

THE CRAWFORD FUND

BUILDING AWARENESS
AND SKILLS FOR
SMARTER AGRICULTURE

ANNUAL REPORT 2016-17

WORLDWIDE CONNECTIONS



STUDENT PROGRAMS



MASTERCLASSES AND TRAINING



THE CRAWFORD FUND

For a Food Secure World



ABOUT US

What is the Crawford Fund?

The Crawford Fund is a not-for-profit organisation seeking to increase Australia's engagement in international agricultural research and development (R&D). We work to raise awareness of the benefits – for both Australia and developing countries – of investment in the sector. We also support training programs for developing country scientists, drawing on Australian experience.

We are a registered charity and depend on grants and donations from governments, private companies, corporations, charitable trusts and individuals. We work in partnership with the Australian Centre for International Agricultural Research (ACIAR), the Consultative Group on International Agricultural Research (CGIAR) research centres, and other international research organisations.

The Crawford Fund honours the life of Sir John Crawford, a remarkable Australian who supported international agricultural research for rural development, and contributed to the establishment of the CGIAR and its research centres. Along with Mr James Ingram AO and The Hon. Malcolm Fraser, Sir John was one of the principal architects of ACIAR.

What are our aims?

We aim to sustain international agricultural research for the decades to come by promoting and supporting R&D activities in which Australian organisations and companies are active participants, and by encouraging investment by governments and the private sector in agricultural research and its applications.

What do we do?

Our public awareness program improves understanding of the importance and potential of international agricultural research. Our training program offers practical, highly focused instruction to men and women engaged in agricultural research and management in developing countries.

We encourage and support young Australians in their careers, studies and volunteering in agriculture for development; and we develop policy and discussion papers to improve understanding of food security issues.

Our partners in Australia and in developing countries share a vision of a better world realised through the dedicated efforts of agricultural scientists leading research, development and training. Through collaboration and training, we can achieve more productive and sustainable agriculture, less poverty and hunger, and a more secure world.

ATSE and the Fund

The Crawford Fund was established in 1987 as an initiative of the Australian Academy of Technological Sciences and Engineering (ATSE). At ATSE's suggestion, the Fund became a separate not-for-profit company in 2014. ATSE and the Fund maintain close links – ATSE nominates a member on our Board, and we work with the ATSE Agriculture Forum around food security-related issues as appropriate.

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A SMARTER FOCUS



The next few decades will continue to pose challenges for agricultural producers in Australia and for our Indo-Pacific neighbours. Demand for food will increase as populations grow and diets change. While in Australia these challenges can present opportunities for our food producers and exporters, in many developing countries the ongoing challenge for smallholders will be to produce enough food to feed a growing population – and to feed people nutritiously, as opposed to simply filling bellies.

In Australia and overseas, pressure on already over-stretched natural resources, including land, water and ecosystem services, will increase and will be exacerbated by the vagaries of climate change. To deal with the combined effects of these factors, agriculture has to become smarter and focus on emerging options, including sustainable intensification and climate-smart agriculture.

While the Crawford Fund is a small player in agriculture and overseas development, we can judiciously assist agriculture at home and abroad through targeted interventions aimed at building capabilities. We also aim to complement ACIAR's programs by aligning the skills base of our 'membership' with areas that will benefit from assistance, and deliver this through specialist training, placement of mentors and Master Classes. Our target audiences include both scientists in developing countries, and young Australian scientists interested in careers in international development. We are increasingly

committed to assisting the Australian private sector to better understand market access and biosecurity issues in order to increase the competitiveness of exporters.

A further important plank of our strategy is to ensure that politicians and the Australian public are aware of the overall benefits accruing to Australia from engagement in international agricultural R&D. We aim to do this through our annual conferences; submissions to Australian Government White Paper and enquiry processes, and varied interactions with the media.

In the past financial year, the Crawford Fund mounted a number of State- and Territory-run training courses, and ran Master Classes in genebank operations and advanced learning (in New Delhi, India) and agricultural research leadership and management (in Penang, Malaysia). We also supported over 40 young scholars to attend the 2016 Annual Conference in Canberra: 'Waste not, want not: the circular economy to food security'. We supported a number of networking events organised by Researchers in Agriculture for International Development (RAID), which became a program of the Crawford Fund in 2016.

Submissions were also made to the Foreign Policy White Paper development process and the Senate Inquiry into National Security, emphasising the importance of agriculture as a basis for economic growth and social stability in developing countries. A further highlight was

the ABC Landline TV program highlighting the benefits from Australian agricultural and forestry investment in Nepal, which we sponsored.

The Crawford Fund also prides itself on strong governance and the important role of its State- and Territory-based committees. As the incoming Chair and CEO, we would like to recognise the key leadership roles played by our previous Chair, The Hon. John Kerin AM, who retired in February 2017; and the previous CEO, Dr Denis Blight AO, who retired at the end of July 2017. Their stewardship has helped the Fund remain vibrant during testing economic times over the past several years.

Under their leadership, the Fund ended the most recent financial year with a small surplus and a sound financial basis for future innovation. A key task ahead for the Crawford Fund is the development of a new strategic plan that recognises the challenges described above, further identifies our niche, and defines specific goals and required outcomes. This will be available in the second quarter of 2018.

**The Hon. John Anderson
(Chair)**

Dr Colin Chartres (CEO)



MAKING CONNECTIONS WORLDWIDE

The Crawford Fund's public awareness program implements a diverse strategy to raise awareness among decision-makers, stakeholders in agriculture and development, and the Australian public of the positive impact of international agricultural research on food and nutrition security at home and in the developing

world. This is done through holding national and State-based public events; producing policy papers and submissions to Government inquiries; putting Australian journalists on the ground to report on impact; providing platforms for authoritative international visitors to address key issues; and assisting stakeholders in their

related engagement activities – all through consistent media approaches.

This section presents some highlights from the period July 2016 through June 2017 and indicates some of our plans for the year ahead.



Karen Brooks of the International Food Policy Research Institute presented the morning keynote presentation

Reaching out through public events

Annual conference

Our August 2016 conference, 'Waste not, want not: the circular economy to food security', focused on food loss and waste issues along the supply chain – in production, in getting product to market, and in the management and reuse of waste, with a special presentation on the role of supermarkets. Once again, the conference attracted broad media attention.

We introduced a new structure in 2016, adding to our public and private sector keynote presentations a set of overview addresses on key topics, with a range of case studies on innovative projects achieving real impact. In place of the usual Parliamentary Breakfast, we held an invitation-only reception at Parliament House, co-hosted by ACIAR and the Department of Foreign Affairs and Trade (DFAT), as a way to engage effectively with decision-makers in the House during a busy sitting week.

Our conference survey again suggested success in our efforts to prompt discourse, networking,



'Waste not, want not' video from the 2016 conference²

engagement and mentoring between young and old, as well as action in terms of a global food security issue. Conference proceedings are available on our website¹; a video of speakers and participants, created by Sustainable Agriculture and Food Security students of Western Sydney University, is on our YouTube channel.

The Annual Conference in August 2017 is titled 'Transforming lives and livelihoods: the digital revolution in agriculture', and will be featured in our 2017-18 report.

¹ www.crawfordfund.org/wp-content/uploads/2017/04/CF-2016-Conference-Proceedings-WasteNotWantNot.pdf

² www.youtube.com/watch?v=ZbjSnohiOJU



The Hon. John Anderson's interview with Colin Bettles, Fairfax Agricultural Media Canberra Bureau Chief

Biosecurity in the spotlight Security³

The Australian Institute of International Affairs and the Crawford Fund organised a one-day forum in Canberra in February 2017, on the topic 'Security³: Food security, biosecurity and national security in the Melanesian Arc'. The forum brought together diverse perspectives from foreign affairs, aid, defence, biosecurity, agriculture and fisheries to enhance understanding of security concerns in the Melanesian region.

Our new Chairman, The Hon. John Anderson, opened the event. Media outreach resulted in broad coverage in both traditional and social media, arguing the important role that food security plays in national security, and John's opinion piece was featured in *The Australian* newspaper and other national print and TV interviews.³

³ See the links to national news media at www.crawfordfund.org/news/news-food-security-and-peace-february-2017/

Biosecurity and climate change

The Crawford Fund, in conjunction with the Farm Writers' Association of New South Wales (NSW), attracted a full house and lively discussion around biosecurity at a Rural Press Club event in March 2017. The speakers included Dr Helen Scott-Orr, Australia's inaugural Inspector-General of Biosecurity and coordinator of the Crawford Fund's NSW State Committee; Melissa Wood, General Manager of Global Programs, ACIAR; and Lucinda Corrigan, Director of Rennylea Pastoral Company. An article resulting from the event, 'Climate change risk to biosecurity', appeared nationally throughout the Fairfax Regional media.⁴ The panel was moderated by Sarina Locke, a National Rural Reporter for ABC, and former winner of the 2015 Crawford Fund Food Security Journalist award. Fittingly, this event was chosen to launch the Crawford Fund's 2017 Food Security Journalism Award.



Dr Helen Scott-Orr addressed the NSW biosecurity event

⁴ www.farmonline.com.au/story/4579785/climate-change-risk-to-biosecurity/

Sir John Crawford Memorial Address

The Sir John Crawford Memorial Address has been held since 1985, in honour of the distinguished Australian civil servant, educator and agriculturalist in whose name the Crawford Fund was established.

We have had a tremendous line-up of speakers over three decades for the address honouring Sir John Crawford, which is now an integral part of the annual conferences.

In 2016 Professor Louise Fresco, President of Wageningen University and Research Centre, gave an inspiring presentation on the future of our food. It is available in the conference proceedings, and in future years the address will be filmed and made available on our YouTube channel.

The 2017 Sir John Crawford Memorial Address is by Dr Lindiwe Majele Sibanda, Vice President of the Alliance for a Green Revolution in Africa and member of ACIAR's Policy Advisory Council. Her address – 'A new narrative for ending hunger' – will be covered in our 2017-18 report.

Doing well by doing good

In addition to State networking events, usually held with RAID, forums in Queensland and Tasmania focused on 'Doing well by doing good' to highlight the great work of ACIAR and other partners' researchers and Crawford Fund training, and the benefits flowing back to each State's agriculture and researchers.

In February 2017 around 100 people took part in a forum and reception at Queensland's Parliament House in Brisbane. Guests were welcomed by Professor Kaye Basford FTSE, Chair of the Crawford Fund's Queensland Committee, and the event was officially opened by Queensland's new Chief Scientist, Professor Suzanne Miller. Dr Peter Horne, Director of Country Programs at ACIAR, explained the special role of Queensland in ACIAR's work, and a group of young researchers who had received the Fund's student awards (see page 9) explained their research and the impact of the overseas opportunity.



Some of our 'star' young researchers taking part in a panel discussion at the Queensland forum: (left to right) Gurion An, Tarni Cooper, Madaline Healey, Adam Reman and Lee Hickey



The Hon. Jeremy Rockliff opens the Tasmania Forum

The Tasmania Committee's forum and reception was held at Hobart's beautiful Government House, and was also attended by about 100 researchers, students, farmers and policy-makers. After a welcome by Mr Richard Warner, Chair of the Tasmania Committee, the forum was opened by The Hon. Jeremy Rockliff, Tasmania's Deputy Premier and Minister for Primary Industries. In his keynote address, ACIAR's Dr Peter Horne explained that Tasmania has diverse and highly relevant agricultural research experience for the developing world.

State events are continuing with forums planned in South Australia and Western Australia in November 2017, both with keynote addresses by Professor Andrew Campbell, Chief Executive of ACIAR.

International voices

The Crawford Fund assists with meetings, events and media opportunities for international visitors to Australia,

to help spread the word about important issues concerning food and nutrition security. Here are some 2016-17 highlights.

Rap music spreads the word

We were pleased to assist with another visit to Australia by World Food Prize Laureate Dr Howarth 'Howdy' Bouis, Director and Founder of HarvestPlus, who visited in August 2016. His message to the National Press Club event co-hosted by the Fund, DFAT and ACIAR, and to private meetings we arranged, was that more than 2 billion people don't get enough essential vitamins and minerals, and this hidden hunger is a major cause of easily preventable deaths. We arranged extensive national print, radio and TV coverage for Howdy,⁵ focusing on the science behind biofortification and its nutrition and development benefits, globally and in our region.

Digitising Africa's soils

In October 2016 we assisted with a visit by Dr Keith Shepherd of the World Agroforestry Centre to help him spread the word about the Centre's important work on soils for food security in Africa. Interviews arranged focused on the first-ever set of digital maps of African soils, which are helping thousands of subsistence farmers to maximise their production of basic food crops.

Global insurance for climate change

Our next visitor, in November 2016, was Marie Haga, Executive Director of the Crop Trust. A well-attended public event, co-hosted by the Crawford Fund, DFAT and the National Rural Press Club, focused on the important role of crop wild relatives and global genebanks in developing adaptation to the impacts of climate change.

⁵ www.abc.net.au/news/2016-08-15/african-rap-video-shines-light-on-world-hunger/7734262





Dr Howdy Bouis on News Breakfast with a rap video to promote biofortification, shared on social media



Marie Haga (right) during one of her many interviews in Australia

There was considerable media interest, with national TV, print and radio interviews arranged by the Fund.⁶

Joining forces

To end 2016, we were lucky to have senior agricultural research leaders from a broad range of international centres all visiting Australia at once. Senior staff from the International Center for Agricultural Research in the Dry Areas, International Center for Tropical Agriculture and International Water Management Institute were all available for media interviews that included ACIAR. One feature – ‘Agriculture and food security – where are we headed in 2017?’ – drew attention to important issues for agricultural research in the year ahead.⁷

A balancing act

Dr Matthew Morell, Director General of the International Rice Research Institute, was the keynote speaker at the 2017 International Temperate Rice Conference in March, presenting on ‘Tradition, technology, productivity – a balancing act’. We were able to attract media attention to global rice issues focusing on themes from Dr Morell’s address, including his support for the Fund’s statements around the relationship between food security and peace.

Global cooperation for food security

While trade agreements and market competition are often topics of debate between Australian, US and other governments and agricultural industries, they do agree when it comes to international efforts to conserve the resources needed for agricultural productivity, resilience

and food security. This was the message from Mr Kent Nnadozie, Secretary of the International Treaty on Plant Genetic Resources for Food and Agriculture, in media interviews arranged during his visit to Canberra, also in March 2017.

Livestock’s critical role

Dr Jimmy Smith, Director General of the International Livestock Research Institute, visited Australia in April 2017. His visit provided opportunities for media outreach to highlight the critical role of livestock in global food and nutrition security, and to counter some of the simplistic solutions to sustainability and health suggested for the livestock sector by environmentalists.

Social media for impact and connection

We have an active social media presence and are increasing our efforts in this area to complement mainstream media coverage of international agricultural research success stories. Through our web pages and monthly *Highlights* e-newsletter, we focus on key news items on food policy as well as our own events and training activities. During 2016–17 we posted 124 news and training stories. As expected, the peak number of visits was in the lead up to the Annual Conference.

Social media platforms including Twitter, Facebook and YouTube help us to connect with the increasing number of young members in our network – including those students and early career researchers who join us via RAID as conference scholars or student travel award recipients. A new Opinion Piece series from August 2017 will provide a platform for authoritative spokespeople on food security.

6 www.farmonline.com.au/story/4270503/wild-crop-relatives-critical-to-breeding-gains/?cs=5373

7 www.devex.com/news/agriculture-and-food-security-where-are-we-headed-in-2017-89419

Assisting our Australian partners

As well as our collaborative efforts with DFAT and ACIAR, we engage with a large, active and diverse network of volunteer, science, international aid, government and industry bodies working to promote and implement food security initiatives. We are happy to share our extensive event and media experience to help our Australian partners highlight their food and nutrition security work.

Nourishing the world

There is growing international awareness of the need to focus beyond food security onto nutrition security. We assisted with media outreach on this important issue at the International Symposia on Tropical and Temperate Horticulture held in Cairns in November 2016. Delegates from 23 countries attended the event, supported by the World Vegetable Center and ACIAR. We arranged for Dr Dyno Keatinge of the Global Horticulture Initiative (formerly Director General of the World Vegetable Center) to be interviewed by print and broadcast media to get his message across: "If you want to grow your way out of poverty, don't plant rice or wheat. Grow vegetables."⁸

Dangers of 'anti-science'

For many years we have supported the national conference of the Australasian Agricultural and Resource Economics Society by providing media assistance to the event. In February 2017 the conference's speakers included Sir John Beddington, former UK Chief Scientist, who warned that 'anti-science' leads to poor policy decisions on climate change and genetically modified crops.⁹ And eminent Australian agricultural economist Professor Philip Pardey highlighted some notable trends in investment in agricultural R&D: the middle-income countries now outspend the rich countries in terms of public sector investment; the low-income countries are losing ground; and the global share of food and agriculture R&D conducted by the private sector has increased.

Future food evolution

We have been assisting with programming for the upcoming September 2017 showing of *Food Evolution*, a documentary presenting the case around

⁸ www.abc.net.au/news/rural/2016-11-25/vegetables-vital-to-ending-global-hunger-and-obesity/8054276

⁹ www.abc.net.au/news/2017-02-14/anti-science-era-worries-former-chief-scientist-uk/8265394

Awards and accolades

Derek Tribe Award

The Crawford Fund's prestigious Derek Tribe Award is made to a citizen of a developing country in recognition of their contributions to research in agriculture or natural resource management. The most recent recipient, Dr R.K. Malik, is a Senior Agronomist with the International Maize and Wheat Improvement Center, and he visited Australia in September 2016 to deliver the official Derek Tribe Address.

An international audience, including the ACIAR Policy Advisory Council and the Commission for International Agricultural Research, heard Dr Malik speak on 'Progress and prospects of the rice-wheat cropping system in the Indo-Gangetic Plains since the Green Revolution'. He also made presentations in NSW, Queensland, South Australia and Western Australia.

Recognising continuing support

At our 2016 conference we announced a new accolade – Crawford Fund patron – for those who have demonstrated continuing support for the Fund and for international agricultural research for development. Three outstanding and recent Chairs of the Board all accepted our invitation to be patrons – Jim Ingram AO, former Chief Executive of the World Food Programme and a former head of the Australian International Development Assistance Bureau (precursor of AusAID); The Hon. Tim Fischer AC, former Deputy Prime Minister of Australia; and The Hon. Neil Andrew AO FTSE, former Speaker of the House of Representatives. The award was presented by our current Chair, The Hon. John Kerin AM, who has since been named a patron on his retirement as Chair in January 2017.



Jim Ingram (far left), Tim Fischer (centre left) and Neil Andrew (right) received 2016 patron awards from John Kerin

genetically modified organisms, and with preparations for a panel discussion involving Andrew Campbell of ACIAR and Elizabeth Finkel of *Cosmos* magazine, moderated by Adrienne Francis of ABC News, Canberra.

Reacting in real time

In addition to planned media around events and visitors, we approach media outlets as issues arise throughout the year. In 2016–17 there has again been extensive national TV, radio and print coverage, with just a couple of examples highlighted here.

Svalbard is safe

Our long history of raising awareness about the importance of the Svalbard Global Seed Vault continues. As well as assisting with a visit to Australia by the Crop Trust's Marie Haga (see page 4), in May 2017 the Fund was involved in setting straight some incorrect media reports of safety issues with the Seed Vault.

We assisted with media outreach for The Hon. Tim Fischer AC, former Deputy Prime Minister and former Chair of the Crawford Fund, who is Vice Chair of the Crop Trust.

Tim gave national print and radio interviews from his farm near Albury to help clarify the situation.¹⁰

Food insecurity and political instability

In June 2017 we had an opportunity to argue for the important role that agriculture plays in unstable regions of the world. This backed up the premise in our submission to the DFAT Foreign Policy White Paper (see next



Dr Phil Pardey in a radio studio at AARES, being interviewed by ABC Radio

item). In a feature including the Food and Agriculture Organization's Director of Emergency and Rehabilitation, our then CEO Dr Denis Blight argued that food insecurity can be at the heart of political instability, and that agricultural research is the crucial element to prevent conditions in unstable countries from deteriorating further.¹¹

Informing policy

In addition to meetings with politicians and bureaucrats, networking with key stakeholders, and our public awareness efforts, we endeavour to make use of opportunities to argue our case in support of agricultural research through government inquiries.

2016–17 brought such an opportunity through the Foreign Policy White Paper – the first comprehensive policy paper on Australia's international engagement since 2003. Our submission in March 2017 argued that global food security is essential for international peace and security, and serves Australia's national interests. We suggested that a sharper focus on food insecurity – drawing on the work of Australian scientists in agricultural R&D, the excellent work and partnerships of ACIAR, and the ability of our farmers in harsh and changing conditions – would enrich a new foreign policy with a more uniquely Australian character. We also mounted a successful national media outreach on this message with our Chairman, The Hon. John Anderson (see page 3). Our submission can be found on the Fund's website.¹²

¹⁰ www.abc.net.au/news/rural/2017-05-22/svalbard-seed-vault-declares-seeds-safe-from-climate-change/8547320

¹¹ www.abc.net.au/news/2017-06-02/global-food-security-south-sudan-syria-united-states-australia/8582944

¹² www.crawfordfund.org/wp-content/uploads/2017/03/Crawford-Fund-Submission-on-the-Foreign-Policy-White-Paper-Final-Monday-Feb-26.pdf

Seeing is believing

For more than 25 years, the Crawford Fund has supported or helped arrange visits to agriculture projects in developing countries for print, TV and radio journalists and documentary makers. Explaining how research and training are improving people's lives is an integral part of our public awareness activities. 'Seeing is believing' visits are also arranged for winners of our Food Security Journalism Award. Now in its fifth year, the Award has supported radio, print and TV journalists with visits to India, Timor-Leste and Nepal, resulting in positive national coverage.

Timor-Leste – Sarina Locke (2015 winner)

Following a visit to Timor-Leste in April 2016 by Sarina Locke of ABC, a number of stories appeared through to January 2017 highlighting work under way in the fledgling nation, with support by ACIAR, international centres and local partners. A major focus was on the Seeds of Life program to develop new crop varieties,¹³ and further coverage in January described the personal efforts of a project worker involved.¹⁴

Nepal – Sean Murphy (2016 winner)

In 2016 we had great pleasure in announcing the recipient as ABC journalist Sean Murphy for his ABC TV Landline story 'Coconut comeback',¹⁵ and Sean travelled to Nepal in June 2016. His report on ABC TV Landline, ABC radio, and social media channels covering work supported by Australia (particularly ACIAR) will be featured in our next annual report, as the national TV feature went to air in July 2017.¹⁶

A range of visits later in 2017, taking in the Pacific (October), Colombia (November) and Lao PDR (December), will also be highlighted in our 2017-18 report.



Sarina Locke interviews champion Seeds of Life farmer Francesca Magdalena Pintu



In Kathmandu – (left to right) Sean Murphy, the Crawford Fund's Cathy Reade and David Martin, ABC cameraman

¹³ www.abc.net.au/news/rural/2016-04-29/seeds-of-life-timor-lifts-farmers-out-of-hungry-season/7359522

¹⁴ www.abc.net.au/news/rural/2017-01-03/what-motivates-aid-workers-in-timor-leste/8157720?pfmredir=ms

¹⁵ www.abc.net.au/tv/programs/landline/old-site/content/2015/s4276340.htm

¹⁶ www.abc.net.au/news/2017-07-29/growing-hope-australian-agricultural-aid/8756796

SUPPORTING THE NEXTGEN

We recognise how important it is to foster the interest and enthusiasm of students in agricultural research for development – the ‘nextgen’. The main avenues for doing this are through our alliance with RAID;¹⁷ an increasing number of conference scholar alumni; our awards enabling students to include an international component in their studies; and a growing overseas mentoring program.

RAIDing in earnest

Since our new partnership with RAID was announced in 2016, our alliance has grown – as has RAID. We are pleased to report that in the 2016–17 financial year RAID’s membership increased by 46% to 550 members. It also hosted nine networking events, often with assistance from, or in partnership with, the Fund. As well as producing 47 blog posts and two newsletters, RAID has been promoting relevant job, study and volunteer opportunities, and participated actively in many of our events including the Annual Conference (below) and State-based events (page 4).

RAID was also pleased with this year’s capacity-building workshop, which helped 20 researchers to master Mobile Acquired Data (MAD) apps in order to modernise their fieldwork and streamline data collection. Over two days, participants gained practical skills in building digital surveys, which they could then apply to their own research projects.

Transforming the conference

Loyal participants tell us that the growing number of young people attending our Annual Conference through the scholar program has transformed the event. And we get a strong message from our conference scholars that

we are providing them with a unique learning, networking and mentoring opportunity.

The scholars are involved in additional activities to enable them to engage with keynote speakers; experienced agricultural researchers and educators; and other passionate young people with overseas experience as researchers, volunteers or mentors. They are matched with a mentor for the event to discuss their hopes and plans, introduce them to people in their area of interest, and – most importantly – encourage them in their food security-related study, careers and volunteering.

Our scholar program has grown since it began in 2010. In that year, the Fund’s State committees supported 12 students to attend the conference. In total, and including those attending the 2017 Annual Conference, our scholar program alumni now number 222. Thanks are due to our State committees, and also those companies, organisations, universities and individuals that provided support. A list of the 2016 scholars and supporters – at 48, our largest group yet – and some of their reflections on their conference experiences can be viewed on our website.¹⁸

Learning by doing

The Fund has now introduced special awards to enable university students to get involved in overseas projects as part of their studies – another important strategy to build up the nextgen. In 2016–17, 14 awards were made to students from NSW, Northern Territory, Queensland, South Australia, Tasmania and Western Australia to undertake research, often associated with ACIAR projects, in



RAID’s MAD apps workshop on data collection



Our 2016 conference scholars with Crawford Fund members

Cambodia, Fiji, Honduras, Malaysia, Solomon Islands, Tanzania, Timor-Leste, Tonga, Vanuatu and Vietnam. All the students provide reports on their trips, which are highlighted when they are received on our website. And plans are under way to extend the program to all States and Territories.

¹⁷ www.raidaustralia.net

¹⁸ www.crawfordfund.org/events/2016-conference/2016-conference-scholars/

BUILDING CAPACITY IN-COUNTRY

Since 1987 the Fund has provided training for about 12,000 individuals from 54 countries. These locations can be viewed on a map on our website [🌐](#), along with a full list of the Fund's training activities for 2016–17. This section presents some highlights of our training program.

Master Classes

Two Master Classes were provided by our Master Class Program in 2016–17 and a third was organised through our NSW Committee (see page 12).

Second Genebank Management And Advanced Learning (GOAL) Master Class

National Bureau of Plant Genetic Resources, New Delhi, India, November 2016

Sixteen participants attended from 11 genebanks. The Master Class provided training on how to design a custom genebank operational manual: the components to include a standard structure to describe all the genebank's activities and templates for some commonly used standard operating procedures.



Learning about agricultural research management and leadership in Penang

Dr Michael Mackay, Honorary Associate Professor at the University of Queensland, undertook the logistical planning on behalf of the Crawford Fund, including obtaining support, identifying participants, developing the program and delivering the training. The Master Class was supported by the Global Crop Diversity Trust. "It's particularly important to continue to build skills," said Dr Mackay. "A previous GOAL Master Class in 2015 introduced the participants to the international management and information standards that must be used by genebanks to participate in the global community. Future GOAL Master Classes are anticipated to further improve genebank management within the Asia-Pacific region."

Inaugural Agricultural Research Management And Leadership Master Class

WorldFish Center, Penang, Malaysia, November 2016

Recognising the need for specific training targeted at managers of research for development, this new Master Class provides a structured approach to longstanding management challenges including strategic planning, project management, people and team management, and management of finances – all in a context that is relevant to the international settings in which the participants work. Twenty-eight participants engaged in food and agricultural R&D, from all over the world, explored how to become



Agricultural Research Leadership and Management – participants comment on our inaugural Master Class¹⁹

better managers and reflected on how to address issues such as poverty reduction, malnutrition and food security. The Master Class, supported by the Asia-Pacific Association of Agricultural Research Institutions and ACIAR, was designed and delivered by Shaun Coffey, Colin Chartres and Lynne O'Brien. The key message was "poor management of science leads to poor science".

"There are popular perceptions of individual geniuses working alone in R&D, and coming up with dramatic breakthroughs. This is essentially myth," said Shaun. "The reality is that for most research, the process of scientific discovery and the creation of knowledge is incremental, with many individuals working collaboratively and in diverse teams, sharing information and building on the creative ideas of each other."

¹⁹ www.youtube.com/watch?v=tsu98ODvIYo&feature=youtu.be [🌐](#)



A breath of fresh air for participants in our Northern Territory Committee writing workshop

State and Territory training Australian Capital Territory Committee

An international conference on Regional perspectives on population, development and the environment was held at the University of Yangon, Myanmar in February 2017. With the support of the Crawford Fund, the event was organised by Dr Helen James, Adjunct Professor of Anthropology at the Australian National University (ANU).

The conference aimed to provide training for academics at the University of Yangon on presenting and publishing their research results; to enable networking with international experts; and to provide a platform for

discussion of ongoing human security issues in Myanmar and the Southeast Asian region.

Over 150 participants took part, including delegates from other Myanmar universities, non-governmental organisations (NGOs), water and agriculture specialists and ministry officials. More than 25 papers were presented by local and international speakers. “Each of the Q&A sessions was highly interactive and fast moving as participants took the opportunity to press home the issues they wished to explore,” said Dr James.

“The training program showed University of Yangon academics how productive working in multidisciplinary

teams can be in terms of addressing some of the pressing problems in Myanmar society. Sharing these experiences with others around the region also showed them that benefits can flow from collaboration with others who have experience in this area of research.”

Two media outlets from Myanmar television covered the event, as well as the English language newspaper *The Myanmar Times*.

A book resulting from the conference is to be published by Palgrave Macmillan, and the group is developing plans for a further conference on agriculture, climate change and sustainable development.

New South Wales Committee

A train-the-trainer course in sustainable intensification and diversification in the lowland rice system of north-west Cambodia was held at Mean Chey University, Cambodia in October 2016.

The enthusiastic trainees included students and lecturers from five universities in Cambodia and one in Lao PDR, as well as technical staff from two provincial departments of agriculture, three vocational centres and two NGOs.

Employees from three private companies also participated in the training, which involved classroom and laboratory study as well as practical fieldwork on farms.

The course has successfully increased the number of practically trained and motivated local teachers and experts, which will help to transfer important technologies and research throughout the private sector, public institutions and NGOs.



Supported by the Crawford Fund Master Class and its NSW Committee's training program, through the University of Sydney, the course was designed and produced by Clive Murray of the Syngenta Foundation for Sustainable Agriculture (SFSA) in close collaboration with Dr Yorn Try, Mean Chey University's Vice-Rector. Trainers came from the University of Sydney, Cambodian and Vietnamese research and education institutions and CropLife Asia (a consortium of agribusinesses). Training was conducted in English and Vietnamese with translation into Khmer when necessary.

The feedback from the trainees was uniformly positive – almost all said the course would help them transfer technology to farmers and that they would attend again if offered the chance. Many wished the course had been longer and more detailed. “The training has already had results,” says Bill Rathmell, who initiated the course at the suggestion of Denis Blight of the Crawford Fund.

“The NGO Ockenden Cambodia has already replicated part of it, [and] ACIAR will incorporate lessons learned, as well as trainers and trainees from the course, in its new project, ‘Sustainable intensification and diversification in the lowland rice system in Northwest Cambodia’, led by Daniel Tan of the University of Sydney.”

This three-week training course was the latest in a successful cascade of train-the-trainer courses in practical sustainable technology organised by Mean Chey University for smallholder farmers in Cambodia's provinces and in neighbouring countries.

Northern Territory Committee

In May 2017, 17 researchers/academics from six universities met in the mountain town of Soe in central-west

Timor, Indonesia, for a three-day writing workshop, expertly facilitated by Dr Vivien Silvey of ANU's Academic Skills and Learning Centre. The aim was to work with our Indonesian university partners to develop a number of journal paper outputs from the past three years of on-ground research and capacity-building activities. Participants were from ANU, Charles Darwin University and Western Sydney University in Australia; and Christian University of Wira Wacana, Halu Oleo University and University of Nusa Cendana in Indonesia.

The workshop was coordinated by Mr Rohan Fisher, Dr Sarah Hobgen and Mr Sam Pickering as part of their 3.5-year DFAT-funded small-scale mining project, ‘Artisanal and small-scale mining for development (eastern Indonesia)’. Project partners from the University of Nusa Cendana drafted journal articles on the potential positive livelihood impacts of artisanal/small-scale manganese mining in west Timor; and participants from Halu Oleo University focused on the downstream environmental and social impacts of artisanal/small-scale gold mining.

While there is a strong push in Indonesia to increase internationally rated research outputs, language and structured writing skills remain a barrier. It is hoped that this workshop has supported some of our long-term partners with research writing skills, ensuring the publication of numerous journal papers resulting from project findings.

One of the participants, Jenny Markus from the University of Nusa Cendana, has followed up the workshop with a week-long paper-writing intensive course at Charles Darwin University in November 2017, and she will shortly be submitting a journal paper on women in small-scale manganese mining supporting agricultural practice in West Timor.



Queensland Committee

Two training workshops in statistical analysis and experimental design for horticulture researchers in the southern Philippines were held in August 2016, conducted by two Queensland Department of Agriculture and Fisheries (DAF) biometricians, Dr Carole Wright and Mr Bob Mayer. The first workshop, in Davao, was attended by 20 researchers from two DAF-led ACIAR projects working in mango and banana production in the Philippines; the second, in Cebu, involved 12 researchers from a DAF-led project researching tropical fruit production.

The workshops comprised sessions on basic statistical concepts: hypothesis testing, experimental design, sampling, correlation, regression and analysis of variance, with a combination of formal presentations, practical group exercises and a computing component using the statistical software R Commander. The biometry training has empowered our collaborators with the tools they need to make better decisions on experimental design, sampling strategies and choosing the most appropriate method of statistical analysis.

Since completing the training, three graduate students from the University of the Philippines Los Baños have gone on to replicate and teach the same course to seven other graduate students from the Insect Ecology Laboratory at their home university.

South Australian Committee

A training workshop on evaluating agricultural innovations, held in Cambodia and Lao PDR, aimed to provide researchers and rural extension staff with the concepts and tools they need to understand the economics of farming systems and the factors influencing the adoption



Cattle feeding on forage grown on a farm in Takeo, near Phnom Penh

of innovations such as novel forage crops. The training was provided by Dr Marta Monjardino, Research Scientist at CSIRO and Dr Geoff Kuehne, Director of Meaningful Social Research, in November 2016. The value of agricultural innovations is often poorly assessed due to insufficient, overly complex and/or inadequate tools or expertise. Participants were introduced to VALUE-AG, a systematic approach that uses key elements of bioeconomic modelling; risk analysis; adoption theory (using the Microsoft Excel-based tool Smallholder ADOPT);²⁰ and impact assessment to evaluate agricultural innovations in smallholder farming systems.

Although some found the language difficult and felt the workshops could have been longer, participants gained new insights and the confidence to systematically assess the net value of an agricultural innovation in a smallholder

²⁰ <https://research.csiro.au/software/adopt/adopt-smallholder/>



Training in the Smallholder ADOPT tool at the Cambodian workshop

context, including its likely adoption by the target population. Dr Bounthong Bouahom, Director General of the National Agriculture and Forestry Research Institute of Lao PDR, suggested that a follow-up session would help to embed use of the tools among staff in his organisation and in others, such as universities.

Since the training, two journal papers, one on each country's case, are being prepared for submission. And the Adaptation Fund²¹ requested a similar workshop to be held at the University of KwaZulu-Natal in South Africa in December 2017, following the Third International Conference on Global Food Security in Cape Town.

²¹ www.adaptation-fund.org

Tasmanian Committee

In February 2017, two fish scientists from the University of Papua New Guinea, Port Moresby, experienced hands-on training with leading experts at CSIRO and James Cook University in Australia. Dr Ralph Mana, Senior Lecturer at the School of Natural Science and his student, William Tamarua, received training from Dr William White, Dr Sharon Appleyard, Dr Campbell Davies and Dr Jessica Farley of the CSIRO Australian National Fish Collection, and Dr Andrew Chin of James Cook University.

Visiting the CSIRO Australian National Fish Collection in Hobart, they were treated to the largest shark and ray collection in the southern hemisphere. “The scale of the collection of chondrichthyan fish [sharks, rays, skates and sawfish] was amazing,” said Dr Mana. “It was great to see some PNG-caught specimens there too, making the collection a regional one.” The visitors were shown the importance of properly maintaining a fish collection, and the future benefits in having good quality specimens.

They were instructed on the process of using X-ray and high-definition photography in taxonomic work, and creating 3D printed models for scientific study and training. The tour of the molecular laboratory showcased how specimens are prepared and their genomes sequenced, explaining the different stages of barcoding biological tissue samples.

Following the training in Hobart, the pair flew to Townsville to learn more about catching, processing and studying sharks. Hands-on training was provided by researchers at James Cook University on the best practices for preparing and observing vertebrae under a microscope



Dr William White shows Dr Ralph Mana a large stingray holotype specimen at the Australian National Fish Collection

to study ageing and other factors. “All in all, what I was exposed to was more than I expected. The several days I spent at Hobart and Townsville was truly educational and enlightening, particularly in shark research and conservation work. It provides a new stepping stone for me to continue the cooperation I have established with William and Andrew,” concluded Dr Mana.

The in-country workshop is furthering the work of a large-scale ACIAR project on Papua New Guinea’s shark

fisheries,²² which aims to improve capacity in ecological, socioeconomic and stock assessment aspects of fisheries management.

Victorian Committee

In early December 2016, 43 participants and trainers came together in Solwezi, Zambia for the third program of training for African Landcare. Landcare practitioners

²² <http://aciar.gov.au/project/fis/2012/102>



Landcare practitioners sharing experiences

and trainers attended from Australia, Kenya, Malawi, Namibia and South Africa. Participants were drawn from local farmers' groups and extension and development staff.

In her introductory talk, Lydia Bosoga, co-chairperson of the African Landcare Network,²³ highlighted the need for community-led programs: "I have seen lots of programs that have fallen down because it was just a funded project and the people had not said that they wanted it. Landcare is community-led so should always address people's need." The class covered facilitation and coordination, monitoring and evaluation, marketing, networking and value chains. A field trip allowed participants to reflect on the criteria used to design and evaluate grassroots

programs and activities. The training aimed to provide a platform for sharing among local, regional and international Landcare practitioners and to enhance local capacities to support grassroots groups. Another significant objective was to further a large-scale land restoration initiative for Southern Africa, which will use grassroots approaches and will be led by Landcare practitioners.

By the close of the training, all participants voluntarily stood up and pledged personal actions to enhance Landcare and natural resource management in the area. The formation of a district and provincial Landcare Network was also supported. It is hoped that this class will inspire further grassroots work and capacity-building in the area. The training was organised by the World Agroforestry Centre in collaboration with Australian Landcare International and the African Landcare



African Landcare practitioners and trainers in Solwezi, Zambia

²³ www.silc.com.au/east-african-landcare-network



Learning technical aquaculture skills in Timor-Leste

Network. It was funded by ACIAR, through the project 'Developing value chain innovation platforms to improve food security in East and Southern Africa,' and the Crawford Fund, which provided funds for regional and Australian trainers to attend.

Despite the challenges of working across local, regional and cross-national levels, the course provided a starting point that has created great impetus in the local area, and local value chains targeted by the ACIAR project are now reaping the benefit.

Agricultural and forestry extension staff are creating an agency network to enable information sharing and better planning in the region. Further training on soft skills is planned with the farmers' groups.

Western Australian Committee

In Dili, Timor-Leste, in late August 2016, 25 participants attended a five-day training workshop, 'Developing aquaculture as a livelihood in Timor-Leste'. Organised by Susan Gibson-Kueh and Dr Alan Lymbery from Murdoch University in collaboration with Dr Mohan Chadag of

WorldFish, and funded by the Crawford Fund, the workshop trained farmers alongside staff of the Ministry of Aquaculture and WorldFish. This event was a response to requests by both trainers and farmers, following farmer field schools in Timor-Leste, for further training in fish health.

Training addressed capacity-building at the farm, field extension and laboratory support levels, with an emphasis on technical skills and aquaculture best management practices. Issues covered included pond management, water quality, disease investigation, record keeping and biosecurity.

All lectures and sessions were simultaneously translated into Portuguese by two WorldFish local support staff. Participants were also given hands-on experience of disease investigation techniques, dissecting and examining fish samples from the hatchery for parasites and signs of disease, and sampling fish tissues for submission to diagnostic laboratories. As water quality has a huge impact on fish health and pond management, participants developed skills to investigate key water quality parameters such as the amount of nitrogenous wastes and dissolved minerals in water.

The workshop was very well received by participants, many of whom felt that the information and skills they obtained will be useful to them in improving the management of their tilapia (freshwater fish) ponds. Many attendees requested follow-up workshops in the near future.



FOCUS ON FOOD SECURITY

This section highlights some of our ongoing special projects.

Mentoring in Lao PDR

In Lao PDR, our innovative team-volunteering initiative matches experienced Australians with young volunteers and developing country researchers to help them all develop their technical and organisational skills and expertise, to improve food security for farmers.

An integral element of this is our partnering with both in-country institutions and the Australian Government's volunteer program to place young Australian agricultural researchers in-country for extended periods to work with a lead mentor and local researchers.



Mentoring with the Crawford Fund: Lester Burgess with Madaline Healey²⁴

²⁴ www.youtube.com/watch?v=w-JLgy2LD7M&feature=youtu.be



Out in the field at our workshop

In November 2016, a group of farmers participated in a two-day workshop in integrated plant and disease management, with the involvement of lead mentor Lester Burgess (former Dean of Agriculture and now Honorary Professor at the University of Sydney); Madaline Healey (a former Crawford Fund scholar who became a volunteer and now a mentor), and Deirdre Lamerle (from our NSW Committee, formerly Director of the Graham Centre for Agricultural Innovation). This year's volunteers included Brendon Bangma, formerly at GrainCorp, and Sara Hain from Western Queensland. Once again our in-country partners were vital to our success, and we particularly appreciate the ongoing commitment of Dr Phoudalay Lathvilavong, Director of the Thasano Centre, Savannakhet.

Common-sense plant breeding

Another continuing project this year was 'Demand-led plant variety design for emerging markets in Africa', sponsored by an alliance between the Crawford Fund, ACIAR and SFSA, managed by the University of Queensland. In 2017 Dr Gabrielle Persley, Research Director at the Crawford Fund and Dr Vivienne Anthony of SFSA worked on development of a book, *The Business of Plant Breeding: Market-led Approaches to New Variety Design in Africa*, with contributions from leading plant breeders in Africa. This resource for professionals in plant breeding and related disciplines will share best practices from private and public sector breeding programs worldwide, identified by the project, that are applicable to improving tropical crops in Africa.

In December 2016 we celebrated International Volunteer Day by recognising the dedicated volunteers on assignment to our mentoring program in Lao PDR, with former volunteer Kylie Ireland featuring on a promotional billboard at the Australian Embassy.

Plans are under way for the mentoring program to be boosted with further programs in different countries, allowing more passionate young Australians an opportunity to gain work and life experience in agriculture for development.



AVID for experience

Our longstanding relationship with the Government-supported Australian Volunteers for International Development (AVID) volunteer program dates back to 2002, when the Crawford Fund became an Australian Partner Organisation.²⁵ Our long-term mentoring program in Lao PDR, led by Lester Burgess – mentioned on page 17 – continued apace this year, with ongoing volunteer placements, mentoring visits and a farmer workshop. As part of this work to improve food security in Lao PDR, we continue to partner with the Australian Government's volunteer program to place young Australian agriculture researchers in-country for extended periods to work with the lead mentor and local researchers. As noted in the 'Mentoring' section above, volunteers this year were Brendon Bangma, formerly at GrainCorp, and Sara Hain from Western Queensland.

Working together in Africa

National and regional quarantine and plant protection capacity is vital to raise crop yields, enable safe regional trade, expand international market access opportunities and secure greater food security. The Fund is an active member of the Australia-Africa Plant Biosecurity Partnership, funded through ACIAR and coordinated by a consortium comprising the Plant Biosecurity Cooperative Research Centre (PBCRC), the Centre for Agriculture and Biosciences International (CABI) and the Crawford Fund.

The project, formally completed in March 2017, involved 10 African countries: Burundi, Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Tanzania, Uganda, Zambia and Zimbabwe. It worked to build capacity through 45 Fellows who were plant biosecurity experts from both the public



One of the seeders delivered to villages in Savannakhet, Lao PDR

and private sectors in Africa. Our then Director, Dr Denis Blight, remained an active member of the partnership steering committee, and the Fund provided training in communication skills to improve Fellows' ability and confidence to communicate the priority of biosecurity policy and practice for food security and trade. More details, including videos and testimonials, are available on the PBCRC website.²⁶

Rolling out seeders

In 2016-17 we continued to support the 'Seeders for Lao farmers' program led by NSW rice farmer Dr Leigh Vial. The seeders will help Lao farmers to establish rice and other crops on a range of soils and conditions, earlier in the season and with less labour. This has significant implications for women and girls, who will be freed from weeks of drudgery spent in transplanting every year. This year the project celebrated a significant milestone – the funding and roll-out of 10 mechanical drill seeders across seven villages in Savannakhet, with training on their use.

Life story

We are continuing to assist in the project to develop a biography of Sir John Crawford, headed by Professor Nicholas Brown, Head of the School of History at ANU, and co-funded by DFAT and the Australian Research Council. Aspects of the research have been presented in seminars and conference papers, including a full panel at the Australian Historical Association's annual conference in July 2016. The Fund's former Chief Executive, Dr Denis Blight, is spending time at ANU on the project as it nears completion.

²⁵ www.australianvolunteers.com/australian-partner-organisations

²⁶ www.pbcrc.com.au/research/east-africa

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Chairs, Coordinators and Members of the Crawford Fund's Committees are listed in full on each Committee's own page on our website.



FINANCIAL REPORT

This financial statement is an extract from the 2016–17 Directors' report. The full report, with accompanying notes, can be found on our website.²⁷

Crawford Fund Limited ABN 86 141 714 490

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 30 JUNE 2017

Crawford Fund Limited ABN 86 141 714 490

STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2017

	2017 (\$)	2016 (\$)
Revenue from government and other grants	1,067,181	1,131,465
Other income	472,113	366,622
<i>Total revenue and other income</i>	<i>1,539,294</i>	<i>1,498,087</i>
Employee benefits expense	(240,836)	(221,700)
Depreciation expense	(4,803)	(6,447)
Rental expense	(21,784)	(49,658)
Audit, legal and consultancy expenses	(8,750)	(9,254)
Program expenses	(1,072,033)	(1,163,923)
Other expenses	(83,314)	(68,134)
<i>Total expenses</i>	<i>(1,431,520)</i>	<i>(1,519,116)</i>
Surplus for the year	107,774	(21,029)
Other comprehensive income for the year	-	-
Total comprehensive income for the year	107,774	(21,029)

	2017 (\$)	2016 (\$)
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	763,423	536,050
Trade and other receivables	86,031	123,850
Other financial assets	398,866	387,733
Other assets	62,346	48,121
<i>TOTAL CURRENT ASSETS</i>	<i>1,310,666</i>	<i>1,095,754</i>
NON-CURRENT ASSETS		
Plant and equipment	12,174	15,043
<i>TOTAL NON-CURRENT ASSETS</i>	<i>12,174</i>	<i>15,043</i>
TOTAL ASSETS	1,322,840	1,110,797
LIABILITIES		
CURRENT LIABILITIES		
Trade and other payables	380,730	292,431
Provisions	50,918	28,011
<i>TOTAL CURRENT LIABILITIES</i>	<i>431,648</i>	<i>320,442</i>
NON-CURRENT LIABILITIES		
Provisions	26,984	33,921
<i>TOTAL NON-CURRENT LIABILITIES</i>	<i>26,984</i>	<i>33,921</i>
TOTAL LIABILITIES	458,632	354,363
NET ASSETS	864,208	756,434
EQUITY		
Managed closure reserves	350,002	-
Innovation and Investment Reserve	406,432	-
Accumulated surplus	107,774	756,434
TOTAL EQUITY	864,208	756,434

²⁷ www.crawfordfund.org/resources/

Financial report

Crawford Fund Limited ABN 86 141 714 490

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 30 JUNE 2017

	Managed closure reserves (\$)	Innovation and investment reserve (\$)	Accumulated surplus (\$)	Total (\$)
Balance at 1 July 2015	-	-	777,463	777,463
Total comprehensive income for the year	-	-	(21,029)	(21,029)
Balance at 30 June 2016	-	-	756,434	756,434
Total comprehensive income for the year	-	-	107,774	107,774
Transferred to reserves during the year	350,002	406,432	(756,434)	-
Balance at 30 June 2016	350,002	406,432	107,774	864,208

Crawford Fund Limited ABN 86 141 714 490

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 30 JUNE 2017

	2017 (\$)	2016 (\$)
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipt of grants	1,067,181	1,131,465
Other receipts	634,477	426,201
Payments to employees and suppliers	(11,490,894)	(1,569,100)
Interest received	29,676	31,167
Net cash provided by / (used in) operating activities	240,440	19,733
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds from sale of (payment for) other financial assets	(11,133)	(347,389)
Payment for plant and equipment	(1,934)	-
Net cash provided by / (used in) investing activities	(13,067)	(347,389)
Net increase / (decrease) in cash held	227,373	(327,656)
Cash and cash equivalents at the beginning of the financial year	536,050	863,706
Cash and cash equivalents at the end of the financial year	763,423	536,050



Acronyms

AARES	Australian Agricultural & Resource Economics Society	DAF	Department of Agriculture and Fisheries (Queensland)
ACIAR	Australian Centre for International Agricultural Research	DFAT	Department of Foreign Affairs and Trade (Australia)
ACT	Australian Capital Territory	GOAL	Genebank Management and Advanced Learning
ANU	Australian National University	MAD	Mobile Acquired Data (AgImpact/ACIAR digital data collection apps)
ATSE	Australian Academy of Technological Sciences and Engineering	NGO	non-governmental organisation
AVID	Australian Volunteers for International Development	NSW	New South Wales
CABI	Centre for Agriculture and Biosciences International	PBCRC	Plant Biosecurity Cooperative Research Centre
CGIAR	Consultative Group on International Agricultural Research	RAID	Researchers in Agriculture for International Development
CIMMYT	International Maize and Wheat Improvement Center	R&D	research and development
CSIRO	Commonwealth Scientific and Industrial Research Organisation	SFSA	Syngenta Foundation for Sustainable Agriculture

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