mann
- AusAID Counsellor, Dr Julia Newton-Howes and First Secretary, Dr Bernice Lee

The Review team is satisfied that these represent a broad cross-section of stakeholders in Australia and three partner countries. They include both long-term and more recent collaborators, government departments or agencies involved in the implementation or carriage of ACIAR's programs, universities, international agricultural research centres and other scientific research and development institutions and agencies.

1.7 A broad overview

There is clear evidence of ongoing strong support for ACIAR.

From the submissions and discussions outlined above the Review team formed the clear view that there is strong support for ACIAR and its mode of operation. In particular, there is overwhelming support for the continuation of the partnership mode of operation to which ACIAR is so strongly committed. In both partner countries and Australia ACIAR is claimed to be one of the most effective donors whose focus on strong and high quality science helps to ensure that its activities represent a high return on a small investment. There is undoubtedly strong support generally for the Centre's continuation and expansion. No real desire for fundamental change to ACIAR's mode of operation was expressed to the reviewers, but there were perceptive and considered suggestions for incremental change to various aspects of ACIAR's operations.

The Review team feels it is important to state at the outset that the recommendations for change contained in this review report should not be construed to mean that ACIAR is not doing a good job. The choice of title for this report – 'Staying Ahead' – reflects the high regard in which ACIAR is held and the good work it has done, but implies that it is important that ACIAR continue to assess, adjust and redefine itself.

Indeed, the challenge for ACIAR is the fact that it is highly regarded. This makes change very difficult. Among the points made to the Review team is that ACIAR is a very successful organisation that has a clear appreciation of the value and strength of research partnerships. However, it is precisely this success and espousal of its role that puts ACIAR at risk of complacency and resistance to change. The Review team hopes that ACIAR will heed the views put to the review about the need for changes, however radical or marginal these may appear to be. Self-evaluation and redefinition of role in the context of a changing research and development scene, within Australia, in the countries with which ACIAR collaborates, and internationally, are fundamental to ACIAR's viability.

The previous review that ACIAR underwent – the sunset review – was about survival. ACIAR emerged very successfully from that review, with an expanded mandate, an increased level of funding and confirmation of its independent role in the Australian aid program. The Review team was therefore surprised to observe that an attitude of survival, so necessary at the time of the sunset review, has persisted in ACIAR's outlook. The Review team found ACIAR to be somewhat conservative when questioned about future approaches or policies. It is important for ACIAR to recognise that it is no longer its survival that is at stake, and that it needs to develop a more proactive approach in order to carry the organisation forward in a rapidly changing environment. The discipline instilled by the public exposure of the earlier reviews has helped ACIAR to attain the position it now holds, but the conservatism of ACIAR's approach is also perhaps a legacy of the sunset climate in which it had to justify publicly its ongoing existence and independence.

The issue, therefore, is change, rather than survival. This review focuses on the long-term viability of a successful organisation through adaptation and a philosophy of change.

The time for ACIAR to change is now – when all is going well and the Centre can be confident; immediate survival is not an issue and objectivity can be called upon. There is a clear call from ACIAR's stakeholders for it to become a more flexible and responsive organisation and that it continue to take a leading role in ensuring development through targeted research partnerships that meet the priorities and changing needs of both its developing country and Australian partners.

ACIAR will need to look to the future in a positive and open-minded way in order to position itself firmly and opportunistically as a leader in research **for development**. The emphasis on development is intentional. ACIAR's research partnerships are very successful; they are highly acclaimed for the role they play in building the capacity of developing country and Australian institutions and researchers to tackle critical agricultural research problems. Sixteen years of such successful research partnerships have resulted in a range of development achievements that ACIAR can rightly claim as its own, but the Review team was made aware of many more that could have occurred, and could still occur, if ACIAR was able to put greater effort into fostering the adoption of the promising technologies developed through its research projects.

It was put to the Review team that the development achievements of ACIAR's programs in developing countries are somewhat elusive because of ACIAR's role as a research funder and facilitator, which places it quite early in the research-through-to-development process. ACIAR could acknowledge the complexity of this process and promote the way in which it contributes, through intermediate impacts, to the goals of the Australian aid program. Would it not be better, however, if ACIAR could enhance these intermediate impacts by brokering further support for the transfer of relevant technology with the appropriate partners, or in some cases by undertaking the development phase itself?

ACIAR will need to adapt and react flexibly to the advantages and opportunities that the changing research and development scene presents. In some areas – such as planning for multidisciplinary research, building adoption pathways into projects at the project conceptualisation and design phase, determining and communicating strategic directions more consistently, broadening the collaborator base, and forging better linkages with AusAID – ACIAR has already begun to take concrete steps, for which the present Director and Board

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of Management are to be congratulated. The Review team urges ACIAR to continue to evaluate the environment in which it operates, to heed the suggestions of its stakeholders, and to be proactive in considering the changes it will need to continue to make in its culture and organisation.

The recommendations in this report represent the Review team's advice to ACIAR on strategies it might adopt to redefine its role and assert itself so that it can continue to play a leading role in international agricultural research for development. In doing so, ACIAR should be wary of complacency and not take its successes for granted. The Review team feels that the key to ACIAR's future viability is for ACIAR to be flexible and willing to reexamine its approach to key areas of its operations, such as management of the project cycle, priority-setting mechanisms, and methods of evaluating impact, in order to achieve a variety of models that can be implemented innovatively to meet the needs and expectations of its stakeholders.

PART 2: FULFILMENT OF THE CORPORATE MISSION

2.1 ACIAR: a development research organisation committed to poverty alleviation and food security

In its Corporate Plan 1997–2001 ACIAR states that its corporate mission is 'to reduce poverty, improve food security and promote sustainable natural resource management through international agricultural research partnerships for the benefit of developing countries and Australia'.

In the wake of the Simons Review, this mission is highly appropriate.

But the question needs to be asked of ACIAR: how do its successful research partnerships contribute to the development of the countries concerned, and what is ACIAR's real impact on poverty alleviation and food security?

The bulk of the early submissions to the review were from Australian researchers, so information on the developing country views of ACIAR was lacking in the early stages of the review. The Australian bias in the submissions created the unfortunate perception that ACIAR was appreciated most for its support (i.e. funding) of Australian research. As submissions from developing countries came in, and the Review team had the opportunity to speak with collaborators in developing countries, the team was relieved to hear that ACIAR was similarly popular in the developing world for its support of research, with all the benefits that this entails – the introduction of new technologies; infrastructure building in terms of provision of equipment and resources; capacity building in terms of personnel development and skills acquisition; exposure to Australian (developed country) research; contribution to, and receipt of, publications; etc. However, both Australian and developing country researchers alike voiced their frustration over ACIAR's inability to play a more active role in translating the promising results of its many excellent research projects into development gains.

This highlights an essential dilemma for ACIAR with its agricultural **research** mandate: to what extent can the research it commissions, which will more often be strategic than applied, be claimed to have development impact, when it will be upstream and removed by several stages from eventual impact on the rural and urban poor in developing countries? The ideas and technologies developed through ACIAR projects are clearly relevant to development, but the role that ACIAR itself plays is therefore catalytic in the development process, and the impacts it will have are mainly intermediate ones. The question then, is not whether ACIAR is doing its job effectively, because all evidence shows without doubt that it is, but whether it can and should take on a broader role in assisting the aid program in meeting its development objectives.

The ACIAR submission defines its vision as 'to be recognised world-wide as a leader in facilitating international agricultural research partnerships that contribute to a lasting improvement in the lives of people in rural communities in developing countries and Australia'.

Critical operational issues that ACIAR has identified as affecting its mission include the need to identify research priorities, develop and deliver solutions to problems, and ensure impact

where it matters. The Review team endorses the need for ACIAR to focus more intently on these constraints, for these are fundamental to its success in the aid program.

ACIAR is demonstrably very successful if one interprets its mission to be the enhancement of research capacity in developing countries and Australia. Indeed, there could be a case for suggesting that ACIAR amend its mission statement accordingly. It would be quite valid for ACIAR to acknowledge that it is part of the Australian aid program, whose objectives are poverty alleviation and sustainable development, and within those overarching goals, to have the mission of 'improving the capacity in developing countries and Australia to identify and solve agricultural problems and constraints to development'. But this might devalue the vital contribution that the Review team is confident ACIAR makes to achievement of the aid program's broader development goals. This confidence derives from statements such as the following (from submissions):

In Vietnam:

'ACIAR's projects have reached the aims of agriculture and rural development, and income generation for farmers. Though only nine large and small projects are completed, their impacts are enormous for agricultural production. Just 50 kilometres from Hanoi, we can see thousands of green eucalypt trees, thanks to the application of enhanced techniques transferred from ACIAR's forestry projects. Farmers at Dong Thap Muoi Territory of the South of Vietnam are applying the results of [a project] for sustainable crop protection. In-store drying in the grain industry is now very popular in the Mekong Delta region, etc. In addition, Vietnamese agricultural institutes and scientists have many good opportunities to approach modern and advanced research methodologies, exchange knowledge and experiences with Australian and international scientists. Many labs in Vietnam have been equipped with modern equipment.'

In the Pacific:

'The impact of the giant clam farming research funded by ACIAR has taken several years to emerge but, in Solomon Islands at least, the private sector is now adopting the technology. Research on blacklip pearl oysters has been of shorter duration and has made rapid gains. For example, a rudimentary hatchery established in Kiribati by ACIAR staff has already succeeded in producing spat. Also, technology for growing out oysters based on the collection of wild spat has progressed far enough in Solomon Islands to result in a pilot-scale pearl farm.'

In China:

'After only three years there has been a significant switch to biopesticides in the project region, due in large part of the activities of the project. Apart from the production benefits, this change has reduced the considerable risk of pesticide poisoning for potentially over 60 million consumers in the Chang Jiang valley.'

'Chinese and Australian grain scientists have developed an advisory system of management and control of insect pests and related software. More than 50 grain depots have used the software. Grain depot managers find the software very helpful and effective. In recent years, thousands of grain storage managers and keepers have mastered the methodology.'

In Africa:

'Seeds of some acacias from the Australian tropical dry zone are now a regular part of the diets of communities near Maradi, Niger. Traditional knowledge of Australian Aboriginals has been blended with modern science to offer food security in a region of chronic famine. ACIAR supported part of the research which has led to the safe use of this new food source.'

'Small sized logs are converted to lumber in village-level saw mills. This lumber is widely used for low-priced furniture and general construction and finds its way into schools, hospitals and private homes. For example, Addis Ababa, the capital of Ethiopia, is dependent on plantations of Tasmanian blue gum (*Eucalyptus globulus*) for most of its timber needs including building.'

In Pakistan, India, Thailand and Vietnam:

'Australian tree species identified in ACIAR-supported trials have proven to be particularly useful in rehabilitation of degraded sites. Sites have included saline lands in Pakistan and Thailand, bauxite mines in India, impoverished sandy soils in dry areas of south-central Vietnam, and acid sulfate soils in the Mekong delta.'

Against these strongly positive comments, the Review team had to weigh the following (again from submissions):

'The weaker side of ACIAR-funded work has been the implementation of the results. Unfortunately, this is the necessary step to translate relevant research to impact on poverty and natural resource management.'

'Results of research efforts in Indonesia could not be measured in terms of impact on income of rural poor farmers, since the technology generated needs to be further developed and taken forward for its adoption by those concerned.'

'Wild stocks [of giant clams] have not yet been restored in any Pacific country, but this is not a fault of the technology developed by ACIAR. Rather it is due to lack of development assistance to implement the technology.'

'ACIAR projects that have been most successful have generally focused on a narrowly defined constraint, that can be addressed in partnership mode within the short term of 3 to 6 years. Commonly, the Australian institution brings a new approach or methodology to the problem, and the overseas partner benefits through capacity building as well as the solution of the problem. [...] However, the narrow definition of the research objectives may reduce the impact and relevance of projects if the research plan does not fit the development context. In an extreme case, the ultimate clients of the research may not adopt the technology because it is inappropriate to their needs.'

'Although it is quite obvious that Thailand was granted financial assistance in implementing research projects, and was able to avail itself of scientific equipment, and a number of researchers were sent abroad, the questions of whether this collaboration responded to the needs of poor farmers or whether ACIAR was instrumental in the improvement of the collaborated research areas are still rather difficult to answer. [...] To date there is no available information to justify that technologies generated by ACIAR-supported projects are being useful to Thai farmers.'

'Many research projects undertaken by ACIAR have the potential to greatly increase income of poor farmers. However, much of this potential has not been realised.'

The thrust of this latter set of comments is clear: that ACIAR could focus more carefully on ways to ensure delivery of development benefits through technology transfer, rather than be satisfied with successful research outputs that are intermediate impacts in the development chain. To have significant impact through being involved in technology transfer activities will require a higher level of investment than is currently available to ACIAR.

The Review team is certain that to change ACIAR's mission is not a viable option; instead, it is ACIAR that could change by reorienting its focus more clearly towards development, and it will need resources to do so. There is no suggestion that research should not be a fundamental part of ACIAR's approach – that is its charter, its essential focus, and its difference from AusAID. Nor is it implied that ACIAR should undertake extension activities *per se*. That would be foolish. But to respond to the concerns of its stakeholders, and to better guarantee impact from its projects, ACIAR must be willing to take on the responsibility of development; that is, to allocate funds to projects that in themselves will assist the technology transfer process, and to undertake a broader range of activities designed to ensure, as far as possible, that the research projects it supports will ultimately result in development gains.

In addition, ACIAR will need to be able to provide evidence of impact that goes beyond the readily discernible but intermediate impacts of research outcomes and capacity building benefits. In this respect ACIAR cannot rely solely on the economic assessments it routinely commissions to assess potential benefits, in that those benefits are dependent ultimately on technology uptake.

The ACIAR Board put the view to the Review team that ACIAR's focus is on the notion of agricultural development generally and that poverty alleviation at the rural level is a complex issue. In simple terms, agricultural development contributes to the economic development of the countries involved, which implies an impact on the income levels of the poor. The Review team accepts this argument, but nevertheless recommends to ACIAR that there is still a case for a more explicit and human demonstration of the contributions that ACIAR projects make to poverty alleviation at the rural level.

The challenge of demonstrating ACIAR's contribution to poverty alleviation in developing countries is considerable, and is one in which ACIAR is not alone. The impact of individual ACIAR projects may be barely visible, yet taken as a collective whole there will be impact. The Review team understands that the Consultative Group on International Agricultural Research (CGIAR) is to undertake a study of the impact of agricultural research on poverty alleviation over the coming two years, and recommends that the Board of Management keep

abreast of the progress of the CGIAR study and that the Board work towards a paper that situates ACIAR's contribution in this context.

The impact of the international agricultural research centres

The contribution of the international agricultural research centres to poverty alleviation and food security is considerable. The CGIAR system has recently undergone review, and in its findings the review panel commented on the value of the investment by the international community in the CGIAR, observing that 'the CGIAR has established a universally acknowledged record of success in international agricultural research. Indeed investment in the CGIAR has been the single most effective use of official development assistance (ODA), bar none. There can be no long-term agenda for eradicating poverty, ending hunger, and ensuring sustainable food security without the CGIAR'.³

The CGIAR has had a greater international impact on increasing the productivity of the most important food crops than any other research entity.⁴ It will continue to have an important role to play into the early years of the 21st century:

'Despite the great advances that have been made, food security for all remains elusive. The yield gap and the food gap in many parts of the world both have to be closed. Agriculture has to be ecologically and socially sustainable. Natural resource management requires urgent efforts. Thus, the global food security situation will be even more challenging in the new millennium that it was in the 1970s. The rapid commercialization of science threatens a diminution of the production of public goods in the broad area of agricultural research and development – a diminution that will hit the poor and hungry hardest. Through its scientific research, capacity building and knowledge dissemination, the CGIAR has a critical leadership role to play in the world of the twenty-first century.'5

The ACIAR Review team wishes to emphasise the considerable regard in which Australia, through ACIAR, is held for its contributions to the international centres. Overwhelmingly positive comments were expressed in submissions and discussion about the work of the centres and about ACIAR's management of the Australian Government contributions to them. Australian groups also commented on the effective linkages created with the centres through ACIAR's program of restricted grants, and noted that the restricted grant project mode, as well as collaboration of centres in bilateral projects, generally lent scientific strength to the project and produced beneficial linkages both within institutions and more widely to the developing country national agricultural research systems.

The benefits to Australian industry from Australia's investment in the international centres can also not go unremarked, as the following comment from a submission illustrates:

'ACIAR's contribution has proven very valuable to ensuring the organisational capacity of many centers. These funds are accountable through the boards and management of the centers and through the planning, monitoring and impact evaluation processes of the System. ACIAR and other Australian organisations have been instrumental in returning to the Australian taxpayer not only the development assistance outcomes of the centers' work but also large benefits to Australian rural industry through their sharing of improved germplasm lines and other discoveries.

These outcomes also demonstrate the principle of "mutual benefit" which so underlies ACIAR's mandate and approach.'

It was made apparent to the Review team that Australia has an enviable reputation for its intellectual leadership and its influential role in the international network of centres, but that it is a relatively modest donor to the system (the contribution via ACIAR stands at around AU \$9 million in total, though in addition AusAID supports specific projects with the centres where these meet aid objectives). Australia has significant standing internationally in agricultural research, and through its financial contributions to the CGIAR, and its insistence on productive alliances among the international centres, ACIAR ensures that the return on the Australian investment is significant.

In the light of the CGIAR System Review, the ACIAR Review team recommends that ACIAR continue to assess the relative benefits of the international agricultural research centre programs, and that it continue to maintain a high level of core support to the centres. Australia's continuation of core support in the wake of the increasingly tied support sought by other donors is much appreciated by centres. This core support represents a valuable contribution to the overhead costs of projects, but also assists collaboration between centres and collaboration with the developing country national agricultural research and development systems.

There was some comment to the Review team about ACIAR's underlying rationale for the multilateral and bilateral division of its program and for the determination of the individual centre contributions. The Review team understands that there is an historical basis for the current splits in ACIAR's program elements, but the comments suggest that ACIAR needs to more clearly articulate the rationale and strategies behind the multilateral funding component of its programs. In the light of the benefits and dividends from the multilateral program, increased funding to the centres could readily be justified, particularly given that many of the Centres are facing acute funding shortfalls.

Recommendation 1

ACIAR should be more transparent as a development organisation committed to poverty alleviation and food security.

The Review team recommends that, to fulfil its mission, ACIAR:

- reorient its focus more towards development impact;
- demonstrate explicitly its achievements in poverty alleviation at the rural level;
- justify the underlying strategy and maintain at least the current level of support to the international agricultural research centres; and
- monitor the CGIAR study on the impact of agricultural research on poverty alleviation.

2.2 The balance in Australian and partner country benefits

Where does the impact of ACIAR's programs matter most? In Australia, or in partner countries? In research communities or in rural communities? Answers to these questions require ACIAR to focus honestly on the benefits.

The benefits to developing countries from ACIAR's activities can be categorised as follows:

- 1. food security, poverty alleviation, natural resource management, and thus improved incomes, health and skills, through implementable technologies and requisite policy influence;
- 2. an increased body of scientific knowledge; and
- 3. increased research capacity.

The Review team was impressed by the fact that the benefits to Australian industry and Australian research institutions from ACIAR's programs are easily and precisely described. Perhaps this is because ACIAR has put considerable and commendable effort into achieving recognition in Australia, to secure the involvement of the Australian collaborators, and to maintain political support. However, there has been a concern expressed by some developing country partners that Australian benefits are taking priority over developing country benefits.

The Review team recognises that **mutual** benefits do not necessarily imply **equal** benefit. In this context the potential for the Australian partners to take greater advantage of the opportunities than the developing country partners is an issue that ACIAR needs to manage equitably. An example given to the Review team where the developing country partner felt that there was good mutual benefit was a project on papaya ringspot disease in the Philippines and Australia. The common element in the project was claimed to be the research technique. The Filipino scientists argued that the Australians were better in the laboratory science, but that the Filipinos had more field experience. Thus the two teams worked together to the mutual benefit of the economies of the farmers of each country, and in scientific terms learned from each other in different ways.

The concept of mutual benefit in its research partnerships is a fundamental tenet of ACIAR. When it established ACIAR the Government stated:

'ACIAR will benefit both giver and receiver. While its primary purpose is to assist developing countries, Australia too will gain in the following ways: enhanced contact between our agricultural scientists and their overseas colleagues; the increased information Australia will have at its disposal on the agricultural problems of developing countries; by strengthening the links between Australian and overseas scientists and institutions; and finally some of the solutions the research sponsored by the Centre produces will be of direct and practical benefit to Australia, even though that may not have been the original intention.'6

In recent years there appears to have been a trend to focus on Australian benefits of ACIAR projects, which, while not necessarily at the expense of developing country benefit, creates the impression that the developing country benefit is taken for granted. The Review team recognises the constraints facing Australian researchers in committing themselves to aid projects where benefit to Australian industry may not clearly be apparent. It was claimed that the Australian industry research and development dollar was being leveraged into the aid

program. ACIAR itself seems to be prepared to take a broad view of benefit and to look globally at the program of collaboration rather than project by project. It should encourage its Australian partners to do likewise.

In order to reduce the apparent emphasis on Australian benefits, these could be construed more broadly than the direct scientific outputs or institutional support generated through individual projects and more than the direct benefit to Australian industry from these projects. Many of the Australian researchers themselves voiced a broader and altruistic view of the benefits they derive from ACIAR-funded research collaboration, enumerating the following, for example, which are taken from one submission, but echoed in many:

- assisting Australia to meet its international commitments such as implementation of the FAO World Food Summit Plan of Action aimed at alleviating poverty, and technical cooperation on agriculture in APEC;
- support for Australian policy objectives in the areas of agricultural and environmental development and the promotion of international trade through ACIAR's emphasis on areas that encourage a more market- and export-oriented focus;
- benefits to Australian agriculture through access by Australia to plant genetic resources activities in the international agricultural research centres;
- stronger links between Australian research institutions and those overseas, with flow-on of benefits to Australian industry and investment interest generated through promotion of Australian industry capability;
- valuable performance information on other species that can be applied in an Australian context:
- an improved knowledge base of industries in other countries, and improvements in the
 economic and environmental health of neighbouring countries, with the potential for spinoffs to the Australian economy;
- linkages to the international scientific community in the Australian region and further afield:
- training and development opportunities for Australian scientists and enhancement of their capabilities to assess and reduce threats to Australia from the introduction of new pests and diseases, and enhancement of regional disease control;
- closer agricultural cooperation with the countries of the region and the consequent support for development of broader bilateral agricultural relationships with countries in the Asia–Pacific region.

The Review team encourages ACIAR to promulgate this approach of assessing benefits more generally to its Australian partners. The benefits enumerated above should be sufficient to justify Australian involvement and ACIAR should resist the pressures from Australian institutions to fund their contributions at a higher rate. As against this, ACIAR may need to be quite flexible: sometimes ensuring that the developing country's needs are put first may require greater support to the Australian institutions involved in the partnership.

Whose priorities come first?

To allay any concerns in partner countries that Australian priorities take precedence over their own priorities, then first ACIAR could illustrate the way in which it ensures appropriate identification of those priorities, in the context of development needs rather than research desires. ACIAR's reputation as a credible and attractive donor will be enhanced both through its priority-setting processes and by its focus on development outcomes.

The Review team recognises the efforts ACIAR already invests in trying to ensure that it has a clear and correct picture of the agricultural research priorities of developing counties. To do so, ACIAR undertakes regular government-to-government consultations with key countries (in those countries), though as the set of countries has expanded, the intervals at which these relatively resource-intensive exercises are undertaken have similarly grown. ACIAR's 'country consultations', as they are known, involve an appropriate set of partner country agricultural research-implementing agencies, including the universities, and policy makers. In addition, the Board complements this approach by holding one Board meeting overseas each year, taking the opportunity to meet with higher-level government and university representatives. Emerging partner country research needs and priorities are also discussed with Policy Advisory Council members at the annual Council meeting.

These efforts are commendable for a small agency, but perhaps the primary focus on agricultural researchers still leaves room for the development dimension to be sidelined. ACIAR has radically changed its approach in recent years to the country consultation process. Far more effort is now put into ensuring that the development context for the research program is covered by involving national development planning agencies and relevant ministries, and the Review team encourages ACIAR to maintain this effort.

In addition, in reality a country's priorities change continually, rather than at fixed intervals, or indeed may alter radically as a result of crisis situations, as evidenced by the fact that the current financial crisis in the Southeast Asian region has given agriculture renewed prominence by virtue of the powerful role it can play in countries' economic rehabilitation. ACIAR needs to be able to respond both to such crisis situations in a timely way and to continually re-evaluate the priorities that have been articulated by its partner countries. One clear mechanism for doing this is in the form of the advice that the overseas Policy Advisory Council members can provide. The ACIAR Board expressed to the Review team that it felt the annual input from Council members about country and regional priorities was extremely valuable. Another suggestion, welcomed by those Council members the Review team met, was for ACIAR to formally seek annual revision of the priorities. It was clear to the Review team that the Council members and implementing agencies would appreciate more frequent formal interest from ACIAR in their priorities.

The Review team was encouraged to hear from the agencies in the countries it visited that it would be highly desirable for ACIAR to take a regional or multilateral approach to research in some cases, particularly in the ASEAN and Pacific contexts. To achieve this, ACIAR will need to ensure that it maintains effective dialogue with regional organisations. One channel would be to include regional representation on the Policy Advisory Council, though another would be for ACIAR to participate more overtly in relevant regional meetings than it presently does.

At a program level, the Review team therefore recommends that ACIAR continue to take opportunities to involve a wide catchment of stakeholders in its priority-setting processes, and this may require a different format from the current infrequent high-level meetings. The focus on stakeholders who can see the role research can play in the solution of development problems suggests that AusAID should take greater advantage of the opportunity afforded by ACIAR's country consultations to ensure that ACIAR's program fits the context of the wider development program. Non-government organisations might also be involved, in recognition of their knowledge of the relevant development needs and opportunities. However, in widening stakeholder involvement in the priority-setting process, ACIAR should be aware of, and respond to, the sensitivities of partner-country governments.

At a project level, inputs that assist prioritisation include situational analyses, field-oriented diagnostic studies, literature reviews (analysis of previous research and its outcomes), user perspectives in agricultural research and development, and project identification and specification workshops involving relevant stakeholders including social scientists. ACIAR has adopted these approaches and the Review team suggests that ACIAR could broaden and strengthen them.

Apart from its country consultations and Board and Council dialogue, the present ACIAR Director and staff have made a considerable investment in strategic planning. The current ACIAR Corporate Plan appears to have been a helpful document in communicating ACIAR strategic directions and priority research areas to the Australian research community. Under the Corporate Plan is a set of similarly indicative program-specific strategic direction statements.

Against the developing-country priority-setting process, ACIAR's approach requires assessment of Australia's capacity to assist – the comparative advantage – and of Australia's geopolitical and industry interests. The Board already plays an important role in policy guidance, and by its composition reflects the views of the main stakeholder groups – universities, CSIRO, State government and industry, but it was suggested that ACIAR might consult more formally with other government agencies in Australia in determining its priorities and strategies, and this would balance the developing-country approach.

The Review team recommends that ACIAR formalise its consultation with Australian stakeholders, including R&D providers and relevant government portfolio agencies (notably the Agriculture, Fisheries and Forestry portfolio and the Industry, Science and Resources portfolio). This assumes that consultation within the foreign affairs and trade portfolio – with the Department, and with AusAID – routinely occurs. An annual roundtable discussion with the individual groups concerned, backed up by more informal contacts by individual officers, would probably be adequate. The prime objective of such consultation should be to fully tap the capabilities and expertise of the respective agencies, listen to their respective priorities and strategies, and thereby ensure maximum relevance of ACIAR to its Australian stakeholders. Another suggestion made to the Review team was to involve senior ACIAR staff, Board members, eminent Australian researchers and administrators, and representation from the international agricultural research centres, in an annual consultation at ACIAR on key policy issues.

Assurance of Australian interest and priority balanced against partner-country interest and priority will create the type of win-win situation that will guarantee continued successful partnerships. The Review team feels that ACIAR's investment in research planning and

prioritisation will be well repaid in terms of achieving demand-driven research and development outcomes.

Recommendation 2

The balance in Australian and partner-country benefits should be apparent.

The Review team recommends that ACIAR:

- encourage a broader, long-term view of mutual benefits by Australian partners;
- continue to focus projects on the development priorities of the partner country rather than on Australian interest;
- review the effectiveness of its current country consultations process; and
- make a more targeted investment in research planning, prioritisation and roundtable consultation with all relevant stakeholders, including extension-focused agencies, in both developing countries and Australia.

2.3 The research-extension interface

ACIAR has had a mandate for development activities, where these are linked to its research projects, since the amendments to the ACIAR Act arising from the sunset review. From the comments made to the Review team, the perception is that ACIAR has not taken full advantage of this new mandate.

There are many research-generated technologies, funded by many donors, that have not been adopted, and they underscore the now-questioned research extension farmer adoption paradigm as the scenario changes to less favourable areas and to diversified farming systems. In development terms, it is now a matter of livelihood systems in which survival is not just a matter of crops, livestock and/or forestry, but also of non-farm income. Labour requirements for adoption are also a significant constraint, as is insecurity and uncertainty of access to land.

Greater impact of ACIAR's programs in terms of food security, poverty alleviation and natural resource management, and thus improved incomes, health and skills, will be achieved by the increased adoption of research outcomes in partner countries. The idea that ACIAR might focus more readily and systematically on impact through adoption was a strong concern in almost all submissions and discussion. There was no suggestion from ACIAR's partners that they are unwilling to devote efforts in this area. Indeed much of the concern came from the Australian partners who were keen to see the results of good research in which they had been involved translated into clear development benefits. There is consequently a sense of frustration on the part of researchers when neither ACIAR nor AusAID takes the promising results of research further into technology transfer and application.

This orients ACIAR toward a greater focus on the development of relevant adoptable technology options. The Review team does not suggest for a moment that ACIAR should embark upon a full-scale program of extension activities. This would be folly, given its small

resource base and the scale and difficulty of what might be involved. It is also acknowledged that adoption is always more appropriately the province of the national systems in the partner countries with which ACIAR operates. However, it is pleasing to see that ACIAR's cooperating scientists do not seek to hide behind that argument.

It was put to the review that the ACIAR program has to be embedded in the national effort of partner countries. However, experience indicates that there is little coordination between national research centres and national extension services, and that the resources available to the national systems for this purpose are scarce. If ACIAR works toward maximising the impact that technology can have on poverty reduction for smallholders, there will be scope to involve Australian research institutions and NGOs (non-government organisations) to collaborate in the design and implementation of technology transfer activities and to monitor their impacts. The NGOs in particular are highly skilled in community participation and ownership strategies, and their on-the-ground experience makes them logical contributors in terms of both the identification of local needs and the delivery of solutions.

While there has been some involvement of the commercial sector in ACIAR's work, it was put to the Review team frequently that ACIAR seems to have been slow to capitalise on the opportunities offered by linkages to the commercial sector in terms of facilitating the uptake of technology in developing countries. If ACIAR's focus is on development outcomes, then it will need to be open to the involvement of all the necessary and interested parties to achieve the uptake of technology arising from projects, and the commercial sector will be a logical player in some instances.

Responding to the development dilemma

It should be recognised that ACIAR's outputs are usually intermediate. Therefore, ACIAR has to continually evaluate its portfolio with an eye to development opportunities – the uptake of promising technologies – and similarly promote a culture of evaluation to the developing country partners.

There will be no single model for development; this will vary from country to country, and from project to project. In some cases, where the development opportunities are clear and large-scale, it may be appropriate to look to AusAID to carry the effort forwards, and it will be important to involve AusAID in a timely way, preferably at the outset of the research project if the promise of implementable technologies is clear at that point, or at least by involving AusAID in ACIAR evaluations and reviews of projects. Given AusAID's own emphases and priorities, however, there will not always be a logical AusAID link, and it is in these instances that ACIAR must be prepared to carry or push forward the activity using its own resources. It was made clear to the Review team that AusAID sees it as ACIAR's responsibility to fund development activities that flow logically from its research programs.

An example of the dilemma faced by ACIAR that was raised with the Review team concerns a possible development project to follow on from the very successful research projects ACIAR has funded on the identification and improvement of Australian tree species for Vietnam. Australian tree species play an important social, economic and environmental role in Vietnam's rural development and make up a substantial part of the country's 5 million hectare reforestation program. What is now required, according to the Vietnamese and Australian collaborators, is the application of the results of the research work through the development of adequate supplies of high-quality seed. The activity has been given priority

by the relevant ministry in Vietnam. The example highlights the need for ACIAR to continually evaluate its projects to determine which are likely to be amenable to development, and to plan adequately for this, either through allocating its own resources or by entering into negotiations with AusAID at an early stage. It would be even better to involve AusAID at the project design stage in anticipation of the likely development outcome.

The example quoted illustrates another interesting question for ACIAR. In China, it is said that 86 000 hectares per year are being planted through improved seeds resulting from earlier ACIAR projects, without the need for ongoing Australian assistance. There is scope for ACIAR legitimately to commission research into the research–extension interface itself in developing countries, to understand why these differences occur.

From promise to performance

There may be several factors contributing to missed opportunities to take the outcomes of projects further along the adoption pathway, and some of these will be beyond ACIAR's control. Furthermore, ACIAR may determine legitimately that it is not appropriate for it to fund the development phase of particular projects. However, the Review team believes that there are ways in which ACIAR can attempt to ensure that greater adoption occurs.

As discussed earlier, at a program level, ACIAR could strengthen its approach to priority-setting with partner countries. It is critical for a project to have the clear support of the partner-country implementing agency in order for technology transfer to be facilitated. It was clear to the review team that ACIAR would need to use a different approach in countries such as Thailand where research and extension are generally the separate domains of independent agencies, than in countries like Vietnam where the research—extension interface is covered by the one agency. In the former case, the researchers are in many cases unaware of the eventual outcomes of their research.

At a project level, ACIAR should maintain its commitment to the institutionalisation of project outcomes that can make a difference. ACIAR's approach of ensuring that a research project should not be regarded as an individual project by an individual researcher, but an integral part of the institution's research program, is commendable. In many instances the personal contacts developed through the ACIAR project help the work to continue long after ACIAR support has ceased, and this bodes well for its ultimate development even where ACIAR has judged it timely to withdraw.

Consultation during project development with all interested players, including end-users, to achieve the building of adoption pathways into projects is one approach among several options enumerated here that ACIAR might make greater use of. The Review team acknowledges that ACIAR has already begun to move in this direction and the following suggestions are made by way of encouragement to continue the impetus.

• Provide for a diagnostic phase or situational analysis in order to better define the research problem. This phase should be participatory, interdisciplinary and interagency. The appropriate players have to be involved at the front end and their involvement retained throughout the research process, not just at the end-point of technology adoption.

- In the project negotiation with partner countries, ensure appropriate leverage of funding from the relevant agencies so that they will develop a sense of ownership of the project.
- Extend research up to the pilot extension or technology trial phase.
- Work with AusAID, the commercial sector and NGOs so that the technology promotion
 phase could be built into, or follow on from, the research project, and ensure appropriate
 funding. Liaison should occur throughout the project, and will need to be driven from
 within ACIAR.
- Use publications and information technology to effect, including publication of materials in local languages, among a variety of possible mechanisms to communicate research results in a form suitable for use by extension officers with farmers.

These suggestions are not mutually exclusive. All could be pursued. Many of these initiatives are to some extent currently being pursued by ACIAR, but the Review team suggests that greater use be made of them. The addition of a development dimension to ACIAR's projects adds a layer of complexity to an already difficult task in formulating a viable project. The more levels of difficulty that are placed on the project, the greater the costs and impediments to implementation are likely to be, and ACIAR will need to manage this effectively.

'After-sales service'

Where ACIAR is unable for good reason to support the technology transfer phase of a project, it still has a fundamental responsibility to assist the process. As one submission to the review puts it, the partner country and agency always earnestly wish to maintain the momentum of the work after the termination of the project, but their financial base rarely allows it. If ACIAR could foster the established linkages through the promotion of an 'aftersales service' concept by its Research Program Managers after the conclusion of a project, this would help to maintain the research momentum, assist in the retention of linkages between partner country and Australian researchers, and provide the opportunity to identify, at a later stage, the potential or need for sometimes what will be minimal financial assistance to facilitate technology transfer.

Recommendation 3

ACIAR should be committed to, and prepared to allocate funds for, the research–extension interface. In doing so, it will have the support of both developing country and Australian partners.

The Review team recommends that ACIAR continually evaluate its portfolio to identify development opportunities and explore various mechanisms on a case-by-case basis to assist the institutionalisation of an adoption culture, including:

- funding a participatory, interdisciplinary and interagency diagnostic phase or situational analysis;
- ensuring appropriate leverage of funding from the relevant agencies so that they will develop a sense of ownership of the project;
- extending the research up to the pilot extension phase;
- working effectively with AusAID, with NGOs and with the commercial sector to identify and facilitate a technology promotion phase to appropriate ACIAR research projects;
- focusing on the communication of research results and the delivery of technology options to extension workers and, ultimately, to farmers; and
- providing an 'after-sales service' to encourage the research impetus and stimulate technology transfer.

2.4 Capacity-building through focused training

Apart from the informal (within-project) training that is an essential part of ACIAR's project design, ACIAR's formal training activities comprise a program of postgraduate fellowships and short courses. In addition, ACIAR supports the Crawford Fund for International Agricultural Research which assists individuals from developing countries to participate in short-course training, both in Australia and partner countries, and most notably through its biotechnology masterclasses. ACIAR's support for the International Foundation for Science (IFS) and the International Service for National Agricultural Research (ISNAR), two of the international agricultural research centres funded through ACIAR, could also be seen as a contribution to capacity-building in developing countries. Furthermore, of the \$6 million in core funding that ACIAR provides to the international agricultural research centres, approximately 20% is put into the centres' capacity-building programs.

In early 1998 the ACIAR Director commissioned a separate review of ACIAR's training activities. This review, conducted by Professor Lindsay Falvey, Professor Rodney Hills and Dr Ratana Sdoodee, was carried out during the period of the ACIAR Review and the Review team communicated with that training review, passing on in particular the comments it had received in submissions and discussion about ACIAR's training program. The ACIAR Review team commends the Director of ACIAR for having commissioned this independent review of ACIAR's formal training program, which recognises the prominent role training

plays in ACIAR's programs in terms of increasing the capacity of developing-country researchers to identify and contribute to the solution of their countries' agricultural problems.

The training review report was submitted to the ACIAR Director early in October, and the ACIAR Review team was therefore able to consider its recommendations on training in the light of that review report. It is pleasing to note that the training review team has taken up many of the points raised through the ACIAR Review and these are reflected in their recommendations, which are reproduced in full at Appendix 2. Given the comprehensive nature of the training review, the ACIAR Review team proposed not to deal with training matters in detail, other than to mention some particular issues that were raised. All these matters could be dealt with within a carefully considered training strategy that would underlie ACIAR's training programs, and the objective of which would be to focus flexibly on national and institutional needs and priorities to build lasting capacity.

The terms of reference of the training review were to:

- assess the impact and relevance of the components of ACIAR's training program that are managed by the ACIAR Fellowship and Training Advisory Committee;
- assess the appropriateness of the relative expenditure on formal and informal training in the program; and
- assess the effectiveness of management of the program, including monitoring and evaluation.

In summary terms, the training review recommended the following:

- the need for ACIAR, through the Board of Management, to have a clear policy on training;
- the need for a training committee with terms of reference that would aim to increase the roles and responsibilities of ACIAR's Research Program Managers and the coordination, monitoring and reporting of training;
- a modest increase in training investment;
- strategies by which to manage ACIAR's relationship with AusAID in relation to training;
- special strategies to deal with China, Thailand and Malaysia, the Pacific Islands, and research capacity development, and the development of alternative fellowship training modes:
- the need for fellows to identify better with ACIAR and for the development of mechanisms to communicate with them during their fellowship and to remain in contact with them after their studies;
- administrative efficiencies and improved management of universities, to further strengthen the already well-respected program.⁷

The Review team concurs fully with the view of the training review team that training activities in ACIAR are integral to the attainment of institutional objectives and have contributed significantly to the impact and sustainability of ACIAR's programs. But like the training review team, the ACIAR Review team believes that there are areas on which ACIAR could focus in order to enhance training outcomes and position ACIAR for the future.

Strategic allocation of postgraduate fellowships

The Review team received consistently positive comments in submissions and in interviews about ACIAR's training program. In particular, developing-country partners were highly appreciative of the opportunities to study for postgraduate degrees in Australia under ACIAR's John Allwright fellowships program, noting the benefits in terms of equipping developing country researchers with skills to meet emerging issues before these issues attain major importance, and fostering the longer-term continuation of the relevant research methodologies overseas. The John Allwright fellowships program recognises the contributions of a former member of the ACIAR Board, and President of the National Farmers' Federation, the late Mr John Allwright AO. One criticism of the program was that ACIAR did not invest enough effort in ensuring clear and timely links of fellowship programs to the core program of research projects.

The point was made in submissions that 'well-trained postgraduates have the ability to establish and lead effective research programs in their home countries, on topics of local concern, and to train local students in research technologies. ACIAR's advantage is its ability to link postgraduate training with funded research programs that address agricultural problems in developing countries. The opportunity to train scientists in an environment of active research and in areas which are of significance to future work in their home countries should not be underestimated'.

Similarly, 'in the short term, Australian postgraduate students and their host institutions benefit from the greater breadth of cultural background of the postgraduate student body when they include students from overseas countries. In the long term, Australia benefits by having elite members of the government and industry sectors of our near neighbourhood who were trained in Australia. [...] As other sources of funding for overseas students to engage in postgraduate study in agricultural science and related areas in Australia diminish, the comparative advantage of ACIAR providing more funding of this type will grow'.

A relatively small proportion of ACIAR's resources are devoted to postgraduate fellowships (there are eight to 12 new fellowships per year on average and a total of about 32 supported at any one time), but there is no shortage of potential fellows or training activities that could be supported. A critical issue for ACIAR will be to ensure that fellowship opportunities are allocated according to external need rather than on sectorally or country-based quotas.

Some different modalities were suggested to the Review team in relation to the fellowships program, including advertising for nominations and basing the award on ACIAR's programs or relationship with the parent agency rather than tying it to a specific project. The loss to the developing-country research institution of a valuable member of staff while that person is studying in Australia is also a factor that ACIAR needs to consider in its fellowships program. While this is in many instances regarded as par for the course, there are also suggestions that ACIAR could encourage split programs of research in which some research is undertaken in Australia and some in the home country, with appropriate supervisory

arrangements that in turn would have benefits. A greater association with the home institution might also help to overcome the dilemma that ACIAR and fellows are faced with when subsequent employment opportunities in Australia arise. (One suggestion was that ACIAR have a policy of repayment of the costs of studies where this situation arose.)

The contact the ACIAR Review team had with ACIAR fellows in partner countries (some of whom had completed their studies and some of whom were about to embark upon them) highlighted some problem areas that ACIAR could move fairly easily to rectify. The ACIAR Review team endorses the training review team's suggestion that support and follow-up to trainees is an area where ACIAR has the potential to take on a broader role by creating a strong linkage of fellows to, and identification with, ACIAR both during and after formal programs of research and training. This could involve inviting ACIAR fellows to Canberra for familiarisation with ACIAR and its program, encouraging Research Program Managers to take a more active role in monitoring fellowship progress and outcomes (including the benefits to partner countries in terms of the subsequent employment of fellows, on which there is currently a surprising lack of information) and promoting the establishment of networks of alumni, etc. Appropriate AusAID scholars involved in agricultural research could also be linked into this process.

The Review team believes feels that ACIAR could examine all the above suggestions among a range of options to increase the efficiency of the fellowships program as a result of the training review recommendations.

Greater diversity of training support

Many developing-country partners, while commenting favourably on the current formal training programs, strongly advocated more short-term training in-country, or 'sandwich' courses, including training that is relevant to the research effort, both before and during the project, and training in the associated areas of research management, impact evaluation and communication. In doing so they recognise their own capacities to provide training, with assistance, and the need for training that is targeted specifically to local needs and the local situation in order to achieve maximum impact. In-country training initiatives can also take advantage of Australian expertise, thus enabling the partnership mode to continue to be relevant.

A suggestion made consistently to the Review team, primarily by partner-country institutions, though also by Australians, was that ACIAR expand its training program to support studies by young Australian postgraduates in developing countries, thereby providing young, up-and-coming Australian scientists with developing-country experience. While it is inappropriate for ACIAR to allocate fellowships for this purpose, ACIAR could continue to encourage interchange arrangements as part of the informal (non-award) training that is built into projects, provide opportunities for young Australian project officers to visit the off-shore project components, and facilitate access by Australian scientists to the Australian Youth Ambassadors for Development Program. In addition, the Review team was made aware of some arrangements already in place for the training of Australians in developing countries, notably through Australian universities and the SEAMEO Regional Center for Research and Graduate Study in Agriculture (SEARCA) in the Philippines. The Review team therefore encourages ACIAR to support existing university schemes that offer Australian postgraduates opportunities for overseas research experience as part of their studies. Such support could extend to a financial contribution, but is more likely to involve assistance in the establishment

and facilitation of linkages between an Australian postgraduate student and an ACIAR project in a developing country institution.

It was made clear to the Review team that in some countries, such as Vietnam and China, where English language skills are less developed, the research collaboration suffers. This was a point made by the Vietnamese researchers who, while acknowledging the careful efforts of ACIAR and the Australian collaborators to ensure that the project was progressing smoothly, felt that they could have gained more benefit from the project, especially in the early stages, if their English skills had been stronger. The Review team supports the view that ACIAR could invest in the improvement of English skills, not just in relation to its fellowships program, but also as an adjunct to its research projects where this will lead to improved research collaboration.

There may be other ways of harnessing training opportunities that ACIAR could similarly explore. For example, ACIAR, as a donor to the International Foundation for Science (IFS), an organisation that is devoted to research capability-building in developing countries, could explore collaborative training activities with IFS.

The activities of the Crawford Fund for International Agricultural Research, particularly its master classes in biotechnology, were commended, and the Review team notes the wide range of activities supported by the Crawford Fund that link directly to ACIAR's programs. The small investment in the Crawford Fund that ACIAR makes is well repaid through these linkages that focus on the shorter-term training of developing-country researchers through workshops, seminars, conferences and exchanges.

The capacity-building benefits of the partnership mode

Apart from the supportive comments about ACIAR's formal training activities, there was much comment, particularly in countries where research infrastructure is comparatively weak, on the immense direct benefits of ACIAR's programs in terms of developing-country researchers working with their Australian counterparts. In many cases, this encompasses not only travel by Australian researchers to the developing-country institutions, but reciprocal travel to Australia by the developing-country researchers, support in the production of scientific reports and publications, training in the use of sophisticated equipment and techniques, and ultimately the development and use of new and relevant technologies arising from projects. It was apparent to the Review team that the benefits of the collaboration can endure long after the project has concluded and that there is potential for strong and lasting linkages to be established between Australian and developing-country research teams, and between Australian supervisors and their former research students. The after-sales service modality suggested in section 2.3 would be one way of achieving this. The Review team urges ACIAR to maintain its focus in projects on this flow of benefits that is such an important feature of the partnership mode.

The strong capacity-building aspects of ACIAR's programs may not lend themselves readily to precise measurement. In the ACIAR-commissioned impact assessments (benefit:cost analyses) of projects, the capacity-building benefits of collaboration are rarely mentioned. ACIAR itself has acknowledged this gap. Roger Mauldon, in his classification of ACIAR projects based on the final external review reports of projects, used categories of those that achieved impact at the community level and those that achieved impact in terms of scientific capacity-building. The Review team believes that the latter is again an area where ACIAR

would do well to collect and publish concrete evidence. ACIAR could, for example, take the Mauldon analysis further by gathering information on the training of project staff, the publications by developing-country researchers that have emanated from projects, the provision of equipment and facilities as part of projects, etc. This type of information would help to give a more human dimension to the benefits of ACIAR's programs, and would contribute to allaying the concerns of the critics whose claim is that ACIAR's development impacts are not always discernible. The considerable goodwill and appreciation voiced to the Review team about the training and capacity-building benefits of ACIAR's programs in Vietnam and the Philippines for example, deserve to be heard more widely.

Development of a focused training strategy

The Review team received consistent comment about the lack of information available on ACIAR's training program and the lack of clear policies and strategies. The overall thrust of the comments is that ACIAR's training programs lack a strategically determined base. This perhaps springs from the fact that ACIAR's formal training mandate arose only after the sunset review.

The overall benefits of ACIAR's training programs are clear, and training opportunities meet with considerable enthusiasm. There is no shortage of areas in which to invest in training. These reasons alone justify a more strategic and focused approach to training by ACIAR.

The elements of capacity-building – the ability to develop and implement new technologies, the building-up of infrastructure through equipment and facilities, the training of personnel – will be valued and sought differently according to country and agency. Research capacity-building strategies should desirably be country-specific and reflect the country's priorities and needs. Training programs and infrastructural support in China, for example, are likely to be given much lower priority consideration than the building and sustaining of capacity in Papua New Guinea or the Pacific.

Within a particular country, universities may place greatest emphasis on the overseas training of their personnel and in this regard will prefer postgraduate fellowship opportunities or even 'sandwich' courses that do not result in prolonged absences of their staff.

The feature of the training strategy could be flexibility on ACIAR's part, and a willingness to move out of traditional modes where circumstances justify a different approach. Development and promulgation of a focused training and capacity-building strategy, that takes account of a variety of possible approaches and needs, should logically be a focus of the Board of Management and the Director.

Improved training linkages with AusAID

There is a strong feeling among ACIAR's research partners that ACIAR and AusAID could cooperate more effectively not only in terms of the linkages that are possible through associating AusAID fellows with ACIAR projects, but also in the definition and support of training priorities for partner countries to feed into the strategic approach that is advocated. Given AusAID's much greater role in training programs in the aid program, this is an area in which AusAID should have considerable expertise. However, while there should be convergence in the goals of ACIAR's and AusAID's training programs, the modes of selection and operation of those training programs will justifiably be quite different, and it is

important that ACIAR's collaborators comprehend the distinction and understand the goals of the agency that is supporting them.

AusAID has a comparatively large program of fellowships, though a relatively small number of postgraduate fellowships. A number of these are in the areas of agriculture and rural development and some are linked to ACIAR projects, though these recipients of AusAID fellowships have competed on their merits in the AusAID scheme. This is a logical and beneficial linkage that maximises the value of the fellowships by linking them to an agricultural research project that is already part of the aid program. If the prominence of agriculture in the aid program rises as expected, there will be increasing value in these synergies, and ACIAR will need to position itself to explore mutually beneficial opportunities with AusAID.

In addition, if AusAID continues to handle the administrative and management aspects of ACIAR's fellowships, there are openings for improved communication and interaction.

Recommendation 4

ACIAR should give priority to capacity-building through focused training.

The Review team supports the general thrust of the recommendations of the ACIAR training review (Appendix 2), and recommends that ACIAR develop and promulgate a research program focused training strategy that takes account of national and institutional needs and priorities, and of a variety of possible approaches that could include:

- a larger program of postgraduate fellowships;
- enhanced linkages with AusAID;
- stronger linkages to trainees both during and after their fellowship; and
- diversification of training activities to include short-term and sandwich courses, fostering opportunities for young Australians to train in developing countries, English language training to improve the research collaboration, and continuing linkages with the Crawford Fund for International Agricultural Research and the International Foundation for Science.

2.5 Priority for partners in need

Recommendation 5.4 of the Simons Review states that 'clear and predictable strategies need to be developed for fast-growing middle-income countries. A trigger to start the process of negotiating graduation strategies with relevant recipients should be developed by AusAID'.⁹

The Review team endorses the applicability of this recommendation to ACIAR similarly. ACIAR is a small agency with comparatively limited resources, but its program expenditure in 1997–98 shows a spread of those resources over no fewer than 27 countries. The regional spread of the ACIAR program derives from policy parameters set by the Board of Management and Policy Advisory Council as follows:

Southeast Asia	50-60%
Papua New Guinea and the South Pacific	10-20%
South Asia	10-20%
China	10-20%
Africa	5–10%.

During strategic planning activities in 1996, ACIAR reviewed these percentage allocations using group processes, reinforced by quantitative and qualitative data about the relative needs of developing countries and Australia's political and trade interests. To assess the needs of developing countries, countries were combined into sub-regions and indicators developed of poverty and malnutrition. The poverty index was calculated taking into account current income per head and anticipated future income. Also taken into account was the equality of income distribution.

As a result of its strategic planning exercise, ACIAR decided to:

- reduce allocations to those countries in Southeast Asia that were becoming less needy;
- increase allocations to countries in the Mekong region;
- increase the allocation to Papua New Guinea, particularly in forestry and in agricultural and natural resource economics:
- lift allocations in South Asia, particularly in India in animal sciences;
- increase the African allocation slightly; and
- in Indonesia, focus more on eastern Indonesia.

A number of submissions to the Review proposed that ACIAR should further expand its geographic mandate to include the West Asia and North Africa (WANA) region, and a wider spread of countries in Africa, recognising Australia's strengths, and hence the potential benefits, in temperate agriculture. It was suggested that this would also provide greater opportunity for the involvement of research groups in southern and western Australia and of some of the international agricultural research centres that currently do not figure in ACIAR's program.

The Review team does not recommend a shift beyond the current geographic focus of ACIAR's program on the basis of the large level of support for the present focus and the need for ACIAR not to spread its limited resources too thinly.

The Review team commends ACIAR's strategic planning efforts but encourages ACIAR to be vigilant both in regularly reviewing the above priorities to take account of changing development needs and Australian capability, and in ensuring that the project portfolio is targeted in a timely way to the articulated priorities. Within the current country and region spread, there would appear to be further scope for ACIAR to make a realistic assessment of where its programs could be targeted to achieve maximum impact by taking into account the relative potential for adoption of technologies among the criteria it uses.

In this context, it is worth remarking on the different views about ACIAR that were put to the Review team in the countries it visited (the Philippines, Thailand, Vietnam), and in particular about the visibility of ACIAR's contribution to development. In countries where ACIAR research partnerships are longstanding and the countries' own development is advanced, ACIAR's role appeared to be considered less crucial to development, though not necessarily less valuable. Yet it is often in those countries that are technologically more advanced that development gains can be carried through more effectively, as a result of more highly developed infrastructure and policy commitment.

In countries where development is generally less advanced, and ACIAR is a relatively new player in the game, ACIAR's contributions are highly and enthusiastically praised at all levels. Strong commitment to research outcomes is likely to put ACIAR well ahead in terms of achieving adoption and impact, in addition to substantially enhancing research capacity.

The key to ACIAR's success in Vietnam, where there are some notable examples of positive impact in a relatively short timeframe, seems to have been the good farmer involvement in projects and collaboration with agencies that have dual responsibility for research and extension. The consequent strong focus on farmer needs has been complemented by a focus on the training of young researchers. A rodent trap crop barrier system developed through an ACIAR project is being applied by farmers and there is interest in promulgating it regionally, while the spin-off has been good capacity-building in rat ecology. A new type of grain dryer has been adopted very well in Vietnam, though it apparently met with less success in the Philippines, largely attributable to the involvement of socio-economists at the Vietnamese end. The capacity-building elements of the latter project were the collaboration between Vietnam, the Philippines and Thailand, and the training of a junior staff member at an Australian university with some of the best scientists in the world in the particular field.

ACIAR will be under pressure to direct its resources to assisting primarily the poorest countries of the aid program and it will need cogent arguments for retaining a portfolio of projects in the more advanced countries. The Review team believes that ACIAR must continue to take a realistic and objective approach to the assessment of potential benefit, taking account of both extension and capacity-building potential, to ensure that valuable resources are well-targeted and not diverted from countries in need of greater or more immediate assistance.

Recommendation 5

ACIAR should be willing to accord priority to partners in need, and be open to the concept of 'graduating' countries as their development needs diminish and the research impact becomes more diluted.

The Review team recommends that ACIAR not widen its geographic focus but that it continue to concentrate its efforts in a timely way on regions and countries where its mission can most effectively be realised, through:

- regular review of the relative priority accorded to regions and countries, taking into account changing development needs and potential to achieve impact; and
- development of clear policy arguments for the retention of agricultural research support to more advanced countries.

2.6 Methods for demonstrating adoption and benefits of research

Although the Review team was supplied with data on the *ex ante* and *ex post* analysis that had been conducted by external reviewers as well as the Impact Assessment Program in ACIAR, the Review team was constantly made aware of the strong feeling by both overseas and Australian researchers that there was little evidence of substantial adoption of the outputs of many of the ACIAR-funded projects.

Whether or not this perception is well-founded, it is clear that ACIAR has to take note of this attitude which is widespread, and develop a range of appropriate strategies. One strategy would be to embark on a public awareness marketing program that emphasises the flow-on benefits, while another is to examine the reliance on the *ex ante* and *ex post* methodology for determining benefits.

ACIAR has been an internationally acclaimed pioneer and leader in the development of models for research prioritisation and in the rigorous application of routine *ex ante* and *ex post* impact assessment processes. The demonstration of economic benefit of research, through independent economic assessments of selected projects, even where these benefits are still in the process of accruing as a result of the adoption lags in research, has stood the Centre in good stead. The quantification of benefits to developing countries from projects such as the Newcastle Disease oral vaccine in Malaysia, the biological control of salvinia in Sri Lanka, and feed supplements for dairy cattle in India, were very persuasive, particularly at the time of the sunset review. Recent assessments of benefits from projects on the banana skipper butterfly in Papua New Guinea, Epizootic Ulcerative Syndrome in aquaculture systems in Indonesia and Thailand, and Australian trees in China are similarly impressive in terms of the economic returns they predict from the initial ACIAR investment.

However, the Review team questions whether ACIAR's reassuring focus on quantification of **potential** economic benefits of its research has diverted it from attending to the more important issue, which is to ensure that the technologies developed in ACIAR projects are **in fact** adopted, or at the very least well-positioned for adoption to occur. In other words, the focus on economic assessment, given that it occurs for the most part necessarily prematurely and relies therefore on adoption presumptions, may give rise to a false sense of security that is overthrown if ultimately adoption does not occur.

The economic assessments themselves raise this critical issue:

'These benefits are based on the assumption that the knowledge obtained from the project is actually adopted by [...] producers and others. There is no guarantee of this, and the results should be interpreted in that light. This also suggests that ACIAR could achieve high leverage from funds devoted to increased rates of adoption.' 10

The benefit:cost analyses commissioned by ACIAR do increasingly show realised benefits, and every analysis uses stated assumptions about the rate and extent of adoption, which can be verified. The rigour of *ex ante* benefit:cost analysis also helps to focus researchers on the need to maximise the rate and extent of adoption, and so is catalytic in achieving consideration of the adoption strategies that are advocated earlier in this report.

It is commendable that ACIAR has progressed to involve developing-country partners in the systematic evaluation of ACIAR-funded projects, but it is precisely as a result of comments

made in developing countries that the Review team has reason to question ACIAR's approach. Some of the developing country partners, including those involved in impact assessment activities, are left mystified by ACIAR's 'miraculous' quantification of economic benefit when they do not see the projected financial gains being realised through implementable technologies that have, in fact, not yet been implemented. Indeed, it may cause them to assume that the main benefit is being realised by Australia.

While *ex ante* and *ex post* evaluation will continue to have a role to play in terms of accountability, the Review team recommends that ACIAR shift from its reliance on benefit:cost analysis as the main mechanism for assessing and demonstrating the benefits of its activities. The Review team notes that the guidelines and terms of reference that ACIAR provides to external reviewers of projects do not specifically seek the reviewers' assessment of the project in terms of its potential impact on poverty alleviation at the rural level, nor its extension potential or the extent to which extension strategies have been developed, nor the extent to which capacity-building has been achieved.

Development and promotion of an adoption focus among researchers and reviewers should assist ACIAR to obtain sound evidence rather than assumptions of impact. The intermediate products of the research effort, for which ACIAR and the project partners have clear responsibility, will be more readily identifiable, but demonstration of impact in terms of the three components of ACIAR's mission – reduced poverty, improved food security and sustainable natural resource management – should not be overlooked. Nor might ACIAR be able to claim sole credit, for the attribution of credit for impact is problematical and estimation of final impact is complex and difficult. ACIAR may join the research effort after another agency has made an investment, or vice versa. A focus on partnership, participation and shared goals will assist ACIAR develop a culture of sharing credit for development outcomes.

Recommendation 6

ACIAR has to be able to provide persuasive evidence of the adoption and benefits of its research projects.

The Review team recommends that ACIAR:

- more effectively communicate the way in which the benefits flow from ACIAR projects to ultimately achieve poverty alleviation, improved food security and sustainable natural resource management;
- place less reliance on the academic assessment of potential economic benefit and increase emphasis on evidence of adoption;
- review its guidelines for project proposals and for external reviews in order to focus researchers and reviewers on the adoption of the research and better demonstrate the project's outcomes in terms of relevant technologies, capacity-building and extension potential; and
- in the spirit of partnership, give greater acknowledgment to the role of all participating agencies in demonstrating the benefits of agricultural research and development initiatives.

PART 3: OPERATIVE SUCCESS

3.1 Clarification of effective leadership roles

The ACIAR Act establishes ACIAR's governance arrangements. These comprise a Policy Advisory Council and Board of Management. The Council is appointed by the portfolio Minister and reports to him on the agricultural problems of developing countries, on agricultural research priorities and on Australia's capacity to assist agricultural research in developing countries. The Board is appointed by the Governor-General on the recommendation of the Minister. As the board of an Australian government statutory authority, it is responsible in broad terms for the conduct and control of the Centre and thus reports directly to the Minister.

The ACIAR Act also establishes the position of Director as Chief Executive Officer (CEO) of the Centre and as a member of the Board. As the CEO of a statutory authority the Director is also appointed by the Governor-General on the recommendation of the Minister and is responsible to the portfolio Minister for ACIAR's financial performance.

The fact that both the Board and Director are responsible to the Minister causes some ambiguity of roles that the ACIAR Board recognises and discussed with the Review team. In addition, recent changes relating to public sector financial accountability have shifted financial responsibility from the Board to the Director.

It is useful to note that ACIAR is unusual in that it is one of only a few government agencies made subject to the *Financial Management and Accountability Act 1997* (FMA Act) (because it deals solely in public moneys) rather than the *Commonwealth Authorities and Companies Act 1997* (CAC Act). The CAC Act places reporting obligations on the (board of) directors rather than the CEO, although CEOs are usually also directors. This reflects the fact that the enabling legislation of CAC bodies usually provides for boards to determine policies and strategies and for the CEO to manage the day-to-day operations, under the direction of the board. Amongst other things the FMA Act places reporting and money management obligations on Chief Executives, and boards are not recognised (because most FMA agencies do not have boards). The resulting ambiguity of CEO and Board responsibility in ACIAR's case is evident and requires further investigation in the interests of internal clarity of responsibility.

In a climate of focus on corporate governance it is appropriate that there be clear delineation of responsibility between the Board and management, and that corporate strategies are developed and communicated effectively. The following recommendations are presented for the Board's consideration as the opportunity for ACIAR to communicate more effectively with its stakeholders.

Board of Management

The Board's current focus appears to be the following:

• setting broad policy directions, mainly by considering the advice of the Director, usually on the basis of discussion papers prepared by ACIAR staff;

- approving large expenditure items, notably agricultural research projects and contracts over \$150 000, again on the advice of the Director;
- monitoring the performance of the Director, generally in an informal way.

While the appointment and performance of the Director, as CEO of a statutory authority, are ultimately the responsibility of the Minister, the Review team believes that the Board could seek the Minister's formal confirmation of arrangements that would assist the Minister. Confirmation by the Minister of the Board's role in the appointment process, and of its role in monitoring the Director's performance, would formalise, and clearly identify, one aspect of the Board's role.

Policy guidelines relating to statutory authorities indicate that 'the chief executive is responsible to the governing board for the conduct of the authority's business. A particular matter to be examined in reviewing a statutory authority will be whether a chief executive should be appointed (and removed) by the governing board or by the Government itself'. The Cabinet Handbook outlines procedures for the appointment of full-time statutory office-holders and states that 'the governing body should be consulted in the case of an appointment to an executive position responsible to that body' and that 'the Minister may arrange for the position to be advertised and for a selection committee to be convened'. The three Directors of ACIAR to date have been appointed by the Board acting as the selection committee for the Minister.

The Review team recommends that, at the beginning of a Minister's term, the Board seek the Minister's endorsement of its role in appointing and formally monitoring the performance of the ACIAR Director, and that the Board institute formal performance appraisal arrangements with the Director.

The Review team feels that, to assist ACIAR in meeting the challenges of the future, the Board could strengthen its focus on the policy parameters and strategies for ACIAR's operations. Its agenda should be to drive and facilitate change. The fact that the Board has commissioned this Review report indicates that it understands and accepts this role, and that it desires to ensure that ACIAR remains a highly regarded and relevant organisation. To do this, the Review team recommends that the Board continue to seek the definition and implementation of policy on:

- the research–extension interface and the nature of ACIAR's development interventions;
- intellectual property rights in ACIAR projects and involvement of the commercial sector in technology transfer;
- the determination of country and regional priorities, taking account of the effectiveness of mechanisms available to assess the relative needs of those countries and regions;
- the desirable balance between partner-country and Australian benefits;
- the relative balance of the program between research, development and training and between bilateral and multilateral funding, and the strategies underlying these;
- the ACIAR–AusAID relationship;

• an improved training and capacity-building strategy.

These areas will not remain static. They will require continual re-evaluation. An overt and consistent policy focus on them will therefore drive the development, implementation and ongoing revision of ACIAR's corporate and strategic framework, will require high-level inputs from the Director, and will be the catalyst for change and adaptation in the organisation.

In the short term, the Board may need to review the nature and frequency of its meetings to meet this challenge. For example, the Review team believes that the project approval role undertaken by the Board might with advantage be re-examined. Currently the Board maintains a watching brief on all stages of project development, from new ideas to concluded projects, and approves all projects at 'Phase 2' of their development under delegation from the Minister. The Board argued to the Review team that it valued this role as an important means of keeping abreast of the project portfolio and hence the policy context.

The project approval role dates back to the beginnings of ACIAR, when the Board took an even greater role than at present in the approval and facilitation of projects throughout their development and implementation. The creation of the 'in-house review' about 10 years ago removed much of the formal responsibility for project development from the Board, but the legacy is apparent in the form of the Board's current considerable involvement at each meeting in monitoring and appraising projects. ACIAR as an organisation has grown considerably over its life; its project portfolio has grown similarly, as has its cadre of senior staff – it employs specialist Research Program Managers who are agricultural scientists in relevant fields. This scenario suggests that the Board could further reduce its program monitoring role, and seek delegation of that responsibility to the Director, perhaps confining its own role to noting the projects approved by the Director. Given the phased approach to project development adopted by ACIAR – one that has been commended – the Board, like the Minister, still would have the chance to intervene if it considered this to be necessary, before a project's implementation.

It would be logical and beneficial for the Board to be kept informed of projects that represent a new approach, for example in Papua New Guinea or the Pacific, or of projects that open up a new research area or offer exciting developments. The Board's wisdom in relation to the policy framework will need to be anchored solidly in the project portfolio; indeed, the projects will provide the empirical 'validation' of that policy framework. What is advocated is not an abnegation of the Board's role in keeping abreast of ACIAR's portfolio, but a less intensive approach.

The shift of responsibility for routine project approval and monitoring from the Board to the Director would be consistent with the greater responsibilities of the Director as CEO under the FMA Act, and would sit neatly with the proposed performance appraisal of the Director by the Board.

Director

Flowing from the Board's role, the Director has the key leadership role. It is a role comprising inward and outward functions, in which the outward functions are paramount. Through strategic vision, the Director has the responsibility of guiding and advising the Board on policy issues, influencing and motivating staff and stakeholders toward shared

goals and implementation of the Board's policies, and providing organisational leadership in the management of change. The Director sets in place appropriate processes and structures to manage the affairs of the Centre, instils the corporate culture, and cultivates the high-level external communication networks which are crucial to the success and image of ACIAR.

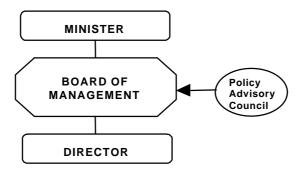
The Review team suggests that while the anomaly of the FMA Act makes the Director accountable to the Minister for ACIAR's financial performance, the Director should be accountable primarily to the Board in fulfilling the Board's policy requirements and leadership expectations.

Policy Advisory Council

ACIAR's Policy Advisory Council comprises the members of the Board together with members drawn from partner countries. The structure of the Council provides a ready interface between the Board and ACIAR's main overseas stakeholders. Given the part-time nature of the Board members, it could provide a ready mechanism for keeping abreast of the priorities of partner countries, assisted by a program of occasional visits to those countries by the Board. In this respect it is interesting that the Council has the function, under the ACIAR Act, of advising the **Minister** on the agricultural problems of developing countries and Australia's capacity to assist in their solution, and on where agricultural research should be targeted to meet complementary priorities of developing countries and Australia.

The Board members argued very strongly to the Review team that they appreciated the Council's advisory role **to them** on partner country and region priorities. The distinction is subtle, but carries an important message of responsibility. The Review team understands that the creation of the ACIAR Council was a somewhat unusual and innovative step in statutory terms. Its members were to be chosen so as 'to ensure the continuing relevance of the Council to the changing needs of developing countries'. ¹³

The Review team suggests that a redefinition of the Council's role in terms of an advisory mechanism to the Board would be appropriate. It would recognise what happens in fact, though opens the way for some different modes of interaction between the Board and Council, and would help to delineate the responsibilities of the Board, Council and Director vis-à-vis the Minister, without in any way devaluing the Council's role.



The Council currently meets once a year and, given its composition and the nature of its responsibilities, this is probably appropriate. On the other hand, it is a pity to have access to the wealth of knowledge and experience it represents only once a year through a very formal channel. It would be appropriate for the Council to take on a wider role in line with its proposed advice to the Board. Apart from the Board consulting it in relation to the abovementioned policy and strategy papers that constitute the Board's main focus, it could

become more actively involved in commenting on policies and strategies for ACIAR's program, and this could be achieved through targeted out-of-session consultation rather than, or as well as, at its formal meeting. It could also be beneficial for the Council members to be involved in wider discussion with the Australian scientific policy community at the time of the annual Council meeting.

The Council's collective wisdom and potential to focus, for example, on regional issues, is uniquely valuable. With thoughtful organisation, workshop or panel discussion style and strong policy papers for its consideration, an annual formal meeting would still seem to be sufficient. The Review team suggests that it would be helpful to keep Council members well-informed of the project portfolio and related developments, through regular updates between meetings, so that their advice can take account of these. Their views on regional and country development priorities, on opportunities for regional cooperation, on local strategies to foster the implementation of research results, and on ACIAR's policy and program impact will represent critical information for the Board and staff. The recent CGIAR System Review report mentions the use of 'policy dialogues to encourage implementation of research results'. The Policy Advisory Council would appear to be well-placed to achieve this in relation to ACIAR's projects.

With regard to the membership of the Council, the Review team notes that ACIAR tends to seek representation from among the agencies involved in the implementation of its programs in key partner countries. While this gives ACIAR an effective channel of communication at a high level to those implementing agencies, ACIAR may be missing out on the opportunity to consult with people who might have a more regionally-oriented development perspective, or with people who might be able to contribute a more overarching view of agricultural research and development locally or globally and thus provide thoughtful input to policy discussion. This has apparently been the route taken with the Papua New Guinea member, for example.

Membership also tends to favour the narrower agriculture and agricultural policy disciplines, thereby excluding the forestry and fisheries sectors.

Given that there are existing opportunities for interaction between the Director and the heads of countries' agricultural research implementing agencies, ACIAR might be able to maximise the value of the Council by modifying the membership base to include senior statesmen and women with a broad understanding of agricultural research priorities against a background of development needs and constraints (including constraints to adoption), at both or either country or region level, such as might be found for example in the Philippines Institute for Development Studies or the Thailand Development Research Institute. ACIAR should also be mindful of sectoral representation (agriculture, forestry, fisheries, etc.) and of gender balance. There would also seem to be no reason why the Council could not contain a member drawn from one of the international agricultural research centres, given that nexus in ACIAR's programs.

Recommendation 7

Operative success depends on the clarification of effective leadership roles.

The Review team recommends that the roles of the Board of Management, the Policy Advisory Council and the Director be delineated as follows:

- an overt and consistent focus by the Board on the policy framework, as the context
 for strategic planning and the catalyst for organisational change, and a less intensive
 focus on the project portfolio; this would be assisted by greater delegation of its
 project monitoring and approval role to the Director and by effective consultation
 with the Council;
- a more active role for the Council of input to policy discussion and advice to the Board on regional and country-specific development needs, priorities and issues, assisted by a broadening of the membership base and effective consultative mechanisms;
- an outward and strategic focus by the Director who, as CEO, is accountable
 primarily to the Board, on guiding and advising the Board on the policy framework,
 motivating staff and stakeholders toward shared goals, and providing organisational
 leadership in the management of change;

and that the Board seek the Minister's endorsement of its role in appointing and formally monitoring the performance of the ACIAR Director, institute formal performance appraisal arrangements with the Director, and seek to rectify the ambiguities of responsibility that have arisen under the *Financial Management and Accountability Act 1997*.

3.2 Building an effective working partnership with AusAID

The problem in the ACIAR-AusAID relationship could be summed up in the following quote from a submission: 'At the heart of the relationship is the challenge of reconciling two remarkably different modes of operation, scale and organisation, and differing world views born from the respective perspectives of the two agencies'. Yet despite the difficulties, there is a widespread feeling within the two organisations, and outside, that the two organisations have to work together more effectively.

It is important to make the observation that the establishment of ACIAR was an initiative of AusAID (then ADAB) and that the working relationship was developed and embedded during the first eight or so years of ACIAR's existence. ACIAR and AusAID have tended to diverge in operational terms since then, and particularly since the sunset review reinforced ACIAR's successful independence.

The Review team was greatly encouraged by indications that key staff from both organisations agree that the time is now ripe to rebuild the cooperative linkages. There is also a window of opportunity through the Simons Review recommendations on rural development.

Areas of cooperation between the two organisations already exist. These include:

- *ad hoc* working lunches involving the two chief executives (helpful in achieving policy convergence);
- access by AusAID to ACIAR's technical expertise in supporting project development, and through interdepartmental committees in contributing to the formulation of government policy;
- two-way organisational and administrative support both in Canberra and at overseas posts;
- administration by AusAID of ACIAR's fellowships scheme;
- an increasing trend for AusAID to involve ACIAR in project design and management through both multilateral and bilateral mechanisms.

While these are an excellent beginning, the Review team feels that there are many more opportunities that ACIAR and AusAID could explore to strengthen the working relationship. Many of these build on the synergies that should have already become apparent from earlier recommendations, among which are the opportunities for ACIAR—AusAID collaboration in country and regional priority definition, in training and capacity building strategies, and in promoting the uptake of ACIAR research outcomes. The interactions between ACIAR and AusAID will need to take account of the differences in approach by the two organisations to planning and project definition. Flexibility, rather than a focus on incompatible modes of operation, is required. A current example where ACIAR and AusAID have modified their approaches to achieve a mutually acceptable solution involves a suite of projects in the renewable natural resources sector in Papua New Guinea that ACIAR is managing on AusAID's behalf.

To facilitate the building of the partnership, some concrete steps could be taken:

- ACIAR has to accept the responsibility of making planned inputs at the research—extension interface in partner countries. To work effectively with AusAID, ACIAR must be seen to be a research-oriented development organisation. There needs to be on the ground demonstration of research-based recommendations that have positive impact in farmers' fields, plus the associated awareness raising. The partnership must be developmental in order to demonstrate mutual benefit and a positive impact in decreasing poverty.
- There should be an invitation to the Director-General of AusAID to join ACIAR's Board of Management. The rationale is at once symbolic of enhanced cooperation and builds on the good relationship that exists between the two agency heads. It provides an effective exchange mechanism on policy issues and program development; it draws on AusAID's rich experience of the countries involved in the program; and it stimulates interest in the value of widespread informal contacts between AusAID country managers and ACIAR's program managers. This should be supported by Ministerial agreement to any legislative changes required.
- The ACIAR Board of Management could develop an agreed policy position paper on ACIAR-AusAID cooperation and have it endorsed by AusAID and promulgated throughout ACIAR and AusAID.

It would be helpful if the ACIAR Director could be invited to convey an ACIAR perspective on agriculture and rural development in the aid program in some formal and ongoing capacity. ACIAR is a major contributor to the sector, and this is a mechanism that would give ACIAR access to AusAID's country programming process. ACIAR input to any proposed agricultural advisory group that may flow from the review of the agriculture and rural development sector in the aid program may be an appropriate modality.

• ACIAR and AusAID should work together more closely to pursue an increased level of activity in agricultural policy development. This would be complementary to, and strengthen, ACIAR's policy research programs. A 'jump-start' mechanism is required for such work where the economic environment is one of crisis and radical change. Australia has a strong comparative advantage in agricultural policy analysis by virtue of its vital interest in trade reform and world leadership in this area. There are significant mutual benefits to be obtained from well-focused aid projects combining research and development.

Recommendation 8

Operative success depends on building an effective working partnership with AusAID.

The Review team recommends that ACIAR and AusAID develop a mutual focus on rural development that will involve:

- inputs to the development of country and regional priorities and strategies;
- further training and capacity-building initiatives; and
- enhanced cooperation in the identification and implementation of research and development activities, including collaboration in projects directed towards agricultural policy;

and will be assisted by:

- a Board-endorsed policy position paper on ACIAR-AusAID cooperation;
- an invitation to the Director-General of AusAID to be a member of the ACIAR
 Board of Management, together with appropriate input from the ACIAR Director to
 policy dialogue in AusAID on agriculture and rural development in the aid
 program; and
- strengthening commitment to the existing array of informal contacts at all levels.

3.3 A case for legislative change

All of the recommendations in this report can be implemented effectively within ACIAR's legislative framework. However, two elements could be formalised through legislative change:

- recommendation 7 proposes that the Policy Advisory Council advise the Board on policy and program issues; and
- recommendation 8 proposes that there be an invitation to the Director-General of AusAID to be a member of the Board of Management.

The ACIAR Act establishes the Board of Management as a subset of the members of the Policy Advisory Council, placing the Council in a pre-eminent role that has not been fulfilled, and blurring the definition of the Board's responsibilities. The line of responsibility from the Minister to the Board could be formalised by making the Board clearly responsible to the Minister for the development of policies and strategies in ACIAR.

In order for the Director-General of AusAID to participate as a full member of the Board, but without loss of the broad stakeholder representation that the Board comprises and that is necessary to its policy role, the membership of the Board will need to be expanded by one. To retain flexibility in the future, the Review team recommends that the membership be expanded without specification of *ex officio* membership of the Director-General of AusAID. Membership of the Board would therefore comprise:

- the Director of ACIAR
- five other members, one of whom shall be appointed Chair of the Board.

The Act currently specifies the Director-General of AusAID, or his nominee, to be a member of the Policy Advisory Council. This need not change.

Membership of the Council, as a body designed to achieve formal consultation between the Board and overseas country or regional representatives, would be expanded similarly by one to a maximum of 15 members comprising:

- the Director of ACIAR (ex officio)
- the Chair of the Board (ex officio)
- the four other members of the Board
- the Director-General of AusAID, or his nominee, unless the Director-General is one of the members of the Board
- between six and eight representatives from overseas countries or regions, appointed in recognition of their familiarity with agricultural research and development issues.

Recommendation 9

The Review team recommends that ACIAR seek the Minister's endorsement of amendments to the ACIAR Act that will improve the effectiveness of the Board of Management and Policy Advisory Council by delineating their respective roles and responsibilities and improving linkages with AusAID.

3.4 An adaptable and flexible research partnership model

Both the ACIAR Board and the Director have described the difficulties ACIAR has in adapting its usual partnership mode of operation to countries where research infrastructure is weak. Unfortunately, this is often the case with countries of greatest need and priority in the aid program, including Papua New Guinea and the Pacific Islands.

The Review team suggests that, recognising the particular problems of countries or regions where the traditional partnership mode of operation is constrained, ACIAR could examine alternative approaches including the possibility of making greater use of international and regional institutions. A proactive approach to tackling these problems is advocated, and is one that lends itself to ongoing policy development by the Board of Management.

ACIAR's Pacific Program: a tactical expansion of the partnership model

ACIAR has a commitment to support the Pacific region's research needs in food security. It is a top priority region in Australian foreign policy. There are also high-priority issues relating to resource conservation where improved knowledge and new technologies are required. The small island states also need adaptive research and development in agriculture, forestry and fisheries in responding to the long-term trends and recurrent crises that characterise the nature of food security issues in the region.

The Simons Review of Australian aid had this to say: 14

- education and capacity building are fundamental to the long-term development of PNG;
- a Pacific islands strategy should be devised to reflect the different circumstances and assistance required by different island countries;
- special attention should be given to Australia's aid relations with PNG and the Pacific because of the relative size and impact of Australian aid in the region, our potential to help achieve development, and our national interests. This is likely to require additional resources to be devoted to analysis, strategic planning, aid design and delivery...

It is hardly surprising then that since its inception, ACIAR has always accepted its obligation to the Pacific peoples. There is a real challenge, however, as the countries and territories of the Pacific have limited research and development capacity, even the largest – and it is said that the costs of maintaining even this limited resource are such that deterioration over time will continue. ACIAR's 'basic' partnership model is increasingly difficult to apply.

The Review team understands that ACIAR's Board of Management wants to explore a revised operative approach to supportive R&D for Papua New Guinea and the small island states. No doubt ACIAR's Research Program Managers, encouraged by their Director, are already exploring new approaches, given their appreciation of current difficulties.

The South Pacific Organisations Coordinating Committee (SPOCC) is a regional coordinating body which brings together the heads of seven Pacific regional agencies. It is timely that SPOCC is currently involved in producing a series of sectoral studies including agriculture and fisheries. These studies are well advanced. They define the array of regional institutional resources available, the roles and activities of the organisations involved, and the

prioritised regional needs requiring attention. This suggests that ACIAR could, with advantage, cooperate with SPOCC and its associated regional organisations in priority identification.

ACIAR's objective in the Pacific is to see that new technologies, well-adapted to suit local conditions, are developed to a state where they can be packaged by governments and put into the hands of producers. The Pacific is a place for adaptive research, working with proven approaches and solutions developed elsewhere.

Revising the operative research model for the Pacific

No doubt ACIAR should continue to explore possible research/development partnerships in countries and sectors where such capacity exists, and where it can be usefully enhanced through project support. In designing programs, development areas which lend themselves to ease of acceptance and the spread of new technology would carry obvious advantage. The partnership contracts would also need to provide additional resources for the developing-country partner to help build both the research resource and the linkage with extension outreach. There would also be particular value in linking such projects with the research interests of the international agricultural research centres – and with research students from the region.

The Review team understands that an expansion of the partnership approach with Papua New Guinea is being supported by the availability of additional aid funds from AusAID's large bilateral program with that country. The reviewers see this as a window of opportunity for the ACIAR–AusAID relationship which would give additional strength in the effort to build and sustain in-country capacity in both research and research-extension liaison. Papua New Guinea has great potential of both land-based and marine resources but its potential is being constrained by inherent weaknesses in its R&D structures. While Papua New Guinea is in the throes of putting in place new institutional arrangements, for these to be successful both AusAID and the government of Papua New Guinea would need to recognise the priorities and resourcing issues involved for effective R&D in the agriculture sector.

For the smaller states of the Pacific, with the possible exception of Fiji, the balance could be shifted toward R&D partnerships with regional organisations. This would be a cost-effective approach – and in many cases, the only approach. Many problems and development needs are shared, whether one is looking at logging in Melanesia, diseases of root crops in Polynesia, absence of produce markets in Micronesia, on pressure on reef fisheries everywhere. ACIAR has two existing models that could be applied – the combination of core funding and project support such as is used for the international agricultural research centres, and the straight project partnership with regional organisations such as exists with SEARCA in the Philippines.

Defining the plan

In defining a planned approach to the Pacific region, it is the Review team's belief that ACIAR could seek the assistance of those agencies that have the ability to act as a research broker in the region or to reach beyond individual countries. For example, the assistance of the Secretariat of the Pacific Community (SPC) could be sought in organising a meeting involving the several international and regional organisations active in the Pacific with development programs in agriculture, fisheries and forestry. The French institutions could be

important contributors. The outcome would be a policy paper for consideration by the ACIAR Board of Management – and consequently, as a basis for interaction with the region's key donors, Australia, France, New Zealand, Japan and the European Union. ACIAR has already established dialogue with France with a view to cooperative research partnerships in the Pacific.

The possibilities for consequent action are:

- for Papua New Guinea, ACIAR could shift the emphasis from its well-established collaborative research partnership model toward a more active participation through research involvement in the planning of natural resource development and in capacity-building of the emerging research infrastructure this approach would gain great strength through cooperation with AusAID;
- for the small island countries of the Pacific, ACIAR might focus more on regional activities as distinct from bilateral projects. In developing this model, ACIAR might consider applying a similar approach to that it uses with its restricted grant program with the international agricultural research centres, with those regional bodies that have appropriate research capacity. There will have to be a useful element of human resource development in the partnership, conferring lasting benefit to the Pacific's research capacity. There will also be spillover benefits for Papua New Guinea and vice versa;
- a search could be made, using the regional network, for adequate Pacific representation on ACIAR's Policy Advisory Council.

Whatever the eventual format of ACIAR's Pacific Islands Program, the requisite arms of government should also be involved from the start as they inherit the task of conveying end results to farmers, fishers and forest users. The regional organisations carry an advantage in such communication through their intimate association with island governments.

Recommendation 10

Operative success depends on the introduction of an adaptable and flexible research partnership model that adjusts to changing and differing needs over time and country location.

The Review team recommends that ACIAR examine alternatives to the usual mode of operation in countries or regions where the research infrastructure is inadequate to maintain a balanced input, focusing initially on the special needs of Papua New Guinea and the Pacific countries by:

- for Papua New Guinea, deliberately changing the partnership balance, recognising both the potential of its natural resource base and the weakness of its infrastructure. This revised approach, toward which ACIAR has already taken steps, would gain great strength through cooperation with AusAID;
- for the small island countries of the Pacific, moving to a regional partnership akin to the approach used by ACIAR in restricted grants with the international agricultural research centres;
- seeking adequate Pacific representation on ACIAR's Policy Advisory Council; and
- the ACIAR Director preparing a policy paper for the Board of Management to use as a basis for possible future interaction with the region's key donors.

3.5 Concentration of effort – ACIAR's niche

It is Australian Government policy that the national responsibility is to help ensure stability and prosperity in near neighbouring countries. In its response to the Simons Review the Government agreed that 'Australia's aid program be concentrated on PNG and the Pacific, East Asia [Cambodia, Laos, Vietnam, China, Indonesia and the Philippines], and selectively in South Asia, Africa and the Middle East. The aid program already has a focus on the poorest regions in eastern Indonesia, the southern Philippines and China. Priorities in South Asia and Africa will reflect countries' development needs and prospects and Australia's broader national interests'. ¹⁵

ACIAR's portfolio already reflects this policy position, and an enhanced focus on the development of priority statements and strategies for the countries and regions in ACIAR's mandate will ensure that this continues. As developing countries themselves become increasingly able to articulate national rural development strategies, there may be opportunities for ACIAR and AusAID to take a complementary and multidisciplinary approach to agriculture and rural development within the broader aid program target of assisting the poorest of the poor in marginal areas. In some cases this may imply a longer-term commitment for ACIAR within a particular development thrust.

The Review team believes that ACIAR could take advantage of opportunities that might arise to contribute to multidisciplinary multidonor development programs. It will need to ensure that its resource inputs to participatory research efforts in this context are within its capacity and avoid high transaction costs. A long-term commitment to on-farm experimentation may

not always suit ACIAR's mode of operation, and there may be benefits to working in closer collaboration with international agricultural research centres to achieve the desired linkages.

ACIAR's project portfolio at present comprises a small but not insignificant number of 'small' projects (with budget under \$150 000 and duration of up to two years) and a large number of 'standard' projects (with budget over \$150 000 and duration of three to five years, with the average duration somewhere between). A common scenario for the larger projects, however, is to extend the research for as long as up to two years, and/or to have a 'follow-on' or 'replacement' project that continues the research effort, often in a more targeted or applied way. In effect, many projects have comprised seven or eight years of activity and support by ACIAR – support that is quite justified in view of the outcomes.

The benefit and cost-effectiveness of small projects is an issue for ACIAR to consider. In the partner countries the benefits of small activities were generally questioned as a result of the small amount of financial support they contributed to the partner-country research institution. Indeed, in some cases, there is no direct partner-country involvement. ACIAR's resources are not large-scale, and dilution of the research effort through a multiplicity of activities is undesirable. In addition, the larger the portfolio, the greater ACIAR's research management requirements will be.

A related issue for ACIAR is the timeliness of decisions made to terminate, extend or renew project support. In both partner countries and Australia the Review team was advised of research that was allegedly placed in jeopardy and contract personnel who had to be retained during the period between projects. Australian research institutions are not alone in experiencing contracting core research budgets and consequent resource constraints.

The Review team believes it is important for ACIAR to envisage a range of project modes and duration that reflect the priority agricultural research and development needs of the partner country, and that are geared to ACIAR's niche. The example of a different approach for Papua New Guinea and the Pacific countries is one option of a different operating mode. The Review team proposes that where ACIAR has identified and accepted the research need, and has clearly identified its own role within that need, it should be prepared to commit itself to support for a program of activity for an appropriate period. This program may be serviced by a number of linked projects of lesser duration, with well-established milestones.

The recently established program of R&D for Papua New Guinea has this structure of projects within a program, with AusAID support, and would be applicable elsewhere, including the Pacific.

However, there will still be a place for short, targeted research with clearly predictable outcomes in particular research areas or countries. More importantly, there will be a need for flexibility and astuteness in determining the approach appropriate to the country concerned, based on analysis of the situation, and relevance to the priority framework. The research and development needs of a particular country might be acute, but might require only a relatively small involvement by ACIAR in order to stimulate the research effort and subsequent technology transfer. Projects of three to five years duration therefore might be quite appropriate to China, for example. On the other hand, the needs of Papua New Guinea and the Pacific Island countries might justify a much longer commitment to research and capacity-building through program support in order to achieve impact.

Recommendation 11

Operative success depends on concentration of effort through targeted research and development activities that are situated firmly in the context of identified development priorities and that reflect the complementary niche for ACIAR in stimulating research and development outcomes.

The Review team recommends that:

- ACIAR and AusAID interact in the formulation of agricultural and rural development priorities and strategies in the Australian aid program, and determine their respective or joint roles;
- ACIAR be prepared to envisage a limited number of opportunities to work with other donors in a multidisciplinary development effort;
- ACIAR be willing to fund the research and development effort for as long as is appropriate to the country, the problem and ACIAR's own role.

PART 4: CAPACITY FOR CORPORATE CHANGE

4.1 An effective structure

The Review team was given six terms of reference in its brief. Two of these (numbers 5 and 6) are relevant to the organisational structure of ACIAR. An organisation chart depicting the current structure is at Appendix 3.

As a result of consultations with ACIAR staff and scrutiny of the current structure, the Review team identified a number of areas where some changes had the potential for organisational improvement.

The Director currently has 15 people reporting to him. This means that a considerable amount of his or her time is occupied in staff administration and appraisal. This would be considered excessive for the CEO of any organisation that employs about 60 people. A structure which delegates some of the line management tasks but leaves the Director in contact with program policy and scientific aspects of ACIAR would seem desirable, particularly in the light of the roles of the Director and Board of Management that were identified earlier.

The Board expressed its concern to the Review team that the Director remain involved with the policy directions for each research program and monitor the quality of the scientific components. The structure the Review team proposes still retains this responsibility for the Director but relieves him or her of administrative and scientific staff appraisal functions.

All of ACIAR's research programs report to the Director, as does the Communications program. In addition, there is a position of Principal Adviser, who also has responsibility for coordinating the international agricultural research centres program. The review team sees no compelling reason why the person heading the international agricultural research centres program should have a special role as adviser to the Director, who should draw advice from all senior managers. If the reasons for creating the position of Principal Adviser are to provide high-level policy advice, liaison with government departments on policy development, and to have someone stand in for the Director in his or her absence, then this position would be better described as Deputy Director.

The Corporate Services program reports to an Associate Director position. This position has responsibility primarily for ACIAR's operational (corporate) policy and procedures and, like the Principal Adviser, deputises for the Director during his or her absences overseas or on recreation leave.

An option would be to have a Deputy Director who has line management responsibility for all of the research and development program managers, including the international agricultural research centre program. This option would remove the necessity for a Principal Adviser. The move to place the multilateral and bilateral programs on the same footing recognises matters which the Review team suggests that ACIAR needs to clarify: why the balance of the multilateral and bilateral funding is set the way it is; whether these should be seen as discrete parcels of funds; and whether there is room for better integration of the two programs. ACIAR's objective should be to use the multilateral and bilateral programs as strategies to achieve its overall goals, and this is how it is shown in ACIAR's Corporate Plan.

An important point to note in any organisational change is to bear in mind that some positions (the Deputy Director position, for example) are already established (though vacant) whereas new positions may require further justification.

In most medium- to large-sized organisations, there is a close administrative link between information technology (IT) and communications/information. Currently in ACIAR these two areas are separate. Bringing them together under a single administrative head could provide some benefits, as there appears to be a need to inject more sophisticated IT into the Communications section.

The existing position of Associate Director is currently vacant. This provides an opportunity for some structural adjustment such as combining Communications and Computer Services, and moving the Policy and Secretariat and Executive Secretariat groups out so that they report directly to the Director. The responsibilities of the current Corporate Affairs Manager position would need to be amended to reflect the proposed structure but there are opportunities to focus the position on overseas support, including the overseas manager teams, liaison with non-government organisations and negotiating the partner-country and domestic legal framework for ACIAR's operations. Such an arrangement is shown in a proposed new structure in Appendix 4, with the Associate Director position renamed Deputy Director (Corporate Programs) to signify the symmetry of responsibility in relation to the Director.

The rationale for combining the Policy and Secretariat and Executive Secretariat groups into a Policy Secretariat is to emphasise the importance of the Director's role in policy development and executive functions, and to provide a broader range of high-level support to the Director and Deputy Director(s).

In summary the Review team suggests that considerable efficiencies would be achieved, together with improved clarity of leadership and line management responsibility, through a structure that, under the Director, comprises primarily a program of research and development, headed by a Deputy Director, Research and Development Programs (the current vacant Deputy Director) and a program fulfilling corporate functions – and including the external and internal communications functions – headed by a Deputy Director, Corporate Programs (the current substantively vacant Associate Director position).

The appointment of a Deputy Director, Research and Development Programs, should provide the Director with more time to explore, develop and nurture opportunities for collaborative research and development initiatives with like-minded organisations, NGOs and the private sector.

In addition, each Deputy Director would have an external communication role in support of the Director, and could help fulfil some of the recommendations suggested earlier in this report that require strategically appropriate interaction with stakeholders. These include, in particular, the building of the ACIAR–AusAID partnership, ensuring the development of priority strategies reflecting regional and country research and development needs and achieving a multidisciplinary approach to program development, facilitating the adoption of research outcomes, developing and implementing a responsive training strategy, contributing to policy dialogue in Australia, and responding strategically to concerns such as equitable intellectual property rights and private sector involvement that will be critical to the ongoing effectiveness of the research partnerships. The Review team also notes and commends the

Director's efforts to instil a greater management ethos among Research Program Managers, and to foster a cohesive corporate body, and expects that the Deputy Directors will need to maintain this momentum.

Program efficiencies

The Review team did not propose to make recommendations on any other structural matters that might flow from the above suggestion, and recommends instead that the two Deputy Directors be appointed with a view to their tackling the issues of program structure and efficiencies required to achieve the changes advocated in this report. However, it might be useful to state some important key matters for consideration that were put to the Review team.

- It is apparent, and was commented on several times, that ACIAR's commodity-based program structure inhibits multidisciplinary research. Cross-program linkages, even between existing projects, are difficult to achieve, particularly when no underlying strategy that links projects is apparent. The development of multidisciplinary approaches is essential to address the complex problems of natural resource management in developing countries, but this is a challenge to ACIAR because of its discipline-based mode of project management.
- A more effective structure might be to have several multidisciplinary or similar-discipline teams in the research program. Such an arrangement could also create opportunities for some rationalisation of support staff, with a view to middle-level scientifically qualified support as well as lower-level administrative support. Furthermore, one of the implications of larger, longer projects and streamlined administrative procedures might be that fewer Research Program Managers would be needed.
- ACIAR might examine the possibility of dedicated positions within the organisation: to provide improved linkages with AusAID (such a position could be a desirable way in which to promote understanding of the two organisations' modes of operation through staff exchange); to promote understanding of the role NGOs might play in ACIAR projects; to enhance knowledge of research extension and technology transfer methodologies and opportunities; to provide training expertise for the development of tailored training programs; or, in the absence of other strategies to achieve interdisciplinary research, to facilitate work across programs. Care would need to be taken to ensure that any such positions did not substitute for the shared corporate responsibility that is necessary for all of the above.
- Increasing concern over intellectual property rights among researchers suggests that ACIAR might need to look to in-house legal expertise to manage this, and related contractual matters, in the future.
- ACIAR must recognise the imperative of linking traditional communication with information technology and take decisive steps toward achievement of ACIAR's Information Management and Communication Strategic Plan in the fulfilment of ACIAR's research communication mandate. This is further discussed in the following section.

Recommendation 12

ACIAR could demonstrate capacity for corporate change and achieve a more effective structure.

The Review team recommends that:

- there be clear leadership and organisational structure as set out in Appendix 4; and
- both Deputy Directors be motivated to seek structural and program enhancements that maximise the potential of staff and programs to contribute effectively to the achievement of ACIAR's identified goals and priorities.

4.2 Modern communication

The Review team received consistent comments about the high quality of ACIAR's publications, specifically the publications relating to the outcomes of ACIAR's research – conference and workshop proceedings, technical reports, monographs and working papers. The information distributed through ACIAR's less specialised newsletters and *Partners* magazine is also much appreciated. ACIAR's research publications can be seen to make an important contribution to scientific literature, but perhaps have less impact on the body of development literature, as might be expected.

This does raise the question of whether the efforts devoted to the production of high-quality scientific publications are achieving as much impact as they could, and the Review team was interested to pose the question to developing country researchers of whether ACIAR's publications contributed to the uptake and adoption of technology. In most cases the response was vague, but ACIAR's publications seemed to be valued more for their capacity-building attributes and contribution to scientific literature in developing countries than for the dissemination of results to assist the technology transfer and extension process. The Review team does not wish to suggest that this is necessarily inappropriate. However, there is a feeling among ACIAR's partners that additional benefits could be derived from an enhanced focus on the dissemination of information that stimulates technology uptake, and by capitalising on an already established good track record in publications.

The Review team feels that ACIAR has been rather slow to pick up on the opportunities afforded by modern information technology. It was apparent to the Review team that access to electronic media, including the Internet, is increasing rapidly in developing countries (many submissions were submitted via this route), and many of ACIAR's developing-country partners expressed disappointment that extensive information on ACIAR and its project outcomes was not readily available electronically. In particular there was a clear view that developing-country partners could derive significant benefit from ACIAR publications being available on the Internet.

ACIAR has recently established a web site, but the Review team feels that there is much more that ACIAR could do to present information on itself and its research outcomes more effectively to meet the information needs of a variety of stakeholders, notwithstanding the relatively small size and budget of the Communications team.

The Review team notes that ACIAR has an excellent and comprehensive Information Management and Communication Strategic Plan, and that considerable effort went into the production of this plan. What is lacking to date is decisive positive action toward the implementation of that plan. ACIAR does not need to be a path-breaker in communication and information technology but should position itself to be able to make effective use of information technology to achieve its primary communication goal of disseminating information on project outcomes. This need not be restricted only to current or recently concluded projects. The valuable information contained in publications relating to past projects could be important for extension officers, quite apart from the scientific community.

The Review team is sure that ACIAR could use modern communication methods to greater effect to disseminate the results of research, to increase public awareness of ACIAR, particularly in Australia, and for handling data, records management and publications. The structural changes proposed in section 4.1 are intended to assist a process of change in this regard. Structural change will provide leadership for the effective management of information technology and its applications, publications and the library.

The Review team therefore does not wish to pre-empt further steps – the way ahead is clearly set out in the strategic plan. However, a few comments made generally could be considered by ACIAR.

- Greater use of IT by ACIAR would achieve better penetration of Australia's R&D infrastructure. In response to criticisms of project selection and transparency of processes, ACIAR could on its web site, for example, publish its country and regional priorities, indicate that proposals are welcome, and provide an indication of the processes and criteria for project selection and development. This will foster some awareness of the complexities and timeframe inherent in the implementation of successful collaborative projects.
- On the basis that there is as much interest in developing countries in having access to ACIAR as there is in the Australian research community, ACIAR could attempt to define Australia's research strengths that are appropriate to the developing-country research context.
- Final project reports and review reports often contain valuable information about intermediate and final research outputs that is not communicated outside ACIAR. Timely provision of this information to relevant policy-makers and researchers, both within Australia and partner countries, has the potential to foster dialogue and bring about policy change.
- The more extensive publication of technical information in local languages would enhance the effectiveness of publications and assist the technology transfer process.
- Manuals and publications produced in the partner countries themselves, in partnership with a local publishing agency, would help technology transfer and institutional capacity building in its own right.
- The distillation of project-based information into decision-support tools and other knowledge-based systems is an area where ACIAR could take a leading role.

- Publication in refereed journals would assist the credibility and independence of research outputs. More leverage could be gained in the scientific community if the results of ACIAR work were more strongly represented in mainstream international conferences.
- Networks of researchers and fellowship alumni could be fostered through ACIAR's web site.
- While it is clear that ACIAR is well-regarded by Government, it is not clear that ACIAR's role and value is well understood in the broader Australian community. There may be scope for a deliberate effort to improve public awareness of ACIAR's work and its benefits. Such an effort could be undertaken independently, as part of, or complementary to, the Government's agenda to promote community understanding of, and support for, the aid program.

Recommendation 13

ACIAR could improve its capacity to use modern communication to achieve its goal of disseminating information on programs and project outputs to a wide range of stakeholders in partner countries and Australia.

The review team recommends that a key task of the Deputy Director, Corporate Programs, be to manage the imperative of linking traditional communication with information technology and to take decisive positive steps toward implementation of ACIAR's Information Management and Communication Strategic Plan.

4.3 Cost-effective program management

This section relies heavily on the focused and thoughtful comments and suggestions contained in submissions. The Review team emphasises that what may appear to be strong criticism of ACIAR's processes was in all cases motivated by desire to see ACIAR remain a leader in research support. ACIAR's interaction and collaboration with research organisations has been good, but could be better.

System streamlining to meet client needs

There is no doubt in the minds of ACIAR's supporters that its comprehensive planning processes and guidance to proponents result in high-quality, well thought-out proposals. The employment of specialised Research Program Managers, the collective 'in-house review' and an interactive project development process increase the likelihood of projects more successfully competing for ACIAR funds.

Many institutions recognise that the processes applied by ACIAR result in extremely good research proposals, and attribute this largely to the thorough evaluation pipeline, involving concept outline, Phase 1 proposal, Phase 2 proposal, peer review and Phase 3 final proposal. It was felt that the Australian Government could rest assured that it 'funds world class, relevant research through ACIAR'. ACIAR is also appreciated as a very accessible and welcoming organisation.

As against these positive points, the most consistent criticism of ACIAR apart from the concern to ensure the uptake of technology from its projects was about the time-consuming

nature of ACIAR's project processes. Almost every submission from Australian institutions commented on this, and developing-country researchers, in discussion with the Review team, concurred.

It is important to note that the negative comments related overwhelmingly to **project development** processes, as opposed to project management, where, on the contrary, the level of satisfaction seemed high. ACIAR's approach to project management was viewed as amongst the most enlightened, in particular the way in which ACIAR trusts the commissioned organisation, as managing agent, to carry out the project without excessive intervention. Monitoring and review is undertaken by highly competent scientists, and occur at appropriate intervals.

The negative comments about project development, while recognising the accountability requirements for ACIAR as a public funding body entering into large, long-term commitments, focused on what they perceived to be the 'maze of approval processes and guidelines', the 'excessively bureaucratic and tortuous process', the 'long, time-consuming and cumbersome' nature of this process and the assertion that ACIAR projects have a reputation of requiring twice the time and effort to design and gain approval than those with other R&D funders.

Of course the inclusion of overseas research institutions in ACIAR's projects, and a focus on a developing country rather than, or together with, an Australian problem are additional dimensions that make ACIAR quite different from many other domestic R&D funding bodies. In addition, ACIAR operates under government-to-government protocols, and this imposes a layer of political sensitivity that must be managed in a formal way. These dimensions logically pose difficulties for the Australian proponents, and in this respect, the expertise and knowledge of ACIAR's Research Program Managers come into play.

Implementation difficulties or contractual negotiations often seem to be the root cause of delays in project commencement. In Thailand, the Review team was made aware of several years delay in commencement of a project because a third country had not yet agreed to participate. As a result of the delay, the contributions of the original collaborators were now at risk. This is an extreme example that represents the exception rather than the rule, though there were other instances quoted to the Review team where project activity had commenced, but funds had not yet been made available by ACIAR because of delays in obtaining formal contractual agreement from one of the participating countries. The Review team commends ACIAR's stance of requiring that projects commence only when the correct contractual processes have been carried out, but encourages ACIAR therefore to be proactive in seeking solutions to apparently insurmountable problems that jeopardise a project's success and cause frustration on all sides.

A long timeframe for project development is discouraging, and cannot fail to jeopardise the relevance of the research itself as well as the nature and effectiveness of the partnership. An interesting counter-view to the problems of the long lead-time in ACIAR projects was put to the Review team in Vietnam, however. In countries where the collaborative program is new, there are real capacity-building benefits in the long project development timeframe that provides for training in project preparation and design, for the mode of operation to be understood, for English language skills to be developed, and for cultural and technological matters to be clarified.

The Review team recommends that ACIAR move quickly to shorten the timeframe and simplify the steps in project development without negative impact on what appear essentially to be sound processes of quality control. The quality of ACIAR projects (indicated by a transparently low failure rate once proposals are 'in the system') and the positively regarded opportunities for interactive project development should not be compromised.

It is important that ACIAR drive and have ownership of any changes made to the project cycle, and ACIAR's Research Program Managers should be involved actively in this. The Review team was encouraged by the range of suggestions put forward by the Program Managers themselves, signalling willing capacity to improve the processes. As an initial step, the Review team recommends that ACIAR involve some of the main external critics of the process in a working party with ACIAR senior staff to examine the parts of the process that cause the most delay and frustration and to canvass options for improvement.

The submissions to the Review are an excellent starting point from which to canvass the views of collaborators, and so some specific comments on the project cycle are summarised below together with suggestions that were made for improvement. They highlight the fact that ACIAR needs to find an appropriate balance between on the one hand the accountability requirements of a public funding body dealing in large, complex, multi-country projects and, on the other, the need to expedite, streamline and effectively communicate its policies and processes in order to meet the expectations and requirements of its clients. Re-evaluation and recognition by all partners in the relationship of their own and each other's requirements should facilitate a mutually acceptable outcome.

- ACIAR could specify a reasonable timeframe for project development six months
 would seem appropriate and work with proponents to reach this goal. Within that total
 timeframe, a reasonable turnaround time for proposals could also be set two months, for
 example. ACIAR could also consider calling for proposals at specific times each year.
 ACIAR could nevertheless recognise the need for a reasonable lead-time to the
 commencement of projects with new countries or new institutions.
- To expedite project preparation Australian project proponents and Research Program
 Managers could work more closely together, perhaps at ACIAR. In order to facilitate this
 and to complete project design in a timely way, ACIAR might consider funding project
 design teams. If ACIAR was willing to fund proponents to develop projects, this would
 provide it with leverage.
- A smaller in-house review group that involves fewer program managers might be able to meet more frequently. ACIAR will need to ensure that the in-house review process does not influence project design at the expense of the original needs of the partner country.
- More use of project planning workshops will facilitate problem definition, project design, the formation of functional collaborative linkages and the identification of adoption mechanisms and pathways.
- Delays in project implementation due to lengthy overseas negotiation processes indicate a
 need for ACIAR to better manage its project planning and pipeline, and to communicate
 more effectively with its partners. If projects do align with partner-country priorities, and
 the developing-country partners at all levels are involved appropriately in project
 development, project approval is likely to be facilitated. In recognising the desire of

partner countries to have firmer control over the selection of proposals that are in line with their national priorities rather than institutional research interests, ACIAR may wish to encourage project prioritisation committees within partner-country implementing agencies, such as exist in Indonesia, for example.

- Some concerns were raised over the complexity of ACIAR's project guidelines, the length of project documents, the apparent illogical sequence of components required in the documents, and the token attention paid to some of these by proponents. In particular, the value of each section of the project document in contributing both to the effectiveness and quality of the research itself and to its impact could be re-evaluated. In this context the Review team questions why gender impact is not a strong focus in ACIAR's projects and appraisal processes. ACIAR is currently reviewing its project guidelines and the Review team encourages ACIAR to complete this process and ensure ongoing review.
- Lengthy processes mitigate against a timely response by ACIAR to urgent environmental or agricultural issues in a region. ACIAR needs to be able to mobilise funds for projects that react to crises or emerging issues in a timely way.
- A prescribed project length mitigates against the viability of an activity that is designed to meet a particular need. ACIAR has become more flexible about project duration, though many people the Review team spoke to seemed unaware of this. Many collaborators were appreciative of the fact that ACIAR is prepared to fund a second phase of a project if results are promising. However, they are unhappy that, in such cases, progression to a second phase of activity requires submission of a new proposal and negotiation of it through the entire project development process again. The result may be a hiatus in funding that compromises the continuity of personnel and of the research itself.

A more flexible stance on project duration, motivated by the imperative of funding an activity for the term appropriate to the identified need and niche for ACIAR, may commit ACIAR to larger, longer-term activities. In such instances the need for project players to re-enter the project development system to gain approval for continuing activities within an identified strategy should be minimised. Project reviews have to be timed to enable decisions about project extension and continuation to be implemented in a timely way. Against this ACIAR will need to balance the desirability of broadening or changing the collaborator base in an activity to involve the best team to achieve relevant outcomes and impact.

Equity of funding and activity

Some of the suggestions above imply higher project development costs to ACIAR. As against this, the timeframe and complexity of ACIAR's project development processes as they stand give proponents a good case for seeking some reimbursement, in financial terms, of their efforts. Of course there are resource costs to ACIAR from intensive evaluation processes, just as there are to the proponent organisation, and these considerations alone suggest a need for re-evaluation of the effort that is invested.

It will be for ACIAR to examine whether the possibly increased costs of project development will be repaid in the form of a more efficient pipeline and enhanced project outcomes. For example, increased focus on project development jointly by the Australian and developing-country partners could necessitate a greater commitment to pre-project visits to the

developing country, but would be critical to assist in problem definition, to understand the partner-country research environment, to foster successful collaboration between researchers and to identify and build relevant adoption pathways into projects.

Generally the funding levels and arrangements in ACIAR projects were viewed to be appropriate. ACIAR now funds research infrastructure costs and does this in an equitable way. Many institutions, particularly universities, considered that the maximum overheads covered by ACIAR still fall well short of the real costs. ACIAR in general does not cover the salaries of project leaders in Australia or in partner countries, and this may ultimately affect the ability of research organisations to participate. The burden of administrative requirements is felt to be high and in the commissioned organisation falls primarily on the Australian project leader. The cost to the commissioned organisation therefore has to be weighed against the benefits of the collaboration. If the costs are too high ACIAR may fail to be able to attract the best quality researchers whose time is most valuable.

A focus on outcomes in the partner country and on the benefits of the collaboration to Australia should help to keep ACIAR's program in partnership rather than contractual mode, but there may still be instances where increased remuneration can be argued by either the Australian or developing country collaborator. The Review team recommends that ACIAR take a flexible approach to the demands for salary recovery or funding of replacement staff by institutions, based on realistic assessment of the benefits of the collaboration. If ACIAR does agree to meet salary costs, the inevitable result will be an increase in the costs of projects, and consequently a reduced number of project opportunities. Whatever ACIAR determines with regard to cost-recovery by its partners, the Review team is certain that ACIAR will need to recognise the increasing costs of research as the public funding base of institutions diminishes, and be more prepared to fund these, both in Australia and in developing countries.

The Review team notes that a relatively small proportion of actual ACIAR funds in projects goes offshore to the developing country. This may lead to perceptions of inequity of benefit in the partner country, particularly given their own in-kind contributions and growing capacity to participate internationally on an equal footing. Overseas partners expressed the keen desire to be treated as equals within projects, observing that the actual amount of funds flowing to their country was less important than the equitable nature of the resources (including the in-kind contributions of each participating institution) and activities generally. Some felt that there was a tendency within projects for the higher-level experimental work to be done in Australia and lower-level work in the partner country. It will be important for ACIAR to remain vigilant over the equitable nature of the research partnerships.

Transparent project selection processes

One of ACIAR's strengths is the way in which it employs a clever mix of proactivity and reactivity in project selection, working within developing-country research priorities and matching these to Australian research strengths. Its weakness by all accounts is that an indication of these priorities and strengths is accessible only with considerable difficulty and persistence on the part of proponents. There has already been discussion in this report of ACIAR's priority-setting processes and the breadth of inputs sought to these. A related issue is for ACIAR to be quite transparent about the strategic directions and policy parameters for its programs, in order to justify the weight given to particular program areas, to particular research areas, or to collaboration with particular institutions.

The argument was made, for example, that research into aquatic and marine resources is under-represented in ACIAR's programs, considering Australia's interest in these resources and the potential they have to increase incomes and alleviate poverty in the developing world in general, and the Asia–Pacific region in particular. Continuing with the same argument, normal priority-setting processes rate the Pacific countries low, in view of the relatively small numbers of people involved, yet fisheries research in the Pacific has the potential to have tremendous impact on livelihoods.

The ACIAR system, while competitive, favours teams whose research strengths have been recognised before by ACIAR, whose track record of delivery is good, and whose knowledge of the developing-country research context, and of ACIAR's processes, is thereby advanced. It can easily be argued that this is as it should be. However, it creates the perception that ACIAR commissions the same institutions, or the same researchers within institutions, for its projects, and that this occurs not only in Australia, but also in the partner country. In the overseas countries, the partnership mode itself favours the country's scientific elite and those with good overseas networks.

ACIAR has been increasingly aware of this view and has moved to raise its profile throughout Australia and to place project proposals, including those that are essentially a continuation of an earlier research effort, on an equally competitive footing. This seems to have created the unfortunate impression among some stakeholders that ACIAR is willing to work with possibly less appropriate partners in order to be able to claim the involvement of new collaborators. It has also increased the timeframe and complexity of the project approval process for these activities.

The Review team agrees with the view that, ultimately, ACIAR must work with the scientists and institutions that are most effective in delivering against ACIAR's objectives. This will imply researchers of high quality, with skills in overseas collaboration and proven capacity to deliver well, who have developed professional links overseas, and who are committed to the type of activity. The Review team recommends, however, that while ACIAR should legitimately continue to commission relevant activities, drawing on the knowledge and experience of its scientific staff, it could also test the approach of seeking expressions of interest in project areas that ACIAR and partner countries have determined to be priority areas for development.

Publication of developing-country priorities on ACIAR's web site, for example, or of priority research themes or topics designed to meet those priorities, would reduce the extent to which information flow is driven by R&D organisations and individuals seeking external funds to support their work. Resulting proposals are more likely to be in line with national partner-country needs and require less modification. Most collaborators recognised that it was not reasonable to expect ACIAR to make block grants to principal R&D providers, but felt that dialogue on R&D priorities and strategies might lead to healthier long-term relationships and departure from the current 'grant mentality'.

A move towards greater transparency of process in project selection will assist ACIAR to retain the confidence of its Australian partners, and ACIAR's Research Program Managers will have an important role to play in allaying any concerns. The onus is on the Research Program Managers to put together the right teams, to manage projects effectively, to be aware of project achievements and of new strategic directions, and to exercise sound judgment in extending, renewing or winding-up project activity.

The maintenance of ACIAR's professional staff skills

The Review team notes the positive regard in which ACIAR's Research Program Managers are held both in Australia and in partner countries. Like other funding bodies in Australia, ACIAR has created a central role for the Research Program Managers who are themselves researchers by training and experience, and who are thereby able to make technical judgments in the project development process. They have authority and independence to build and shape a strategic program, and this is essential to their effectiveness and to the level of respect and trust that needs to be placed in them to ensure success both in partner countries and Australia. Indeed it was suggested that ACIAR could document its experience of the role of Research Program Managers, focusing on the way in which they add value to programs. This would also highlight any changes warranted to enhance their effectiveness.

Comments were received about the supportive assistance provided by the Research Program Managers in the development of project proposals and their close and concerned interaction with developing-country partners in monitoring and evaluating projects.

The Research Program Managers are ACIAR's main interface with the scientific community and it is important that they be current in their fields, respected by their peers and have a clear management focus. They are also ACIAR's main interface with the international development community, and there were suggestions that the commitment to development among ACIAR staff and among Australian project staff, as opposed to clear scientific research commitment, was not always apparent. Opportunities for managers to maintain their scientific skills, to understand the wider development context and be culturally aware, and to develop management acumen through access to career development opportunities in the scientific, management and development fields are therefore critical.

The Review team suggests that ACIAR encourage Research Program Managers to keep abreast of developments in their field and maintain a network of contacts both in Australia and overseas. To do so, their programs will need to be adequately resourced, and some structural change might facilitate the necessary support arrangements. It would be valuable for Research Program Managers to have the opportunity of working on projects within Australian or developing-country institutions, to enhance their understanding of the difficulties encountered in the research partnership, and to maintain the relevance of their own research skills.

ACIAR provides an excellent opportunity for skilled researchers and research managers in Australia and in international organisations to make a contribution to international agricultural research, and the Review team agrees with the Board's policy of recruiting Research Program Managers for a fixed term, and indeed sees value in actively and consistently seeking secondment arrangements for this purpose. Some ACIAR Research Program Managers argued that a term of three years tended to be professionally unsatisfying given that a typical project duration of three to five years would mean they had little opportunity to shape a program or even to see a project though from start to finish. The Director argued a case for flexibility depending on the incumbent's preference and management's imperatives.

Taking account of these equally valid views, and the need for organisational stability and corporate memory, the Review team recommends that, as a general rule, Research Program Managers be appointed for a term of up to six years maximum. Within that maximum

timeframe, continuation of employment beyond three years should be contingent on performance in the first three years, as measured against clear objectives. On conclusion of the six-year term, positions should be re-advertised publicly and incumbents would have the right to apply. Nothing should prevent the Director from having the flexibility to offer contracts of shorter duration where appropriate to the situation or the individual concerned. In view of the lack of tenure in the positions, ACIAR may need to look to making the positions professionally rewarding and attractive in other ways (such as the training and development opportunities noted above) or through other conditions of employment.

The Review team also suggests that ACIAR management pay close attention to gender balance among its senior staff.

The Review team notes generally that ACIAR does not appear to be a 'learning organisation', and suggests that ACIAR explore opportunities to institutionalise training, induction and seminar programs that would foster both commitment to ACIAR's mission and an understanding and appreciation by all staff of the operating environment and policy context.

Overseas support

The other critical interface with partner countries is ACIAR's country managers. The Review team was impressed with the strong and effective support provided by ACIAR's overseas officers in the facilitation and implementation of ACIAR's programs. This was reflected in submissions and borne out at the time of the Review team's overseas visits. ACIAR's overseas managers play a potentially vital role in fostering close linkages with partner-country research institutions and agencies, providing feedback to ACIAR and Australian project staff on project achievements and problems, and maintaining a watching brief on other agricultural development activities, including the work of NGOs.

Some submissions suggested that ACIAR could boost its overseas support by including Australians with a technical base in the overseas support teams, who could assist locally with project design and implementation through interaction at the scientific level with local institutions. The Review team feels that the costs of such an arrangement would significantly outweigh any efficiencies and also notes the level of appreciation voiced by ACIAR's partners in developing countries and Australia about ACIAR's hands-off approach. The Review team recommends that ACIAR continue to provide support in key partner countries through administrative support teams headed by an ACIAR Country Manager, noting that the co-location of ACIAR's offices with the Australian embassies and High Commissions in developing countries seems to be a cost-effective and efficient use of resources.

Recommendation 14

Cost-effective program management and professionalism are vital to ACIAR's attractiveness and success.

The Review team recommends that ACIAR:

- take steps to shorten the timeframe and simplify the processes in project development, and involve Research Program Managers and external critics together in this process;
- take a flexible approach to requests for funding the increasing costs of research equitably in partner countries and Australia, based on realistic assessment of the benefits of the collaboration;
- continue to employ a clever mix of proactivity and reactivity in project selection but test the approach of seeking expressions of interest in project areas that ACIAR and partner countries have determined to be priority areas for development;
- continue to provide support in key partner countries through administrative support teams headed by an ACIAR Country Manager; and
- appoint Research Program Managers for terms of up to six years, with major performance review after three years, and encourage and support them, and ACIAR staff generally, to maintain relevant skills and awareness of the policy context and operating environment.

PART 5: ACIAR'S FUNDING BASE

5.1 A compelling case for substantial additional funds

ACIAR is juggling the needs of international development and the needs of Australian science in a much more critical way than was necessary even six years ago at the time of the sunset review. This involves some new costs, and also offers some new opportunities. The Review team believes that the changes advocated are critical to ACIAR's future success. But equally critical will be the need to resource these adequately.

The Review team identified a number of areas where an increase in funding was deemed to be justifiable: adoption of technology, international agricultural research centres, multidisciplinary team research, training and capacity-building, research infrastructure, and corporate structure. It was difficult for the Review team to put a figure on the additional funds required, but it is suggested a paper be prepared by the Director setting out details for each of the six areas indicated.

Given the thrust of this Review in urging more of a development focus for ACIAR, and taking account of the recommendations from the Simons Review, the Review team would confidently expect a compelling case could be developed that substantial additional funds should be allocated to ACIAR.

Adoption of technology

There is considerable scope, and much support, for ACIAR, as well as AusAID, to be able to foster the adoption of technologies arising from ACIAR projects. It would be unfortunate if development activities in support of ACIAR's research projects were undertaken at the expense of an already valuable portfolio of research activities. A general increase in ACIAR's core research budget would enable a greater focus on adoption through the strategies suggested in section 2.3, as well as providing ACIAR with independent means to extend promising research projects into a development or technology transfer phase. The opportunities will increase as the portfolio of projects continues to grow over ACIAR's lifetime.

Submissions have pointed out that agricultural policy is an area deserving greater research investment and offering good opportunities for collaboration between AusAID and ACIAR in view of the significant mutual benefits to be obtained from well-focused aid projects combining research and development. ACIAR has already begun to move in this direction and collaboration between ACIAR and AusAID is already occurring in the context of Asia–Pacific Economic Cooperation.

International agricultural research centres

There are clear arguments for supporting the international agricultural research centres, given their impact on food security and poverty alleviation. Australia is a disappointingly modest donor to the system. Through ACIAR, Australia currently contributes A\$9 million to the centres (though contributions are converted to US dollars as the operating currency of the centres and are affected adversely at present by the value of the Australian dollar). AusAID also contributes to some specific development-focused projects, and other Australian research funders contribute minor amounts. After a period of prior growth, Australia's contribution

has now plateaued, as have those of most other major donors. Many of the centres are facing acute funding shortfalls. It was argued that Australia's funding for the international centres through ACIAR should be at least US\$10 million – a doubling of the present contribution.

Multidisciplinary team research

Participative research into the management of shared agricultural resources will involve farming communities and other multiple stakeholders in the development of management strategies that will promote net social benefit. Watersheds, coastal zones, irrigation systems and communal grazing lands fall into this category. This is an area where ACIAR must be at the cutting edge of research: the industrialised countries are still grappling for solutions, but the problems are so acute that the developing world cannot wait. A key challenge is to put together biophysical and social researchers in multidisciplinary project teams that can work closely with farmers and policy makers. A related challenge is to manage such teams once they have been assembled. ACIAR has succeeded in developing only a few projects in this exceptionally difficult area. As ACIAR ventures more into multidisciplinary research, it will need the human and financial resources to meet the associated research management demands and costs.

Training and capacity building

Arguments for an increase in ACIAR's training activities recognise the strong contribution that focused training activities can make to building the capacity of developing-country researchers to continue the research effort and to assist technology transfer in their own countries. Increased resources allocated for training would enable both an expansion of a valuable fellowships scheme, and an increase to project budgets to incorporate enhanced training components, including support for English language training where this is relevant to the success of the research partnership, without this being at the expense of the research and development portfolio.

Research infrastructure

Research infrastructure costs will rise as the public funding base of research institutions continues to fall. If ACIAR is to meet equitably the rising demands of its collaborators, both in Australian and partner countries, for cost-recovery in projects, it will be faced with increasingly higher project budgets, particularly where ACIAR is forced to move into a more contractual mode of operation in instances where development priorities are high but Australian benefits are less evident.

Corporate structure

The structural changes proposed in this report, in particular the filling of the Deputy Director position that has been vacant for some time, recognise ACIAR's growth. Growth in ACIAR's budget since the sunset review has been directed primarily into the research program without concomitant increase of human resources.

Staying Ahead

Recommendation 15

ACIAR is a highly successful statutory authority in the Australian aid program, and has the potential for even greater development impact. The Review team confidently expects that a compelling case could be developed for the allocation of substantial additional funds to ACIAR.

The Review team recommends that a case be written for a substantial budget increase that takes account of the need and potential for ACIAR to:

- foster the adoption of research results and undertake related development activities across a larger number of promising research projects than is currently possible;
- undertake, with AusAID, well-focused agricultural policy projects that combine research and development;
- increase Australia's contribution to the international agricultural research centres in recognition of the clear development impacts and benefits to Australia of the centres' programs;
- meet the challenges of participative, multidisciplinary research efforts that are essential to address the complex problems of natural resource management in developing countries;
- improve the ability of developing-country researchers to continue the research and development effort in their own countries through expanded but focused training and capacity-building programs;
- accept the rising demands for cost recovery by researchers in Australia and developing countries; and
- implement an effective corporate structure.

REFERENCES

- 1. Australia. 1997. Better aid for a better future: Seventh annual report to Parliament on Australia's Development Cooperation Program and the Government's response to the Committee of Review of Australia's Overseas Aid Program. Canberra, Australian Agency for International Development, p. 16.
- 2. Committee to Review the Australian Overseas Aid Program. 1997. One clear objective: poverty reduction through sustainable development: report of the Committee of Review. Canberra, Australian Agency for International Development, p. 141.
- 3. CGIAR System Review Secretariat. 1998. The international research partnership for food security and sustainable agriculture. Third System Review of the Consultative Group on International Agricultural Research (CGIAR). Washington, CGIAR, p. vii.
- 4. CGIAR Secretariat. 1998. Mobilizing science for global food security: CGIAR system review: preliminary findings. CGIAR Mid-Term Meeting, Brasilia, 25–29 May 1998. Washington, CGIAR.
- 5. Mobilizing science for global food security, p. xvi.
- 6. Second Reading Speech on the *Australian Centre for International Agricultural Research Bill 1981* by the Minister for Foreign Affairs.
- 7. Falvey, L., Hills, R. and Sdoodee, R. (unpublished, 1998). Review of the ACIAR Training Program.
- 8. Mauldon, R.G. 1997. An assessment of the success and impact of ACIAR projects. Canberra, ACIAR Economic Evaluation Unit Working Paper No. 29.
- 9. One clear objective, p. 97.
- 10. Centre for International Economics (CIE). 1998. The potential benefits of reducing fish losses due to Epizootic Ulcerative Syndrome: An *ex ante* evaluation. CIE, Canberra and Sydney, p. 1.
- 11. Australia. 1987. Policy guidelines for Commonwealth statutory authorities and government business enterprises: a policy information paper issued by the Minister for Finance, Senator the Hon. Peter Walsh. Canberra, Australian Government Publishing Service, p. 11.
- 12. Australia. Cabinet Office. 1991. Cabinet Handbook [Cabinet Office, Department of the Prime Minister and Cabinet]. Canberra, Australian Government Publishing Service, p. 34.
- 13. Second Reading Speech on the *Australian Centre for International Agricultural Research Bill 1981* by the Minister for Foreign Affairs.
- 14. One clear objective, pp. 107, 114, 117.
- 15. Better aid for a better future, p. 18.

APPENDIXES

Appendix 1: Submissions

Australian submissions

Agriculture Western Australia

Australian Agency for International Development (AusAID), Rural Development Group

Australian Centre for International Agricultural Research (two submissions)

Australian National University

Australian National University, Centre for Resource and Environmental Studies

Australian National University, Australia South Asia Research Centre

Australian National University, Department of Forestry

Australian National University, Faculty of Science

Bevege, Dr D I

Brien, Dr J P

Bureau of Resource Sciences

Byth, Dr D E

Campbell, Emeritus Professor R S F

Chapman, Mr K

Commonwealth Scientific and Industrial Research Organisation (CSIRO)

Cooperative Research Centre for Soil and Land Management

Cooperative Research Centre for Tropical Pest Management

Copland, Dr R

Crawford Fund for International Agricultural Research

Dart, Dr P

Department of Foreign Affairs and Trade

Department of Industry, Science and Tourism

Department of Natural Resources and the Environment, Victoria

Department of Primary Industries and Energy

Dillon, Emeritus Professor J L

Evans, Dr P

Hayward, Professor C

Henzell, Dr E F

Hollywood, Mr N

Humphreys, Emeritus Professor L R

Johnson, Dr G

Midgley, Dr S

Mullen, Dr B

Murdoch University

Murdoch University, Division of Veterinary and Biomedical Sciences

Murdoch University, State Agricultural Biotechnology Centre

Musgrave, Dr W

National Farmers' Federation

Northern Territory University

NSW Agriculture

NSW Fisheries

Overseas Service Bureau

Possingham, Dr J V

Primary Industries and Resources South Australia

Queensland Department of Natural Resources

Queensland Department of Primary Industries

Redden, Dr R J

Staying Ahead

Riethmuller, Dr P

Ryan, Dr J G

Thurlow, Mr C D

Trewin, Dr R

University of Adelaide

University of Adelaide, Department of Animal Science

University of Adelaide, Department of Plant Science

University of Adelaide, Department of Horticulture, Viticulture and Oenology

University of New England

University of Queensland

University of Queensland, School of Natural and Rural Systems Management

University of Sydney, Department of Agricultural Economics

University of Sydney, Faculty of Agriculture

University of Tasmania, School of Engineering

University of Western Australia, Centre for Legumes in Mediterranean Agriculture

University of Western Australia, Faculty of Agriculture

Warr, Professor P

Woods, Mr P

World Vision Australia

W S Cummings Economic Research Services

Overseas submissions

China

China Agricultural University, Department of Plant Pathology

Chinese Academy of Agricultural Sciences, Oil Crops Research Institute

Chinese Academy of Sciences, Institute of Zoology

Chinese Academy of Social Sciences, Rural Development Institute

Sichuan Academy of Agricultural Sciences, Crop Science Institute

State Administration of Grain Reserves, Department of Storage and Transportation; and State Administration of Internal Trade, Department of International Cooperation

Water Environmental Monitoring and Assessment Research Center

Gambia

Gassama, Mr K

India

Central Food Technological Research Institute

Central Sheep and Wool Research Institute

Department of Agricultural Research and Education

Govind Ballabh Pant University of Agriculture and Technology

Govind Ballabh Pant University of Agriculture, College of Basic Sciences and Humanities

Indian Agricultural Research Institute

Indian Council of Forestry Research and Education

Indian Veterinary Research Institute

M S Swaminathan Research Foundation

National Bureau of Plant Genetic Resources

National Dairy Development Board

Nimbkar Agricultural Research Institute

Indonesia

BPTP Biromaru (Assessment Institute for Agricultural Technology)

Indonesian International Animal Science Research and Development Foundation

Udayana University, Faculty of Animal Husbandry

Kenya

UNICEF-ESARO, Regional Nutrition Adviser

Staying Ahead

Laos

Horne, Mr P, Forages for Smallholders Project

Malaysia

Prime Minister's Department, Economic Planning Unit

Universiti Putra Malaysia

Nepal

Chief Soil Scientist

Philippines

Benguet State University

Department of Agriculture, Bureau of Animal Industry

Department of Agriculture, Bureau of Fisheries and Aquatic Resources

Department of Environment and Natural Resources

Department of Science and Technology, Forest Products Research and Development Institute

National Economic and Development Authority

Philippine Council for Agriculture, Forestry and Resources Research and Development (PCARRD)

Sri Lanka

Kelaniya University, Department of Zoology

Thailand

Department of Agriculture (two submissions)

Department of Technical and Economic Cooperation

Food and Agriculture Organisation of the United Nations (FAO) (Asia and the Pacific)

Kasetsart University, National Center of Genetic Engineering and Biotechnology

Khon Kaen University, Faculty of Veterinary Medicine

National Biological Control Research Center

Prince of Songkla University

Prince of Songkla University, Department of Pest Management (two submissions)

Thailand Institute of Scientific and Technological Research

Vietnam

Ministry of Agriculture and Rural Development

National Institute of Plant Protection

National Institute for Soils and Fertilisers

National Veterinary Company (NAVETCO)

University of Can Tho, Mekong Delta Farming Systems Research and Development Institute

International Agricultural Research Centre submissions

Centre for Agriculture and Biosciences International (CABI)

Centre for International Forestry Research (CIFOR)

Centro Internacional de Agricultura Tropical (CIAT)

International Board for Soil Research and Management (IBSRAM) (two submissions)

International Center for Agricultural Research in the Dry Areas (ICARDA)

International Centre for Insect Physiology and Ecology (ICIPE)

International Centre for Integrated Mountain Development (ICIMOD)

International Center for Living Aquatic Resources Management (ICLARM)

International Food Policy Research Institute (IFPRI)

International Institute of Tropical Agriculture (IITA)

International Livestock Research Institute (ILRI)

International Plant Genetic Resources Institute (IPGRI)

International Water Management Institute (IMWI)

West African Rice Development Association (WARDA)

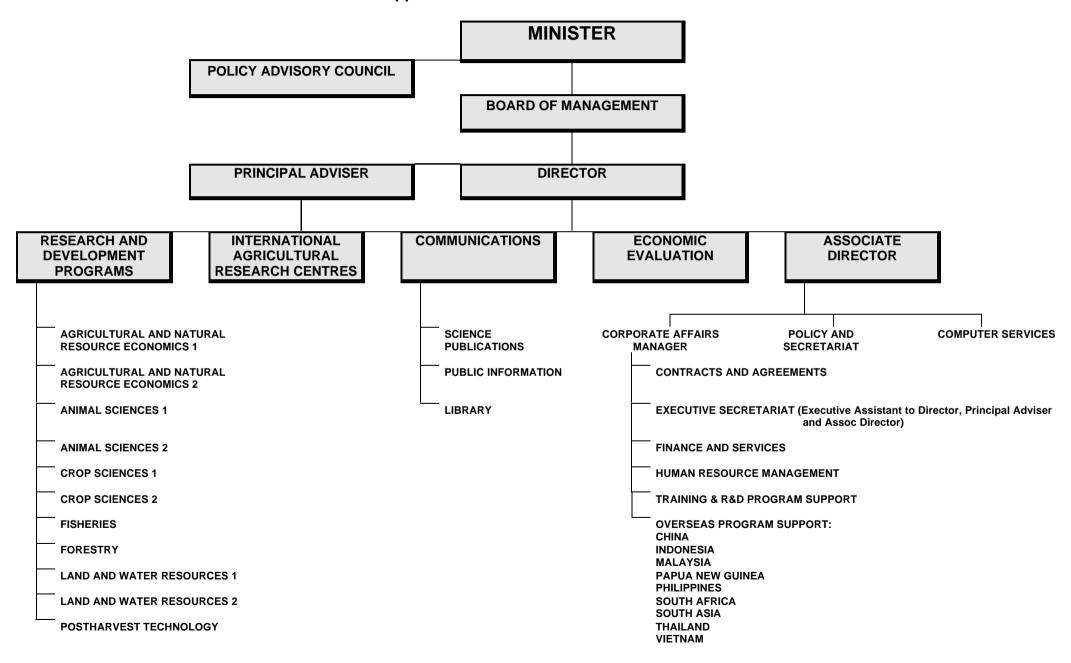
Appendix 2: ACIAR Training Review Recommendations

In early 1998 the ACIAR Director commissioned a separate review of ACIAR's training activities. The review was conducted by Professor Lindsay Falvey, Professor Rodney Hills and Dr Ratana Sdoodee. The recommendations of that review were that:

- 1. ACIAR should develop and promulgate clear policies guiding the development of its training activities. The strategies and guidelines should provide flexibility where special needs are encountered.
- 2. ACIAR's non-award training should be based on identified needs and should be provided through mechanisms that meet those needs through outcome-focused training activities. ACIAR may require professional advice on how to design some of its training activities.
- 3. Resources allocated to training should be increased marginally with the balance between various modes of training determined by Research Program Managers on a country and program basis. To assist introduction of such future flexibility, it is recommended that the Training Committee encourage an average of seven Fellowships per year over the next three years and thereafter set no guideline on numbers.
- 4. ACIAR's working relationship with AusAID should be strengthened through appointment of an AusAID senior representative to the Training Committee to enhance ACIAR knowledge of AusAID's policy direction and management systems with respect to postgraduate scholarships, and to monitor levels of contractual service, and areas of mutual investment interest.
- 5. ACIAR should widen Fellowship modes where appropriate to include in-country and third country institutions which can be well supervised by Research Program Managers. Fellowships should include well-structured sandwich programs which allow Fellows to conduct research in their country and would not encourage emigration. Support for Australian postgraduates should be limited to minor complementary funding in conjunction with existing funded university schemes.
- 6. ACIAR should monitor and report on all training on a readily understood basis through a Training Committee with new Terms of Reference and membership.
- 7. Research Program Managers should ensure that Fellows receive quality service and identify with and have a working knowledge of ACIAR by regular contact through an annual meeting of Fellows and regular monitoring of university services. Selected AusAID scholars should be invited to one such ACIAR meeting. A network ACIAR alumni service should be developed.
- 8. Research Program Managers should propose Fellowship applicants on the basis of consistency with medium and long-term program objectives and linkages to future projects, and should facilitate timely entry to study through management of placement and release processes.

- 9. Returning Fellows and selected AusAID scholars should be skilled in accessing research funds and be supported by ACIAR for up to two years provided an Australian collaborator and other sustainable research funds are accessed. ACIAR should extend this recommendation to appropriate returning AusAID scholars.
- 10. With regard to non-award training Research Program Managers should report on project-based training expenditures and accept responsibility for management of this training in terms of meeting project and program objectives and accountability requirements; recommendations of the Crawford Fund Master Classes Review should be implemented and reported on as part of ACIAR's regular training program; and a regular program of cross-program training should be funded to support both projects and broader institutional development.
- 11. ACIAR should quickly develop a capacity to collect and analyse data on its training program including on measures of effectiveness in order to ensure its accountability for the recommended 15% of its expenditure devoted to training.

Appendix 3: Current Structure of ACIAR



Appendix 4: Proposed Structure of ACIAR

