

Australia Awards Global Tracer Facility

Costa Rica Case Study: Environment and Agriculture

November 2019



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Australian Department of Foreign Affairs and Trade

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Abbreviations and Acronyms

AgMIP	Agricultural Model Inter-comparison Project			
CABEI	Central American Bank for Economic Integration			
COALAR	Australia's Council on Australia Latin America Relations			
CSIRO	Commonwealth Scientific and Industrial Research Organisation			
DFAT	Australian Government Department of Foreign Affairs and Trade			
GDP	Gross Domestic Product			
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit / German Agency for International Cooperation			
Global GAP	Global Good Agricultural Practices			
IADB	Inter-American Development Bank			
ICE	Instituto Costarricense de Electricidad / Costa Rican Institute of Electricity)			
IICA	Inter-American Institute for Cooperation on Agriculture			

ISO	International Organization for Standardization		
MPA	Marine protected area		
MoU	Memorandum of understanding		
NGO	Non-government organisation		
OECD	Organisation for Economic Co-operation and Development		
PIMA	Comprehensive Agricultural Marketing Programme / Programa Integral de Mercadeo Agropecuario		
PhD	Doctor of Philosophy		
SCB	Scholarships and Alumni Branch (DFAT)		
SFD	Shit flow diagram		
UN	United Nations		
UNEP	United Nations Environment Programme		
USA	United States of America		
WEF	World Economic Forum		

Executive Summary

This report has been developed based on interviews with nine alumni and various stakeholders to examine the long-term outcomes of Australia Awards scholarship alumni from Costa Rica. The alumni of focus for this Case Study undertook scholarships in Australia in studies relating to environment and agriculture, and graduated between 2013 and 2016. This research was conducted by the Department of Foreign Affairs and Trade's (DFAT) Australia Awards Global Tracer Facility (the Facility) in July and August 2019.

The overall aim of the Australia Awards is to help 'partner countries progress their development goals and have positive relationships with Australia that advance mutual interests'. This aim is extrapolated in four long term outcomes for the Australia Awards, which form the basis of the findings for the alumni from this Case Study.

Outcome 1: 'Alumni are using their skills, knowledge and networks to contribute to sustainable development'

Alumni in this Case Study have used the skills and knowledge developed in Australia to make contributions in:

- environmental policy development and advocacy—
 through work in marine conservation, contributions to
 multilateral engagement on climate change action, and
 advocacy for the inclusion of environmental and social impact
 considerations in major infrastructure projects
- sustainable infrastructure development—through the support and oversight of a major sewerage infrastructure development project, designing detailed feasibility studies that examine financial issues alongside environmental impacts, and integrating sustainable business practices into large organisations
- developing improved agribusiness practices—including the design and development of a new wholesale produce market for Costa Rica, and encouraging a re-thinking of the use of pesticides and fumigation in farming and biosecurity
- environment and climate change research—especially in relation to environmental systems analyses and new approaches to understanding climate change adaptation and food security.

For the alumni in this Case Study, Australia Awards Outcome 1—development contributions—is being **achieved**.

Outcome 2: 'Alumni are contributing to cooperation between Australia and partner countries'

Some of the alumni in this Case study maintain relationships with Australians that were developed on award. Others have relationships with other international students who were classmates in Australia. Cooperation with contacts made in Australia include:

- academic relationships—with supervisors and other academic staff met while on award. In some cases, these have resulted in subsequent study and academic opportunities for these alumni
- links with other alumni—such as ongoing friendships with classmates that involve sharing common interests in fields of expertise.

For alumni in this Case Study, Australia Awards long-term Outcome 2—cooperation with Australia—is **partially achieved.**

Outcome 3: 'Effective, mutually advantageous partnerships between institutions and businesses in Australia and partner countries.'

There were few examples of ongoing business partnerships with Australia among the alumni in this Case Study. The examples identified included:

- facilitating partnerships—such as linking international organisations with Australian experts in marine conservation
- encouraging a Memorandum of Understanding (MoU)—
 whereby an alumna helped her organisation in Costa Rica
 recognise the value of signing an MoU with an international
 group which includes Australian organisations such as the
 CSIRO.

For alumni in this Case Study, Australia Awards long-term Outcome 3—partnerships with Australia—is **partly achieved.**

Outcome 4: 'Alumni view Australia, Australians, and Australian expertise positively'

Alumni in this Case Study hold strong, positive views of Australia. Key elements in the building of these positive views are:

- satisfaction with the high quality of Australian education they received while on award
- support from universities and the Australia Awards that enabled alumni to focus on their studies and provided an outlet for help when needed while on award

• Australian lifestyle and amenities that were highly valued by alumni and enjoyed as part of their on-award experience.

For alumni in this Case Study, Australia Awards long-term Outcome 4—positive views of Australia is being **achieved.**

Factors contributing to achieving these outcomes

Based on the evidence collected in this Case Study, the success of the scholarship for these alumni has been due to a number of important factors, including:

- the quality of the skills developed while on award and the way they introduced new approaches and ways of thinking
- the individual motivation of each of these alumni to make a difference
- mentorship from supervisors and work experience while on award
- broadening of mindset from living and studying in Australia.

The continuation of these supports and policies for selection in the Australia Awards will increase the likelihood of successful outcomes for alumni in the future.

Challenges to achieving these outcomes

A couple of consistent themes relating to the challenges confronted by alumni since returning home were identified in this Case Study. These challenges can impact the extent to which the long term outcomes of the Australia Awards can be achieved, and working towards understanding and where possible addressing these, could be beneficial to improving outcomes in the future. Key challenges identified are:

- the ceasing of the Australia Awards in Latin America and subsequent lack of reintegration and engagement opportunities for alumni. This has substantially limited the potential for capitalising further on developing cooperation and partnerships between Australia and Costa Rica
- the availability of relevant jobs and workplace
 opportunities immediately post-award delayed many alumni
 in this Case Study in fully utilising the skills and knowledge
 they gained from their scholarship. While this issue is
 closely related to localised labour market conditions, there
 could potentially have been benefits for alumni if further
 reintegration support existed.



Global Tracer Facility



Australia Awards Alumni Costa Rica - influencing environmental and agricultural policy and practice

Australia Awards alumni are contributing to:



Environmental policy development and advocacy



Sustainable infrastructure development



Developing improved agribusiness practices



Environment and climate change research

Australia Awards results

Alumni provided strong examples of development contributions

Achieved



For the sustainable use of water in the new wholesale produce market, I developed the scheme for the water management. I also trained the people who are going to sell at the market: how to separate the waste, how to use the waste, the packaging material and all that. They are the kind of things that I learnt in Australia."



Alumni are contributing to cooperation between Australia and Costa Rica

Partly achieved

When I was back in Costa Rica, there were many instances when [my old colleagues at CSIRO and I] kept in touch, either for things that we were working on together or me using them as support when I needed contacts or information or whatever. So that relationship was kept alive."



Alumni support effective institutional partnerships between **Australia and Costa Rica**

Partly achieved

I know the guy who developed the compliance unit for the Great Barrier Reef Marine Park quite well and I met him while I was doing my PhD. So, whenever I have a project that has something to do with dealing with compliance in general or illegal fishing or dealing with tourists in a marine protected area, I tell [the NGOs I work with], 'You have to contact this guy. He is the best."



Alumni view Australia and Australian expertise positively

Achieved



"Imagine the quality of a course where the lecturer was the one who wrote the book. And the book was used not only in Australia but also around the world. For me, it was amazing."





Case study participants:

- Female alumni
- Male alumni
- Colleagues of alumni
- Stakeholders



Participants: Alumni who completed scholarships between 2013-2016



1. Introduction

The Australia Awards Global Tracer Facility (the Facility) is a project which commenced in 2016 and is funded by DFAT. Through this project, DFAT assesses the development contributions and public and economic diplomacy outcomes of Australia's investment in the Australia Awards. The key research and reporting activities being undertaken by the Facility are a quantitative Global Tracer Survey and qualitative Case Studies, which are prepared concurrently throughout the project.

This report provides the key findings of the Costa Rica Case Study, which focussed on Costa Rican alumni who completed their scholarship between 2013 and 2016 in areas relating to the environment and agriculture. The majority of the data collection for this Case Study was undertaken by Facility researchers in Costa Rica in July 2019.

1.1 Objectives

The Facility seeks to generate high-quality information on former scholarship holders, with a focus on less recent alumni. This information provides a strong evidence base for country programs and the Scholarships and Alumni Branch (SCB) of DFAT to evaluate the impact of Australia Awards on alumni and, on their home institutions and countries.

All research by the Facility is undertaken with close reference to the long-term outcomes of the Australia Awards. These outcomes underpin the interviews, surveys and the reporting of the Facility. The long-term outcomes are detailed in the Australia Awards Global Strategy: Investing in the next generation of global leaders for development 2016–2018 (the Strategy) and the Australia Awards Global Monitoring and Evaluation Framework (the Framework). They are:

- Outcome 1: Alumni are using their skills, knowledge and networks to contribute to sustainable development.
- **Outcome 2:** Alumni are contributing to cooperation between Australia and partner countries.
- Outcome 3: Effective, mutually advantageous partnerships between institutions and businesses in Australia and partner countries.
- Outcome 4: Alumni view Australia, Australians and Australian expertise positively.

In addition to these long-term outcomes, gender and disability inclusion are overarching cross-cutting priorities of Australia's aid priorities outlined in the *2017 Foreign Policy White Paper* (Australian Government, 2017). These themes are incorporated in the analysis of this report where relevant.

1.2 Scope

The Facility's specific focus is on alumni of DFAT's Australia Awards and previous Australian Government-funded scholarship programs, awards and fellowships. For each Case Study undertaken by the Facility, this focus is further refined to a specific cohort of alumni based on the years they completed their scholarship and particular field of education or sector.

For this Costa Rica Case Study, the research focus is on alumni who completed their scholarships between 2013 and 2016 and studied a course relating to environmental or agricultural sciences.

1.3 Country context

Costa Rica is an upper-middle income-country with a population of 4.9 million (World Bank, 2019a). The development model of Costa Rica is based on four key pillars—democracy, its social welfare system—the 'Social Compact', an outward-oriented economy, and its 'Green Trademark' (Oviedo, et al., 2015).

Costa Rica is considered a leader in the Latin American region in the coverage of education, healthcare, pensions, and natural resource and environmental management, and has one of the lowest rates of poverty in the region and the Caribbean (CABEI, 2015; World Bank, 2019b). With no military, Costa Rica prioritises its social outcomes, committing 8 per cent of gross domestic product (GDP) to education spending, compared with the global average of 4.8 per cent (Moulds, 2019).

Despite these successes economically, socially and environmentally; rising inequality is challenging Costa Rica's transition to a higher-income economy (Oviedo, et al., 2015; World Bank, 2019). One such area requiring focus to address these challenges are education and human resource capacity. For example, learning outcomes and completion rates in the country are not commensurate with its high education spending: less than half of young adults complete secondary schooling, and performance on test scores falling. There is also a mismatch between skills and the labour market needs, whereby which an excess demand for skilled workers has resulted from Costa Rica's move towards high-value-added sectors such as electronics and IT business services (Oviedo, et al., 2015, p.10).

1.4 Australia Awards in Costa Rica

The Australia Awards scholarships and fellowships were run in Latin America with intake cohorts from 2010 to 2014. At the time of this Case Study, Latin America was not part of the Australia Awards. As such, the alumni in this cohort were part of a relatively small group of beneficiaries of the Australia Awards from Latin America.

Costa Ricans were eligible to apply for Australia Awards during the 2012 to 2014 intake years, and according to DFAT's Global Alumni database, there are 24 alumni in total from Costa Rica who studied under the Australia Awards.

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1.5 Alumni and other interview participants

Nine alumni fitting the focus population of this Case Study were interviewed. Each had studied in Australia and completed their scholarship between 2013 and 2016. All had undertaken a qualification relating to agriculture and or the environment. The nine alumni of focus are introduced below along with their scholarship details and current occupation. Detailed profiles are provided in Chapter 7.



Mr Glenn Alonso Aguilar Hernandez

Master of Sustainability, The University of Sydney, 2014–2015

PhD Candidate, Leiden University, Netherlands



Dr Adrian Arias Rodriguez

Doctor of Philosophy (Marine Biology), James Cook University, 2012–2016

Project Manager, Latin America and the Caribbean, Oceans 5



Mr Mauricio Luna-Rodríguez

Master of Environments, The University of Melbourne, 2013–2014

Regional Climate Governance Advisor, German Agency for International Cooperation (GIZ)



Ms Linette Maria Alfaro Cordero

Master of Diplomacy/Master of Environmental Management and Development, Australian National University, 2013–2015

Market Development Process Leader, PIMA (Comprehensive Agricultural Marketing Program)



Dr Dora Carias Vega

Doctor of Philosophy (Land and Food Resources), The University of Melbourne, 2012–2016

Economist and Coordinator, Environmental Management Office, Costa Rican Institute of Electricity (ICE)



Ms Diana Madrigal

Master of Integrated Water Management, The University of Queensland, 2014–2015

Water and Sanitation Analyst, Inter-American Development Bank, Founder and President of Lifting Hands Foundation



Ms Daniela Lucia Medina Hidalgo Master of Environment Advancement (Honours), Griffith University, 2014–2015 PhD Candidate, University of the Sunshine Coast



Ms Laura Beatriz
Soto Portillo

Master of Plant Protection,
The University of Queensland,
2012–2013

Phytosanitary Inspector,
Vegetable Imports and
Exports, Ministry of Agriculture



Mr J. Daniel Ocampo García

Master of Sustainability,
The University of Sydney,
2014–2015

Head of Environmental
Management, Dos Pinos

In addition to the nine alumni, a further eight interviews were carried out as part of this Case Study. These were designed to build an understanding of the Costa Rican context, to further explore the contributions of alumni, and to better understand the Australia Awards in Costa Rica. The eight other participants included five employers/colleagues of alumni, Australia's Honorary Consul in Costa Rica and two staff from the Australian Embassy in Mexico City (which has accreditation to Costa Rica). Further details on interview participants can be seen in the Methodology section (Annex 1).

2. Development Outcomes

This Case Study demonstrates the impact that alumni can make within the first five years post award. Although most described difficulties transitioning back into the workforce on return to Costa Rica, these alumni have subsequently secured positions or further study which enables them to use their skills and knowledge in technical and managerial roles.

Through their work, alumni are making development contributions in Costa Rica, Central America and internationally. These alumni are well-connected and creative in identifying opportunities for future engagement.

2.1 Introduction

This chapter details the development impact of alumni and explores the Australia Awards long-term Outcome 1: 'Alumni are using their skills, knowledge and networks to contribute to sustainable development'. The analysis and discussion explore the following Case Study propositions:

- alumni use their skills, knowledge and networks to contribute to partner-country development goals
- alumni develop skills, knowledge and networks on-award that enable and are used to contribute to achieving partnercountry development goals
- alumni understand, value and want to contribute to partnercountry development goals.

The alumni who are the focus of this Case Study are each making contributions to development. The examples in this chapter highlight these contributions across a variety of activities spanning policy development, agribusiness practices, infrastructure development and research in the areas of environmental conservation, management and sustainability. The examples discussed in this chapter help to show that for the group of focus in this Case Study, long-term Outcome 1 of the Australia Awards is being achieved.

2.2 Background

The focus of this Case Study is on alumni who undertook their scholarships in an area of study related to **agriculture** and **environment**. This area of focus reflects two key sectors and development priorities in Costa Rica.

Agriculture and environment in Costa Rica are interdependent in achieving Costa Rica's development goals. In 2019, Costa Rica became the first country to introduce an economy-wide National Decarbonisation Plan to achieve zero net emissions by 2050. This plan is in accord with the commitments under the 2015 Paris Climate Agreement and UN Sustainable Development Goals (UNEP 2019b). The roadmap for this objective includes economic growth objectives while reducing greenhouse gases. Costa Rican President Carlos Alvarado Quesada highlights that this will be achieved 'through the electrification of transport, smart and resilient cities, sound waste management, sustainable agriculture and improved logistics' (UNEP, 2019b). Further, in 2018, Costa Rica's Ministries of Agriculture and Livestock, and of Environment and Energy signed a joint agreement to reduce greenhouse gas emissions in the agriculture and livestock sector (Veeger, et al., 2018).

Costa Rica today is recognised as a global environmental leader, receiving the highest United Nations environmental honour, the 2019 Champions of the Earth award. This award acknowledged Costa Rica's role in protecting nature and commitment as a policy leader in combatting climate change (UNEP, 2019). This reflects the great strides Costa Rica has made in recovering its forests which were stripped to just 26 per cent of their natural state by 1983 due to an increasing population and a policy focus on agricultural development (Oviedo, et al., 2015). Costa Rica is the 'only tropical country in the world that has reversed deforestation' (OECD, 2018).

2.3 Skills developed on award

This chapter highlights examples of a range of skills that alumni have developed and utilised on their return from Australia. While these skills are implicit throughout the analysis that follows, a list of skills identified by the alumni is provided here to highlight the breadth in knowledge gained by alumni on award.

'Soft'/interpersonal skills include:

- critical thinking
- communication
- problem solving
- persuasion
- team building

'Hard'/ technical skills include:

- applied research skills in agricultural, marine and social sciences
- knowledge in environmental management and climate change adaption
- agricultural and marine sciences research
- · social sciences research
- environment and climate change expertise
- English language

2.4 Alumni contributions

The alumni in this Case Study are between three and six years post-graduation and are early to mid-career in their sectors. All are making significant contributions to sustainable development in Costa Rica and internationally. The nine alumni of focus have worked across the university, international non-government organisations, government and private sectors, and as independent consultants in the relatively short time since their return to Costa Rica.

The impact of the contributions made by these alumni occurs at both the organisational and societal level in Costa Rica and internationally.

The strong, positive contributions of this group of alumni tend to align with the larger-scale research on Australia Awards alumni undertaken by the Facility. Data from the Facility's Global Tracer Survey show that among Latin American alumni from the 2011 to 2016 cohort, 92 per cent indicated they had used the knowledge and skills from their scholarship to improve practices or implement change within their workplace. In addition, 93 per cent of alumni have passed on their new knowledge since returning home (Edwards & Taylor, 2019).

Working in positions demonstrating technical and thematic expertise, key contributions to development among the alumni of focus in this Case Study highlighted in this section are organised into four key themes, summarised in the following table:

Policy development and advocacy	Sustainable infrastructure development and business practices	Developing and improving agribusiness practices	Environment and climate change research	
marine conservation and combatting illegal fishing	supporting a sewerage infrastructure development	wholesale market development	environmental systems analysis	
in Latin America and the Caribbean	project in San Joseconducting environmental	 pesticide and biosecurity practices. 	 climate change adaption and food security in the 	
 multilateral engagements in Latin America—climate change action 	impact, and social and financial feasibility assessments for infrastructure projects	·	Pacific region.	
workplace advocacy to				
consider environmental and social impacts of projects.	 integrating sustainable business practices. 			

2.4.1 Policy development and advocacy

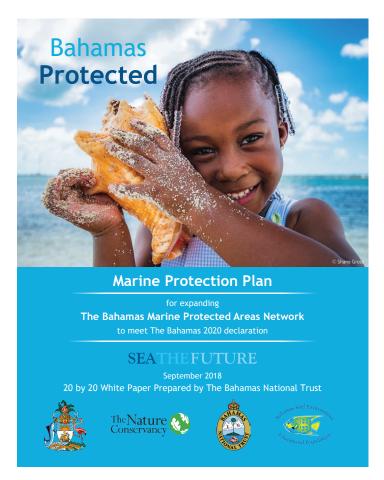
Four alumni in this Case Study are contributing to national policy development in the Latin American and Caribbean regions through their work with a donor aid agency and a philanthropic organisation. In particular, their contributions demonstrate the various ways in which policy development and change can occur.

Directly linked to his doctoral thesis on combatting illegal fishing, **Dr Adrian Arias** transitioned from academia to a policy and advocacy role utilising his expertise and networks to address marine sustainability. Dr Arias is a Project Manager with Oceans 5, an international philanthropic group focused on improving global ocean health, establishing marine reserves and constraining overfishing through policy change. With responsibility for the Latin American and Caribbean regions, Dr Arias identifies, develops and manages a multimillion-dollar project portfolio providing financial support to non-government organisations (NGOs) working to improve marine conservation policies and awareness.

Examples of projects Dr Arias has directed Oceans 5 support to include funding the Bahamas Protected project which produced and presented to the Bahamas Government the *20 by 20 White Paper: Marine Protection Plan*¹.

In scoping this project, Dr Arias identified a group of capable NGOs in the Bahamas to provide support to develop effective design and management of marine protected areas (MPAs) in the Bahamas.

Dr Arias states that if approved by the Government of the Bahamas, 'the Bahamas will be the only country in the Caribbean protecting 20 per cent of its ocean'. The Bahamas Government states that the White Paper will help solve major issues such as the decline in marine resources from negative impacts, including climate change and poaching (Adderley, 2018).



Bahamas Protect (2018), 'Marine Protection Plan'.
Credit: http://bahamasprotected.com/wp-content/uploads/2018/02/
Bahamas-Protected-Marine-Protection-Plan.pdf.

For further information: https://oceans5.org/grants/?s_country=bahamas&list=detailed & http://bahamasprotected.com/wp-content/uploads/2018/02/Bahamas-Protected-Marine-Protection-Plan pdf

Ms Daniela Medina Hidalgo completed a Master of Environment Advanced with Griffith University with first class honours in 2015. She then returned to the Inter-American Institute for Cooperation on Agriculture (IICA) as an Agriculture and Climate Change Specialist. Working as part of a collaborative network in IICA, which acts 'like the bridge between science and policymaking', Ms Medina was able to utilise her knowledge and networks from her time on-award to advocate for new practices to improve policymaking:

I felt like we were in a really privileged position to make some really incredible influence in how governments do things there. Because I was pushing this [climate models for policy making] so much, we ended up developing some partnerships with other international organisations doing similar work and I was really happy, actually, that just when I left, we signed a cooperation agreement between one of these organisations that I got to meet when I was here in Australia. I met people from that organisation, so it sort of linked a bit.

There's attribution and contribution, so I can't claim attribution to any of the things that we did, because it was always big efforts with collaboration with many stakeholders, and so on. But I think some of our work helped improve the way climate change adaptation policies are made.

Mr Mauricio Luna-Rodríguez has similarly contributed to projects focussed on policy change and development in climate governance across the Latin American region following his Master of Environment specialising in climate change. In his current role as Regional Advisor on Climate Governance with the German agency for international cooperation and development, GIZ, Mr Luna-Rodríguez is part of an international collaboration to address climate change in the Latin American region. The program, EUROCLIMA+ aims to improve environmental sustainability and climate-resilient development by improving the knowledge of decision-makers in 18 countries about the problems and consequences of climate change.

As a Regional Advisor, Mr Luna-Rodríguez works with local community groups to ensure their needs are included in the policy responses to climate change and adaption. One such example is his work supporting the Government of Honduras to develop inclusive credit access for farmers, which supports their capacity to respond to climate adaption needs. Mr Luna-Rodríguez takes pride in his contribution working with rural communities in Central and Latin America to ensure representation in national policies:

The main thing we do is we try to influence policies and policy-making processes, and we work on different levels. We work at the more local level sometimes or have the opportunity to see that reality with the municipality, [then] with the top-level decision-makers at the international level. I think having that experience with the local people, we hope—at least I hope—gives you the opportunity to include their needs in those policies.

Last week, we were having a workshop with top decisionmakers, but there were also representatives of farmers, and [as a result] they understand the needs of coffee farmers in the field.

I have the privilege to involve very vulnerable groups in my work, people who usually don't have a voice, and that's something I really enjoy, and I'm proud of.



Alumnus Mauricio Luna-Rodríguez (standing) at the VI Workshop of the Regional Group of Latin America and the Caribbean: "Monitoring and Evaluation of Climate Change Adaptation in light of the Reinforced Transparency Framework". Credit: EUROCLIMA+, 2019

Driving change at an organisational level, **Dr Dora Carias Vega** is an Economist in the Environmental Management Office at the Costa Rican Institute of Electricity/ Instituto Costarricense de Electricidad (ICE). In her role, Dr Carias Vega coordinates and conducts Environmental Impact Assessments and Economic and Social Appraisals of infrastructure development projects, compiling disaggregated information across departments to provide a holistic feasibility analysis.

Following her PhD at the University of Melbourne, Dr Carias Vega has led social and economic project appraisals for her Institute. One such appraisal was to conduct a financial and economic analysis of an aqueduct construction proposal for the capital city, San José.

Dr Carias Vega's motivation is to ensure infrastructure projects are implemented in a way that takes into account the findings and advice from the appraisals and assessments undertaken prior to the project commencing:

When I'm doing these economic and social project appraisals, I'm definitely trying to bring more than is asked of me. For example, for some of the results that I get, there has to be a discussion [held] because a lot of people see the [reports] as just like a permit.

But then the message I try to give: "This is information that you need to take into consideration for what you're doing, especially because we're in the public sector, and these are public resources and we need to make good use of them."

2.4.2 Sustainable infrastructure development and business practices

Three alumni are contributing to sustainable infrastructure development and business practices.

Ms Diana Madrigal is a Water and Sanitation Analyst in the Water and Sanitation Division at the Inter-American Development Bank (IADB) in Costa Rica and provides technical advice and project management support. One such project Ms Madrigal is providing monitoring and support for is a US\$73 million loan as part of a US\$320 million joint investment to improve water supply and sanitation services benefitting one in four Costa Ricans and contributing to environmental sustainability².

Ms Madrigal is also using skills from her Master of Integrated Water Management final project to conduct a research project to map faecal sludge management systems in Costa Rica. This mapping provides a full picture of how a municipality manages, sanitises and disposes of its waste:

There is something called a Shit Flow Diagram (SFD) in my world. Basically, what you do is you want to know what happens to the [faecal matter] of a place, a specific area, and especially in the development context that uses septic tanks or open defecation. A certain percentage goes through a sewerage system, a percentage to a septic tank, and so on...

We have some money from a corporate to do a SFD for Costa Rica. So I researched and found a municipality that's doing a great job and has a sewerage system. So we decided to do a SFD of their system, and there's a lot of research behind that, I've done 34 interviews in [the last few months].

Dr Carias Vega, as described above, conducts social, environmental and financial feasibility assessments for project proposals with the Costa Rican Institute for Electricity.

Since coming back, I've been more working on my own in the social and economic project appraisals. So, for example, there is an aqueduct that they want to build for San José, so I've been in charge of doing the whole financial analysis and then going from financial to economic analysis, which is more of like a social perspective, like a nationwide perspective, and I've been involved in that. Mr Daniel Ocampo García is supporting the integration of sustainable environmental practices throughout the 92 sites of Costa Rica's largest dairy cooperative - Cooperativa de Productores de Leche R.L - Dos Pinos (Dos Pinos). One of Mr Ocampo García's key projects and achievements since beginning in March 2019 as the Head of Environmental Management is the recertification of the Environmental Management System under ISO 14001, which Dos Pinos has held since 2005³. The certification is a voluntary international standard and framework for effective environmental management systems (International Organization for Standardization, 2019). Mr Ocampo García states that the approach he is implementing now is to harmonise and embed environmental sustainability practices across the company:

What I'm trying to do now a lot is to support the people from [the Quality and Environment Department] because normally, environmental management has been only focused in, let's say, industrial and planning and logistics. So that has been the approach for many years.

But the primary sector, that is the agricultural sector, has been apart. So now I'm trying to make a link between these two. So there is another department of the primary sector. Since I came here, I've regularly been having meetings with them, trying to, somehow, contemplate the life cycle interconnection. But that was also part of the Masters degree. You have lots of inputs and outputs, and to put all that together is critical because we can't see good environmental management if we are not responsible for our primary sector from where all our inputs come.

Mr Ocampo García's manager, Mr Adrian Calderon (Senior Quality and Environment Manager at Dos Pinos), stated the impact Mr Ocampo García has had in his short time with the company is a result of his accumulated study, experience, knowledge and networks:

I think he has brought to the company a lot of new concepts because even though the company is about 70 years old, it maybe had a narrow vision about environmental things. And because his preparation [study and experience] is pretty good, we are having a lot of new strategic roads to follow. Then also his connections, because he's got a lot of good connections; his network is pretty strong, and he knows a lot of people in the business and has helped us a lot to understand and to refocus our strategy to go on.

² For further information: https://www.iadb.org/en/news/costa-rica-improve-water-and-sanitation-services-help-spain-japan-idb

For further information: http://www.dospinos.com/policies.php





The newly built Regional Wholesale Market in Chorotega by PIMA Credit: Norberto Soto

2.4.3 Developing and improving agribusiness practices

Two alumnae in this Case Study are utilising their technical knowledge to develop and improve agribusiness⁴ practices and increasing food security and safety in Costa Rica.

Since completing a Master of Plant Protection and Integrated Pest Management at the University of Queensland in 2013, **Ms Laura Soto Portillo** has worked in both the private and public sector in technical roles in the area of food safety. Ms Soto is driven to educate about and improve the use of pesticide and chemicals in agriculture. Costa Rica is ranked as one of the highest intensity users of pesticide globally, negatively affecting both health and environmental outcomes (Pesticide Action Network, UK, 2016; Oviedo, et al., 2015).

In Ms Soto's immediate role following her Australian Development Scholarship, she worked for Chiquita Banana as an Agriculture, Pest Control and Fertilisation Program Technician. Ms Soto then progressed to the position of Internal Supervisor with responsibility across 28 banana plantations for compliance with the voluntary Global Good Agriculture Practice (Global GAP) standards. Ms Soto highlighted how she used the persuasive reasoning and communication skills she gained on award in advocating for improved practices:

In Chiquita Banana, I was in charge of nematology and fertilisers: the most toxic pesticides. My bosses were very accepting of the way that I thought. [I used the analogy] that if you're very, very sick and you need to take antibiotics because you've got a bacteria in your lungs, you take the antibiotics. But if you've got acne, you don't take antibiotics, because that's bad for you. So that's what I convinced them with the plants. If we have a very, very big problem, okay, we bring in the pesticides, and we control the problem or even to prevent it, but not always use pesticides. So they agreed with that, and they were happy to implement, and it was nice.

Ms Soto is now a Phytosanitary Inspector for the Ministry of Agriculture at the Puerto Caldera ensuring food safety and biosecurity in the export and import of vegetable products. In this role, she implements similar approaches to the example above when it comes to designing practised and improving the environmental aspects of this biosecurity work.

⁴ The agribusiness sector comprises the business activities performed from farm to fork, covering the entire value chain including the supply of agricultural inputs, the production and transformation of agricultural products, and distribution to final consumers (FAO, 2017)

Ms Linette María Alfaro Cordero is the Market Development Process Leader at the Comprehensive Agricultural Marketing Program (PIMA) where she has developed the operations planning for the new Chorotega Regional Wholesale Market. The regional market for agribusinesses, which opened in July 2019 is only the second such market in Costa Rica (the other is nearby the capital San José. The new market aims to increase the marketing and distribution of agricultural production, thereby improving food security for half a million people in the region⁵. According to the Central American Bank for Economic Integration (CABEI), a funding partner for the project, the new market is 100 per cent environmentally friendly, a key facet of the project which Ms Alfaro Cordero contributed to (CABEI, 2019).

Ms Alfaro Cordero highlighted the link between this contribution and the knowledge she gained from her Master of Environmental Management and Development and Master of Diplomacy at the Australian National University:

For the sustainable use of water in the market in Guanacaste, they have the knowledge, but I developed the scheme for water management. I also trained the people who are going to sell at the market: how to separate the waste, how to use the waste, the packaging material and all that. They are the kind of things that I learnt in Australia. We have a lot of case studies in Asia and the Pacific, but there are a lot of things that I can use here in Costa Rica in environmental services. I have a lot of information that I can use.

For the operations of the [new] market, all the planning or trying to focus and think: "Okay, how are the products going to enter the market? How are they going to put their products to the locals and how can they buy those fruits, how is it going to go out on the market?" And the main one is going to have use of water, waste, it's going to have the integrity of the workers and security all that. So my job is to think about how to do all that kind of processes, and not to think only, but to do it.

2.4.4 Environment and climate change research

Careers in agriculture and environment can be highly specialised, and two alumni in this Case Study who completed a Masters for their scholarship have continued to build their expertise and contribute to research through further postgraduate studies as Doctoral candidates.

Ms Medina is now completing a Doctor of Philosophy (PhD) with the University of the Sunshine Coast where she is conducting research examining the link between climate change adaption and food and nutrition security goals in Fiji. The purpose of Ms Medina's research is to improve understanding of the impact of climate change in this particular context, with 'the idea that it could eventually expand to other Pacific Island countries'.

Similarly, **Mr Glenn Aguilar Hernandez** completed a Master of Sustainability with the University of Sydney in 2015 and returned to Costa Rica undertaking the position of Lecturer and Research Associate at the University of Costa Rica. As a Lecturer, Mr Aguilar Hernandez was able to draw on his knowledge developed in Australia to develop and teach a course on climate change mitigation and adaption. Mr Aguilar Hernandez is now a completing his Doctorate with the Institute of Environmental Sciences, Leiden University in the Netherlands, building on his skills in environmental impact analysis developed on award:

Based on my training in Australia, I learnt certain tools that we can use to analyse the environmental impact of our society. My research right now is focused on the circular economy, so basically an economic model in which we try to return the material as much as we can into society, so in that sense, we will have less waste and we will need fewer resources.

Dr Carias Vega, who completed a PhD for her scholarship, has also been actively disseminating her research and recently published a paper in the peer-reviewed Journal of Sustainable Forestry based on her Doctoral thesis.

You have a PhD, and I have publications that I'm really proud of, and I feel like I made some contributions and things that I wanted to do.

Dr Carias Vega has recently been offered the opportunity to return to Australia to pursue a Postdoctoral Fellowship relating to her PhD research at the University of the Sunshine Coast where she will further contribute to this research field over the coming years.

⁵ For further information: https://presidencia.go.cr/comunicados/2018/03/nuevo-mercado-regional-chorotega-genero-200-nuevos-empleos-en-su-primera-etapa-constructiva/&x id=25657,15700021,15700186,15700190,15700256,15700259,15700262,15700265,15700271&usg=ALkJrhgDioDD2tPM1Z3kwqC9QQu-YxRDvA

2.5 Factors influencing these outcomes

In exploring their post-award experiences, the following factors were identified by the alumni in this Case Study which enabled or challenged them to use their skills and knowledge in the workplace and contribute to development. An important context in thinking about the outcomes of this group of alumni is the relatively recent time since graduation (between 2013 and 2016).

The common factors raised by alumni which impacted their ability to contribute to development are summarised in the table below and further discussed in this section.

Enabling contributions to development

- access to international postgraduate education
- building skills and knowledge
- · broadening of mindset studying and living in Australia
- motivation of alumni
- on-award work experience
- on-award mentorship

Challenges in contributing to development

- job availability post award
- · lack of reintegration support
- workplace opportunities
- level of influence
- resource constraints

2.5.1 Enabling factors

While the nuances and combination of the enabling factors differ between individuals, in this section, broad enabling factors are outlined with examples from alumni.

Access to international postgraduate education

Most alumni mentioned that without a scholarship, they would not have been able to gain a Masters degree from an international university. At the time this group of alumni were seeking opportunities to study abroad, there were limited international scholarships available to Costa Ricans. This was attributed to the relatively developed status of Costa Rica in comparison to other countries in Central and Latin America, meaning international scholarship programs often did not include Costa Rica. Consequently, the Australia Awards was important for these alumni in accessing opportunities to study abroad in their field of expertise. One alum, Ms Soto, succinctly stated—'I saw it [the Australia Awards] as a once in a lifetime opportunity, and, of course, I couldn't afford to study that in the States or Europe.'

Another alum, Mr Ocampo García, stated the Australia Awards presented an opportunity for his professional development in Australia that he would not otherwise have had access to:

Here in Costa Rica, it's a developing country, but in comparison with other countries of Central America and Latin America, it has better IDH [Human Development Index] conditions, developing conditions. So somehow we are not rich, but we are not in some bad conditions like in the other countries. So that somehow limits the opportunities for professionals to go abroad.

So in my perception, as a Costa Rican, [the Australia Awards] gave me the opportunity to do that. To study in a really recognised university in the world, to be in a really good programme, and to open my professional viewpoint. So I think that that's the greatest aspect.

Building new skills and knowledge

The alumni in this Case Study are forging careers in highly specialised and technical areas. Five of the alumni emphasised how their Australian scholarship has enabled them to build upon both their technical knowledge and soft skills to make contributions through their work. Undertaking postgraduate studies in Australia are described in terms such as 'enhance' (Mr Ocampo García) and 'developing areas I know' (Ms Alfaro Cordero).

Two employers of alumni also emphasised their opinion that the courses studied in Australia provided important preparation for the work the alumni are now undertaking. Ms Alfaro Cordero's manager, Mr Rodrigo Li, Director of Market Development at PIMA, stated:

For me, when I saw her CV and I saw the scholarship, the important part was the preparation as she had studied environmental management and development, she had the preparation to work with the producers.

In particular, alumni identified soft skills as transferrable and useful. For example, Ms Soto, who is driven to change approaches in the use of chemicals in agriculture, used the reasoning techniques her professors demonstrated to her in her first workplace post award:

Everything I studied, I applied from day one in Chiquita, telling my bosses, "Okay we need to use nematocide but maybe we can start doing some other stuff." I guess I used the skills that I saw my professors try to use on me to convince me to use all their other methods.

Broadening of mind-set studying and living in Australia

The opportunity to study and live in Australia was a transformative experience that was explicitly highlighted by six alumni. The impact this had on alumni both broadened their worldviews and improved their critical thinking and problemsolving skills. The alumni particularly valued the experience of living in 'another world' (Dr Carias Vega) and experiencing 'other ways of thinking' (Mr Ocampo García). Mr Aguilar Hernandez stated that from this exposure to multicultural living environments and classrooms, he 'learned so many things about life, about people around the world. I think that was really the part that really enriched my life the most'.

Ms Alfaro Cordero summed up the benefit of this exposure, stating—'To be with other people in there from other countries, other cultures...in some projects [now] you can have some other ways of solving it, and people don't see it'. Ms Soto also highlighted the exposure to different approaches to fumigation was her main focus in seeking out study in Australia 'to be able to come back and tell them' these new ideas and evidence.

Motivation of alumni

The motivation of the alumni in this Case Study is a significant factor in their achievements and contribution to development. Alumni, as part of the Case Study interview, are asked what motivated them to apply for an Australian scholarship. The responses of this group of alumni demonstrated characteristics of highly motivated and high performing individuals and an ethos to build careers with societal and environmental benefit.

Overall, in selecting applicants who will then be able to contribute to this long-term outcome of the Australia Awards, the alumni in this Case Study articulated clear objectives for their purpose in undertaking postgraduate studies. An exemplar of these sentiments is the response by Ms Alfaro Cordero:

I started working with coffee plantations and with certifications of coffee...when I was there, I wanted to do more to learn more. I saw in me that I had the potential to learn more and try to give them more.

On-award work experience and mentorship

Less common, but emphasised by the alumni who experienced his, are the benefits of on-award work experience and mentorship which contributed to the alum's professional development.

Dr Carias Vega, and Ms Medina both undertook work related to their study, experiences which became significant to their overall experience and development of skills, knowledge and networks on award. Dr Carias Vega described undertaking challenging opportunities such as conducting interviews as a part-time researcher with RMIT University, an experience she 'really appreciated'. Ms Medina built strong professional networks on award which extended from an industry research project for her course, which led to a guest researcher role with the Commonwealth Scientific and Industrial Research Organisation (CSIRO). This experience was central to Ms Medina in forming networks but also provided additional training opportunities and work experience to build skills and knowledge further.

Ms Soto and Dr Carias Vega also described the mentorship role their supervisors played in their on-award experience that have become enduring relationships. Dr Carias Vega stated her supervisors pushed her out of her 'comfort zone' in her research practice to undertake experiences she had not thought possible. Ms Soto stated that she found the encouragement she had been seeking, which validated her goal of developing new methods for pesticide use in agriculture:

The support that I got from amazing women that I met in Australia: Elizabeth Aitken and Juliane Henderson, just helped that seed to grow stronger. And here I have two teachers, two professors that are very good with me in that sense, that listen to me and don't mock me.

The impact of gender on alumnae outcomes

The alumnae in this Case Study have at times in their career progression and workplace opportunities, been both positively and negatively impacted by their gender. Some alumnae suggested their experiences and opportunities had been as available, if not more so, than men because of their gender, with sentiments such as:

I think, and especially in Costa Rica, actually, the gender balance is more towards women. In my office, it's unbalanced because we're just women.

If anything, I think I've been favoured for being a woman, getting scholarships and things like that.

I think [my employers] helped me because I was a woman, so they needed the numbers to show in Europe, the global gap and everything. They had women in positions of power.

At the same time, some alumni, female and male, perceived that there exists a patriarchal culture in Costa Rica, reflective of 'machismo' (exaggerated masculinity) in Latin American culture. The aspects of gender inequality stated by these alumni related to remuneration and access to job opportunities.

One alumna felt that this results in a 'glass ceiling' which limited career progression for women: 'They're always like, "Oh, so you're a woman, and maybe you'll never get a really, really, really good position." It's more chauvinistic here than over there [in Australia].'

Two alumnae also stated that motherhood can negatively impact career development, with one alumna stating that it can 'limit your capacity of working' due to workplace inflexibility following maternity leave. However, another alumna, whose professors in Australia were strong female role models, indicated that despite what she was being told in Costa Rica, she now believes it is possible to balance a career and children. Her inspiration comes from these female role models in Australia: 'for me [seeing them] it was like, "Wow, you can really do it all."

2.5.2 Challenging factors

The challenges the alumni in this Case Study have navigated to fully utilise their skills and knowledge reflect the short time since graduation (three to six years) and their stage of career progression (early to mid-career).

The following section outlines the factors experienced by alumni, which can be broadly categorised as challenges related to 1) reintegration; and 2) the workplace.

Six of the nine alumni in this Case Study were required to leave their jobs to undertake their scholarship award. As such, their reintegration challenges more commonly reflect similar alumni who did not have a job position held for their return post award.

These findings also reflect the challenges experienced by the broader cohort of alumni from this generation. In the Facility's Global Tracer Survey, the most common constraints mentioned by alumni were—lack of job opportunities, mismatch of skills to work available and workplace inflexibility (Edwards & Taylor, 2019).

Reintegration

Job availability post award: Six alumni in this Case Study working in the private or NGO sector were required to leave their positions to undertake their Australian scholarship. Of this group, five alumni stated their job search post award was challenging, taking up to 18 months and prompting them to follow uncertain pathways as freelance consultants before finding relevant ongoing working in their fields in Costa Rica.

The alumni perceived the challenges to finding ongoing work related to the context of Costa Rica as a small country with a small job market, the perception of international postgraduate degree holders as expensive to hire, and nepotism.

The risk of not immediately finding a job on return was a factor some alumni were aware of before accepting their scholarship. One alum stated:

It was hard to quit. I remember I'm like, "What if I come back and I don't get another job?" But thank god I did... I was nine months unemployed, looking and looking and looking. This period of job searching was particularly disappointing for some of the alumni, with one reflecting:

If you had asked me six months after I came [back] I would say, "I don't know what to do; the Masters didn't work." So in the beginning, it was hard, or I don't know if I wasn't lucky. But then, for example, my partner also studied abroad and he spent a year without a job as well, so I'm not really sure if that...I don't know...

Another alum described experiencing difficulty navigating entry into a speciality area of the sector. This challenge was in addition to being required to prove their Australian degree, a key problem identified by Oviedo, et al. (2015, p.11) in which 'outdated and bureaucratic procedures for recognising foreign degrees create obstacles for Costa Rica to "import" the skills needed':

When I try out to get involved in that area, I found it really, really closed. They are not really open to new ideas or something like that...maybe I took the wrong approach. Maybe it was all my fault—I don't know—but it didn't work...I really loved to come back, but I noticed these things that made my life a bit difficult when I went back to my home country.

Interestingly for some of these alumni, the alternative short-term consultation work ended up helping them to gain local and regional experience and networks, which helped in finding the permanent positions they now have.

Lack of reintegration support: Reintegration support and career advice was not available or offered to the alumni in this Case Study. One alum stated participation in this Case Study was the first contact he had in relation to the Australia Awards since graduation, explaining 'So when you asked me before how the beginning was, I said it was great [the program support]. But after the graduation was completed, there was none'.

An alum identified support in the form of career counselling on return as a service which could have been helpful in navigating re-entry to the Costa Rican job market:

I don't think that I received too much about career counselling. I don't know whether it's the responsibility of the award or the university.

Workplace

Workplace opportunities and level of influence: The challenges for alumni in gaining opportunities within their workplace to be able to influence change are not unique to Costa Rica, and reflect the commonly cited experiences in the Year 3 Global Tracer Survey as discussed earlier in this section.

One alum in this Case Study described returning and feeling their degree was not valued by their employer who did not engage with them about the Australian experience they had tried to share. Another alum stated they returned during a period of 'political change' which left them without the support and opportunities encouraged by their previous supervisor, stating this experience 'frustrated' them:

It was like I felt that I had gone to Australia, I had learned so many things, like I came so motivated to implement a lot of what I had learnt and then at the same time, I didn't have the context [because things at work had changed].

One alum stated that opportunities to progress in the workplace was limited to those with Doctorate degrees and biased in age:

I was in an organisation where there were managers who were pretty old. As a young professional, it was a bit hard just initially to be taken into consideration first and then to move into more senior positions. There would be this preconceived idea that you have to have had 30 years working to be able to perform manager tasks. There were things like that.

Another expressed they were not yet at a level to directly implement change, stating 'I think I've done a good job trying to plant that seed in them...But I've also learnt that I don't have to convince everyone right now. You have to choose your battles'.

An alum reflecting on their overall return experience stated that these challenges were beyond the influence of the Australia Awards:

It was not as positive as I would have expected. I would say that there's nothing wrong with the program, but there's only as much as you can do. The Australia Awards can train people and can give them tools, and it could be a fantastic opportunity, but if then they go back to their countries [and are] not given the opportunities, well, it's not likely that great things are going to happen.

Resource constraints: Resource constraints have influenced the ability of alumni to continue their contributions or to maximise the use of their skills and knowledge. One alum stated that limited financial resources affected their ability to achieve the best practice standards they have learned:

We don't have the economic support or economic funds. I can plan, and okay, we are going to have this, but we cannot develop that. So we cannot have good management of 100 per cent of the [issue]. And even though I have that knowledge or all that kind of knowledge for other areas, I cannot develop that.

Another alum described the difficulty in taking leave from their position, knowing that their current work would not be able to carry on in their absence, also affecting their career momentum on return:

When I came back, some of the stuff was I was working on, that I was really passionate about was discontinued because when I left, no one was able to carry on with them. So I think that was the hardest part for me, just knowing that leaving, that some things were going to get stuck there. Two years is a big break.

3. Public Diplomacy Outcomes

Alumni in this Case Study maintain a variety of relationships that were formed on award in Australia. The strongest relationships are within universities and have resulted in subsequent study and academic opportunities for these alumni. The ceasing of the Australia Awards in Latin America and subsequent lack of engagement opportunities for alumni have limited the potential for capitalising further on developing cooperation and partnerships between Australia and Costa Rica.

3.1 Introduction

This chapter explores the extent to which alumni are contributing to two of the Australia Awards long-term outcomes:

- Outcome 2: 'Alumni are contributing to cooperation between Australia and partner countries', and;
- Outcome 3: 'Effective, mutually advantageous partnerships between institutions and businesses in Australia and partner countries.'

The Australia Awards Global Monitoring and Evaluation Framework (the Framework) describes Outcome 2, cooperation, as being the connections and networks between alumni and Australia which represent the people-to-people links such as alumni associations, friendships, or professional connections with former lecturers. Whereas Outcome 3, partnerships, 'looks beyond the individual links' and 'articulates Australia's intention to see organisational links' occur as formal partnerships.

The 'seeds' for these outcomes are intended to have been developed on award. The Framework suggests that during their time on award, scholars 'build relationships with Australians, other awardees, and Australian organisations and businesses' and act to catalyse or enhance links between organisations. Further to this, it is anticipated that alumni engagement and support then assist as a post-award mechanism to maintain alumni's relationships with Australia.

This chapter explores the extent to which alumni in this Case Study have been able to develop and maintain connections and professional networks with people and organisations based on their time on award in Australia. The findings from this group of alumni suggest partial achievement of Outcome 2—cooperation, and partial achievement of Outcome 3—partnerships.

In the context of this Case Study, it is also important to highlight that at the time of interview, these alumni had only been back from their scholarship for between three and six years. As discussed in the previous chapter, during this time much of the focus of these alumni was in finding relevant job opportunities and beginning to forge their careers at home. As such, attempts at consolidating networks with Australia may have been a lower priority focus in these initial years. This aspect could perhaps be more prominent in the next stage of the careers of these alumni.

3.2 Background

The bilateral relationship between Australia and Costa Rica is described by DFAT as 'a warm relationship based on trade and international cooperation' (DFAT, 2019). Australia's diplomatic presence in the country involves an Honorary Consulate, with the Australian Embassy in Mexico City having accreditation to Costa Rica.

Australia's interactions with Cost Rica are guided by its wider interests and involvement with the Latin American Region.

Australia's Council on Australia Latin America Relations (COALAR) is a key mechanism for building relationships for Australia across the region. COALAR has a range of aims including to 'assist in developing government policies to enhance Australia's economic, political and social relations with Latin America' (DFAT, 2014). While it is a small country in comparison to many in Latin America, Costa Rica is a potentially important partner for Australia because it is one of the most politically and economically stable countries in the region, certainly in Central America. As recognised by the Australian Embassy in Mexico City, this stability offers the opportunity for long-lasting, mutually beneficial bilateral relationships.

In an interview for this Case Study, Australia's Honorary Consul in Costa Rica highlighted the importance of the Australia-Costa Rica relationship as both countries 'share values and views in different fields.' In particular, it was noted that both countries rely on these shared values in high-level discussions on the world stage. For example, the Honorary Consul noted that 'in the multilateral organisations like the World Trade Organisation, we share points of view and we work together very well in certain commissions and panels to try to strengthen the multilateral trade agreements.'

Within the context of this Case Study, one area of cooperation between Australia and Costa Rica is in the environmental sciences. Many of the alumni featured here have benefitted from Australia's strength in teaching and research in the environmental sciences. This area aligns with the policies and economic direction Costa Rica has been taking over the past decade as it moves towards its goal of becoming the first country in the world to be carbon neutral (ISO, 2019). As such, the potential synergies on issues of renewable energy, climate change and ecological conservation exist between the two countries.

3.3 Networks and links developed on award

Each of the alumni featured in this Case Study have developed and maintained connections with Australia as a result of their scholarship. As with the overall trend in the research of the Facility, for this group of alumni, the evidence relating to relationships developed as part of the award tend to fit more in relation to cooperation and people-to-people links (which align with Outcome 2) than with formal partnerships and organisational links (Outcome 3).

The findings from the alumni examples in this Case Study align to a certain extent with the responses from all Latin American alumni to the Facility's Global Tracer Survey of the 2011 to 2016 completion cohort (Edwards & Taylor, 2019). The survey responses from the Latin American cohort suggested that in terms of cooperation and contacts, many alumni maintained frequent contact with friends in Australia, fellow Australia Awards alumni and other Australian classmates. On the other hand, as found in this Case Study, the Global Tracer Survey responses suggest that fewer than half of the Latin American cohort had established any ongoing professional partnerships with Australian businesses or organisations.

The following list summarises the types of networks and links alumni of focus in this Case Study developed on award, and as a result of their scholarship. The discussion below elaborates on these types of connections with examples from the alumni interviewed.

Outcome 2—Cooperation

- · Academic links with supervisors
- · Links with other alumni in similar fields

Outcome 3—Partnerships

- Networking to facilitate business relationships
- Cooperation agreements with international research groups

3.3.1 Academic relationships

Many of the alumni from this Case Study continued to have an interest in academia—with two currently undertaking their PhDs (Ms Medina and Mr Aguilar Hernandez), one is considering a PhD in the future (Ms Soto) and another about to take up a post-doctoral position (Dr Carias Vega). In each of these cases, there is an ongoing relationship with academics and researchers in Australia. These relationships have helped in creating opportunities or building ambitions.

For example, Ms Medina's opportunity to study her PhD at the University of the Sunshine Coast came as a direct result of the connections she made while studying her masters in Australia during her scholarship. Of particular importance in her ongoing connections with Australia was a relationship Ms Medina fostered within a research group at the CSIRO in Brisbane. During the early part of her scholarship, Ms Medina actively reached out to academics in Australia with similar research interests to identify a useful research topic for her Masters thesis. These efforts resulted in a link with CSIRO's Global Food and Nutrition Security research group to contribute to an ongoing research project and a position as a guest researcher.

According to Ms Medina, not only was this a substantial benefit for her thesis, but the ongoing interaction within a research team was critical in building relationships that continued following her return to Costa Rica:

We kept in touch, either for things that we were working on or me using them for support when I needed contacts or information...so that relationship [has been] kept alive for those two years.

Now back in Australia, Ms Medina is funded through the Australian Department of Education's Research Training Program, with a CSIRO top-up scholarship, and her work is jointly supervised by the University of the Sunshine Coast and CSIRO.

Ms Soto, Mr Aguilar Hernandez and Dr Carias Vega's ongoing academic connections with Australia were also built out of the networks that they established while on scholarship. Ms Soto was able to host her Australian supervisor in Costa Rica last year, and Mr Aguilar has been able to contribute a chapter on sustainability to a book edited by the coordinator of his course in Australia.

Dr Carias Vega's supervisors have supported her in writing academic papers and keeping her informed of upcoming opportunities. This support has included providing strong references for her recently successful post-doctoral application for research in Australia. As Dr Carias Vega highlighted 'a good thing about my experience in Australia—I was able to create relationships' that have provided ongoing support in her career.

3.3.2 Professional partnerships

Specific partnerships between organisations or institutions that have resulted from the Australia Awards scholarships were relatively uncommon among alumni in this Case Study—a consistent theme across most of the Facility case studies. However, one strong example identified within this group is the networking and professional opportunities being facilitated by Dr Arias through his work in identifying and supporting projects relating to ocean conservation.

Dr Arias has active networks in the scientific community in Australia, which he is using effectively through his work to the mutual benefit of his projects and Australian marine scientists. He explained:

A concrete example is the guy who developed the compliance unit for the Great Barrier Reef Marine Park, I know him quite well, and I met him while I was doing my PhD. As far as I know, he's the best person to develop compliance management tools and processes for marine protected areas. So, whenever I have a project that has something to do with dealing with compliance in general or illegal fishing or dealing with tourists, whatever, in a marine protected area, I tell them, "You have to contact this guy. He is the best."

His employer, the Executive Director of Oceans 5, noted that Dr Arias' Australian connections had been important to their work—'Adrian has been really helpful in solidifying connections, in particular within the academic community around the Great Barrier Reef, coral and fisheries conservation.'

In another example of partnership building, Ms Medina encouraged her organisation to sign a Memorandum of Understanding (MoU) with an international organisation she had come into contact with while in Australia. Ms Medina's employer on return to Costa Rica, the Inter-American Institute for Cooperation on Agriculture (IICA), has become more involved in international partnerships in recent years as a result of this MoU, which is with the Agricultural Model Inter-comparison Project (AgMIP)⁶. AgMIP is a collaboration of more than 60 international research organisations which includes Australia's CSIRO.

3.3.3 Links with other alumni

All alumni in this Case Study have maintained connections with their classmates from Australia, often on a professional basis. These links and ongoing friendships with students met during the scholarship are from a vast mix of nationalities working across a range of countries. This mix includes Australian as well as fellow alumni from across Latin America, and in countries as diverse as China, Oman and the USA.

Interestingly, the connections and networks established by this group of alumni while in Australia have been maintained based on personal connections rather than through an organised or formalised alumni network. The benefit to alumni of a more formal alumni network is discussed in more detail in the box at the end of this chapter.

3.4 Factors influencing these outcomes

The following factors summarised below influenced the outcomes for this group of alumni in the formation of partnerships and cooperation with Australia and fellow alumni. These factors discussed further in this section.

Enabling cooperation and partnerships

- Personal motivation of alumni to make connections
- Digital communication platforms (including social media)
- Bonds developed through living with fellow students while in Australia

Challenges to cooperation and partnerships

- Alumni were in the early stage of their careers and are often more focussed on finding work in the years following award than forging partnerships
- Limitations for on-award internship opportunities
- Lack of follow-up from Australia on return from award (linked to the cessation of Australia Awards in Latin America)

3.4.1 Enabling factors

As has been the situation in other case studies of the Facility, a common factor driving the networking and connections that alumni made while on award has been their motivation and interest in fostering relationships. Ms Medina, as noted above, established and maintained networks and has subsequently returned to Australia for her PhD. She has clearly benefited from her ability to create and engage with the research community and maintain her networks. In her interview she highlighted that for the research work in her degree she believed the most important element was being able to build a partnership as part of the research:

At the time [when I was planning my research project], it was more so that I was looking to partner up with Australian research institutions [than worry about the research topic itself].

Digital communications platforms have also been a significant factor in facilitating alumni's ongoing connections following their award. The ubiquitous nature of social media now, and at the time of the award, means that most of the alumni's connections are maintained on digital platforms. Further, the accessibility of the internet to this group of mainly urban-based alumni means there are fewer barriers to connectivity than are seen in some other case studies undertaken by the Facility.

These platforms are fostering both ongoing professional connections as well as helping to maintain friendships. For example, Mr Ocampo García and Dr Arias are in contact with fellow alumni through WhatsApp groups, and Mr Luna-Rodríguez stated 'we keep in touch professionally, mainly through Linkedln'. Such connections are less likely to be 'lost' when people change employers or move countries. In this regard, this cohort of alumni is different from the alumni of previous generations who had studied before the digital era and the widespread availability of social media platforms. Unlike alumni of previous case studies who initially had to rely on emails or letters to stay in touch, this group have been able to seamlessly establish digital connections while on award and continue them on return.

Some of the strongest links made by alumni in this Case Study were with the people they lived with on award. The holistic experience of living together—and in some cases also studying together—is no doubt an important ingredient in developing long-lasting relationships. This ongoing link is exemplified by Ms Soto who lived with three of her classmates (international students from across the globe). She noted 'the four of us, we're still really good friends—we all work in government actually' and maintain connections both on the personal level as well as sharing their experiences professionally.

3.4.2 Challenging factors

As noted in the introduction to this chapter, an important context for the discussion of ongoing networks and connections for this group of alumni is the time since their award (three to six years). In many cases, the alumni of focus here were beginning to establish their careers. In the years since their return, alumni have spent considerable time finding work in Costa Rica that utilised their new skills and potentially had not yet had an opportunity to capitalise on networks developed in Australia.

In addition to this context, alumni also highlighted a couple of other issues that have made it difficult to establish or maintain networks with Australia since their return. These issues relate to limited opportunities for work experience or engagement with industry while on award and the lack of follow-up from DFAT and other Australian organisations since their return.

Two alumni in this study made particular mention of the lost opportunities to make relevant connections with Australian organisations while on award. Both were proactive in their efforts to engage with industry and find related job or internship opportunities. Each found that not being Australian had been a key stumbling block in securing this work. For example, one alumna had made several attempts to connect with relevant organisations, including government departments:

I tried places and asked, 'Do you want me or do you have any opportunity for me to work? I have experience in coffee, bananas, pineapples...' and they told me 'No, because you are not Australian and you need the requirement to work', even though it's an internship.

This inflexibility felt like a lost opportunity both for the alumna and for Australia: 'I am a good source of information to link Australia and Costa Rica, but how do I if I don't have the opportunity to do it?'

A lack of follow-up with alumni on their return to Costa Rica was also an issue raised by alumni as a limitation to nurturing ongoing relationships. Most alumni in the Case Study made some mention of the fact that they had heard little or nothing from the Australian High Commission since returning from award. A number remarked that the request to participate in the Case Study research was the first genuine contact they had had in relation to the Australia Awards since returning. One alumni noted:

When you contacted me I was like, "Oh, it's nice to have people from Australia contact me and tell me that they're wanting to know about my experience." Because when I left, I felt like Australia was sort of like, "Okay, well, she's gone and whatever, she'll find whatever. Wish her good luck."

In this regard, alumni also highlighted the difference between the support they were given prior to going on award, and the relative silence following. One alumni summed this up as follows:

When you asked me [in the interview] how the beginning was, when I was awarded the scholarship, I said it was great! But after graduation was completed, there was no contact. I felt very happy when you contacted me because that was very much the first contact after I graduated.

The views of the nine alumni in this Case Study echo the sentiment identified through the Facility's Global Tracer Survey of the broader Latin American cohort of alumni from this period. It is interesting to note from the global figures, that 45 per cent of alumni from Latin America indicated they have never had any contact with an Australian Embassy or High Commission since returning from award. Compared with alumni across all regions who indicated they had not had contact (on average 32 per cent), the Latin American respondents were the least likely to have had contact with their local Australian Embassy or High Commission (Edwards & Taylor, 2019).

It is clear that a critical element in the lack of follow-up with this cohort has been the fact that the Australia Awards is no longer funded in Latin America. Alumni in this Case Study were well aware of the ending of this funding and believed that this had contributed to the general lack of engagement following their award. The sentiment of the Case Study participants was that the ending of the program had an 'opportunity cost' for alumni, 'because all those who are coming back looking for a way to engage with Australia are not getting a way of doing it because there is no program in place'.

Another challenge is the location of the Embassy in Mexico City and the challenges of locating, contacting and engaging with and traveling to Costa Rica for the purposes of alumni engagement. With nine countries of accreditation and a limited budget, it is difficult for the Embassy to pay due attention to all alumni in its network.

The alumni in this Case Study tended to see that any links or networks they had formed with Australia since their award are therefore very much of their own making. As mentioned in the section above, it was the personal motivation of alumni that has resulted in these relationships. Once again, the voice of the alumni best articulates this feeling:

I felt like the relations that I managed to maintain were only on me, so there wasn't anyone. It wasn't like a government push to support them, or there wasn't like a programme to continue them, it was only because I had developed these personal relationships on a one-to-one basis.

However, the potential to re-invigorate relationships with alumni remains, with all in this Case Study being positive about engagement through alumni networks or groups established by Australia to keep them connected with each other and Australia. This potential future opportunity is explored further in the box below.

Alumni Engagement in Costa Rica—future opportunities

Alumni in this Case Study were asked about their interest in opportunities to engage further with other alumni in Costa Rica, the region and across the globe, and with Australia. This discussion with alumni was in part designed to offer some insight into these views to the Australian Embassy in Mexico City, which is considering new ways of engaging with alumni across its nine countries of accreditation.

Overall, the alumni in this Case Study were receptive to the idea of formal alumni engagement initiated and facilitated by Australia, with seven of the nine alumni here strongly indicating a willingness to participate in an alumni network. Many of the alumni have seen the events and opportunities that Australia Awards alumni from other regions have been benefiting from and indicated they would relish the chance to be involved in something similar. While from an Australian perspective, there are some potential difficulties given the Australia Awards is no longer funded in the region, alumni tended to think that this was not an issue that should prevent pursuing mutually advantageous opportunities. One alumni addressed this directly:

I know that they are not giving the scholarship. It's okay. But they have all the opportunities like collaboration in professional areas...The Australian Government [have] the human resource from the scholarships – we are here, we have the knowledge. I would like to give back but don't know how to do it.

Another, following this theme, emphasised their views on this:

I would like to give back something to the Government of Australia because they put credibility and trust in us, and they put in investment. So, I think there is a big opportunity to rescue that networking and to work together to see spaces like this to say "What are you doing? How can we work together? How can we do something with your government or the private sector?"

Alumni provided their suggestions on the sorts of engagement or activities they would see as important or beneficial if a network were to be established for Latin American alumni. It was also emphasised that anything built needed to have a clear strategy towards establishing the structure and mechanisms connecting alumni (i.e. 'for who?', 'for what purpose?'). With the caveat about overall purpose in mind, the kinds of ideas and initiatives suggested by alumni included:

- The ability to network with other Australian alumni from Costa Rica, Latin America, and across the globe through a central digital platform. Most alumni in the Case Study already have their own 'organically' grown networks with fellow Australia Awards alumni, and could bring these into a more formal setting. In this network, alumni saw potential benefits in sector, industry or research specific subgroups which enable professional connections for work opportunities, and keeping in touch with updated knowledge or technologies.
- **Face-to-face** events or meetings in Costa Rica to network socially with other alumni and with Australians or Australian organisations interested in partnerships.
- Professional development and capacity building opportunities directed at alumni, similar to what are offered to Australia Awards alumni in other regions (for example South and West Asia). These might not necessarily require travel, with one alumni suggesting digital learning platforms (like edX, for example) to deliver and connect across regions.

- Facilitating business partnerships by helping identify Australian organisations or government agencies to connect with in cases where alumni have identified specific joint ventures. Importantly, alumni and their employers offered several specific ideas or examples they had identified for such partnerships. In all these cases, alumni and their organisations have a clear understanding of the 'problem' and potential ways to collaborate with Australian to share 'solutions', but do not have the current channels to begin the process of collaboration. Ideas raised in this sector-specific Case Study include:
 - The potential to **collaborate in the mitigation of the banana disease** Fusarium, currently a significant issue for this industry in Central America, and something that Australia is exposed to and could help with as well as benefit from contemporary research and practice in fighting the disease.
 - Research and development in the recycling supply chain of Tetra Pak—a packaging product used a great deal in the dairy industry in both Costa Rica and Australia. The largest dairy company in Costa Rica is looking for ways to collaborate in researching how best to process this product in a cost-efficient way to encourage recycling and to adhere to increasing regulation around the industrial use of plastics.
 - Sharing knowledge and practice in the use of **technology** in wholesale agricultural markets to improve food safety, productivity and gains for farmers and producers. This sharing was expressed as an area of significant interest to Costa Rica, which is methodically expanding this aspect of the food production cycle and looking for other large agricultural producing nations to collaborate with regarding the role technology can play in this cycle.

4. Alumni Views of Australia

Alumni in this Case Study hold strong positive views of Australia. Key factors in shaping these views was the experience of living in Australia which they enjoyed and explored, and the support provided by both their universities and the Australia Awards to achieve their academic goals.

4.1 Introduction

Outcome 4 of the Australia Awards intends 'alumni view Australia, Australians, and Australian expertise positively'. This outcome is also a significant basis for the achievement of Outcome 2—cooperation. Long-lasting positive personal and professional attitudes to Australia are seen as 'fundamental to alumni contributing to cooperation between Australia and their home countries, and more broadly to the bilateral relationship' (DFAT, 2016).

To achieve Outcome 4, the Monitoring and Evaluation program logic (DFAT, 2016) identifies three key components for building a positive view of Australia:

- · alumni were able to establish links within Australia
- alumni had positive experiences on award in Australia, through both living and studying in Australia
- alumni continue to have positive experiences in their interactions with Australia and Australians post award.

The alumni in this Case Study all developed strong positive views of Australia, Australians and Australian expertise as a result of their time studying and living in Australia, **demonstrating achievement of Outcome 4**.

Interestingly for this chapter, some of the alumni in this Case Study were familiar with Australian study and Australian expertise in their areas, while others had no prior experience or knowledge of Australia. For example, Dr Arias had previously studied in Australia, and Ms Medina targeted Australia because she was aware of the high quality work in climate modelling being undertaken. In contrast, Ms Madrigal noted that if not for the scholarships, Australia was not really 'on the map' when it came to thinking about further study. This context is useful for understanding the outcomes of alumni and important in showing that overall, the positive outcomes were apparent regardless of prior knowledge or experience of Australia.

4.2 Examples of positive views of Australia, Australians and Australian expertise

Overall, the alumni in this Case Study had positive views of their time in Australia on award and these views encompassed 1) Australian education quality, 2) on-award support, and 3) Australian lifestyle and amenities.

Collectively, these three facets of views of Australia were significant to the overall on award experience, with alumni such as Dr Carias Vega describing their Australian scholarship experience as 'one of the best times in my life':

It was a time of a lot of opportunities, a lot of learning, a lot of support. I was able to work part-time at RMIT University, met amazing people.

Mr Luna-Rodríguez similarly stated the greatest benefit of the Australia Awards was 'pretty much everything: the city, the university, the environment, my classmates, the people there, and the opportunities to engage culturally and academically in the region'.

In the section below, specific examples of alumni views are detailed, in addition to the views of two employers of alumni.

4.2.1 Australian education quality and expertise

The alumni in this Case Study stated they felt they had received an internationally-recognised high-quality education experience in Australia. Mr Ocampo García stated that this was 'the greatest aspect' of the Australia Awards:

As a Costa Rican, [the scholarship] gave me the opportunity to study in a highly recognised university in the world and to be in a really good program, to open my professional viewpoint.

Further to these views, Ms Alfaro Cordero highlighted that this scholarship allowed her to learn directly from the key experts in her field:

Imagine the quality of a course where the lecturer was the one who wrote the book. And the book was used not only in Australia but also around the world. Imagine. For me, it was amazing when our lecturer was talking about a case study, and to know that he was there, he was working in there, and he had some achievements and something that you could not imitate, but you could take the example and use it in your context. How amazing.

Australian expertise, in particular, Australia's research culture, was another factor valued by the alumni. Mr Luna-Rodríguez stated he was 'really impressed by the research that was taking place at the University of Melbourne in my sector with some top researchers like some of my professors'. Similarly, Ms Medina was 'impressed' by the 'type of research that was being done in CSIRO...the capacity of organising so many topics and research in one single institution', an insight she thought 'was really valuable'.

The research quality was also highlighted by Dr Carias Vega, who felt privileged to be studying within an institution with a world-class reputation:

If you're reading the New York Times, you're like, oh, researchers from the University of Melbourne came up with this. So Australia produces a lot of excellent research and stuff that's published all over the world.

The Australian qualifications are also highly valued by the employers of these alumni, with Mr Luna-Rodríguez explaining this was 'because people see an Australian degree as a good quality degree'. Dr Arias' employer, Mr J Charles Fox, stated that the scholarship was 'incredibly valuable' in providing exposure to 'some of those leading ocean conservation policymakers as well as scientists' at James Cook University.

4.2.2 On-award support

Alumni highlighted the support mechanisms provided by their Australian institution and their scholarship, which enabled their positive academic experiences.

Four alumni emphasised the university staff (both academic and non-academic) and services as being outstanding. Ms Medina recalled feeling that 'if you fail academically in Australia, you really have to try to fail, because you've got so many people helping you do this'. Dr Carias Vega also stated that with the support provided 'you feel the opportunities':

For example, when I was doing my research, there was money to go and do fieldwork—it wasn't a lot of money, but there was money, and then if you published, you'd also get some money, and that was always helpful. And there was just a lot of motivation.

From a financial perspective, the Australian scholarship bursary was also a positive factor for alumni. Dr Arias stated that the living allowance from the scholarship 'was absolutely necessary and a huge help, otherwise I don't know how it could be possible to focus fulltime on those studies'. Ms Madrigal stated that in comparison to other international scholarships, the Australia Awards was 'way more generous' with 'assets that you wouldn't have from other scholarships'. One such asset Ms Madrigal stated was access to symposiums and conferences related to her field of study, which were 'those kinds of opportunities' that were only available to the Australia Awards scholars.

4.2.3 Australian lifestyle and amenities

The exposure to 'another world' (Dr Carias Vega) and different ways of living was an experience which impressed alumni during their time living, studying and travelling in Australia. In addition to the public facilities and spaces which formed a significant part of alumni's positive views of Australia, alumni discussed the enjoyable and personally fulfilling time they had on award. Ms Medina met her 'now husband, who is Australian', and Dr Arias stated, 'my wife and I fell in love with Australia; we were having a great time, we had many good friends, and the country is just beautiful in every sense'.

In particular, two alumni discussed the transformative impact of seeing a different lifestyle had on their personal lives. Ms Soto and Mr Aguilar Hernandez stated they learned how the balance between their personal and professional commitments could be reached. The successful professional female mentors Ms Soto had on-award provided her with an example for the goals she would like to achieve personally and professionally:

I'm really happy with that; I learnt balance. The first time that I really saw that was in Australia with those two teachers when they took me to their house, and I saw how happy their children and their families and how beautiful their homes were and how professional they were at their office and how respected they were. And I'm like, "One day; I'm going to get there." I feel like finally, I'm getting that.

Mr Aguilar Hernandez similarly stated—'I think in Australia that it's a very good balance between your personal life and also the activities that you are doing. So I really like that part. I learned how to live, in that sense'. The impact of living in Australia also extended to Mr Aguilar Hernandez's partner, who was inspired to continue challenging herself professionally:

Just to give you an idea of how the Australia Awards impacted me in our life; I'm referring to my wife right now. Actually, the only reason why I thought to apply to Europe specifically [for my PhD] was because my wife got a scholarship to do her Masters here. That happened in 2016, so it was just on our way back from Costa Rica. The reason why she did that was because we learned so much from our friends back in Australia in many ways, [that] you can achieve, especially professionally or personally...I think that was really inspirational for her to keep going [in her career].

The opportunity to travel was also a significant factor mentioned by two alumni, Mr Aguilar Hernandez and Mr Ocampo García of their Australian experience. Mr Ocampo García worked part-time as a cleaner at his university to extend his funds to travel around Australia and the Asia-Pacific region, describing this as 'the other asset of living in Australia and doing studies there'.

4.2.4 Employer views of Australia Awards program through its alumni

Two of the employers interviewed for this Case Study specifically mentioned how they were impressed by the Australia Awards. Mr Fox, the employer of Dr Arias, stated:

I can't say enough about the program [Australia Awards]. I didn't even realise the program until much later after we'd hired him. On one of those trips he was telling me a little bit more of the back story, and it's just amazing. So, hats off to Australia.

Ms Alfaro Cordero's manager, Mr Li, echoed these sentiments, stating the scholarship opportunity is 'very important, as you see in the figure of Linette. Thank you for the results that we are now seeing every day.'

4.3 Issues that challenged the development of positive views

While the overall emphasis of alumni in this Case Study was on their positive experiences and appreciation of Australia, there were a few themes that ran slightly counter to this. These issues were not necessarily uniformly mentioned by alumni, but are nonetheless important to include in this research because they help in highlighting some of the areas where improvements in the implementation of the Australia Awards could be focussed.

4.3.1 Cessation of the Australia Awards in Latin America

The Australia Awards in Latin America ceased in 2014 in line 'with the government's decision to focus Australia's aid program on the Asia-Pacific / Indian Ocean regions' (DFAT, n.d.). The view of some alumni in response to this, at the time, was the lost opportunity for the region. One alum stated:

There's a lot of really good universities in Australia, and I just thought that it was really bad that now many Latin American people were not going to be able to go there with a really good scholarship.

Mr Escalante, Honorary Consul for Australia, stated that after the Australia Awards ceased:

There were a lot of people from Costa Rica asking [about the scholarships]. I would say that at least once a week we received an email asking for opportunities to study in Australia and we would refer them to general information about Australian universities and those kinds of things, but there is no program in place for scholarships or anything like that.

This change in program potentially limits the effect of the impact of alumni's positive views of Australia, Australians and Australian expertise because there is no ongoing opportunity to promote and encourage new generations to follow this pathway to study in Australia. In turn, this has a limiting effect on the development of bilateral and people-to-people and business links with the region. As mentioned in the previous chapter, this Case Study has shown that there are potentially suitable opportunities for mutual benefit in the agriculture and environment sectors for Costa Rica and Australia.

The staff interviewed from the Australian Embassy in Mexico City also mentioned that building engagement with alumni and nurturing these positive views has been difficult following the ending of scholarships for the region. Embassy staff suggested that in contexts such as Costa Rica, the scholarships were a great tool for diplomacy that they no longer have at their disposal. While this has been difficult in the years immediately following the decision to cease the Australia Awards in Latin America, there are plans underway to redevelop the alumni engagement focus for the region with the hope of building on the positivity of those who studied in Australia.

4.3.2 Expertise and understanding of low and middle-income country contexts

Two alumni mentioned a lack of understanding and expertise of low and middle-income country contexts in their scholarship experience and coursework. While this is an issue more related to the university courses than something the Australia Awards itself can influence, it nonetheless reflects a perception that is worth noting.

One alum stated they felt their courses sometimes had a 'generalised view of development'. That 'they talked like you had to have a degree to work in the developing world, [that] it was the same going to Papua New Guinea, to India or Latin America'. This alum perceived this to result in a 'superficial' overview of some subjects, stating they wanted 'more meat, more discussion, more implementation'.

Another alum who also received an Australian Leadership Award stated: 'I wasn't really convinced about [the workshops] because I think their ideas of developing countries were a bit stereotyped and stuff', but was satisfied when, following feedback, changes were implemented as part of the leadership program.

4.3.3 Representation of Indigenous Australians

One alum mentioned being surprised by the low representation in education and the poor health outcomes of Australia's Indigenous population. This perception of the treatment of Indigenous people challenged the views of this alum.

4.3.4 Family experience

For those who were accompanied by a partner, there were some added challenges to integration. One alum discussed the challenges for their partner in finding relevant work in their field in a regional town, describing the initial period settling in as 'pretty difficult'. Although they found some work in hospitality, 'eventually, because most of our circle of friends were from uni, they started thinking about going for a Masters degree, [and receiving a university] scholarship, so that was fantastic'.

The initial challenge to life in Australia for this alum's family does go counter to the aims of the Australia Awards that 'awardees and their families have positive experiences of life in Australia'. In this particular case, the eventual outcomes were positive, but further understanding of the experiences and impact the scholarships have on the family members of Australia Awards alumni may likely be helpful to ensure a successful outcome of the Australia Awards for all in the future.

5. Conclusion

This Case Study helps to emphasise how alumni of the Australia Awards are making strong, substantial contributions to sectors of international significance in their country. In the relatively short period since completing their award, the alumni of focus in this Case Study have been able to draw on the skills and knowledge from their study in Australia to contribute to sustainable development in Costa Rica and internationally. Their contributions include environmental policy development, sustainable business and infrastructure projects, and environment and climate change research. As Costa Rica's reputation as a world leader in the implementation of renewable energy use and environmental management grows, the potential for this group of alumni to further these contributions is substantial.

As such, this Case Study shows strong achievement of Australia Awards long-term Outcome 1—contributions to development. The findings here also reflect the wider global outcomes being explored by the Australia Awards Global Tracer Facility. Among this generation of alumni, the Facility's Year 3 Global Tracer Survey showed most alumni globally (96 per cent) and most from Latin America (92 per cent) were using their knowledge and skills to make improvements to policy and practice in their work and were sharing these skills with others (98 per cent globally, 93 per cent in Latin America) (Edwards & Taylor, 2019).

Another of the Australia Awards long-term outcomes, Outcome 4—positive views of Australia, was also shown to be embedded in the alumni of focus in this Case Study. Alumni expressed strong and positive sentiment towards the quality of Australian education, highly valued the support they received while on award, and spoke fondly of their experience of the amenities available and their lifestyle while in Australia. Again, this enduring outcome also reflects the global analysis of alumni's views of Australia—with the Global Tracer Survey showing the vast majority of alumni (95 per cent) indicated that their experience in Australia positively influenced their perception of Australian skills and expertise.

This Case Study also found that the connections and partnerships of alumni with Australia are not particularly strong for most of the alumni interviewed—again, a similar outcome to what is being seen globally for this cohort. There were some good examples of ongoing connection with Australia through study and research (with one alum currently in Australia undertaking a PhD and another about to return to take up a post-doctoral position), and an example of an alum using his connections to link Australian experts into marine conservation projects. However, in general, Outcome 2—cooperation with Australia, and Outcome 3—partnerships with Australia, do not appear to have been fully achieved in this particular context.

For the Costa Rican alumni, one of the factors limiting the embedding of relationships with Australia is no doubt influenced by the cessation of the Australia Awards in Latin America. This occurred for some of these alumni not long after returning, or while they were still completing their scholarship. As a result, there has been little or no reintegration support, and limited follow-up from the Australia Awards or the Australian Embassy in Mexico City for this cohort. An issue also identified in the Independent Program Completion Report commissioned by DFAT at the conclusion of the Australian aid program in Latin America (Fargher, 2014).

Discussion during this Case Study with alumni and with the Australian Embassy in Mexico suggests that the opportunity for improving engagement is strong. As recommended by the review mentioned above, new approaches towards alumni engagement and facilitating links are being developed. This generation of alumni focused on in the report are moving into more senior roles, and there is a significant possibility of mutual benefit from further engagement by Australia with these alumni. The specific suggestions from alumni and their employers detailed in this report offer a small sample of the potential for the future.

6. Alumni Profiles



Dr Dora Carias Vega

'It was one of the best moments of my life. Just with my PhD and my experience in Australia, I found that I'm very driven and very determined, even in moments that are frustrating and you're like, "I don't know how. I don't know," you always find a way to motivate yourself and get through the hard times and continue forward.'

Scholarship

Australia Awards Scholarship, Australian Leadership Award

Years

2012-2016

Degree

PhD, 'A new institutional economic approach to the organisation of community forestry enterprises'.

University

The University of Melbourne

Current position

Economist and Coordinator, Environmental Management Office, Instituto Costarricense de Electricidad / Costa Rican Institute of Electricity (ICE)

Brief biography

Dr Carias Vega is a senior economist in Costa Rica's Institute of Electricity, working on environmental management of large-scale electrical projects in the country. She successfully applied for an Australia Awards scholarship in order to add another dimension to the experience she had from working in the field of environmental impact assessment.

During her PhD, undertaken at the University of Melbourne, Dr Carias Vega was able to work in a local university, RMIT, and develop networks to broaden her knowledge. In her PhD studies, she examined the environmental and economic impact of forestry enterprises on local communities in Latin America.

After her award, Dr Carias Vega returned to the Institute of Electricity where she worked closely with engineers to build a more holistic approach to the implementation of large scale infrastructure projects. This approach takes into account the social, environmental and economic factors and better connects communities and stakeholders involved. In 2020, Dr Carias Vega will return to Australia to take up a Post-Doctoral Fellowship at the University of the Sunshine Coast in Australia.



Dr Adrian Arias Rodriguez

'The oceans, they're a common good. They belong to no one and to everyone at the same time and there's a lot of things that we need to fix in the oceans. The projects that we work on, they're based, essentially, around marine protected areas, combating illegal fishing and helping countries in developing better fisheries and better managing their fisheries...I feel that I'm doing good things, not only for my country but for the region: Latin America and the Caribbean'

Scholarship

Australia Awards Scholarship, Australian Leadership Award

Years

2012-2016

Degree

PhD, 'Avoiding and reversing marine "paper parks": integrating fishers' compliance into conservation efforts'.

University

James Cook University

Current position

Project Manager, Latin America and the Caribbean, Oceans 5 (Philanthropic investments on marine conservation)

Brief biography

Dr Arias works for Oceans 5; an organisation managing philanthropic investments focused towards marine conservation. In his role, he develops and manages projects in Latin America and the Caribbean. Dr Arias undertook his scholarship at James Cook University to complete a Doctoral degree and received the Glenn Almany Memorial Prize for his thesis. This prize recognises 'a graduate student whose research required them to work with people beyond traditional academic boundaries to make a difference or which has the potential to influence policy, management or practice.' He secured his current job while on award, through a connection at his university, and has maintained contact with Australian marine conservation experts in the years following completion of his PhD.



Mr Mauricio Luna-Rodríguez

'I have the privilege to involve very vulnerable groups in my work, people who usually don't have a voice, and I think that's something I really enjoy and I'm proud of. For example, I've been recently working with super rural communities in Central America. I think having that experience with the local people, gives you the opportunity to include their needs in the larger policies we contribute to.'

Scholarship

Australian Development Scholarship

Years

2013-2014

Degree

Master of Environment

University

The University of Melbourne

Current position

Regional Climate Governance Advisor, Deutsche Gesellschaft für Internationale Zusammenarbeit / German Agency for International Cooperation (GIZ)

Brief biography

Mr Luna-Rodríguez currently works with 18 countries in the region on climate change and environmental management policies, especially in the area of governance. Prior to his award, Mr Luna-Rodríguez had experience working in small environmental-focussed NGOs in rural areas of Costa Rica. This experience instigated his desire to learn more about climate change and motivated his application for the Australia Awards.

Studying at the University of Melbourne, Mr Luna-Rodríguez relished the chance to engage culturally and academically with Australians. On return to Costa Rica, Mr Luna-Rodríguez worked as a consultant on various climate change based projects before taking up his current position with the German Agency for International Cooperation.



Ms Linette Maria Alfaro Cordero

'Through the scholarship, I could see real cases in many, many contexts: how to write the plans, how to develop the plans, how to evaluate those kinds of plans, the results, and how to try to develop more areas. Imagine the quality of a course where the lecturer was the one who wrote the book. And the book was used not only in Australia but also around the world.'

Scholarship

Australian Development Scholarship

Years

2013-2015

Degree

Master of Environmental Management and Development; Master of Diplomacy

University

The Australian National University

Current position

Market Development Process Leader, Programa Integral de Mercadeo Agropecuario / Comprehensive Agricultural Marketing Program (PIMA)

Brief biography

As a Market Development Process Leader, Ms Alfaro Cordero works with food producers to create systems and facilities to ensure that the supply and distribution of food in Costa Rica is efficient, beneficial for producers and of high quality for consumers.

Ms Alfaro Cordero completed her undergraduate degree in agronomy at Costa Rica's Earth University and then worked with coffee plantations in environmental management. Her desire to 'learn more' led to the successful application for an Australia Awards scholarship where Ms Alfaro studied a dual Masters at the Australian National University the areas of environment and diplomacy. On return from award, Ms Alfaro Cordero worked as a consultant in agricultural research before undertaking her current position with PIMA. Ms Alfaro Cordero has recently helped develop and launch Costa Rica's second wholesale regional market designed to benefit the farming families in disadvantaged rural parts of the country.



Mr Glenn Alonso Aguilar Hernandez

'Living in Sydney, it is so cosmopolitan. I learnt so many things about life, about people around the world. I think that that was really the part that really enriched my life the most, that big picture as well, because the friends that I made, they're around the world, they come from such a different cultural backgrounds that you learn so much from them.'

Scholarship

Australia Awards Scholarship

Years

2014-2016

Degree

Master of Sustainability

University

The University of Sydney

Current position

PhD Candidate, Institute of Environmental Sciences, Leiden University, The Netherlands

Brief biography

Mr Aguilar Hernandez is currently undertaking his doctorate in the Netherlands at Leiden University. His Australia Awards scholarship, undertaken at the University of Sydney, where he studied a Master of Sustainability, was an important factor in securing his doctoral candidature.

Immediately following his award, Mr Aguilar Hernandez worked in the higher education sector in Costa Rica, lecturing in climate change and undertaking research in biodiesel production and performance. In his doctorate, Mr Aguilar Hernandez is now exploring sustainability and environmental impact from the concept of an economic model known as the 'circular economy'—exploring the extent to which we re-use, recycle, and repurpose materials to reduce waste and use fewer resources.



Ms Daniela Lucia Medina Hidalgo

'I definitely felt very proud of the things I was doing in Costa Rica. I feel in many ways we were doing honest work. We were really working with governments trying to improve policies, improve the sustainability of the agricultural sector. So if anything, I'm proud that I always had in the back in my mind that anything we did, it had to be done in a committed fashion, in the best way possible, because we were actually dealing with quite important issues.'

Scholarship

Australia Awards Scholarship, Australian Leadership Award

Years

2014-2015

Degree

Master of Environment, Advanced with Honours

University

Griffith University

Current position

PhD Candidate, University of the Sunshine Coast, Australia

Brief biography

Ms Medina is currently in Australia undertaking her doctorate at the University of the Sunshine Coast. Ms Medina applied for an Australia Awards scholarship after being encouraged by her boss in Costa Rica to seek opportunities to further her education. She studied a Master of Environment at Griffith University in Brisbane. On return from award, Ms Medina worked for an international organisation coordinating agricultural ministries in Latin America. Ms Medina's strong industry connections she established in Australia led to her current doctoral opportunity and return to Queensland in 2018. Her Doctoral thesis is exploring links between climate change adaptation and food and nutrition security goals in the Pacific.



Ms Diana Madrigal

'I think it was one of the best scholarships there was. I guess most of us wouldn't be able to afford going to Australia just any day. So it's also an opportunity to go beyond what you could expect or where to study.'

Scholarship

Australia Awards Scholarship

Years

2014-2015

Degree

Master of Integrated Water Management

University

The University of Queensland

Current position

Water and Sanitation Analyst, Inter-American Development Bank; Founder and President of Lifting Hands Foundation

Brief biography

Ms Madrigal works for the Inter-American Development Bank (IADB), managing large scale infrastructure projects relating to water and sanitation. Under an Australia Awards scholarship, Ms Madrigal studied water management at the University of Queensland. This degree enabled her to pursue this area of work when she returned home. In her work, Ms Madrigal has oversight of significant projects that the IADB helps fund—including the development of a sewerage system for San Jose's urban areas and a project to improve access to drinking water in rural communities. Ms Madrigal also continues to be involved in community work in Costa Rica through an NGO she founded, Lifting Hands, which offers education and support for more than 200 children in a slum in San Jose.





Mr J. Daniel Ocampo García

'As a person and as a professional, I have the viewpoint that if you don't motivate people enough as a person, as a human being, you can't develop well their professional skills. So since I came here [to my current job], many things have started to happen, so I feel proud about that.'

Scholarship

Australia Awards Scholarship

Years

2014-2015

Degree

Master of Sustainability

University

The University of Sydney

Current position

Head of Environmental Management, Cooperativa de Productores de Leche R.L—Dos Pinos.

Brief biography

Mr Ocampo García leads the environmental management of Costa Rica's largest dairy producer, Dos Pinos. He was awarded an Australia Awards scholarship to undertake a Master of Sustainability commencing in 2014 at the University of Sydney.

On return to Costa Rica, Mr Ocampo García worked as a consultant for governments and other organisations within Latin America on a range of environmental and sustainability-based projects. Since beginning at Dos Pinos in 2019, Mr Ocampo García has used the knowledge from his Masters to help refocus the cooperative's approach to environmental and waste management across a vast supply chain – 'from farm to fork'. This has included several projects working with communities and stakeholders on recycling and reforestation programs.



Ms Laura Beatriz Soto Portillo

'To be able to experience other ways of thinking and to be able to express the way you think to those other ways of thinking, so we both can grow together. That was amazing, because I had this seed but then they put a little fertiliser, and then I found out that I was the owner of all the fertiliser that that seed needed. So, that was amazing.'

Scholarship

Australia Development Scholarship

Years

2012-2013

Degree

Master of Plant Protection

University

The University of Queensland

Current position

Phytosanitary Inspector, Vegetable Imports and Exports. Ministry of Agriculture, Puerto Caldera.

Brief biography

Ms Soto works at Puerto Caldera, the main port on the Pacific Coast of Costa Rica. In her current role, she is in charge of quarantine relating to all imports and exports for the Port.

Ms Soto's scholarship to undertake a Master of Plant Protection opened her eyes to the alternative solutions to the commonly used pesticides in the farming and storage of vegetables and fruits. Through her work since returning home, Ms Soto has been methodically making improvements to practice. On return from scholarship, Ms Soto worked for Chiquita providing technical expertise on the treatment of banana plantations and eradication of diseases. In the future Ms Soto hopes to help drive a substantially more environmentally sustainable approach to the control of pests and diseases in agricultural production in Costa Rica.

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Annex 1: Methodology

This chapter includes an overview of the Case Study design, development and implementation. This is the 15th Case Study of the Facility. Costa Rica is one of five Case Study countries proposed in the Year 4 Facility Annual Plan. Costa Rica was selected as a Case Study country on the basis there was a core group of alumni identified who had studies which focussed on the environment and agriculture, key areas which are of importance to development in Costa Rica.

Overall Case Study design

The purpose of the Facility Case Studies is to collect detailed qualitative data on the impact and benefits of the Australia Awards. The Case Study methodology is based on the Facility Case Study Approach, which was developed in the inception phase of the Facility and reported in the Annual Plan for Year 1.

The Global Strategy and Australia Awards Global Monitoring and Evaluation Framework (the Framework) form the basis for the Case Study design. The research questions, propositions, data collection instruments, and report template are built around these frameworks. Findings reported by alumni are triangulated with relevant stakeholders such as employers and colleagues, and industry bodies thereby strengthening findings by providing further evidence to support or refute propositions. This methodology was developed by the Facility and SCB.

The overarching theory that has guided the design of this Case Study methodology is based upon the goal of the Australia Awards that '... partner countries progress their development goals and have positive relationships with Australia that advance mutual interests'.

The Case Study research questions are framed by the intended long-term outcomes of the Australia Awards as guided by the Framework:

- 1. How do alumni use the skills, knowledge and networks gained on award to contribute to achieving partner-country development goals?
- 2. How are Australia Awards contributing to Australia's economic and public diplomacy outcomes?
- 3. How has being an Australia Award alumni impacted alumni?
- 4. Are the benefits of receiving a scholarship experienced equally by all groups who have received them?

The primary unit of analysis for this Case Study is the alumnus or alumna. Case studies seek to explore how alumni of Australia Awards have acted to contribute to the achievement of the goal and objectives of the Australia Awards.

The case studies are being conducted via an iterative approach whereby the qualitative phase can be designed based on what is learned from the initial quantitative phase. In essence, the Facility implements this by drawing on data collected through a Global Tracer Survey and using this data as one of the means of developing the focus and scope of a number of case studies carried out in the following year.

As such, the planning and initial scoping of this Case Study was undertaken on the basis of the Facility's Year 3 Tracer Survey, which surveyed alumni who completed their scholarships between 2011 and 2016.

Methods

The data collection method used for this Case Study was through interviews. A set of questions were developed for each key participant group, namely alumni, colleagues and employers (both of alumni and generally), alumni associations; and the DFAT staff, managing contractors, and coordinating authorities working on the Australia Awards in partner countries. Questions for each key participant group align with the research propositions (located at Annex 2) and long-term outcomes of the Australia Awards. This ensures that data collected directly relate to the key questions the case studies are seeking to answer and that there is consistency across each Case Study.

Sample

The alumni selected for this Case Study were chosen based on two key criteria: 1. that they had undertaken study in areas relating to environment and/or agriculture; and 2. that they completed their study between 2011 and 2016. Within the sample selected for the research, the Facility also took into account where possible—gender representation, the inclusion of persons with disability, and a variety of employment types (e.g. sector and level of seniority).

The Global Alumni database and the Year 3 Tracer Survey were the key means for identifying the potential sample for this Case Study. The research team looked at these sources, and focussed on alumni who had completed their studies in the fields of agriculture, environment and related studies in order to focus on the overall thematic aim of the Case Study.

In total, based on analysis of the Global Alumni database, 10 alumni were determined to have potential 'fit' within the population of focus. Of these alumni, six had also completed the Year 3 Tracer Survey.

Within this sample, alumni where additional information was available—i.e. the development sector of focus from their scholarship, their current employment, contact details—were selected to participate in the Case Study. The Facility invited nine alumni to participate, and all nine agreed and were interviewed. As per the table below, the sample included five women and four men.

Table 1 Costa Rica Case Study alumni participants

Interview Date (2019)	Gender	Name	Scholarship years	Scholarship	Course & University	Current Position
30/7	F	Dr Dora Carias Vega	2012-2016	Australia Awards Scholarship, Australian Leadership Awards	PhD, University of Melbourne	Economist and Coordinator, Environmental Management Office, Instituto Costarricense de Electricidad / Costa Rican Institute of Electricity (ICE
29/7	М	Dr Adrian Arias Rodriguez	2012–2016	Australian Development Scholarship, Australian Leadership Awards	PhD, James Cook University	Project Manager, Latin America and the Caribbean, Oceans 5 (Philanthropic investments on marine conservation)
30/7	M	Mr Mauricio Luna- Rodríguez	2013–2014	Australian Development Scholarships	Master of Environment, University of Melbourne	Regional Climate Governance Advisor, Deutsche Gesellschaft für Internationale Zusammenarbeit / German Agency for International Cooperation (GIZ)
29/7	F	Ms Linette Maria Alfaro Cordero	2013-2015	Australian Development Scholarships	Master Of Environmental Management And Development; Master Of Diplomacy, ANU	Market Development Process Leader, Programa Integral de Mercadeo Agropecuario / Comprehensive Agricultural Marketing Program (PIMA)
17/6	М	Mr Glenn Alonso Aguilar Hernandez	2014-2015	Australia Awards Scholarship	Master of Sustainability, University of Sydney	PhD candidate, Institute of Environmental Sciences, Leiden University
11/6	F	Ms Daniela Lucia Medina Hidalgo	2014–2015	Australia Awards Scholarship, Australian Leadership Award	Master of Environment Advanced With Honours, Griffith University	PhD candidate, University of the Sunshine Coast, Australia
29/7	F	Ms Diana Madrigal	2014-2015	Australia Awards Scholarship	Master of Integrated Water Management, University of Queensland	Water and Sanitation Analyst, Inter- American Development Bank Founder and President of Lifting Hands Foundation
31/7	M	Mr J. Daniel Ocampo García	2014–2015	Australia Awards Scholarship	Master of Sustainability, University of Sydney	Head of Environmental Management, Dos Pinos.
1/8	F	Ms Laura Beatriz Soto Portillo	2012–2013	Australian Development Scholarships	Master of Plant Protection, University of Queensland	Phytosanitary Inspector, Vegetable Imports and Exports, Ministry of Agriculture, Puerto Caldera

In addition to the alumni who participated in the Case Study, eight other people were interviewed in order to provide context, triangulate alumni perspectives and better understand the impact of the Australian scholarships on the outcomes for Costa Rica and Australia. These additional interviews included stakeholders such as the colleagues of four alumni, the Australian High Commission in Mexico and Australia's Honorary Consel in Costa Rica.

The table below lists these participants. In total, 17 people were interviewed for the Costa Rica Case Study.

Exclusions

As noted in the section above, all Case Study alumni were selected from the Year 3 Tracer Survey and the Global Alumni database. These sources only include those who have successfully completed their degree. Accordingly, this study excludes anyone who did not complete their scholarship.

Data collection

As part of the development of the interview questions for case studies, the Facility piloted all instruments with Australia Awards alumni who resided in Australia. Subsequently, questions have been reviewed annually and refined over the four years of the project. All interview guides can be downloaded from the Facility website: www.australiaawardstracerfacility.org.

This Case Study was conducted by Ms Amanda Taylor and Dr Daniel Edwards, core Facility staff who bring relevant expertise in qualitative research and international development. These researchers worked together to undertake data collection and report writing: one conducted the interview and the other recorded and took notes. This enabled high-quality reliable data to be gathered. At the conclusion of interviews, the researchers discussed and verified the data to ensure completeness and accuracy.

Table 2 Key stakeholder and employer/colleague interviews

Interview context	Date (2019)	Name	Position		
Alumni	29/7	Rodrigo Li	Director of Market Development, PIMA		
employers or colleagues			[Employer of Ms Alfaro Cordero]		
concagues	29/7	Rolando Gonzales Ruiz	Technician, PIMA		
			[Colleague of Ms Alfaro Cordero]		
	30/7	Chuck Fox	Executive Director, Oceans 5		
			[Employer of Adrian Arias]		
	31/7	Adrian Calderon	General Manager, Dos Pinos		
			[Employer of Mr Ocampo García]		
	1/8	Nelson Dijeres Bonilla	Administrative Officer, Ministry of Agriculture, Puerto Caldera		
			[Colleague of Ms Soto]		
Australian High Commission,	19/7	Estelle Parker	Deputy Head of Mission and Counsellor, Australian Embassy Mexico City		
Mexico	19/7	Lorena Zapiain	Public Diplomacy Officer, Australian Embassy, Mexico City		
Other stakeholders	1/8	Javier Escalante Madrigal	Honorary Consul of Australia, San Jose, Costa Rica		

Process

The Case Study field research was undertaken in Costa Rica from 29 July to 1 August 2019. Most interviews were conducted face-to-face during this period. The exception to this was interviews with two alumni who are not currently in Costa Rica, one alumni employer, and the Australian High Commission in Mexico.

Alumni were requested to provide their resume to researchers where available for further background information. Participants were provided with background information relating to the research and the Facility, and all provided written informed consent to their participation and identification in reporting.

Data management and reporting

Interviews were voice recorded (with approval granted to do so). In addition, the Case Study researchers annotated responses during the interview. A transcription specialist transcribed all interview recordings. After the completion of the interview and transcription process, the Case Study researchers consolidated the written and oral recordings into a single near-verbatim transcript (with restarting of sentences and fillers excluded).

Coding and review

Interview scripts were subsequently coded using computerassisted qualitative data analysis software, NVivo. This enabled emerging themes to be identified and links to be made between participants that supported or refuted the research propositions, as aligned with the long-term outcomes of the Australia Awards.

Analysis of the Case Study data involved a strategy that was guided by the theoretical proposition developed under the conceptual framework for the Case Study and by the techniques identified in the Facility's Case Study Approach document.

Case Study participants were sent segments of the report where clarification or review and approval were necessary—for this Case Study, this primarily involved cross checking with the Australian High Commission interview participants. Review by participants is not consistently used in qualitative research but was done so here to ensure the validity of the data and avoid errors.

Limitations

There were a number of limitations of this research that were inherent to both the nature of the research and the research process, as discussed below.

Positive response bias

It is probable that alumni who felt that they had a positive experience as an Australian Government scholarship recipient and/or had success in their career following their award are more likely to agree to participate in Case Studies. In a study by the Commonwealth Scholarship Commission in the UK (Mawer, 2014), recognition of positive response bias is highlighted:

...there is widespread recognition that a more pressing problem is nonresponse bias in which those who reply to sample surveys are likely to be engaged with alumni associations or tracing (e.g. Day, Stackhouse and Geddes, 2009) and disproportionately represent the 'successful' outcomes of scholarship programmes (p.9).

Accordingly, it is likely that the alumni in the Costa Rica Case Study had a positive bias towards their experience, outcomes and views of Australia. The Facility has developed interview questions and analyses approaches to reduce the impact of this bias—these are applied consistently across all case studies. Through this approach, leading questions are avoided and alumni are offered opportunities to reflect on their outcomes at the beginning and at the end of the interview without specific questions to guide their answers.

Nature of the research

Outcome 1 of the Global Strategy is: 'alumni are using the skills, knowledge and networks gained on award to contribute to achieving partner-country development goals'. However, some alumni have shaped development goals rather than contributed to them, and while it may be outside the purview of partner-country development goals that this research is being evaluated against, such contributions are still significant.

Throughout the research it has conducted, Facility has consistently experienced difficulty in evaluating Outcome 2 'alumni are contributing to cooperation between Australia and partner countries', and Outcome 3 'effective, mutually advantageous partnerships between institutions and business [have been developed] in Australia and partner countries'. These two outcomes are aligned with the second research question for the Case Study 'How are Australia Awards contributing to Australia's economic and public diplomacy outcomes?' There is an overlap and difficulty in differentiating 'cooperation' and 'partnerships'. The research team delineated them by determining that Outcome 2 relates to people-to-people links including informal relationships; whereas Outcome 3 specifically relates to institutional links between the partner country and Australia, which alumni have contributed to establishing.

No issues were encountered by the research team in collecting, collating, coding or analysing data related to Outcome 4 of the Australia Awards - 'Alumni view Australia, Australians and Australian expertise positively'.

Research process

The ability to code the interview transcripts effectively is dependent on understanding the partner-country development goals, at the time these alumni were awarded their scholarships. Researchers involved in the Case Study made concerted attempts to identify relevant secondary data such as policy documents, papers, books and digital resources to provide background and insight into development plans, policies and changes over the time span of 2013 to 2016, the years of focus for when these alumni completed their scholarship.

Annex 2: Case Study Propositions

Explanatory case studies require the development of propositions that are intricately linked to the original research questions. A proposition is a statement that helps direct attention to something that should be examined in a Case Study. The researcher has to make a speculation, on the basis of the literature and any other earlier evidence, as to what they expect the findings of the research to be. When a Case Study proposal includes specific propositions, it increases the likelihood that the researcher can limit the scope of study and complete the project. The researcher can have several propositions to guide the study, but each must have a distinct focus and purpose. The data collection and analysis can then be structured in order to support or refute the research propositions.

For the Facility, propositions were formed using the Global Strategy outcomes as the basis. Sub-propositions were formulated by speculating on the underlying assumption or enabling factors that realise the proposition. In alignment with the methodology, instruments will be designed to collect data that both support and refute the propositions.

- 1. Alumni use their skills knowledge and networks to contribute to achieving partner-country development goals⁸.
 - a alumni develop skills, knowledge and networks on award that enable and are used to contribute to achieving partner-country development goals
 - b alumni understand, value and want to contribute to partner-country development goals.
- 2. Alumni are contributing to cooperation between Australia and partner countries
 - a alumni possess and are able to leverage their useful networks and relationships.
- 3. Effective, mutually advantageous partnerships between institutions and business [have been developed] in Australia and partner countries
 - a alumni possess and are able to leverage their useful networks and relationships
 - b partnerships that are developed are effective and mutually advantageous to participating countries.
- 4. Alumni view Australia and Australian expertise positively
 - a alumni's views are underpinned by their experiences in Australia.
- 5. The benefits of receiving an Australia Award or scholarship are experienced equally by all recipients.
 - a receiving an Australia Award or scholarship positively addresses, rather than reinforces, imbalances that are associated with gender and disability.

This proposition differs from the Australia Awards Program Logic long-term outcome number 1 in order to link this proposition to the Goal of the Australia Awards Program. The use of the term 'partner-country development goals instead of 'sustainable development' makes the proposition and ensuing questions more relevant and relatable to alumni.