Mid-Term Review

of the

ACIAR 10-Year Strategy 2018–2027

and its impact on organisational performance and results

Final Report

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09 May 2022

Mrs Fiona Simson
Chair, Commission for International Agricultural Research

Dear Fiona

We are pleased to submit our review of the 10-year strategy 2018–2027 of the Australian Centre for International Agricultural Research (ACIAR). The panel congratulates ACIAR on the development and implementation of the strategy to date particularly in the face of the many significant changes in its operating environment. Stakeholders value ACIAR and are positive about ACIAR's 10-year strategy, approach, operations and programs and, while indicating they would welcome more longer-term transformational partnerships rather than *ad hoc* research projects, did not want to see wholesale changes to the strategy.

Much of the strategy has been achieved, to ACIAR's credit. However, notwithstanding the challenges of the last few years, the panel believes that there has been insufficient progress in the development of longer-term transformational research programs and this represents a risk to overall success in strategy implementation. The panel recommends some rebalancing of the budget to allocate specific funds to longer-term transformational projects on an aspirational trajectory over the next one to two years, with targets in Annual Operational Plans. As an example, opportunities appear to be available for development in the transformation of the CGIAR for ACIAR to deliver innovative new partnerships with the CGIAR and other stakeholders through brokering substantial investments of its own and CGIAR resources along with other interested partners and stakeholders to respond to major issues of concern in South-East Asia and the Pacific.

The panel has made 14 recommendations which we believe will enhance the implementation of the strategy. We wish ACIAR and the Commission success in delivering the next five years of the strategy.

Dr Wendy Craik AM Chair

Professor Lindsay Falvey Dr Beth Woods Dr Collin Tukuitonga

Dr Brian Keating Dr Samantha Grover Dr Carina Wyborn

Acknowledgements

The panel wishes to thank all those who contributed submissions and participated in discussions with the panel during the review, including ACIAR staff and the many stakeholders who gave generously of their time and thoughts. The panel would also like to thank the Chief Scientist, Dr Daniel Walker, for his willing support and assistance throughout the entire review process and Ms Suzie Gaynor without whose cheerful and outstanding organisational capacity and forethought this review would not have occurred as smoothly as it did.



Executive Summary

ACIAR's 10-Year Strategy (2018–2027) aims to build on its history and reduce poverty and improve livelihoods in the Indo-Pacific region through more productive and sustainable agriculture resulting from collaborative international agricultural research. The strategy addresses 6 key objectives consistent with the 2030 Agenda for Sustainable Development: food security and poverty reduction, natural resources and climate change, human health and nutrition, gender equity and women's empowerment, inclusive value chains and capacity building.

The strategy was predicated on increases in overall funding through growth in ACIAR appropriations and improving ACIAR's capacity to attract more strategic co-investment with a range of funders; it had four foci: fit for purpose research partnerships, evaluating, synthesising and assessing research impact, enhancing regional capacity building in policy and science and expanding outreach in Australia and partner countries.

Research management is largely undertaken by Research Program Managers (RPMs) working with researchers and officials in Australia and partner countries and facilitated by ACIAR's ten country offices. Importantly the strategy aimed to move from many small projects to fewer larger longer more programmatic transformational and transdisciplinary projects. Existing research programs were consolidated from 13 to ten, a new Chief Scientist position and Associate cross-cutting RPM positions were established, the senior Executive was expanded and a focus on improving gender equity and business systems and internal processes was introduced.

Five years into the strategy the development objectives remain relevant and consistent with Australian Official Development Assistance priorities but significant changes in the environment in which ACIAR operates have moderated the achievement of strategy intentions. Reduced appropriations have been paralleled by the absence of significant new funding from other partners.

On the pandemic front, the impacts of COVID-19, both in Australia and the countries in which ACIAR works, have necessitated major changes in how ACIAR operates and its capacity to develop and undertake activities outside Australia. How much ACIAR can achieve is inevitably affected by restrictions on overseas travel, greater reliance on in-country partners to deliver projects, and the inherent challenges in remote, as opposed to face to face, communication on the speed and effectiveness of project development and conduct. Establishing and maintaining the relationships on which much of ACIAR's success is based, is much more difficult remotely.

Internationally, beyond pandemic impacts, the geopolitical situation has also changed markedly. Australia's relationship with China is challenging and the recent outbreak of war in Ukraine is having significant consequences on food and energy security and prices, especially in developing countries. Australia's aid priorities have also shifted, with the Australian Government committing to two 'step-ups' in Papua New Guinea (PNG) and the Pacific region with an initial increase of 30% in aid funding between 2017 and 2021 and a subsequent COVID-19 response related increase in aid funding of 10% in the Pacific and PNG and 17% in South-East and East Asia.

Further new funding announced in the 2022 Federal Government budget builds on extensive COVID-19 response efforts, to address the economic and social costs of COVID-19 in the Pacific and bolster Partnerships for Recovery by providing continued fiscal crisis support.

In the biophysical environment, climate change influenced events such as floods, cyclones, sea level rise and heat waves appear to be occurring with greater frequency and/or severity. Likely related in part to climate change and also to massive increases in trade flows, biosecurity risks to health and agriculture in Australia and the region have escalated in the last five years with the spread of African Swine Fever in pigs and Lumpy Skin Disease in cattle, two of the top five animal disease risks.

Finally, the ACIAR Executive is likely to experience some major changes over the next couple of years including the CEO completing his term of office.

On the positive side, the G7 have responded to the World Bank's Economic Case for Nature by announcing that the 'world must not only become net zero, but also nature positive', since nature provides a multitude of services to humankind, which underpin our economic activities, just one of which is climate. This promises further reshaping of the global financial system to generate massive investment in reducing and managing nature-based risk.

As a result of these changes, the Commission for International Agricultural Research has taken the opportunity at the halfway point in the 10-year strategy to review progress and to consider whether changes to the strategy are warranted.

Feedback from partners, stakeholders and ACIAR staff in Australia and the region confirms that despite the challenges outlined above, the organisation continues to provide a unique and valued (especially by stakeholders) contribution to agricultural research and capacity building in developing countries. The Country Network has excelled in its efforts to establish and maintain connections and activities. ACIAR's long term relationships with officials and researchers in Australia and countries in which it operates remain highly valued and effective, although many partners expressed a preference for longer-term strategic relationships over *ad hoc* project based collaborations.

Stakeholders support the 10-year strategy as appropriate and generally effective, seeking to build on progress rather than make wholesale changes. The cumulative impact of implementation of 40 years of research and capacity building is increasingly evident in the sophistication of partner countries' agricultural production and research leadership. Improvements in ACIAR's operations have been observed under the strategy but ACIAR's project and program design and approval processes are seen as slow and inefficient, research portfolios could be better coordinated, and longer transdisciplinary projects would be welcomed.

In addition to the ACIAR staff changes in research management, other staffing changes have been made to implement the strategy. The Executive has been expanded and both the Executive and the organisation as a whole have a greatly improved gender balance. The panel believes that ACIAR should take advantage of its expanded Executive to increase senior level liaison with relevant Australian and State Government counterparts and research institutions and work to develop longer-term collaborations where appropriate. In particular, ACIAR's relationship with DFAT remains fundamental to its operation and the panel believes there would be value in establishing a timetable of regular dialogues at several levels and agreeing upon indicators of a successful relationship.

Business and finance systems have significantly improved, facilitating remote working. The percentage of funding for research procurement was reduced from 90% to 80% to allow for increases in expenditure for outreach, synthesis and impact evaluation and especially capacity building. While actual expenditure on research has averaged the target level of 80%, the vast majority of it was spent on 'traditional' bilateral projects rather than more cross-cutting programmatic approaches comprising fewer larger projects, an integral element of the strategy. Slippage in research expenditure was allocated to the CGIAR and capacity building which grew to 12% of budget in 2020–21 but is forecast to reduce in outyears. While the new and very successful Meryl Williams Fellowship program, Pacific Scholarships program, leadership training and the Alumni Research Support Facility (ARSF) program should be continued along with other capacity building programs, the panel believes the research target should be maintained and that a rebalancing of the budget is necessary over the next 1 to 2 years to enable allocation of specific funds for large, transformative projects. To help rebalance budget allocations, a review of the quantum and frequency of capacity building programs appears essential.

To ensure a better integration of capacity building in research it is suggested that the ACIAR Executive take a more portfolio wide approach to capacity building as the significant capacity building generated by research activities has not been a focus of the capacity building group. More specifically, ACIAR could consider running several specifically targeted small grants programs for an expanded alumni on a regular basis to foster integration.

While much of the 10-year strategy has been delivered, not all elements have been implemented to the extent proposed. Changes in the operating environment suggest that focusing, reducing the span of activity and reinvigorating around the changing operating environment, warrant consideration.

As already indicated, a major element of the strategy which has not been achieved is the development of fewer large transdisciplinary research programs. Developing these projects should be a priority over the next 12 to 24 months and should include a review of the project development and approval process as acknowledged by ACIAR. The CEO and Chief Scientist should be responsible for this shift, which should involve the assignment of specific funds in the budget. New modalities of design and operation for example, 'adaptive alignment' of activities and expenditure in larger programs involving multiple partners with an overarching agreement rather than a single controlling entity, might be worth considering.

Other changes which could be implemented in projects include ACIAR taking a more supportive rather than controlling role in project design and delivery, encouraging greater leadership from partner countries reflecting their increased capability, and locating technical expertise through international staff within ACIAR Country Offices (rather than Canberra), potentially supported by Researchers in Agriculture for International Development (RAID) members. The panel strongly believes that at its earliest opportunity ACIAR should reinstate economics and policy capacity in its research program, among other reasons, to assist in crafting the arguments for adoption of beneficial policies based on research results in partner countries.

One of the more significant changes in the operating environment is the ongoing transformation of the CGIAR system from individual discipline or commodity focussed centres towards a single entity 'One-CGIAR'. ACIAR should consider brokering substantial investments of its own and CGIAR resources, and including other interested partners and stakeholders in programs aligned with Australia's development assistance priorities in South-East Asia and the Pacific. Australian research organisations and funders have expressed interest in participating in such collaborations.

Suggested areas of investment include biosecurity threats, maintaining food supply, livelihoods, food safety and human nutrition in South-East Asia under climate change and water scarcity while preserving natural capital; and addressing the unique challenges of Pacific Nations: impact of climate change, malnutrition and non-communicable diseases. While local food systems have generally supported communities during the pandemic, progress against some of the Sustainable Development Goals (SDGs) on global hunger and nutrition has reversed, with greatest impacts on women and children. ACIAR could use these larger research collaborations to embed gender skills in field activities – a move which would be welcomed by long-term technically skilled researchers who have the commitment but not the skill to achieve greater gender equality.

Finally, to reinvigorate ACIAR's valued relationships and commence working towards larger, longer-term collaborations, the panel recommends that ACIAR recommence in-country visits as soon as possible and encourage commissioned and contracted organisations to do likewise.

Recommendations

- That the ACIAR 10-year strategy be reworked to provide clearer linkages between its 6 objectives and more specifically defined strategies with budget allocations, with appropriate Key Performance Indicators (KPIs) for its remaining five years in Annual Operational Plans.
- 2 ACIAR consider adopting a framework to assess its development effectiveness, without compromising the quantum of research funding.
- **3** ACIAR increase senior level liaison with government and research agencies within Australia, with a particular focus on DFAT, DAWE, ABARES, DISER, CSIRO, AIA, RDCs, universities and state government departments. A Partnership Health Check with appropriate agencies should be a priority for 2022.
- 4 ACIAR's Business Systems Unit and Outreach enhance the utility of the ACIAR public facing project map by disaggregating projects, adding in-design projects and enabling external stakeholders to access some of the ACIAR internal systems, where appropriate.
- 5 ACIAR maintain the research procurement funding target of 80% and review and adjust budget allocations to find and identify funds in the budget specifically allocated to large integrated transdisciplinary programs. To assist in that process, ACIAR Executive review the quantum and frequency of capacity building programs.
- **6** ACIAR Executive implement strategies to ensure organisation wide integration of capacity building, particularly into research programs and projects.
- ACIAR explore adding named researchers on current projects and selected past researchers to the Alumni Network; and initiating an annual program of small grants in capacity building, outreach and research seed funding.
- **8** ACIAR enhance the relationship with DFAT by establishing a structured timetable of discussions at appropriate levels and an agreed definition of success in the ACIAR-DFAT relationship.

- Over the next 12 to 24 months, ACIAR prioritise moving to fewer longer-term transdisciplinary transformational programs. This move should include a review of the project development and approval steps to streamline the process including addressing delays by providers and partners. Relevant KPIs reflecting progress to an aspirational timeline should be assigned to the CEO and Chief Scientist.
- **9b** ACIAR reinvigorate its economic and policy capacity as opportunities arise.
- 10 Where capabilities and capacity in developing countries' economies and innovation systems have matured, ACIAR actively seek to devolve greater initiative, leadership and control to country partners in project initiation, delivery and linking with Australian partners, with ACIAR taking a more supportive than controlling role.
- **11** ACIAR consider the greater use of in-country technical expertise such as international staff, possibly supported by RAID members.
- **12** ACIAR recommence in-country visits as soon as possible and encourage commissioned and contracted organisations to do likewise.
- a) ACIAR work within the changing CGIAR arrangements to develop innovative partnerships involving the CGIAR, other stakeholders and Australia's partner countries in South-East Asia and the Pacific to respond to major issues of concern, for example, biosecurity threats; food supply, livelihoods, food safety and nutrition in the face of climate change and decreasing water availability while preserving natural capital; and responding to the unique challenges of Pacific nations. One or more regional collaborations could be set up to deliver these projects.
 - **b)** ACIAR encourage and facilitate the involvement of Australian government and research institutions in longer-term partnerships to assist in the delivery of these major innovative new multi partner, multifaceted collaborations.
 - **c)** ACIAR retain a small but carefully chosen set of activities in eastern and southern Africa which contribute Australia's scientific expertise and interests to improvements in agroecosystems common to Australia and Sub-Saharan Africa.
- **14** ACIAR use larger research groupings to resource dedicated gender skills and embed them in field activities to facilitate more inclusive research approaches.

1 The ACIAR 10-Year Strategy 2018–27: Overview of the first five years 2018–2022

The ACIAR 10-Year Strategy 2018–2027 (the strategy) aims to build on four decades of success of ACIAR's research partnership model through progressive adjustments in modes of operation. As it is general in its high-level strategies and as agricultural research is often long-term, the review acknowledges that changes in direction might not be fully evident at the mid-point in the strategy. In addition, changes in the external environment have interrupted what appears to have been intended as evolutionary change for some objectives. Accordingly, the review also considers the organisation's adaptability to such unforeseen circumstances within the general framework of the strategy.

Bold in its conception, the strategy provides a vehicle for updating processes and implementation approaches to meet developments in regional countries and research providers. For these reasons and although the strategy was founded on an assumption of growth in a period that subsequently saw a reduction in its resource base, the strategy remains relevant and has been successfully implemented across many areas. Implementation provides opportunities to address issues that arise with time and experience, and these are identified in the following pages. It is emphasised that overall, ACIAR remains an efficient and effective provider of a unique service that provides benefits to Australia and the region, some of which are not elaborated in routine documents. ACIAR stakeholders used the word valued' in discussions and senior Pacific and Asian officials highlight ACIAR's unique (and niche) role, regarded as without parallel in the global development arena.

The strategy outlines means to achieve more productive and sustainable agricultural systems for the benefit of developing countries and Australia through international agricultural research partnerships. It focuses on 6 objectives of: food security and poverty reduction; better management of natural resources and more effective responses to climate change; improved human nutrition and health; empowerment of women and girls; inclusive agrifood and forestry market chains and building regional science capacity. The strategy is operationalised through the three modes of bilateral country partnerships, multilateral research collaborations and co-investment with development partners. Among other imperatives, the strategy requires changes to: improve communication and outreach activities, increase resource reallocation to co-investment within research partnerships, enhance monitoring and impact assessment, strengthen capacity building, restructure research management, develop priorities for 10 country offices, restructure and enlarge the Executive, and update project management and finance systems. Enhancing ACIAR's visibility in Australia and partner countries was also an objective.

The first and the major strategic change focuses on collaboratively defining and commissioning research that maximises impact and returns on investment. Bilateral country partnerships were planned to evolve into a smaller number of long-term research collaborations in major country programs. By this time, half-way through the plan period, implementation has been slow, which raises questions around the appropriateness of the research management structure and the project approval processes. Multilateral collaborations, apart from small allocations to APAARI, SPC and CABI, are overwhelmingly with CGIAR and CGIAR centres, both of which are undergoing

structural changes that behove ACIAR to judiciously manage its contribution to an undesignated CGIAR pool in a manner that accords with ACIAR's geographic and sectoral priorities and efficiencies. Co-investment is a less well-defined category including programs delivered mainly with DFAT and IDRC, with a rising contribution from private sector partners. This first strategic change focus provides the context for the other three foci.

The second strategic change focus is to assess impacts and learn lessons from feedback to enhance performance and improve communication of ACIAR impacts. This includes such crosscutting impacts as gender equality and women's empowerment, climate change and human nutrition and health. Two significant impact assessments across ACIAR bilateral projects conservatively estimate quantifiable benefits to exceed costs by 5 to 1 from conventional analysis. Complementing those impacts, the less-easily quantified social, capacity building and environmental benefits were additionally assessed to be substantial. The review was impressed with progress in this strategic change.

The third strategic change focus of building scientific and policy capacity in Australia, and the region, required an expansion from an emphasis on post-graduate and in-service training for individual scientists from partner countries to include management and leadership short-courses in the PhD and Masters (John Allwright Fellowship) program. An expansion of the mid-career John Dillon Fellowships was needed to include some Australians addressing deficiencies among Australian research providers. Implemented through partnerships with Australian organisations, the program is more oriented to long-term career development and relations with ACIAR and Australia, with additional provision for women leaders in science, which is further enhanced through a dedicated program (The Meryl Williams Fellowships which are well regarded and highly valued, especially in the Pacific region with requests for expansion). Innovations include mentor and alumni programs, and support for younger researchers (RAID). Two risks were evident: managing capacity development separate from research may dilute the impact of both programs, and the objective of increased regional policy capacity did not appear to be linked to policy expertise within the research program.

The final strategic change focus of outreach aims to extend messages of research findings and impact in both Australia and partner countries through an updated communication approach that segments audiences, engages alumni and engages professional support (Crawford Fund and Currie Communications) through increasing digital communication and presence. The multiple communication channels now employed by ACIAR are impressive.

To affect the strategic changes, modest reallocations within the ACIAR budget were proposed. These included a reduction to project research from 90% to 80% of total expenditure including co-investment with an implication of further reductions across the ten years while geographic relativities remained roughly unchanged. The budget reallocation aimed to increase the effectiveness and impact of research through increased co-investment with development partners and enhanced evaluation, capacity building and outreach. Implementation of the changes has required a reduction from 13 to 10 RPMs and their reporting through an additional post of Chief Scientist. Six additional Associate RPM posts for young scientists were envisaged to

improve cross-sectoral portfolio integration. The shift in resource allocations assumed increased co-investment to create a larger total budget meaning no reduction in research investment amounts.

The reality of budget reductions and slow development of co-investments have tempered the rate at which the strategy can be implemented. Nevertheless, some aspects could be accelerated, particularly in the major area of structural change in research management. The objective of a smaller number of larger and cross-disciplinary projects appears to have been slowed by a duplicative system of discipline-based leaders and the assignment of the integrating function to less senior science managers. Compounding this potential inefficiency or perhaps resulting from it, the long process for project planning and approval undermines the objective of encouraging early-mid career research providers. Without acceleration of implementation and resolution of such constraints, objectives related to research delivery and ensuring Australian capacity might not be fully achieved, especially if further external disruptions occur.

While at this time the strategy generally appears relevant for the next five years, experience to date indicates that it could benefit from clearer linkages across the strategic change foci. This includes, as amplified later in this review: consideration of clearer linkages between capacity development and research programs; consolidation of program management around integrated themes; user-friendly integrated business management systems; simplified project planning and approval processes; contextual policy engagement that enhances overall research impact; clearer explication of the co-investment operational mode; effective linkage of multilateral investment to ACIAR's geographical and sectoral interests and requirements for cost-efficiency; fostering ongoing post-project partnerships between Australian and regional scientists and institutions, separation of public relations from knowledge brokering to drive implementation and raising the profile of ACIAR with senior officials around Australia and the region.

Recommendation 1

The ACIAR 10-year Strategy 2018–2027 be reworked to provide clearer linkages between its 6 objectives and more specifically defined strategies with budget allocations, with appropriate KPIs for its remaining five years in Annual Operational Plans.

2 The appropriateness, effectiveness and efficiency of ACIAR investments

Feedback from ACIAR staff, partners and other stakeholders confirms that the organisation provides a unique and valuable contribution to agricultural research and capacity building in developing countries. It is a well-regarded and well-managed organisation operating in a 'niche' environment. Over the years, it has developed trusted long-term relationships with researchers and leaders in countries where it operates as well as experts and researchers in universities in Australia and elsewhere. Partner organisations such as CSIRO and others report generally constructive relationships with ACIAR although as mentioned earlier these tend to be *ad hoc* project-based agreements rather than long-term jointly planned collaborations for which a number of organisations have expressed a preference. The relationship with DFAT is complex and has operated on a needs basis; ACIAR investment supports the broader Australian Government foreign policy agenda and provides a niche offering which differs from DFAT's mainstream role. Clarification of roles and value would be beneficial.

During the last two years, the COVID-19 pandemic has had a major impact on lives and livelihoods of people globally; ACIAR projects have been affected as public health restrictions and border closures limited the ability of ACIAR staff and researchers to maintain the momentum it has generated in partner countries. A reduction in the budget allocation has further limited ACIAR's ability to progress the objectives identified in the 10-year strategy such as the longer-term transdisciplinary projects. Additionally, significant shifts in the geopolitical environment and Australia's policy response, the acceleration of climate impacts and the rise in biosecurity risks were acknowledged to require consideration for the next five years of the strategy.

Based on written submissions and interviews, the review panel notes that ACIAR is making progress on the implementation of the 10-year strategy although more remains to be done. Most stakeholders agree that it is important to protect and build on current ACIAR achievements and partnerships, rather than seeking wholesale changes to the 10-year strategy.

Appropriateness: is ACIAR supporting the right priorities in the right way in the right places? ACIAR has developed a keen sense of what is appropriate in partner countries and the priorities are broadly consistent with the 10-year strategy. In most cases, ACIAR responds to local priorities and project selection is based on the development priorities of the country concerned. In general, all stakeholders agreed with the objectives of the 10-year strategy and these remain relevant. There were requests for ACIAR to maintain the focus on the existing priorities and limit wholesale changes to the strategy.

All stakeholders supported the need to continue research in agriculture, livestock and fisheries in developing countries with a focus on food security and capacity building. The impact of COVID-19 and climate change has heightened food security concerns. The need is expressed by all countries but is especially acute in the Small Island Developing States (SIDS) of the Pacific region. The impact of the climate crisis on crops, inshore fisheries, access to clean water and the environment in the Pacific region should be a priority for ACIAR in the updated strategy.

Declining budgets and a challenging global operating environment support ACIAR continuing its traditional approach globally and operating in the Asia-Pacific region and Africa. Australian foreign policy and development priorities increasingly focus in Asia and the Pacific region. There was a clear consensus from stakeholders on the need to strengthen ACIAR investment in the Pacific islands in support of the Australian Government's Pacific Step-up strategy. While several stakeholders wondered about continuing allocations to Africa, the review noted the projections of population growth and poverty in Africa and concluded that there are scientific and strategic benefits of Australia maintaining a small contribution to the region.

An important part of the ACIAR capability is the oversight and advice provided by the Policy Advisory Council (PAC). The composition of PAC enables ACIAR to gather intelligence and advice from a group of exceptional members from developing countries. It is important for ACIAR to reinforce the role of the PAC and ensure that there is high-level and appropriate representation from developing countries.

Effectiveness While there are no internally agreed criteria and frameworks to assess the effectiveness of the ACIAR investment in research and capacity development, ACIAR has a strong monitoring and evaluation culture and several projects are subject to detailed and formal evaluation on an ongoing basis. Monitoring, evaluation and learning is built into all projects and approximately 10% of all ACIAR-supported projects are evaluated. ACIAR has a scale (1-6) for ranking each criterion used to determine the effectiveness of its investments. The assessment criteria are to ascertain if the projects/programs achieved stated objectives within agreed budgets and timelines.

The scale is used to review project performance at completion of the projects (End of Project Reviews). This template is completed by an independent science expert/s and then discussed by a sub-group of RPMs, subject-expert research manager and the country network manager. This group moderates the scores on effectiveness and gender equity, and these are used in government reporting. In addition, ACIAR also assesses its internal performance and reports its performance in its Annual Report to Parliament.

The ACIAR report *The Impact of ACIAR work in agricultural research for development 1982–2022* (Volume 1 Quantifying returns on investment', Report No. 100 of the ACIAR Impact Series, measures economic returns on investment, assesses social and environmental impacts and seeks to understand the contribution that ACIAR has made to smallholder farmers, fishers and foresters in the region. In the 40-year period examined in the study, ACIAR found the total benefit of ACIAR-supported projects was \$A64 billion, with the very significant benefit: cost ratio of 43:1 for project benefits specifically attributed to ACIAR's work.

While the panel commends ACIAR on its thorough evaluation work the panel believes there would be value in ACIAR considering adoption of a framework to assess its effectiveness; existing examples include DFAT's Development Effectiveness approach or the Paris Declaration on Aid Effectiveness which considers five principles elaborated in the Accra Agenda for Action: ownership, alignment, harmonisation, managing for results and mutual accountability.

Recommendation 2

ACIAR consider adopting a framework to assess its development effectiveness, without compromising the quantum of research funding.

There was consistent feedback from all stakeholders that ACIAR is very effective in the implementation of its 10-year strategy in project and program outputs/outcomes and also in training and capacity building for and with partner countries. The effectiveness of ACIAR's strategy and programs is highly dependent on its long-term partnerships with countries. Furthermore, respondents confirm that ACIAR has a strong commitment to supporting the priorities and approaches of local partners. ACIAR's conduct in-country and flexible approaches to solving local problems are strengths which have contributed to its accomplishments in countries. ACIAR's success in the implementation of the 10-year strategy therefore reflects the long-term partnerships developed with participating countries and partner organisations.

One example is ACIAR's activity in Vietnam. Since 1993 almost 200 projects worth more than \$A100 million have been undertaken in almost all areas of agriculture, 74 John Allwright scholarships (49 doctorates and 25 masters) have been awarded, 18 young scientists have been trained in management as potential leaders in Vietnam and hundreds of scientists have worked directly on projects, many of whom consequently received the State Award for Science and Technology. As a result, ACIAR can claim to have contributed to Vietnam improving its food security index from 63rd in the world ranking to about 50th and moving rapidly towards nutritional security. In the decade 2011–2020, it has lifted fisheries production from 20% to 26.2% of Gross Value of Agricultural Production (GVAP) and raised livestock from 19.6% to 25.2% of GVAP.

Efficiency All stakeholders reported favourably on the structure and functions of ACIAR and most agree that significant improvements have been made to the way the organisation works. RPMs are generally empowered to make decisions within their portfolios in accordance with the overall plan. Support by good Program Support Officers (PSO) is valued.

Delays in project design and approval was the most common concern shared by ACIAR staff and external partners. While all research proposals require preparation and consultation, it appears that there were/are significant delays in the design and approval of several ACIAR-supported projects. Delays have resulted in lost funding opportunities and potential damage to the ACIAR brand. The panel recognises that some delays can occur as a result of factors in participating countries (or intermediary organisation such as universities) rather than factors within ACIAR.

An additional challenge for ACIAR is the need to better coordinate the activities of the various portfolios within the organisations. ACIAR operates in a decentralised manner where RPMs have considerable autonomy within the broad parameters provided by the 10-year strategy. This hampers achievement of the strategy to develop fewer larger integrated programs.

3 Implementation of the strategy and organisational changes.

Organisational structure Staffing of ACIAR has been reorganised to help drive implementation of the strategy. The Executive has been expanded and the CEO is now supported by a gender-balanced Executive team comprising a Chief Scientist, Chief Finance Officer and general managers for Outreach and Capacity Building, and for Country Partnerships. Thirteen research programs, each with their own RPMs, have been consolidated to 10, with an experiment of Associate RPMs trialled early in the first half of the strategy term. The review panel commends the greatly improved gender balance in the current RPM cohort and also notes the younger demographic.

The Country Network has built valuable strategic capabilities for ACIAR at both manager and assistant manager levels as demonstrated during the pandemic. There is a danger, however, of losing the capabilities of assistant managers unless there is a practical pathway on which they can transition to the manager role given the gap in administrative level. ACIAR could explore ways to improve staff retention through an achievable career pathway.

Expansion of the Executive was recommended in the 2013 Independent Review of ACIAR 'to enable more extensive senior-level liaison with organisations and agencies within Australia' in the interests of ACIAR's program. Senior level liaison remains a need in a contracting budget environment where partnerships and co- or aligned investments are increasingly important.

The 2013 review also specifically recommended institutionalising regular high-level engagement by the CEOs/secretaries of the Australian Government agencies (DAWE, ABARES, DISER, CSIRO, DFAT and ACIAR) 'to achieve a whole of government approach to agricultural and rural ODA'. While there were some initial efforts in this direction, engagement has not been sustained.

The ACIAR 'Country Partnership Health Check' model could usefully be applied to assess ACIAR's relationship with each of these agencies. A number of these key stakeholders indicated that they would welcome the opportunity to align their 5 to 10-year planning with ACIAR, in order to maximise productive collaborations and move away from *ad hoc* linkages. A change of title from 'General Manager, Outreach and Capacity Building' to 'General Manager, Strategic Communications' may be considered to contribute to this effort.

Recommendation 3

ACIAR increase senior level liaison with government and research agencies within Australia, with a particular focus on DFAT, DAWE, ABARES, DISER, CSIRO, AIA, RDCs, universities and state government departments. A Partnership Health Check with appropriate agencies should be a priority for 2022.

Systems In the first five years of the strategy, there has been a near-complete overhaul of ACIAR project management and finance systems to improve efficiency, performance, accountability and management of risk. The Business Services Unit is to be commended for its consultative and user-oriented approach. However, the panel heard mixed reports on the utility of the systems with some suggestions that the bespoke project management system does not link as well as it might with the finance system, although others, including PSOs, have ways and means of transferring information across the systems. The review panel acknowledges that many of these system changes have taken place within the context of the disruption of COVID-19 pandemic. Nonetheless, ACIAR staff appear to be positively engaged with the system change and optimistic with respect to future productivity and collaboration benefits of the improved systems.

The review panel also noted that ACIAR has recently committed to continue using a bespoke project management system and that this carries a risk of increasing future costs. History suggests bespoke systems have a poor success record. The review panel suggests that, towards the end of this 10-year strategy, the system's performance is reviewed and if required, off-the-shelf options are further explored.

In addition to planned system changes, COVID-19 pandemic has prompted substantive modifications in ACIAR systems that improve efficiency and help ACIAR to deliver on its mission. Of particular note is that staff travelling or working from home now have remote access to all systems, and that video communications technology is now embedded in standard work practices for most parties within and external to ACIAR. This might mean that some reduction in travel could be considered, and more particularly that Australian staff may no longer need daily access to ACIAR House nor even to be based in Canberra, and more preparation and follow-up might be effectively undertaken online. Efficiencies of time and money as well as a wider pool of potential staff could flow from these system improvements but it is essential that the necessary social contact with country partners and within the agency is not lost.

A potential benefit of these new systems would be to significantly enhance the public facing map of ACIAR-supported projects, currently highly aggregated. A more sophisticated approach could enable disaggregation of projects, show in-design projects and enable external stakeholders to access appropriate ACIAR internal systems. Stakeholders advised they would value greater transparency of past, current and future research projects. A more information rich and accessible structure should improve co-ordination of research programs within a region, engagement of relevant regional stakeholders, learning from past projects, communications with Australian and partner country government stakeholders especially where personnel turnover is high, and speed and transparency of project design and commissioning. Access to concept notes, proposals, annual reports, and budgets might be provided to appropriate stakeholders.

Recommendation 4

ACIAR's Business Systems Unit and Outreach enhance the utility of the ACIAR public facing project map by disaggregating projects, adding in-design projects and enabling external stakeholders to access some of the ACIAR internal systems, where appropriate.

Resource allocation The strategy aimed to grow and reallocate resources to operationalise 3 of the 4our 'Strategies for Growth': synthesising research, assessing impacts, and learning lessons; building scientific and policy capacity in Australia and the regions; and outreach: extending research findings. The panel notes that the increased budget allocation from 8% to 10% in capacity building, 1% to 5% in outreach and 2% to 5% in evaluation have been effective in increasing spending and activity in those areas though not always to the target level.

While ACIAR has successfully reallocated funding despite an overall reduction in total available funds, and the research target of 80% (including CGIAR and multilateral research) has been largely met, 'traditional' bilateral research projects make up the vast majority; large integrated research programs have not been developed as envisaged. Also, the panel notes that by 2024–25 research funding is projected to drop to 76%, capacity building increase to 10% and CGIAR funding increase to 18% of total. The panel is of the strong view that the research allocation should remain at about 80% and that funds should be identified specifically for large integrated research programs. This will mean rebalancing the budget and without being prescriptive, the panel suggests that moving to an initial allocation of approximately \$5 million in a couple of years, might be found from bilateral research (several million dollars), the CGIAR allocation (return to 15% of budget) and capacity building.

The review panel particularly commends ACIAR on the introduction of the Meryl Williams Fellowship program, the Pacific Scholarship Scheme and leadership training within the John Allwright Fellowship training. The creativity and flexibility of this area of ACIAR in adapting to COVID-19 is noted. In particular, the ARSF program and the Alumni Network are high-impact initiatives directly supporting the ACIAR mission that can be built on further.

However, the outlay of funds to enable capacity building online should no longer be required, and as some capacity building programs might fit appropriately within the research program, the panel believes that a review of the frequency and quantum of capacity building programs including the grant program suggested below would assist in rebalancing the budget.

Recommendation 5

ACIAR maintain the research procurement funding target of 80% and review and adjust budget allocations to find and identify funds in the budget specifically allocated to large integrated transdisciplinary programs. To assist in that process, ACIAR Executive review the quantum and frequency of capacity building programs.

Integration of research, capacity building and outreach In addition to the targeted capacity building programs there is significant capacity building occurring through ACIAR research activities but it is structurally disconnected from the group responsible for capacity building. A more integrated and comprehensive approach to capacity building across the ACIAR Executive would be beneficial. Supporting this, closer co-ordination between the research team (including RPMs and PSOs) and the Outreach and Capacity Building team will also be required.

PSOs are in regular contact with Project Leaders and are involved in the detail of budgets for new projects. They are well placed to suggest opportunities where capacity building could be integrated into projects.

The approach that the Country Partnerships team has taken in facilitating the upskilling and strategic engagement of the Country Managers could be applied to the PSOs to facilitate them taking a more active role in integrating capacity building and outreach into research projects. Additionally, some thought could be given to development of a career path for PSOs.

Recommendation 6

ACIAR Executive implement strategies to ensure organisation-wide integration of capacity building, particularly into research programs and projects.

The successful ARSF program is widely commended. It could be further developed to better integrate capacity building and outreach within research partnerships by adding current and selected past partner country and Australian researchers to the Alumni Network. Additionally, ACIAR could consider a network coordinator role which could work with Country Managers to maximise the network's value.

Integrating new outreach and capacity building initiatives within current research partnerships would give agency to partner country researchers to identify and meet emerging needs in research projects. ACIAR could consider offering a small grant program to this wider network, including project researchers and past fellows for three streams of small grants:

Capacity building small grants: available for teams (including Australian researchers) or individuals in partner countries to undertake training courses linked directly to current research project needs or longer-term professional development (\$500–\$5,000)

Outreach small grants: available for teams (including < 50% Australian researchers) or individuals in partner countries to present research at conferences or participate in key regional events (\$500–\$20,000)

Research seed funding grants: available for partner country researchers (as leads, with unfunded Australian collaborators where appropriate) to explore new ideas generated within ACIAR-supported projects (\$5,000–\$20,000)

Recommendation 7

ACIAR explore adding named researchers on current projects and selected past researchers to the Alumni Network; and initiating an annual program of small grants in capacity building, outreach and research seed funding.

4 ACIAR's 10-year Strategy 2018–22: the next five years 2023–27

The ACIAR 10-Year Strategy 2018–2027 was developed in 2017. Under a robust set of six high-level objectives it has underpinned the planning and delivery of much effective and highly appreciated agricultural research for development. Australian and country partners and stakeholders strongly support ACIAR's purpose and operations. In particular and as outlined earlier in this report, the long-term and high value relationships built between researchers and with local communities were recognised by partners, Heads of Mission, and donor colleagues. Capacity building has been recognised for the long-term benefits it generates as researchers graduate into senior positions in partner countries.

ACIAR has been transitioning its structure and operating systems and while some changes have been completed, much of this remains work in progress. Not all areas of the strategy have been delivered to the extent proposed. It is therefore important to consider whether the operating environment now and in the remaining five years under the plan reduce the relevance of the changes planned in 2017.

Operational changes: Relationship with DFAT The ACIAR relationship with DFAT remains a fundamental issue for ACIAR. We heard very positive responses from Posts concerning the value placed on ACIAR work in country and the positive engagement with ACIAR Country Offices. However, the overall relationship with DFAT is more complex.

While the relationship is effective there appears to be something of a sense on the DFAT side that ACIAR processes and protocols don't facilitate always being readily able to respond to short-term DFAT needs. On the ACIAR side, there appears to be a perception that DFAT appreciation of the role of research in meeting Australia's ODA objectives and what it takes to manage a successful research-for-development portfolio could be stronger. Yet there are success stories where DFAT has been able to invest in an immediate research response through ACIAR or a post research scale-out of ACIAR work to achieve broader development objectives, for example, Seeds of Life in Timor Leste (Fini bas Moris), where essential planting material and services to re-establish food production were made available following the devastation of conflict.

While there will periodically be tensions between the two organisations, it is important they identify and act when it is productive to work together. Structured dialogue at several levels between the two organisations should be maintained. It is suggested that ACIAR and DFAT consider developing a jointly agreed set of indicators of success in the ACIAR-DFAT relationship and this be reviewed regularly.

Recommendation 8

ACIAR enhance the relationship with DFAT by establishing a structured timetable of discussions at appropriate levels and an agreed definition of success in the ACIAR-DFAT relationship.

Fewer larger transdisciplinary projects Researchers face increasingly complex questions and problems. Global pressure has grown for strong action on climate change and for the preservation of natural capital through a focus on protecting biodiversity and the condition of natural resources. At the same time, on the ground experience includes declining water availability and the consequences of extreme weather events. More pressured agricultural systems are demonstrating greater impacts from biosecurity incursions and must address interactions with human health ranging from zoonotic disease risks to under- and mal-nutrition and impacts through growing rates of non-communicable diseases.

In this context, the tradition of high-quality bilateral research projects (often in relatively tight discipline domains) which has been a dominant business model and strength of ACIAR operations to this point, can only be a part of future activity. The 10-year strategy recognised that the ACIAR organisational structure which has focused the management of the ACIAR portfolio in commodity or issue groupings under individual RPMs, needed change. In particular, ACIAR committed to a move to larger, longer-term, transdisciplinary transformational research programs. Changes in both organisational process and culture in the first five years of the strategy support the change in portfolio direction. However, examination of the research portfolio shows that the bulk of the portfolio started life well before the current strategy. While legitimate distractions from this task were well handled under COVID-19 both the CEO and the Chief Scientist bear some responsibility for insufficient progress in this direction. In the panel's view, the rate of progress to fewer larger projects is unacceptable and represents a risk to overall success in strategy implementation without some major intervention.

A much greater sense of urgency is required to move the portfolio further and faster in this direction over the next 12 to 24 months. The historical 'bottom-up' project development process initiated by one or more RPMs and potential project leaders from Australian partners is considered unlikely to deliver on this aspect of the strategy. That pathway is too constrained and too slow, and described by some as 'tortuous', to achieve the desired result. To accelerate progress ACIAR might consider developing other modalities for project/program conceptualisation and development. For example, ACIAR working with developing country governments and partners to build new 'adaptive alignments' for major initiatives. These are not 'co-investment' activities in the traditional sense that funds are merged and used for a single purpose generating legal, contractual and stakeholder contortions; instead, activities are 'aligned' via overarching agreements that specify the nature of what is shared (and not shared if need be). Funds and possibly streams of activity are kept separate and remain aligned to their intended purpose and governance mechanisms. The overall intention is to generate 'win-wins' for all partners. The alignments are 'adaptive' in the sense that developing country partners are adapting the approaches, tools, technologies, and outputs to suit their circumstances and priorities. A few examples are provided later in this chapter.

Another possible approach towards achievement of a longer-term programmatic portfolio is to develop a new project initiation approach that stimulates and empowers innovation capabilities in developing country partners. For example, creation of purpose driven 'Innovation Funds' to be

deployed via a moderated competitive process to address a specified challenge identified at a country or regional level. Such approaches could be trialled in regions seen to have made the most progress in research and development (R&D) capabilities and capacity. An early example of this approach can be found in the Africa Biosciences Challenge Fund (ABCF) which was initiated by the DFAT Food Security Initiative to generate capacity building and research innovation and has continued to the present day, well after Australian ODA support ended. While that program leveraged the bioscience research and capacity building strength of the ILRI/BECA Hub, the model could be adapted to leverage science and capacity building strengths in Australian R&D partners.

To ensure the move to a longer-term programmatic research portfolio occurs in a timely manner, specific allocations should be identified in the budget and Annual Operating Plans. KPIs reflecting progress towards an aspirational timeline should be identified as specific responsibilities in performance plans of the Chief Scientist and the CEO.

Given the need to respond to significant changes in the operating environment, the growing complexity and multiple dimensions in the challenges facing agriculture, fisheries and forestry and related management of natural resources, and to deliver benefits more quickly and more equitably in alignment with Australia's development assistance objectives, the panel is convinced that ACIAR needs to reconsider its investment and focus on economics and the policy dimensions of its research agenda.

The Agribusiness Program and project activities are trialling new ways to engage with business and the private sector to enhance adoption. However, many of the significant challenges facing production and food supply have clear national policy dimensions which ACIAR has historically helped partner countries to address through evidence-based arguments developed by partnered research activities in an economics and policy program. In the course of these projects, ACIAR has had access to a broader view of the policy options and policy challenges being considered. We believe that the current ACIAR view is less broad and diversely informed than in the past, with the result that DFAT is regularly seeking policy inputs without reference to ACIAR. It is in the interest of ACIAR to be dialled into these conversations to ensure its ongoing alignment, relevance and value to the DFAT portfolio. As integrated programs become the focus, it may be expected that the number of RPM positions decreases, but the reduced cohort should include policy and economics expertise.

Recommendation 9

- 9a Over the next 12 to 24 months, ACIAR prioritise moving to fewer longer-term transdisciplinary transformational programs. This move should include a review of the project development and approval steps to streamline the process including addressing delays by providers and partners. Relevant KPIs reflecting progress to an aspirational timeline should be assigned to the CEO and Chief Scientist.
- **9b** ACIAR reinvigorate its economic and policy capacity as opportunities arise.

Balancing project leadership between Australia and developing countries The ACIAR project development and implementation model is still weighted towards initiative and leadership from the Australian side of the partnership, albeit always in close consultation with developing country partners. There is a longer-term risk that ACIAR relationships don't evolve sufficiently to match growing capabilities and capacity in the economies and innovation systems of partner countries. Recognising this growth could be reflected in moving greater initiative, control and trust from the Australian side to the developing countryside of the partnership; a natural maturing in the relationships and a tangible sign of success in capacity building. Work could be directly commissioned from overseas partner institutions or overseas institutions could be empowered to set up competitive 'Innovation Funds'; both options could be jointly managed, retaining links to Australia and maintaining the objective of developing long term post-project relationships with Australian researchers.

The review panel recognises new approaches create additional challenges for ACIAR's legal, financial and contractual systems. There may be lessons from parts of DFAT's development portfolio which could be helpful without compromising ACIAR's research role.

Recommendation 10

Where capabilities and capacity in developing countries' economies and innovation systems have matured, ACIAR actively seek to devolve greater initiative, leadership and control to country partners in project initiation, delivery and linking with Australian partners with ACIAR taking a more supportive than controlling role.

In country technical expertise Currently all ACIAR technical expertise in the brokering of R&D is physically located in Canberra and the relationships and projects are successfully overseen by flying visits from staff with deep knowledge of the in-country circumstances and institutions. Traditionally such staff had an extensive early career background on the ground in developing countries. The younger RPM cohort and a growing aspiration for more leadership from developing country partners may require sourcing some technical expertise within countries to serve as the technical eyes, ears, and voice for ACIAR across one or more countries. While this can be expensive there may be models that can contain the costs, for example, the IDRC experience involving extensive use of in-country technical capacity (international staff, not necessarily Canadian). In addition, RAID participants might welcome opportunities to gain overseas experience early in their careers via 2 to 3-year postings under RPM supervision which may be in-country. These skills could be embedded in partner organisations and supported by country offices rather than be embedded in the country office. This would ensure the 'local' culture of the country office is not recast with an Australian expatriate presence. Such in-country technical investments would best be targeted to countries or regions where there was a large up-lift in ACIAR portfolio ambitions as part of the research portfolio transformation.

Recommendation 11

ACIAR consider the greater use of in-country technical expertise such as international staff possibly supported by RAID members.

Relationship risks Deep partnerships with developing country researchers, research leaders and policy makers built on understanding and mutual respect have been the foundation of ACIAR success through its 40-year existence. There is a short-term risk that the 2 years when no travel has been possible from Australia, weakened those partnerships at both project and institutional levels.

While the review panel notes the effectiveness of the ACIAR Country Office teams in maintaining connections during this time, the strength of ACIAR has been its relationship capital and it needs to move quickly to rebuild its presence and key relationships in Australia and with partner countries. This rebuilding needs to include high visibility of senior executives and significant activity by RPMs to ensure that there is a sense of impetus and excitement about ACIAR work over the next five years. RPMs and capacity building activities need to encourage a similarly high level of activity and energy by commissioned and contracted delivery organisations to quickly rebuild momentum.

Recommendation 12

ACIAR recommence in-country visits as soon as possible and encourage commissioned and contracted organisations to do likewise.

ACIAR branding There were some 'niggles' detected in interviews and submissions that the 'ACIAR branding' in outreach activities is sometimes perceived as marginalising the institutions and people who are co-funding and conducting the research. While most appear to understand the need for a 'simple impact facing story' it is important not to demotivate partners carrying the primary roles in project delivery. This can also happen in reverse, where partners fail to recognise ACIAR's fundamental role in initiating and funding the activity. While not a major problem, we suggest ACIAR ensures opportunities to highlight the critical roles of Australian and developing country partners are showcased where appropriate in all its outreach activities. We also suggest ACIAR make sure that partners understand and follow their contractual responsibilities to clearly recognise ACIAR's role in communications they initiate as there could be greater awareness of ACIAR's achievements in partner countries.

Changes in ACIAR's operating environment

The global and regional environment This review is focused on ACIAR strategy and directions for 2023–27. Expectations of future global conditions and the priorities in the Indo-Pacific region (in which most ACIAR activities occur) have shifted significantly since 2017. Over the last five years geopolitical tensions have grown. The long period of increasing freedom in the conditions for world trade and confidence in the potential of global supply chains to deliver food and other essentials under free market conditions has faltered. Real conflict has occurred and tensions relating to potential conflicts have risen. Current conflict in Ukraine has seen global fuel prices spike and potential for food price impacts including impacts on the trade flows of fertilisers – an essential input for global food production. Ongoing energy and food security problems are potential consequences.

Closer to home Australia's relationship with China has been strained, creating an increasing interest in building effective and sustained partnerships across the region with an emphasis on resilience in a less certain world. Despite recent events, the first five years of the strategy have seen several traditional partner nations within ACIAR's portfolio continue to grow and develop. As outlined earlier research and business capacities have grown, and these countries have graduated from an aid assistance model to a stage of true partnership and co-investment in further accelerating the benefits of growth and development. In many cases ACIAR can recognise the benefits of its earlier capacity building assistance as ACIAR alumni move into senior roles and leadership ranks of their research communities. The Philippines, Vietnam and Indonesia are all long-term partners clearly expressing their willingness to partner with their own budget and personnel with ACIAR in priority R&D areas. This extends also to countries that ACIAR has already 'graduated' such as Thailand, Malaysia and even Singapore. Such partnerships have strong potential to engage and benefit less developed neighbours to support south-south knowledge exchange and partnerships.

The CGIAR – a basis for opportunities Under its Act, ACIAR has responsibility for Australia's contribution and participation in the CGIAR centres to which it currently allocates some 16–20% of the ACIAR budget. This longstanding global network of research centres provides agricultural research for development in partnership with global advanced research institutes, local research systems, private sector, NGO and farmer stakeholders funded by a global community of national and philanthropic donors.

The CGIAR system is in the process of substantial transition under the *One-CGIAR* banner. ACIAR should develop opportunities within this change environment to deliver innovative new partnerships with the CGIAR and other stakeholders which work with and benefit people in our regions of interest – in South-East Asia and the Pacific. If ACIAR were to enable the delivery of CGIAR research impacts through brokering substantial investments of its own (utilising ACIAR's general CGIAR contribution funds) and CGIAR resources, along with other interested partners and stakeholders, this would help to ensure that Australia's investments through the CGIAR for both general and bilateral contribution funds were effective, conspicuous and aligned with Australia's development assistance priorities. ACIAR already does this to significant benefit with its bilateral contributions to CGIAR centres.

In response to shifts in regional geopolitics, several other nations have an interest in an increased presence and investments in the Indo-Pacific region. This approach would also provide an opportunity to engage Australian research organisations and agricultural research funders in longer program investments – an opportunity which the panel was told by CGIAR leaders would be welcomed and would retain and build the capacity available to be aligned to the ACIAR mission. One such collaboration with CGIAR centres might focus on South-East Asian nutritional security as climate change, water scarcity and other factors threaten natural capital and biosecurity.

In this context, there could be significant benefits to Australia from a regional focus on biosecurity threats which deserve a higher priority in the ACIAR portfolio. A longer-term transdisciplinary biosecurity program which recognises growing regional expertise and leadership by lead scientists from partner organisations in the region and potentially involving CSIRO, DAWE and university centres of expertise is an example of what could be an 'adaptively aligned' program. Australia could focus on benefits for disease preparedness and developing countries could benefit from detection, containment and mitigation strategies if pests or diseases were already present.

To enable this approach ACIAR may need to consider reshaping one or likely more of the RPM roles to be a leader and facilitator of the development of major research investment collaborations and to oversight the operation and delivery of Australia's investment both directly through ACIAR and through the CGIAR and its centres. The panel heard there is significant interest from the CGIAR and centres, other donors, and partner countries in such an approach, and it has precedents in ACIAR history, where ACIAR senior staff played significant roles in the development of CIFOR (for forestry R&D) and WorldFish (for fisheries and aquatic R&D) in earlier CGIAR history.

In addition to the CGIAR centres active in the region, such as IRRI, WorldFish, ILRI and IFPRI, non CGIAR centres such as the World Vegetable Centre, ICRISAT and CIFOR-ICRAF should also be included in this initiative.

A separate collaborative goal might be to draw spill-over benefits from the CGIAR global research effort and build research, development and adoption capacity to address the unique challenges facing the Pacific region. R&D designed, in the context of climate change and rising sea levels, to address the importance of managing fishery and forestry resources, building diverse and resilient food systems and growing the opportunities in the Pacific for value adding and delivering premium products into export markets, would be a valuable contribution.

Focusing a significant part of ACIAR activities (R&D, capacity building and outreach) in this way would also ensure that ACIAR could clearly demonstrate the alignment of its portfolio with the new directions and priorities of Australia's development assistance policy. The 2017 Foreign Policy White Paper substantially shifted resource towards assistance for PNG and the Pacific and this Pacific Step-up has been further enhanced in the government's 2020 Partnerships for Recovery: Australia's COVID-19 Development Response. This announcement had a particular focus on health security, stability and economic recovery post-pandemic in Australia's near neighbourhood of the Pacific, Timor-Leste and Indonesia. (These resource shifts saw matching reductions in expenditure in Sub-Saharan Africa and the Middle East and North Africa.) The 2022 budget announcements for Australia's development assistance in the Pacific provided a further tranche of funding to support COVID recovery.

Noting the forward projections of the largest global concentration of poverty as well as the largest population growth being in Africa by 2030 and beyond, we suggest that ACIAR retain a small but carefully chosen set of activities in eastern and southern Africa which contribute Australia's scientific expertise and interests to improvements in agroecosystems common to Australia and sub-Saharan Africa. ACIAR's Chief Scientist has an important role to shape this highly targeted investment, possibly aligned to the CGIAR investment.

Recommendation 13

- 13a ACIAR work within the changing CGIAR arrangements to develop innovative partnerships involving the CGIAR, other stakeholders and Australia's partner countries in South-East Asia and the Pacific to respond to major issues of concern for example, biosecurity threats; food supply, livelihoods and nutrition in the face of climate change and decreasing water availability while preserving natural capital and responding to the unique challenges of Pacific nations.
- 13b ACIAR encourage and facilitate the involvement of Australian government and research institutions in longer-term partnerships including with the CGIAR to assist in the delivery of these major innovative new multi partner, multifaceted collaborations.
- ACIAR retain a small but carefully chosen set of activities in eastern and southern Africa which contribute Australia's scientific expertise and interests to improvements (also in association with the CGIAR where appropriate) in agroecosystems common to Australia and sub-Saharan Africa.

Gender equity Impacts of the COVID-19 pandemic have re-emphasised the importance of strategic objectives 1 (food security and poverty reduction), 4 (gender equity and women's empowerment and 5 (inclusive value chains). While local food and agriculture systems worldwide have been a source of stability and resilience in the face of the disruption caused by the pandemic, the impacts on individuals and families have resulted in some backward movement against previous progress on SDGs addressing global hunger and malnutrition. As usual, women and children have been disproportionately affected.

A strong focus on these objectives and on working with the relevant communities and partners on adoption and delivery enabled by early co-design should be enhanced through several larger research activities grouped in a geographical and thematic way. The current need to bring these dimensions into individual projects was reported to be highlighting the shortage of relevant skilled people in both Australia and partner countries, and to be adding to administrative and reporting complexity. A larger research grouping would provide the opportunity to resource dedicated gender skills and to embed them in field activities to facilitate more inclusive research approaches. We heard that this would also be welcomed by long-term technically oriented researchers who are committed to the need for greater inclusion but lack skills and confidence to deliver in a new way to achieve this outcome. The cross-cutting platform of work on gender, diversity and inclusion in the CGIAR might be a source of insight and/or collaboration.

Recommendation 14

ACIAR use larger research groupings to resource dedicated gender skills and embed them in field activities to facilitate more inclusive research approaches.

Appendices

APPENDIX A: Panel Biographies

Dr Wendy Craik AM – panel chair (one of Australia's leading independent public policy advisors, particularly on issues related to natural resource management)

Wendy is currently a board member of the Reserve Bank of Australia and the Australian Farm Institute. Wendy has an extensive record of executive level appointments in both the public and private sectors – including her role as Commissioner of the Productivity Commission between 2009 and 2014. Prior to this, she was CEO of the Murray-Darling Basin Commission, President of the National Competition Council, Chair of the Australian Fisheries Management Authority, Executive Director of National Farmers Federation and Executive Officer of the Great Barrier Reef Marine Park Authority.

Professor Lindsay Falvey (Commissioner for International Agricultural Research)

Lindsay has led research and development missions and projects in dozens of countries on behalf of all major development agencies. Beginning his agricultural career as a rouseabout on a remote Northern Territory cattle research station, Lindsay became CEO of international development consulting companies, Dean and Chair of Agriculture at the University of Melbourne where he continues as Professor Emeritus, and a long-serving director of a major foreign agribusiness investor in Australian agriculture. He has worked with AusAID, the World Bank, ADB, the UN and other agencies, and is the author of several agricultural science books. Lindsay is immediate past Board Chair of the International Livestock Research Institute, which is the CGIAR centre focused on livestock research oriented to the marginalised poor in the developing world particularly in Africa and Asia.

Dr Beth Woods OAM (Commissioner for International Agricultural Research and former Director General of Queensland Department of Agriculture and Fisheries)

Beth is the recently retired Director-General of the Queensland Department of Agriculture and Fisheries where she led development initiatives to deliver an innovative, productive and sustainable agriculture, fisheries and forestry sector. Previously Beth was the foundation Director of the University of Queensland Rural Extension Centre, and Professor of Agribusiness at the University of Queensland from 1997–2004. Beth has served on boards and committees including for the Grains Research & Development Corporation, the CSIRO Board, the Gatton College Council and the Queensland Rural Adjustment Authority (now QRIDA). She chaired RIRDC (now AgriFutures), ACIAR, a National Drought Policy Review, the International Rice Research Institute and WorldFish. She is currently independent Chair of the Policy Council of Cattle Council of Australia.

Dr Collin Tukuitonga (former Director-General of the Secretariat of the Pacific Community, a significant partner in ACIAR projects in the Pacific region)

Associate Professor Collin Tukuitonga is the inaugural Associate Dean Pacific and Associate Professor of Public Health in the Faculty of Medical and Health Sciences, University of Auckland. He has comprehensive clinical, public health and public policy experience in New Zealand, the Pacific Islands and internationally. Collin was the Director-General of the Secretariat of the Pacific Community for seven years to December 2019. It is the largest development organisation serving the Pacific Islands. Prior to that role, Collin was the Chief Executive of the NZ Ministry of Pacific Island Affairs, Director of Public Health for the NZ Ministry of Health and Coordinator of Surveillance of Noncommunicable Diseases for the World Health Organization based in Geneva. He was a Commissioner of the World Health Organization Ending Childhood Obesity (ECHO).

Dr Brian Keating (retired, former CSIRO with more than 30-years association with ACIAR in a variety of roles)

Brian (PhD University of Queensland 1981) is currently Adjunct Professor at the University of Queensland in association with the Queensland Alliance for Agriculture and Food Innovation (QAAFI). This honorary appointment follows a 40-year engagement in agricultural research in Australia and abroad. Brian's career has focused on the productivity and sustainability of agricultural systems in Australia and sub-Saharan Africa. He was a pioneer in the application of simulation models in farming systems research in eastern and southern Africa in the 1980s and 1990s. Over the last two decades, Brian has held a number of senior leadership roles in CSIRO, including: Chief of CSIRO Sustainable Ecosystems (2004–2008), Director of Sustainable Agriculture Flagship (2008–2013) and the member of the CSIRO Executive responsible for Agriculture, Food and Health (2014–2015). Brian served (2010–2015) on the Australian Government's statutory committees responsible for independent advice on the scientific and environmental integrity of greenhouse gas mitigation programs- namely Carbon Farming Initiative (DOIC - Domestic Offsets Integrity Committee) and the Emissions Reduction Fund (ERAC – Emissions Reduction Assurance Committee).

Dr Samantha Grover (middle-career researcher, current ACIAR Project Leader and contributor)

Samantha is a soil scientist and Senior Lecturer in Environmental Science at RMIT University, where she leads the Soil-Atmosphere-Anthroposphere Lab. Her research explores the interconnections between food, climate change and people. She works with farmers, NGOs, industry, government and other researchers around the world to more sustainably manage landscapes. Samantha's research focuses on high carbon systems such as peatlands, regenerative agriculture and composting. As a soil scientist, she applies techniques from soil physics, soil chemistry and soil microbiology with micrometeorology to explore the soil-plant-atmosphere continuum. Samantha collaborates with economists, social scientists, policy analysists as well as other biological and physical scientists to generate whole-of-system knowledge. Through her teaching of Bachelors and Masters of Environmental Science, as well as public engagement as a Superstar of STEM, President of the Victorian Branch of Soil Science Australia, Co-ordinating Lead Author of the Oceania Chapter of the UN's Global Peatland Assessment and growing media

profile, she communicates research to create impact. In this United Nations Decade of Ecosystem Restoration, Samantha aspires to make a nationally and internationally significant contribution to reversing climate change and achieving the SDGs.

Dr Carina Wyborn (middle-career researcher, Associate Professor at ANU College of Science)

Carina is an interdisciplinary social scientist with background in science and technology studies, and human ecology. She works at the intersection of science, policy, and practice, where she is interested in understanding how decisions are made in complex and contested environmental management challenges. Carina is particularly interested in the capacities that enable future-oriented decision making, and the methods and practice that are used to support decision-making in the context of uncertainty. After completing her PhD at the ANU in 2012, Carina has worked internationally, in the United States, Colombia and Switzerland, working with government and non-government organisations on climate adaptation, wildfire governance and biodiversity conservation. Carina holds an ARC Discovery Early Career Research Award, which involves research on foresight practices and anticipatory governance to identify methods that enable stakeholders to negotiate shared pathways for action in water reform in the Murray Darling Basin.

APPENDIX B: Review Terms of Reference

The review panel will:

- 1. Review progress and achievements against the strategic change agenda outlined in the ACIAR 10-Year Strategy 2018–27.
- 2. Review the implications of the strategy and its implementation including organisational structure, systems and resource allocation, and the extent to which they are helping ACIAR to deliver against its mission.
- 3. Through discussions with partners and stakeholders, and review of relevant evaluation material, assess the extent to which the strategy and its implementation is improving the effectiveness, appropriateness and efficiency of ACIAR investments.
- 4. Identify and prioritise 'unfinished business' against the strategy and emergent priorities that were not foreseen when the strategy was written in 2017, as well as any aspects of the strategy that are no longer relevant or have been overtaken by events.
- 5. Assess changes in the external operating environment, including Australian Government Aid Policy and the COVID-19 pandemic, and make recommendations about the extent to which the strategy needs to be refined, updated or re-written.
- 6. The review report addressing points 1 5 above will be delivered to the CEO of ACIAR and the Commission for International Agricultural Research by May 2022 and comprise not more than 15 pages (with not more than 40 pages of attachments) and not more than 12 recommendations.

APPENDIX C: List of Interviewees

Organisation	Interviewee	Position
ACIAR	Alice Tian	Program Support Officer Agribusiness
ACIAR	An Nguyen	Country Manager Vietnam
ACIAR	Anna Macintosh	Program Support Officer Social Systems
ACIAR	Arielle Blokker	Program Support Officer Climate Change
ACIAR	Audrey Gormley	Chief Finance Officer
ACIAR	Bethany Davies	Research Manager
ACIAR	Bethany Lees	Quality Assurance & System
	,	Improvement Officer
ACIAR	Bridgette Gusner	Program Support Officer Forestry
ACIAR	Christopher Payne	Finance Director
ACIAR	Daniel Woolstencroft	Chief Information Officer
ACIAR	Dorren Iga	Country Manager PNG
ACIAR	Dr Anna Okello	RPM Livestock
ACIAR	Dr Clemens Grunbuhel	RPM Social Systems
ACIAR	Dr Daniel Walker	Chief Scientist
ACIAR	Dr Eric Huttner	RPM Crops
ACIAR	Dr James Quilty	RPM Soil and Land Management
ACIAR	Dr Juliane Biddle	Director Multilateral Engagement
ACIAR	Dr Kazmi Munawar	Country Manager Pakistan
ACIAR	Dr Leah Ndungu	Country Manager Africa
ACIAR	Dr Neil Lazarow	RPM Water
ACIAR	Dr Nora Devoe	RPM Forestry
ACIAR	Dr Peter Horne	General Manager
ACIAR	Dr Pratibah Singh	Regional Manager South Asia
ACIAR	Dr Todd Sanderson	Research Manager
ACIAR	Dr Veronica Doerr	RPM Climate Change
ACIAR	Dulce Simmanivong	Country Manager East and Southeast Asia
ACIAR	Eleanor Dean	General Manager
ACIAR	Geoffrey O'Keefe	Manager Capacity Building
ACIAR	Hazel Aniceto	Country Manager Philippines
ACIAR	Howard Hall	RPM Agribusiness
ACIAR	Karen Davies	Program Support Officer Horticulture
ACIAR	Lisa Zaretzky	HR Manager
ACIAR	Mai Alagcan	Regional Manager Pacific/PNG
ACIAR	Mai Alagcan	Regional Manager Pacific/PNG
ACIAR	Max Clarke	Program Support Officer Livestock
ACIAR	Michelle Nakamura	Director Outreach
ACIAR	Mirah	Country Manager Indonesia
ACIAR	Peter Lopa	Procurement Officer
ACIAR	Prof Andrew Campbell	CEO
ACIAR	Rachel McGrath	Manager Research Program Support
ACIAR	Wang Guanglin	Country Manager China
ACIAR Monitoring, Evaluation &	Jenny Gordon	Chair, ACIAR Monitoring, Evaluation &
Learning Panel		Learning Panel

Organisation	Interviewee	Position
CGIAR	Alan Tollervey	Foreign, Commonwealth, and
		Development Office
CGIAR	Elwyn Grainger	Managing Director, Institutional Strategy
2202		and Systems
CGIAR	Holger Meinke	Chair, Independent Science for
CCIAD	Cania Varraavilan	Development Council
CGIAR	Sonja Vermeulen	Global Director, Genetic Innovation
Charles Sturt University	Jason Condon	Project Leader (Soils and Land Management)
Charles Sturt University	Prof Lee Baumgatner	Project Leader (Fisheries)
Charles Sturt University	Prof Michael Friend	Pro Vice-Chancellor, Research and
Charles Start Offiversity	1 TOT WHEHAET THEHA	Innovation
Commission for International	Don Heatley	Former Chair
Agricultural Research	,	
Commission for International	Dr Sasha Courville	Commissioner
Agricultural Research		
Commission for International	Fiona Simson	Commission Chair
Agricultural Research		
Commission for International	Su McCluskey	Commissioner
Agricultural Research	T V. I	
Commission for International	Tony York	Commissioner
Agricultural Research CSIRO	Dr Di Mayberry	Project Leader (Livestock)
CSIRO	· · ·	Project Leader (Livestock) Research Director
	Dr Michael Battaglia	
CSIRO	Michaela Cosijn	Project Leader (Climate)
CSIRO	Monica van Wensveen	Project Leader (Portfolio Planning and Impact Evaluation)
CSIRO	Nick Pagett	Corporate
Department Foreign Affairs & Trade	Fiona Lynn	Director - Agricultural Development and
(Cmwlth)	Tiona Lynn	Food Security Section
Department Foreign Affairs & Trade	Jaimie Isbister	Ambassador for the Environment
(Cmwlth)		
Department Foreign Affairs & Trade	Kathy Klugman	Deputy Secretary
(Cmwlth)		
Department of Agricultural Land	Dr Seng Vang	Director
Resources Management (DALRM),		
General Directorate of Agriculture		
(GDA), Cambodia		D:
Department of Agriculture, Water	Andrew Tounge	Biosecurity
and the Environment DFAT Head of Mission	Craig Chittick	HOM - Vietnam
DFAT Head of Mission	JB Carassco	Former HOM - Laos
DFAT Head of Mission	John Feakes	
DFAT Head of Mission DFAT Head of Mission	Paul Kelly	HOM - Kenya and Fiji HOM - Laos
	·	
Ethiopian Institute of Agricultural Research (EIAR)	Dr Taye Tadesse	Director for Crop Research
Fiji National University	Prof Roland De Marco	Pro-Vice Chancellor Research
Grains Research Development	Peter Carberry	General Manager Applied Research and
Corporation	,	Development

Organisation	Interviewee	Position	
Griffith University	Helen Wallace	Project Leader (Forestry)	
Horticulture Innovation Australia	Alison Anderson	General Manager, Research &	
		Development	
Horticulture Innovation Australia	Anthony Kachenko	General Manager, Stakeholder	
		Experience	
Institute for Policy and Strategy for	Dr Tran Cong Thang	Director General	
Agriculture and Rural Development			
(Vietnam)	DI TI'N I'I		
Institute for Policy and Strategy for	Pham This Ngoc Linh	Head of Science & International	
Agriculture and Rural Development (Vietnam)		Cooperation Department	
Institute for Policy and Strategy for	Trang Truong	Deputy Head of Faculty	
Agriculture and Rural Development	Trung Truong	Deputy field of Fuelity	
(Vietnam)			
International Development Research	Santiago Alba-Corral	Director - Climate Resilient Food Systems	
Corporation (Canada)			
John Dillon Fellowship (Philippines)	Moises Neil Neil Seriño	Scholar	
Mataram University, NTB province	Prof Dahlan	Professor of Livestock Science,	
Indonesia	Dahlanuddin		
Meryl Williams Fellowship	Agnes Sumareke, PNG	Scholar	
National Agricultural Research	Dr Birte Komolong	Program Director, Agricultural Systems	
Institute (PNG)			
Pacific Adventist University, PNG	Dr Lalen Simeon	Deputy VC,	
Pacific Scholarship Program	Leikitah Naituku	Scholar	
Pacific Scholarship Program	Mr Tiraon Taioti	Scholar	
Pacific Scholarship Program	Ms Salote Nasalo USP	Scholar	
Philippine Council for Agriculture,	Dr Reynaldo Ebora	PCAARRD Executive Director	
Aquatic and Natural Resources			
Research and Development Plant Biosecurity Research Initiative	Jo Luck	Program Director	
Policy Advisory Council	Dr Achmad Suryana	Program Director Councillor	
Policy Advisory Council	Dr Audrey Aumua		
Policy Advisory Council	Dr Reynaldo Ebora	Councillor Councillor	
Policy Advisory Council	Dr Segenet Kelemu	Councillor	
Policy Advisory Council	Dr Van Bo	Councillor	
Policy Advisory Council		Former President	
·	Prof Kym Anderson	President	
Policy Advisory Council	Prof Wendy Umberger		
QLD Department of Agriculture and Fisheries	Michelle Sinn	Principal Coordinator (External Funding)	
QLD Department of Agriculture and	Nick MacLeod	Director, Tropical Fruit & Market Access	
Fisheries	THER WILLEGU	RD&E	
Researchers in Agricultural for	Belinda Nielsen	President	
International Development (RAID)			
and ACIAR Graduate			
Royal Melbourne Institute of	Dr Mary Johnson	Project Leader (Social Systems)	
Technology			
Samoa	Tilafono David Hunter	CEO, Ministry of Agriculture and Fisheries	
SPC	Karen Mapusua	Director, Land Resources Division (Suva	

Organisation	Interviewee	Position	
Sunrice	Chris Quirk	Manager Grower Services and Agronomic Development	
Syngenta Foundation Hervé Thieblemont Mekong Region Directo		Mekong Region Director	
The Crawford Fund Colin Chartres CEO		CEO	
The Crawford Fund	Shaun Coffey	Director Capacity Building	
The Pacific Community	Dr Stuart Minchin	Director General	
The Pacific Community	Karen Mapusua	Head LRD	
The Pacific Community	Neville Smith	Head FAME	
University of Adelaide	Dr Tamara Jackson	Project Leader (Water)	
University of New England	Dr Rebecca Spence	Project Leader (Capacity Building)	
University of Queensland	Jaquie Mitchell	Project Leader (Agribusiness)	
University of Queensland	Peter Varghese	Chancellor	
University of Queensland	Prof Neal Menzies	Head of School - School of Agriculture and Food Sciences	
University of the Philippines – Marine Science Institute	Dr Anette Menez	Marine Ecologist	
University of the Sunshine Coast	Prof Ross Young	Deputy Vice Chancellor - Research	
University of Western Australia	Prof Kadambot Siddique	Hackett Professor of Agriculture Chair and Director, Institute of Agriculture	
University of Western Australia in Bangladesh	Dr MG Neogi	Deputy Project Leader, Incorporating Salt-Tolerant Wheat and Pulses into Smallholder Farming Systems in Bangladesh	
Vanuatu Ministry of Agriculture, Livestock, Forestry, Fisheries and Biosecurity	Moses John Amos	Director General	
Visayas State University, Baybay, Leyte, Philippines	Dr Hadasha N Bongat	Instructor	

APPENDIX D: Records of Consultation

Appendix D1 – Commission for International Agricultural Research

Stakeholder	Commission for International Agricultural Research	
Category	Governance	
Date/Time	12 noon, Wednesday 9 February 2022	
Location	ACIAR House	
Start: 12 noon	Finish: 1:00pm	

Panel Members: Dr Wendy Craik, Prof Lindsay Falvey, Dr Beth Woods,

Commissioners: Fiona Simson (Chair), Dr Sasha Courville, Tony York, Su McCluskey, Prof

Andrew Campbell

Observers: Dr Daniel Walker (Project Leader), Professor Wendy Umberger and Suzie Gaynor

(Secretariat)

Dialogue Points

- The changing role of the country offices/network has increased their capacity to take on a broader core role in stakeholder engagement and communications. How far can you push it?
- Outreach has grown in leaps and bounds, while impacted by COVID, it has grown in capacity and capability to offer more: COVID changed the way people operate and works together.
- More country-led activities will need to continue to grow.
- Need to continue to consolidate the cross-cutting functions and cultural dynamics that go along with that.
- Changes in operating environment due to COVID but one thing to look at is how ACIAR responded, and how will we learn from this to ensure responsiveness, nimbleness, and dexterity into the future. How do we assess risk of being like this?
- Need to look at what ACIAR can look like in the future to give directions to an incoming CEO, therefore Andrew/Executive can put some foundational things in place. The MTR may raise more questions for the organisation to consider/answer to shape ACIAR going forward.
- Has ACIAR moved too far away from a focus on a hunger and poverty mandate?
- The unique set of factors in this mid-term review means it is opportune to consider if there is a better way of doing things, without being defensive. Identify the opportunities and challenges so to consider whether the current model of operating can be improved. For example, integration and connections of the work, the private sector work is in the strategy, but hasn't been achieved as yet; the ongoing geographic footprint; evolution of partner countries and their capacity to take on more work; and what is the ongoing role of Australia in leading this work; what are the most appropriate trajectories?
- The work to date has been excellent, but it is a good chance to step back and determine if the ACIAR way of operating is still the best way to do business in the new changes in the operating environment.
- Noting that the budgetary situation since the start of the strategy. Since Federation, ODA funding is at its smallest.

- Consider the unfinished business in the strategy: role of ACIAR in the innovation system; haven't done as much with the RDCs; discussing strategically with partners about the best way to develop capacity to continue to deliver; do more with Peter's diagram of country trajectories; need a more differentiated portfolio; there's an opportunity to be a better/bigger broker of finance and science through the improved relationships.
- How do we engaging more strategically with the Australian agriculture innovation system, including our part on stewardship of it?
- Are we leveraging the private sector enough? How can ACIAR better engage with the private sector to leverage ODA. How can ACIAR more effectively 'reach into' big development expenditure? How can ACIAR broker big research investments (beyond our financial capability) in the region?
- ACIAR partnership model is a core distinctive value proposition are we trading on a dwindling relationship capital (particularly given COVID impacts?)
- Unique value proposition of ACIAR being its partnership model and this has been proven during the last 2 years. But how much have we traded on relationship capital. Are the right things in place to maintain/build relationship capital if we must change the way ACIAR operates?
- ACIAR should not be dragged off target as a multilateral donor
- Need to be clearly communicating the role and not being dragged into donor-space.
- The way ACIAR differentiates how it works with countries and includes tripartite activities where appropriate excellent. Need a sophisticated understanding of the divergent changes in our partner countries
- Is ACIAR working in the right places? Where should ACIAR be based: Australia-based, or Canberra-based or a somewhere else based organisation? Where do we need to be to do our best work; how best do you meet, connect and maintain relationships. We are unlikely to move back to how we worked before the pandemic, rather more likely to be a hybrid way. However, need to be selective about when you do electronic, noting difficulties as we are still going through the transition. Technology has been difficult for oldies, and some partners and we are working with a lot of unknowns.
- Despite the uncertainty and not knowing how long COVID will persist, the mid-term review is happening with a some definites ahead of us: Andrew will end his term as CEO on 31 Jul 2023. We are in a position of strength to decide what works, where are we going and how is it best to get there.
- Keep in mind that the submissions and the report will be public, therefore it is a PR
 document

Action: Provide a copy of the testimonial videos from the 40-year anniversary dinner for the review panel.

1:00pm Interview finished

Appendix D2 – Policy Advisory Council (for international agricultural research)

Stakeholder	Policy Advisory Council	
Category	ACIAR governance	
Date/Time	3pm, Tuesday 22 February 2022	
Location	WebEx	
Start: 3:00pm	·	Finish: 4:45pm

Panel Members: Dr Wendy Craik, Prof Lindsay Falvey, Dr Beth Woods

Policy Advisory Council Members: Prof Wendy Umberger (President), Dr Reynaldo Ebora, Dr

Segenet Kelemu, Dr Van Bo, Dr Achmad Suryana, Dr Audrey Aumua

Secretariat: Suzie Gaynor

Welcome & Introductions -

Wendy Craik (panel chair) and Wendy Umberger (PAC President)

1.0 1. Have there been any significant shifts in the state of agriculture or food security in your country relative to five years ago? Or any significant changes in your research capability or directions?

In Africa: Fall Army Worm threatening maize crops has gotten worse, Locusts in Eastern Africa. Very challenging times due to COVID, shifting budgets and research priorities. No loss of research capability in iCIPE, but other research organisations aren't as well placed and have lost research capacity. Have targeted Foundations for funds

Indonesia: national development planning (2020–2024), food system development, Indonesia Government, internalising sustainable goals into national development planning in SDG1. In SDG2 is being progressed through *Bappanes* (overarching planning department in Indonesia). Significant change to higher value food values which is improving per income capita and attracting more women into the labour force.

There are four shifts/changes of note:

- adoption of demand led food production approach depending on consumers.
- development of a 'Food development Centre' Food Estate in 5 provinces, eg project
- 3. promoting 'farmers cooperation approach to increase economies of small-scale farmers.
- 4. Agriculture modernisation trough smart farming and digital technology

Philippines: still addressing the same problems as 5 years ago, although some improvement in infrastructure and mechanisation, but only in some areas (ricebased mostly). Problems similar to Africa, eg Fall Army Worm massive infestation and are focusing research to address the problems. A major change of note is the focus on technology transfer and strengthening the extension system (DOST-PCCARD) and creating Technology incubation agency. The establishment of

Harmonised National Agriculture Agenda and a Whole of Government approach of agencies involved in agriculture. Digital and smart agricultural approach was very important during the pandemic. Commend ACIAR on assisting them with building capacity. There is a shift in commodities priorities and a shift in changes to possibilities but still addressing the same problems of 5 years ago.

Vietnam: has seen significant improvements when working with AIAR over a long time. Pandemic has disrupted supply chains. Ag was especially important during pandemic because it contributed to social stability. Focus on 1. restructuring of sectors, converting rice lands to fruit trees and 2 quantitative production to quality production to improve productivity and returns (a very important improvement). Food security is still low in parts of Vietnam, to increase food security at national and household levels to improve food security index. Strategy on food security used to focus on production, but we are paying more attention to food waste and post-production losses

Pacific islands: (22 countries) We think about ACIAR work in two styles or approaches, the larger Melanesian islands (PNG, Solomon islands and Vanuatu) and then the smaller Polynesian islands. In Food Security, the land and oceans interface very important in terms of food security, that is oceans and fisheries are equally important and don't think about separately. From a change perspective, the greatest change is related to climate change, and are already experiencing devastating impacts of events in the oceans and rising sea levels. Therefore, approach to resilience is of utmost importance, particularly to small island nations. Eg entire ag sector in Tonga decimated. Water inundation and salt invasions is threatening land agriculture. Smart agriculture can address extreme events, salt invasion, drought and sea level rise. There is a significant shift in priorities to coconut research (pests and diseases, climate effects) as becoming increasingly important.

2.0 What does ACIAR do well that you would like to see maintained? Are there changes to the way they operate that you would like to see?

Pacific island states: unique characteristics is the way they manage their relationships with partners and work with their partners; recognising their partners don't have sophisticated systems, ACIAR has deep accompaniment (hand holding approach to problem solving), deep sense of trust with government partners and institutions with government, they take their time, they are respectful of relationships, look after a partner, and not just help but identify and help grow capacity – they aren't part of fly in , fly out research. Not seen to be taking knowledge, the research is packaged in an 'in country' way.

Indonesia: noting the big changes in research management in Indonesia is centralised into one agency 'National Research Innovation Agency – no more individual agencies. #1 ACIAR does capacity building and research management very well – through short term and long-term training in Australia, learning not just about the science but also about management. Excellent to improving research quality. #2 – partnership approach in research collaboration should be maintained and the

transfer of research knowledge is excellent. .#3 collaboration of ACIAR in Indonesia (BRIN) with influencing the higher levels of government to implement.

Africa: Excellent culture in nurturing and respectful partnership = no patronising. ACIAR is a small, flexible team that is very responsive to change as shown during the pandemic – which is unique and excellent. ACIAR I able to stretch their money by partnering with other agencies as a working strategy which should be encouraged and intensified: eg by partnering with Rockefeller Foundation and influencing other major funders that don't have experience with cultures in the country in which we work. ACIAR can influence priorities of major Foundations eg Jeff Bezsoz

Vietnam: #1 keep harmonising strategies, eg the 10-year strategy with 10-year country collaboration strategy. #2 happy with new mechanism for developing projects. Good job in technology development, but could improve in disseminating the technology; alumni is excellent and provide more opportunity for alumni to join in alumni partner countries.

Philippines: support other speakers of the ACIAR strengths, particularly around partnership nurturing. And the consultative process. Very good approach to reaching a consensus and then easy to implement. Engagement with ACIAR is not donor to recipient, it is a true partner-partner partnership in all ways. Agrees that alumni that can help the process more — hence would like to see ACIAR pick the brains of alumni more, especially those that are occupying high-levels in government. ACIAR can develop the network more both locally and nationally. Philippines have learnt a lot from the ACIAR impact assessments. High level consultation could be more visible to better impact policy in country. Greater participation of other partnerships, particularly private partnerships.

3.0 3. Given the changes (specifically) as a result of COVID, are there new initiatives or further changes to research activities ACIAR undertakes that you think would be valuable?

Indonesia: unfortunately, the big changes in research coordination/management in Indonesia has coincided with the pandemic. A major restructuring of Indonesia's R&D ecosystem is under way. The formation of single research entity BRIN as a central agency covering all research. The single research entity BRIN (also known as the National Research and Innovation Agency) has been created not as a Ministry but as an agency answering directly to the Indonesian President.

The program that could be encouraged into a major project is building resilience to micro biotic resistance, and security in terms of food and human health, #2 Like to see a follow up UN FFS commitment. #3 improve the capacity of farmers to overcome external shock, and increase the readiness for the next shock.

Philippines: endorses the need to be ready for African swine fever – would like to see bigger programs focusing on these things. One of ACIAR major strengths is the coordination by the in country staff (eg Mai) – the consultation is so subtle but so effective. ACIAR should always have a co-funding arrangements that leads to ongoing in-country support, which requires advanced planning. Give much credit to Andrew and Peter for their 'open conversations', and the excellent perspective that they have. Several long-term programs could look at livestock and marine resources to strengthen partnership arrangements.

3.0 3b What about any new initiatives or further changes to the capacity building activities ACIAR undertakes that you think would be valuable?

Vietnam: Commends ACIAR on collaborating with countries to co-fund as that secures the in-country government commitment and implementation to a project.

Also commends ACIAR on the changes to the fellowships JDF JAF and MWF, due to the pandemic. It redesigned its fellowships, and Vietnam is the second country to engage in the new format, increasing the numbers involved from one to 15 people involved and avoid brain drain of people leaving Vietnam.

Africa: ACIAR could look into lessons from Africa that are relevant to the Pacific and visa versa to move the successful stories (eg insects as animal feed and process human waste, and high quality protein for animal feed) and share what works further afield would be really useful.

Someone suggested a wider definition of alumni to include grads from Australian universities as a current/future research resource for new initiatives

4.0 4. Do you think that partner countries working with ACIAR could successfully encourage the private sector to invest in programs?

Africa: the small to medium size private sector in Africa isn't well placed to be involved.

Philippines: an increase opportunity to involve the private sector which has been good. There's a new program going through program now 'Science for Change' to foster more private sector involvement. They are hoping this program will become law after the next election, ACIAR could be more involved in this. Another new program is focusing on business innovation is another program that deals with a group of private sector people, in an R&D style program that gets private sector involved.

Vietnam: private sector play an important role in the national economy. Vietnam is targeting more private sector involvement (to increase private sector contribution to GDP from 43% to 66%), hence involving more private sector is very important. However, private sector isn't inclined to invest in research as it is high risk and low reward. Supports private sector involvement.

Indonesia: supports private sector investment (domestically and internationally).

5.0 5. Is the CGIAR active in your country? Do you have any views on how ACIAR funding should be deployed in the new CG structure?

Vietnam: there are 15 CG centres active in Vietnam and three offices. One success story is the SEACAF program, which developed the Smart Climate program to avoid drought and salinity. CG tends to operate independently, and they would like to see more coordination. Vietnam has a CG coordination meeting every 2 years bringing all CG centres in Vietnam together (2021 was the third meeting in December 2021). ACIAR has provided active and effective support to the dialogue, but needs to think about funding One CG rather than individual centres

Indonesia: has CIFOR, but IRRI could play a huge role in Indonesia. Funding from ACIAR is part of CGIAR, they could continue direct engagement (direct one-to-one partnerships), and not all through the CGIAR.

Philippines: need proper complementation. Funding directly versus funding new CG, depends on implementation. Funding needs to be complementation. If you are going to priorities the funding, first take a look at the in-country situation, national priorities and co-funding with government. Funding depends on situation and impact.

Africa: there are four CGs head quartered in Africa. Enormous respect and appreciation for the CG, but the reform, as yet, has not affected the change that is needed. Communication has not improved, and there is a big void. The reform has to do a lot better and suspects it will return to the collapsing CG. In CG comms there is a void that needs filling especially for CG staff.

Closing remarks

In terms of the CG, there are some good coordinate impact in some countries of CG investment, but this isn't universal. Concern remains for how best for ACIAR to invest and influence the One CG reform and CG centres.

Thank you to all for the ideas of how best ACIAR can continue to engage and invest for the greatest impact and success.

4:45pm

Meeting closed

D2 Addendum to Policy Advisory Council Dialogue

Submitted by PAC Member, Dr Bo, Vietnam

Question 1. Have there been any significant shifts in the state of agriculture or food security in your country relative to five years ago? Or any significant changes in your research capability or directions?

Answer: In the past 10 years, the highlights of Vietnam's Agriculture are as follows:

- Restructuring the sector, especially converting inefficient rice land to aquaculture and fruit trees. More than 200,000 hectares have been successfully converted, especially in the Mekong Delta.
- Agriculture strongly shifted from quantitative production to qualitative one, increasing income per unit area instead of focusing on increasing productivity.

Smart production is a priority direction of agricultural production, in which market intelligence and new advanced technologies are of particular interest.

Vietnam's agriculture has a high degree of openness (many export commodities are over 80-90%), so the shift from supply-driven production to 'demand-driven' is strongly deployed to meet the market demand.

As a result, agricultural production has achieved the following achievements:

2011–2020: Reduced the proportion of crops in the structure of agricultural production value from 56.9% to 43%; fishery increased from 20% to 26.2%; raised livestock from 19.6% to 25.2%; increased forestry from 2.3 to 4.1%.

The proportion of high-quality rice increased from 41% in 2010 to 80% in 2018.

Regarding food security, Vietnam has committed to 'Transparency - Accountability – Sustainability' production, improving the food security index from 63rd in the world ranking to about 50th and moving towards nutritional security.

The orientation of Vietnam's Agriculture in the coming time is: Prosperous Agriculture, Wealthy Farmers and Civilized Rural areas

Question 2. What does ACIAR do well that you would like to see maintained? Are there changes to the way they operate that you would like to see?

Answer: ACIAR has been operating in Vietnam for nearly 30 years, since 1993, with nearly 200 projects and about 100 million Australian dollars. Research collaborations span almost all areas of agriculture, from common policy (land, integration, markets); policies in each sub-sector, food safety and climate change.

ACIAR's research findings are increasingly impactful in terms of scale and effectiveness. In addition to the direct impact of providing technologies and policy recommendations for agricultural development, the projects also support scientists to improve their capacity in research, analysis and policy making, on logical thinking methods and about foreign languages, helping them open the door to scientific cooperation with the world. In 30 years, through ACIAR,

there have been 74 John Allwright scholarship recipients - 49 doctorates and 25 masters; and thanks to the John Dillon scholarship, 18 young scientists have been trained in management to become potential leaders. In addition, hundreds of scientists have worked directly on projects, helped them to significantly improve their professional capacity, many of them received the State Award for Science and Technology from works with contributions from ACIAR

In recent years, ACIAR has approached research in a way that is in harmony with the agricultural strategies of the partner countries. Typically, ACIAR collaborated to develop the ACIAR-Vietnam Research Collaboration Strategy 2017–2027 with nine goals, in which special emphasis was placed on technology development, efficient exploitation of resources in the direction of producing more food and products with less resources and strengthen human resources. ACIAR also continues to support market research and development, with special interest in improvement of skills, livelihoods, and incomes of smallholder farmers, including ethnic minority areas.

The Strategy also specifies 6 research themes, including i) Food safety; ii) Climate Change, iii) Soil fertility and crop-livestock systems, iv) Market engagement, v) Forestry and vi) Aquaculture

In the implementation solution, the strategy shows the strong commitment of ACIAR to continue to support capacity building for researchers; connect businesses, especially the private sector, to participate in research and trade results during the project implementation period. Gender and equity issues are also of interest to both sides. The roadmap to share research funding is also an important solution in the implementation of the strategy.

The year 2022 marks halfway through this comprehensive and feasible strategy. Similar to today's evaluation activity, we also want a review of our partnership strategy next year. We want to see more active participation of the Vietnamese partners in the collaboration, paying more attention to proposing research ideas, financial contributions, and leading future research.

Question 3. Given the changes (specifically) as a result of Covid, are there new initiatives or further changes to research activities ACIAR undertakes that you think would be valuable? What about any new initiatives or further changes to the capacity building activities ACIAR undertakes that you think would be valuable?

Answer: COVID-19 is indeed a huge challenge for agricultural research in general and cooperation in ACIAR projects in particular. The disruption of travel between Vietnam and Australia as well as to the research sites caused many difficulties during the project implementation. However, amid difficulties and wisdom, the project has enhanced the 'participatory' implementation method of all project partners. In this process, local authorities and people are more proactive in project implementation. A bridge via Zoom and/or Webex has been established, allowing people, in addition to updating information about project plans, to have additional knowledge about information technology. All these help them in realizing digital agriculture.

ACIAR is trying a new model of partnership, in which a capable institution from a partner country (instead of an Australian one) can become a commissioned organization and lead a multi-partner

project. The research on food loss along the catfish value chains in the Mekong region is the first trial of the model in the Indochina region. A Vietnamese institute was selected as the leading agency to manage a large partnership from Australia, Cambodia, Laos, and Vietnam. We hope this partnership structure will encourage stronger ownership and more effectiveness of the local partners, at the same time reducing the dependency on travels of the international researchers for the project operation.

Also, due to travel restrictions, ACIAR has re-designed its fellowships. Vietnam has been the second country to try the new structure of John Dillon Fellow, having more fellows from the country with online training and practices through project implementation.

Question 4. Do you think that partner countries working with ACIAR could successfully encourage the private sector to invest in programs?

Answer: Developing private enterprises in general and especially private enterprises in agriculture in particular is a priority of the Vietnamese government. However, due to high risks of weather and market, very few private enterprises want to invest in agriculture. In 2020, there are only 1.4% of agriculture, forestry and fishery enterprises in the whole country (11,398), of which up to 47% of enterprises have less than 5 employees, 22.9% of enterprises have between 5 and less than 10 employees. Only less than 10% of businesses have chain links.

Currently, the strategy to 2030, Vietnam affirms, the state economy, the collective economy together with the private economy are the core to develop an independent and self-reliant economy. In there: forming a system of enterprises investing in agriculture and rural areas that play the core role (input supply, processing, and trade) in association with farmers, leading the value chain and developing the market. The goal is that by 2030, there are at least 2 million enterprises with the proportion of the private sector's contribution to GDP reaching 60-65%.

Therefore, cooperation with private enterprises is not only consistent with the orientation of the Government of Vietnam, but also has many opportunities to improve the efficiency of ACIAR's research cooperation, linking research with development and improving technology transfer as well as its commercialisation.

Question 5. Is the CGIAR active in your country? Do you have any views on how ACIAR funding should be deployed in the new CG structure?

Answer: Currently in Vietnam, there are 10 of 15 CGIAR centers operating in Vietnam, including: IRRI, ILRI, CIAT, ICRAFT, ICRISAT, CIP, IMMI, CYMMYT, Bioversity International, WorldFish and IFPRI; in which 3 organisations have a Country Office: IRRI, ICRAFT, ILRI and CIAT have regional office (currently Alliance of Bioversity International and CIAT, after reorganizing with Bioversity International).

These centers work effectively. Many Vietnamese rice varieties are derived from IRRI's germplasm. More than 70% areas of cassava are planted with varieties originating in cooperation with CIAT. Many other new plant varieties and technologies have also been developed in cooperation with CGIAR centers.

CGIAR is also clear-headed in connecting its centers for crossing issues like climate change and

food security. Following this direction, CGIAR has formed the Research Program on Climate Change, Agriculture and Food Security (CCAFS)

In the last 10 years, this CGIAR Program has brought together the world's best agricultural scientists and climate experts to study and address the interactions, synergies and trade-offs between climate change, agriculture and food security. This program has supported the development of Climate Smart-MAP (CS-MAP) for Vietnam, a special application in the Mekong Delta in rice sowing adjustment, limiting the impact of drought and salinity.

The results are: In the Winter-Spring crop 2019–2020, the area damaged by salinity and drought compared to the 2015-2016 spring season decreased by about 176,000 hectares of rice (equivalent to more than 73% of the area at risk of salinity intrusion) and the damage level also decreased by over 70%.

Early sowing in the Mekong Delta has been proven in Winter Spring 2019–2020 and has higher yield compared to that of the normal schedule farmers group, thus the income of the whole year is also higher by 34%.

Due to the program's effectiveness, MARD was selected CS-MAP as the typical success story of Vietnam to report at the United Nations Climate Change Summit COP26 held in Glasgow, Scotland in November 2021.

About views on how ACIAR funding should be deployed in the new CG structure?

Previously, CGIAR centers operated quite independently, with little exchange of information, even among partners collaborating organizations. This operating mechanism will of course lead to overlaping or create the gaps, wasting resources.

To improve this situation, Vietnam and some of CGIAR centers, leading by IRRI and ILRI took the initiative to organize a MARD-CGIAR coordination meeting every two years for the parties to share information, propose idea of multi-party cooperation. In 2021, the third coordination meeting has been conducted on 10 December 2021. In this process, ACIAR Hanoi provides active and effective supports to above-mentioned meetings.

As I know, ACIAR is a big sponsor of many CGIAR centers. Therefore, the adjustment of the financial support mechanism should also be considered. Therefore, similar to ACIAR that developed a 10-year strategy with Vietnam, perhaps it should also develop a 10-year strategy with CGIAR instead of just planning to cooperate with each centre in accordance with One CGIAR orientation. In this strategy, ACIAR will see the priorities of each partner country in each area to make the most appropriate and effective support decisions.

Prepared by Dr Nguyen Van Bo

Appendix D3 – Senior Officials in ACIAR Partner Countries

Stakeholder	Discussions with Senior Officials in ACIAR Partner Countries	
Category	Stakeholders	
Date/Time		
Location	Online	
Start:	Finish:	

Panel Members: Dr Collin Tukuitonga

Interviewees: as listed

As part of the ACIAR Review, I (Dr Colin Tukuitonga) conducted 12 Zoom discussions with representatives of Governments and universities in Bangladesh, Cambodia, Ethiopia, Indonesia, Philippines (2), PNG, Samoa, Vanuatu, the Director of the Land Resources Division (LRD) of the Pacific Community (SPC) and the Regional Manager Pacific and PNG. Most of the interviewees were senior officials in Government Ministries and/or senior research academics in partner countries.

The Director of the LRD Division at SPC presented an overview of the ACIAR investment in the Small Islands Developing States (SIDS) of the Pacific region. Furthermore, I was able to speak with the Regional Manager Pacific and PNG based at the Australian High Commission in Suva. Both individuals confirmed the importance of ACIAR in the region especially the work to develop climate resistant crops for and with the small islands of the region.

1.0 Policy Advisory Committee (PAC)

All interviewees stressed the importance of PAC and ensuring that partner countries continue to be part of the PAC. The PAC provides guidance and advice to ACIAR based on their experiences from the partner countries. Membership of the PAC is an additional way in which ACIAR develop and maintain effective relationships with ACIAR.

2.0 Constructive and Respectful Relationships

Almost without exception, all interviewees confirm positive and constructive relationships between ACIAR and partner countries. One interviewee had been working on ACIAR projects for over 30 years and he confirmed the value and importance of ACIAR investments in his country. ACIAR stands out as a unique organization supporting basic research in agriculture and related fields. Representatives stressed the importance of long term partnerships as the underlying factor behind much of the success of ACIAR investments in partner countries. They were able to describe the approach by ACIAR in responding to and supportive of local needs rather than imposing their expectations on local partners and researchers. ACIAR staff and researchers were respectful of local preferences and researchers. Interviewees confirmed the importance of long term

partnerships and investments and discouraged investment in 'adhoc' projects not linked to country programmes. They believe that long-term partnerships are key.

All interviewees reported the responsiveness and adaptability of ACIAR. They were unable to identify programme failures in their respective countries and all referred to the open dialogue and flexibility of ACIAR staff. Sustainability was a constant concern and interviewees often referred to the need to build sustainability plans with local governments during the project/programme design phase. Projects that were discontinued usually occurred as a result of local government resource constraints and policy changes at the local level.

3.0 Training and Capacity Building

Training and capacity building is a fundamental part of the ACIAR mission. It has built local capacities and capabilities in a range of areas, including agriculture, livestock and fisheries. Scholarships and fellowships continue to be critical aspects of ACIAR investments and all interviewees supported the investment. Almost all interviews expressed a desire for increased investment in scholarships and fellowships. John Dillon and Meryl Williams Fellowships are well regarded and sought after.

The Pacific Agriculture Scholarships and Support (PASS) program aims to bolster an agricultural innovation system by offering scholarships for postgraduate research into ACIAR priority areas and support for academics. Launched in 2020, the scholarships offers Masters of Science and PhD on agriculture and applied sciences with the University of the South Pacific (USP) and Fiji National University (FNU). The PASS contributes to empowering Pacific communities to build its research capacity to meet current and emerging agricultural challenges that impact the region, particularly on soil health, natural resource management, biosecurity, market access, gender equity, one-health, nutrition, and climate resilience. PASS is regarded by all interviewees as a priority for future investment.

To date, the program has given about 20 scholarships to agriculture researchers in the region and will continue to be available to students from Fiji, Kiribati, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. The PASS programme is a priority for SIDS and SPC.

4.0 Priorities for the Future

All interviewees confirm that the current strategic plan objectives are appropriate and wholesale changes should be avoided. There are, however important improvements needed to ensure that ACIAR investments remain relevant and valued by partner countries e.g accelerate project design and approval process to overcome delays raised by several stakeholders. They agree that ACIAR's role as a broker and investor of international agricultural research partnerships addressing major local challenges is

appropriate and should continue. Training and capacity building is an important part of the ACIAR investment along research.

In the Asia-Pacific region, the negative impacts of the climate crisis will become even more important as extreme weather events become more frequent and agricultural yields are expected to decline. The Pacific Community (SPC) estimates that agricultural yields and coastal fisheries harvest will decline by half by 2050 as a result of the climate crisis. Access to clean water will become even more difficult in the small atolls of the Pacific region but water security is an issue across all areas where ACIAR operates. Salt water inundation, environmental and habitat destruction will compromise the protein source for many communities in the Pacific Islands.

Food Security remains the primary focus of ACIAR investments as part of the ACIAR 10- Year Strategy 2018–2027. All 6 objectives remain relevant particularly in ensuring food security and reducing poverty. In the Pacific SIDS, food security is a critical priority in view of the high prevalence of non-communicable diseases (NCDs) due in large part to the importation and consumption of highly processed food items and increased consumption of sugar sweetened beverages. Concurrently, many infants and children in PNG, Solomons and Vanuatu are stunted as a result of calorie and micronutrient deficiencies. Similar concerns were raised by interviewees from Asian nations.

All interviewees supported the need for scholarships and fellowships as part of the capacity building objective. Interviewees agreed that scholarships should be offered in both Australian universities and local training institutions. Concerns about trainees from developing countries remaining in Australia after their training have not been borne out in practice.

The written submission from Samoa is attached. The submission is a good illustration of the priorities for the Pacific Islands.

5.0 Proposed Technical Support & Research in Samoa for next 3 years

1) Taro-Breeding-IAEA-UV method

Taro breeding still a must maintain research to ensure there is enough new lines to contain not only the Taro Leaf Blight but other viral and fungal diseases that may arise in future. The hand pollination method has proven successful for Samoa thus other available technology as practice by the IAEA could well be much faster and appropriate for Samoa in terms of multiplication and clean indexed materials.

2) Coconut Breeding/Surveillance

Similar to taro breeding, it is a must continue effort before the arrival of other strain of the Rhinocerous Beetle (*Guam Type and Bongia in PNG*). We continue to use the virus and the fungus as bio-control for such a long time, thus at times needed to test the strength of

these bio-controls for its effectiveness. Breeding for new and resistance lines to Rhino-beetle could be well the control that we seek.

3) Fruit Fly Surveillance

There are many exotic fruit fly species that are very hosts and damaging to most traded crops in Samoa as well as fruits. These surveillance to tract new incoming species is important to form appropriate controls and helps with the Government Export/Import Authority for fresh traded crops. Samoa only have two economic species so far while other neighbouring countries have more than two hence it is important to continue surveying for new fruit fly pests that could enter Samoa.

4) Pests/Diseases Surveillance update for Samoa

A task that needed to be updated for not all but for those that needed from time to time for completion of market access process. Samoa has had many Agriculture pests in the past and as time change with many factors affecting our surroundings, some of the listed pests and diseases may not exist now days and thus needed to omit from Samoa's list of pests/diseases.

5) IPM/ICM/Emerging Pests

This specific type of research is again important to minimize the use of pesticides and rely heavily on natural enemies, bio-controls and adequate management of crop rotation and use of integrated methods. It has proven all over the world with proper environment safeguard and clean air.

6) Pesticides Trials

Many Agriculture pesticides are introduced for farm and pest control usage, this can also be verified from planned trials on crops or insect pests. It may contradict with the other type of agriculture research as mention above but as we aspired to trade more of our agriculture products, it is important to have available options to the farmers either subsistence or on commercial operations.

7) Grafting Techniques/Methods

There are vast techniques on Grafting already available and practiced in Samoa, Farmers needed to be well verse on such methods/techniques, hence it's important to search for the best method to be used and saves the farmers' time and to some extend cost that may involve.

8) Tissue Culture

Testing different types of media in propagation in the Tissue Culture is crucial for clean and healthy plantlets. Multiplication of traditional varieties using Tissue Culture assists with the availability of planting materials. The experience in Samoa and may be similar to other pacific island countries is always comes in the form of un-available of planting

materials, although it is not the reason but rather the mentality of farmers that expect to have all the planting materials available anytime.

9) Crop Evaluation

Evaluation of breeding lines or any other form of introduced crop either, root, tree, vegies etc... is important for recommendation for consumption and healthy eating. Now days caution of healthy lifestyle is paramount with awareness and promotions of certain crops as nutrient and other forms of element supplements assisted to these ongoing efforts. Hence recommending the high nutrients source of crops can ease NCDs for Samoa.

10) Soil Nutrients

Recommending soil parts/areas for best cropping farming in Samoa helps with cost of farm inputs and time for farmers either for commercial or subsistence purposes. SROS Samoa has the testing accreditation to verify the findings.

11) ACIAR Strategic Objective 2 (Natural Resources and Climate Change)

Strengthening local capacity to protect human health and the environment from persistent organic pollutants (POPs) through capacity building and research of the prevalence of POPs in Samoa's bio-resources.

APPENDIX E: List of Submissions

Ref	Acronym	Submission received from	Submitted by
00	ACIAR	ACIAR organisational submission	Dr Daniel Walker
01	AARES	Australasian Agricultural and Resource Economics Society	Dr Sayed Iftekhar
02	CABI	Centre for Agriculture and Bioscience International	Sally Stone plus others
03	CG	CIFOR-ICRAF (Agroforestry)	Dr Ravi Prabhu
04	CIC	Coffee Industry Corporation (in PNG)	Ms Matilda Hamago
05	Crawford	The Crawford Fund	Dr Colin Chartres
06	CSU	Charles Sturt University	Prof Michael Friend
07	E-EFRI	Ethiopian Environment and Forest Research Institute	Dr Agena Anjulo
80	FNU	The Fiji National University	Prof Roland De Marco
09	GrifU	Researcher (Griffith University)	Prof Michele Burford
10	HoM	New Delhi Head of Mission	The Hon Barry O'Farrell AO
11	IPSARD	Institute of Policy and Strategy for Agriculture and Rural Development (Vietnam)	Dr Tran Cong Thang
12	NARI	National Agricultural Research Institute	Dr Birte Komolong
13	PCAARRD	Philippine Council for Agriculture, Aquatic and Natural Resources	Dr Reynaldo V Ebora
14	QDAF	QLD Department of Agriculture and Fisheries	Michelle Sinn
15	Researcher	Researcher (former RPM)	Dr Caroline Lemerle
16	Researcher	Researcher (former RPM and associate with UQ)	Dr John Dixon
17	Researchers	A collective of economists (CSIRO)	Dr Tim Capon
18	UAdel	The University of Adelaide	Prof Jacqueline Lo
19	UMelb	The University of Melbourne	Prof Bill Malcolm
20	UNE	University of New England	Dr Rebecca Spence
21	USyd	Researcher (The University of Sydney)	Prof Damien Field
22	UTS	University of Technology Sydney	Dr Federico Davila
23	WorldVeg	World Vegetable Center	Dr Marco Wopereis
24	IWMI	International Water Management Institute	Mark Thomson
25	CG	IRRI - International Rice Research Institute	AJ Poncin
26	CG	ILRI - International Livestock Research Institute	Dr Jimmy Smith

APPENDIX F: Glossary of Terms, abbreviations and acronyms

ACIAR Australian Centre for International Agricultural Research

ABCF Africa Biosciences Challenge Fund

APAARI Asia Pacific Association of Agricultural Research Institutions

ABARES Australian Bureau of Agricultural and Resource Economics and Sciences

APS Australian Public Service

AIA Agricultural Innovation Australia

Bappenas Ministry of National Development Planning (Indonesia)

CABI Centre for Agriculture and Bioscience International

CGIAR formerly the Consultative Group on International Agricultural Research

CIAT The International Center for Tropical Agriculture

CIFOR Centre for International Forestry Research

CIMMYT International Maize and Wheat Improvement Center

CIP International Potato Centre

CSIRO Commonwealth Scientific and Industrial Research Organisation (Australia)

DAWE Department of Agriculture, Water and Environment (Australia)

DFAT Department of Foreign Affairs and Trade (Australia)

GRA Global Research Alliance on Agricultural Greenhouse Gases

GVAP Gross Value of Agricultural Production

DISER Department of Industry, Science, Energy and Resources

ICARDA International Center for Agricultural Research in the Dry Areas

ICRAF World Agroforestry

ICRISAT International Crops Research Institute for the Semi-Arid Tropics

IFPRI International Food Policy Research Institute
IITA International Institute of Tropical Agriculture
ILRI International Livestock Research Institute

IRRI International Rice Research Institute

IWMI International Water Management Institute

KPI Key Performance Indicator

ODA Official Development Assistance

PCAARRD Philippine Council for Agriculture, Aquatic and Natural Resources

RAID Researchers in Agriculture for International Development

R&D Research and Development

RDC Research and Development Corporation
RPM Research Program Manager (ACIAR)
PSO Program Support Officer (ACIAR)
SES Senior Executive Service (of APS)

SPC The Pacific Community **WorldVeg** World Vegetable Centre

APPENDIX G: Background Reading

- Australian Centre for International Agricultural Research Act 1982 (as amended)
- <u>ACIAR 10-Year Strategy 2018–2027</u> released in February 2018 by former Foreign Minister, the Hon Julie Bishop
- <u>ACIAR Corporate Plan 2021–22</u> describes our purpose, key activities, operating context and performance for the next four years.
- <u>ACIAR Annual Operational Plan 2021–22</u> describes our intended work program on a country by country basis, listing all projects with budgets. Highly useful in country and for project leaders
- <u>ACIAR Annual Report 2020–21</u> statutory report tabled annually in parliament by 31 October containing the audited accounts – accountability focus
- <u>ACIAR Annual Review 2020–21</u> a snapshot for key stakeholders with financial summary outreach focus
- ACIAR Reviews, specifically the Independent Review of ACIAR 2013
- ACIAR Gender Equity Policy and Strategy 2017–22
- COVID rapid assessment reports
 - ACIAR Technical Report 95: <u>Food systems security, resilience and emerging risks in the</u> <u>Indo-Pacific in the context of COVID-19: a rapid assessment</u>
 - ACIAR Technical Report 96: COVID-19 and food systems in the Indo-Pacific: An
 assessment of vulnerabilities, impacts and opportunities for action (aciar.gov.au)
- Partners magazine 2021 Issue 1
- Partners magazine 2021 Issue 2
- Partners magazine 2021 Issue 3
- Partners magazine 2021 Issue 4
- ACIAR Executive Biographies
- ACIAR Organisational Chart

APPENDIX H: Additional material

(Internal documents provided to the Review Panel)

- APS Staff Satisfaction Survey- Summary Report (ACIAR) 2019
- APS Staff Satisfaction Survey- Summary Report (ACIAR) 2020
- APS Staff Satisfaction Survey- Summary Report (ACIAR) 2021
- ACIAR Agribusiness Program EXT Focus and Intent EXTRACT
- ACIAR Internal Report: progress in engaging private sector partners in projects and programs (02/2022)
- Phases of an ACIAR Project
- Program Support Officers (PSO) activities
- Biographies for the Commission for International Agricultural Research
- Biographies for the ACIAR Country Managers
- Biographies for the Policy Advisory Council