

## Your research proposal needs to align to an ACIAR project or your country's Agriculture Sector Plan

### Potential research topics

Research Focus	Possible thesis topic	Australian research agency and contact	Scholarship location	Hotlink to ACIAR research project
<b>Horticulture</b>				
<b>Fruit Production Systems</b>	<p><u>PhD topic</u></p> <p>Is Huanglongbing (citrus greening disease) a potential risk to citrus production in the Pacific? (study area Samoa).</p> <p><u>Masters topics</u></p> <p>How do Pacific smallholder farmers currently source pre-harvest and postharvest extension knowledge and expertise? (study area in Tonga and/or Samoa).</p> <p>Smallholder farmer motivations, incentives and resistors to increased citrus production (study area in Tonga and/or Samoa).</p>	<p>Professor Steven Underhill, University of the Sunshine Coast</p> <p><a href="mailto:sunderhi@usc.edu.au">sunderhi@usc.edu.au</a></p>	Samoa	<p><a href="#">HORT/2014/077</a></p> <p>Enhanced fruit production and postharvest handling systems for Fiji, Samoa, and Tonga</p>
<b>Coconuts</b>	<p>Phenotyping Coconut diversity.</p> <p>Diagnostics of exotic pests and diseases.</p> <p>Improving tissue culture techniques.</p> <p>Business case for replanting coconuts.</p> <p>Senile coconut resources in Samoa</p> <p>Impact of Coconut Rhinoceros Beetle (CBR).on export potential of the products processed from the nut.</p>	<p>TBC please contact <a href="mailto:lwess@usc.edu.au">lwess@usc.edu.au</a></p> <p>or</p> <p><a href="mailto:sunderhill@usc.edu.au">sunderhill@usc.edu.au</a> for more information.</p>	Samoa	<p><a href="#">HORT/2017/025</a></p> <p>Safeguarding and Deploying Coconut Diversity for Improving Livelihoods in the Pacific Islands</p>
<b>Protected Cropping Systems</b>	<p><u>Masters topics</u></p> <p>Irrigation systems in protected cropping systems.</p>	<p>Professor Phil Brown, Central Queensland University</p>	Fiji and Samoa	<p><a href="#">HORT/2014/080</a></p> <p>Integrating protected cropping systems into high value vegetable value</p>

	Variety selection in protected cropping systems.  Pest and disease management in protected cropping.	<a href="mailto:p.h.brown@cqu.edu.au">p.h.brown@cqu.edu.au</a>		chains in the Pacific and Australia
<b>Integrated Pest and disease management</b>	<u>Masters topics</u>  Diagnostics for pest and diseases.  Improving extension systems through plant doctors and village plant health clinics.	Professor Mike Furlong, University of Queensland  <a href="mailto:m.furlong@uq.edu.au">m.furlong@uq.edu.au</a>	Fiji and Samoa	<a href="#">HORT/2016/185</a>  Responding to emerging pest and disease threats to horticulture in the Pacific Islands
<b>Forestry</b>				
<b>Gender</b>	Gender dimensions of employment in the forest products processing sector.	Robbie McGavin, Department of Agriculture and Fisheries Queensland	Fiji	FST/2019/128 Coconut and other non-traditional forest resources for the manufacture of Engineered Wood Products
<b>Value-chains</b>	Pacific value-chain for engineered wood products.	<a href="mailto:Robbie.mcgavin@daf.qld.gov.au">Robbie.mcgavin@daf.qld.gov.au</a>		
<b>Restoration</b>	Use of nut tree enrichment in forest restoration.	Professor Helen Wallace, Griffith University.  <a href="mailto:Helen.wallace@griffith.edu.au">Helen.wallace@griffith.edu.au</a>	Fiji	<a href="#">FST/2014/067</a> Enhancing value added products and environmental benefits from agroforestry systems in Papua New Guinea and the Pacific
<b>Fisheries</b>				
<b>Post-harvest Processing</b>	<u>Masters topics</u> Utilization of pearl oyster tissue by-product as fertilizers for food.  Optimizing the nutrient composition and improving the post-harvest processing yield of <i>Holothuria fuscogilva</i> in Fiji.  Assessing the fish-aggregating effect of pearl culture infrastructure.	Professor Paul Southgate, University of the Sunshine Coast  <a href="mailto:p.southgate@usc.edu.au">p.southgate@usc.edu.au</a>	Fiji	FIS/2016/122  FIS/2019/122 Towards more profitable and sustainable pearl-industry based livelihoods in the western Pacific
<b>Aquaculture products for improved nutrition</b>	<u>Masters topic</u> Application of seaweed to develop new food products.	Dr Libby Swanepoel, University of the Sunshine Coast  <a href="mailto:lswanepo@usc.edu.au">lswanepo@usc.edu.au</a>	Fiji	FIS/2019/125 Improving nutrition through women's and men's engagement across the seaweed food chain in Kiribati and Samoa

Livestock				
<b>Small ruminants</b>	<p><u>Masters topics</u></p> <p>Natural and chemical worm control methods in sheep.</p> <p>Value chains for sheep and goats and their meat in Fiji and Samoa.</p> <p>The social role of sheep and goats in Fijian and Samoan cultures.</p> <p>Labour for sheep and goat production systems.</p> <p>Reproduction and health in sheep and goats.</p>	<p>Professor Frances Cowley, University of New England</p> <p><a href="mailto:fcowley@une.edu.au">fcowley@une.edu.au</a></p>	Fiji and Samoa	<p><a href="#">LS/2017/033</a> Improving small ruminant production and supply in Fiji and Samoa</p>
<b>Market and consumption analysis</b>	<p>Implications of market context, and consumer purchasing and consumption patterns for policy, investment and development options in the sheep and goat meat sector in Fiji and Samoa.</p>			
<b>Policy and institutional research in areas of agriculture, trade, public health, and food safety</b>	<p>Analysis of current policy and institutional barriers and opportunities affecting competitiveness and public health outcomes in goat and sheep meat sector in Fiji and Samoa.</p>	<p><a href="mailto:rodd@focusgroupgo.com">rodd@focusgroupgo.com</a></p> <p>University of Sydney</p>	Fiji and Samoa	<p>LS/2018/183 Sectoral analysis and investment requirements for improving Fiji and Samoa small ruminant sector</p>
<b>Value chain and stakeholder research</b>	<p>Analysis of actors and indirect stakeholders with the motivation, capability and willingness to facilitate necessary changes and investments in the sheep and goat value chains.</p>			
Soils and Land Management				
<b>Circular Economy</b>	<p>What are the opportunities to utilise waste streams for improved agronomic production?</p>			
<b>Soil water testing</b>	<p>Utilisation of soil water sensors (fullstops and chameleons) to understand nitrate leaching and irrigation scheduling.</p>			
<b>Intensification and intercropping</b>	<p>Intensification of cropping systems by using intercrops and double taro cropping.</p>	<p>Dr Ben MacDonald, CSIRO</p> <p><a href="mailto:Ben.macdonald@csiro.au">Ben.macdonald@csiro.au</a></p>	Samoa	<p><a href="#">SMCN/2016/111</a> Soil management in Pacific Islands: investigating nutrient cycling and development of the soils portal</p>
<b>Soil testing</b>	<p>Developing fertiliser recommendations from 'quick' soil field test kits.</p> <p>Characterising soil chemical properties using mid-inferred spectroscopy.</p>			

Water and Climate				
Climate change and food security	What are the medium and longer-term impacts of climate change on agricultural production and food security along defined 'reef-to-ridge' transects encompassing different crops and systems?	TBC please contact <a href="mailto:lwess@usc.edu.au">lwess@usc.edu.au</a>  or  <a href="mailto:sunderhill@usc.edu.au">sunderhill@usc.edu.au</a> for more information.	Samoa and Fiji	WAC/2020/178 Climate Risks and Decision Making for Transformational Adaptation to Climate Change in Agriculture and Land Systems in Pacific Island Countries
	What are the vulnerabilities and opportunities for agricultural production (crops and systems) in each segment of the 'reef-to-ridge' transects in the light of increasing climate change pressures?			
	What are the implications for agricultural production in each segment of the 'reef-to-ridge' transects of adopting as the climate change adaptation response (1) adjusting practices and technologies, (2) changing systems, or (3) transformation?			
	To what extent can a region employ climate projections, vulnerabilities, and adaptation options to assess the optimum timeliness for transfer from incremental to transformational adaptation?			
	What existing and potential weather and climate services would most strongly support transformational adaptation, and how would the two be best integrated?			
	What mechanisms and processes enable integrating transformational adaptation into existing decision-making processes for agriculture and land use?			
Other research topics				
Pacific food systems	Citizen-centred innovation to reshape Pacific food systems –identifying entry points for change.	Dr Libby Swanepoel, University of the Sunshine Coast  <a href="mailto:lswanepo@usc.edu.au">lswanepo@usc.edu.au</a>	Fiji	FIS/2019/125 Improving nutrition through women's and men's engagement across the seaweed food chain in Kiribati and Samoa
Eating behaviours	Perceived environmental influences on eating behaviours in the Pacific.			

**You can also choose your own research topic! See the research projects below**

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### Current ACIAR projects

Hotlink to ACIAR research project	Discipline	Research project title	Scholarship location	Australian University	Australian Project contact
<a href="#">AGB/2014/057</a>	Agribusiness	Pacific Agribusiness Research in Development Initiative Phase 2 (PARDI 2)	Fiji and Samoa	University of Sunshine Coast	Lex Thomson mailto:Lex.thomson@gmail.com
<a href="#">ASEM/2016/101</a>	Social Sciences	Climate-smart landscapes for promoting sustainability of Pacific Island agricultural systems	Fiji	University of Western Australia	Bryan Boruff mailto:bryan.boruff@uwa.edu.au
<a href="#">FIS/2014/060</a>	Fisheries	Developing pearl industry-based livelihoods in the western Pacific	Fiji	University of Sunshine Coast	Paul Southgate mailto:paul.southgate@usc.edu.au
<a href="#">FIS/2018/155</a>	Fisheries	Agriculture and fisheries for improved nutrition: integrated agri-food system analyses for the Pacific region	Fiji	University of Wollongong	Neil Andrew mailto:nandrew@uow.edu.au
<a href="#">FST/2014/067</a>	Forestry	Enhancing value added products and environmental benefits from agroforestry systems in Papua New Guinea and the Pacific	Fiji	Griffith University	Helen Wallace mailto:helen.wallace@griffith.edu.au
FST/2016/147	Forestry	Improving Agroforestry Policy for Sloping Land in Fiji	Fiji	University of Queensland	Tyron Venn mailto:t.venn1@uq.edu.au
<a href="#">FST/2016/158</a>	Forestry	Domestication and breeding of sandalwood in Fiji and Tonga	Fiji	CSIRO National Research Collections	David Bush mailto:david.bush@csiro.au
<a href="#">HORT/2014/077</a>	Horticulture	Enhanced fruit production and postharvest handling systems for Fiji, Samoa, and Tonga	Fiji and Samoa	University of Sunshine Coast	Steven Underhill mailto:sunderhi@usc.edu.au
<a href="#">HORT/2014/078</a>	Horticulture	Aligning genetic resources, production and post-harvest systems to market opportunities for Pacific island and Australian cocoa	Fiji and Samoa	Queensland Dept of Agriculture & Fisheries	Yan Diczbalis mailto:yan.diczbalis@daf.qld.gov.au

<a href="#">HORT/2014/080</a>	Horticulture	Integrating protected cropping systems into high value vegetable value chains in the Pacific and Australia	Samoa	CENTRAL QUEENSLAND UNIVERSITY	Phil Brown mailto:p.h.brown@cqu.edu.au
<a href="#">HORT/2016/185</a>	Horticulture	Responding to emerging pest and disease threats to horticulture in the Pacific Islands	Fiji and Samoa	University of Queensland	Michael Furlong mailto:m.furlong@uq.edu.au
<a href="#">LS/2014/042</a>	Livestock	Increasing the productivity and profitability of smallholder beekeeping enterprises in PNG and Fiji	Fiji and Samoa	Southern Cross University	David Lloyd mailto:david.lloyd@scu.edu.au
<a href="#">LS/2017/033</a>	Livestock	Improving small ruminant production and supply in Fiji and Samoa	Fiji and Samoa	University of New England	Frances Cowley mailto:fcowley@une.edu.au
<a href="#">LS/2019/119</a>	Livestock	Enhancing the Management of Antimicrobial Resistance (EMAR) in Fiji	Fiji and Samoa	CSIRO Biosecurity Flagship	Paul Debarro mailto:Paul.Debarro@csiro.au
<a href="#">SMCN/2016/111</a>	Soils	Soil management in Pacific Islands: investigating nutrient cycling and development of the soils portal	Samoa	CSIRO Agriculture Flagship	Ben Macdonald mailto:ben.macdonald@csiro.au