Schedule 25 to the Record of Understanding No. 14376

In Relation to cooperation between ACIAR and AusAID on "Improving soil health in support of sustainable development in the Pacific"

This Schedule No. 25 sets out the shared goals of AusAID and ACIAR (the **Parties**) in relation to **"Improving soil health in support of sustainable development in the Pacific"** which will be implemented under the Record of Understanding signed by the Parties on 28 April 2006 (**ROU**). This Schedule (including any Attachments) itemises the scope of the activity, contributions of each Party to the Activity and sets out the accountability obligations of each Party, including the means for monitoring and evaluation. Unless otherwise stated in this Schedule, the terms and conditions of the ROU will apply.

Signed on behalf of **AusAID** by:

.....

Signature

Sarah Goulding

Counsellor, Fiji & Tuvalu

Signed on behalf of **ACIAR** by:

.....

28/3/11

Signature

Nick Austin

Chief Executive Officer

Improving soil health in support of sustainable development in the Pacific

S1 COMMENCEMENT AND COMPLETION DATES

1.1 The Activity will commence on the date the agreement is signed by both parties and be completed by **30 June 2012**.

S2 ACTIVITY GOAL AND OBJECTIVES

2.1 The goal of the activity is to improve the economic and environmental sustainability of intensive smallholder crop production in Fiji, as part of the broader ACIAR regional initiative to improve soil health in support of sustainable development in the Pacific.

2.2 The purpose of the activity is to develop strategies for improving soil health (including extension approaches and indicators to monitor progress) and underpinned by a sound understanding of biological processes.

S3 ACTIVITY DESCRIPTION

3.1 ACIAR will develop strategies for improving soil health in selected Fiji cropping systems, through undertaking the following:

a) Elucidate crop production and environmental soil problems at specific pilot sites on Taveuni Island in Fiji and develop physical, chemical and biological indicators underpinning an integrated approach to soil management.

Activity/Expected outputs:

(i) **Participatory Rural Appraisal (PRA)**/Farmers' knowledge, attitudes and practices relating to managing soil health documented at beginning and end of project interventions.

(ii) **Participatory Planning Workshop**/'Best-bet' tactics for soil health improvement identified and strategy for testing them agreed.

(iii) **Bench-marking**/Soil health properties (physical, chemical and biological) measured at beginning and end of project interventions.

(iv) **Soil health indicators training**/Farmers, extension workers and local researchers are conversant with the use of soil health indicators appropriate to needs of each user group.

(b) Evaluate 'best-bet' soil improvement practices for sustaining intensive Pacific crop production.

Activity/Expected outputs:

(i) **Evaluating best-bet practices**/'Best-bet' tactics for soil health improvement evaluated in terms of their impact on crop yield/quality and soil health parameters.

(ii) **Evaluation of indicators**/assessment of proposed soil health 'toolbox' to be used in the project and its appropriateness in

terms of ease of use vs. correlation with crop yield and conventional measures of soil parameters.

(iii) **Evaluating farmer perceptions**/Farmers perceptions of soil improvement tactics compared with researcher assessments.

(c) Increase the understanding of soil health concepts (including physical, chemical and biological processes) among smallholder horticulture producers and their service providers and enhance their capacity to apply these concepts for sustained productivity.

Activity/Expected outputs:

(i) **Developing soil health recommendations**/Recommendations on effective practices for soil health improvement are available to farmers and extension workers

(ii) **Developing soil health training resources**/A 'toolbox' of extension resources (to explain soil health concepts and practices) is available

(iii) **Developing a Pacific soil-health strategy**/A long-term research, development and extension strategy is agreed

3.2 Research will focus on pilot sites on Taveuni Island in Fiji where the taro crop is facing declining production and quality levels, providing local farmers with an incentive to address soil health issues.

3.3 Detailed discussions with farmers and rapid surveys will be conducted at each pilot site to assess current knowledge, skills and aspirations of land holders and to benchmark current soil properties and management practices. Soil physical, chemical and biological indicators will be developed (at different levels of sophistication for different stakeholders) that can be used in developing soil health management strategies. 'Best-bet' soil improvement and management tactics will be trialled in Fiji and compared to three other locations (three in the Pacific and one in Australia) to determine the best options for soil health management on weathered basalts (Fiji and Samoa), coral atolls (Kiribati) and an alluvial plain (North Queensland). Information packages and extension techniques will be developed to assist growers and their intermediaries to develop sustainable soil health management practices for tropical crops in the Pacific region.

3.4 Expected outputs of the project are an enhanced understanding of the role soil biology plays in sustaining productivity, along with strategies and best practices for improving soil health in key cropping systems, and soundly-based indicators appropriate for monitoring the health status of soils by researchers, extension officers and smallholders. The capacity of farmer intermediaries to understand soil health concepts and to use participatory methods in support of helping farmers to improve soil health will be enhanced. An outcome of this capacity building will be that growers themselves are able to use soil health concepts and practices to sustainably improve the productivity of crops.

3.5 The Commissioned Organisation for this Activity is the Secretariat of the Pacific Community (SPC), with scientific leadership and administrative support being provided by SPC's Land Resources Division, based in Suva, Fiji Islands. Technical support is provided by the Department of Employment, Economic Development and Innovation, Queensland, Australia. Partner organisations are:, TeiTei Taveuni farmers' association in Fiji; the University of the South Pacific, School of Agriculture, and the Ministry of Agriculture and Fisheries, in Samoa. In Fiji, the work on Taveuni Island will be done in close collaboration with the Government Research Centre in Waiyevo. SPC will take overall responsibility for technical and financial coordination and reporting.

3.6 A full description is provided in the attached Project Proposal (PC/2009/003) at Attachment 1. The specifics of the AusAID collaboration and budget support for the work on Taveuni Island in Fiji are reflected in Appendix C of the Project Proposal.

S4 RISK MANAGEMENT

4.1 The Parties have undertaken an Activity risk analysis with key risks and their management identified in the risk management matrix at attachment 3.

S5 PERSONNEL

5.1 ACIAR will ensure through its normal contractual arrangements that personnel engaged on the Activity maintain for the duration of the Activity:

(a) adequate medical and dental insurance; and

(b) adequate insurance for medical evacuation and evacuation resulting from an insured event.

S6 FINANCIAL ARRANGEMENTS

6.1 The financial arrangements outlined below will apply to the Activity.

6.2 The maximum amount payable by AusAID in respect of this Activity is **A$265,000** plus GST if any up to a maximum amount of **A$26,500**. AusAID will not be liable for any amount, costs or expenditure incurred by ACIAR in excess of this amount.

6.3 AusAID will pay ACIAR the sums in accordance with the detailed budget attached as part of the project document at Attachment 1, the co-funding summary at Attachment 2 and the payment timetable set out below. The unexpended part of advances paid by AusAID (if any) will be refunded to AusAID.

Payment Schedule	Payment Date	Amount ($)
First payment	08 April 2011	A$102,000
Second payment is contingent on delivery of proposal for 'best-bet' options for soil improvement in Taveuni and AusAID agreed plan to test them on farms.	01 June 2011	A$163,000
Total		A$265,000

6.4 Except as otherwise specified, these amounts are inclusive of all costs, expenses, disbursements, levies and taxes and the actual costs and expenses.

6.5 Claims for Payment of sums due and payable in respect of the Activity will be submitted in a form identifiable with the services and in accordance with Clause 12 of the ROU. Invoices should be sent to the AusAID Accounts Processing email address **accounts.processing@ausaid.gov.au** and addressed as follows:

Chief Financial Officer
AusAID
GPO Box 887
Canberra ACT 2601

S7. MONITORING AND REPORTING REQUIREMENTS

7.1 ACIAR will provide the following reports by the date and in the format indicated: (reporting requirements are a guide and may differ for activities that are not projects)

(a) A certified statement acquitting funds advanced against the agreed budget at six monthly intervals on receipt from the Commissioned Organisation. Each statement is to be submitted prior to the payment of the following tranche.

(b) Annual report in electronic form. An annual report will be submitted by 30 June each year, on receipt from the Commissioned Organisation, using the standard ACIAR Project Annual Report proforma.

(c) A final report on the impacts of the regional project will be submitted by 31 January 2015, on receipt from the Commissioned Organisation, using the standard ACIAR Project Final Report proforma.

7.2 All reports must:

(a) Be accurate and not misleading in any respect; and

(b) Allow AusAID to properly assess progress of the activity.

7.3 Routine monitoring of the Activity will be the responsibility of the relevant ACIAR Research Program Manager. In addition there will be:

(a) A Mid-term Review after approximately two years according to ACIAR procedures; and

(b) An External Review conducted at or near the end of the Activity, according to ACIAR procedures.

The relevant AusAID Program Manager will be advised of the time and place of these reviews and will be welcome to participate.

S8. LIAISON AND NOTICES

8.1 The contact Officer for each Party is the Activity Manager. Each Party's address for the service of notices for the purposes of this Activity is as follows:

ACIAR:

Contact:	Richard Markham, Research Program Manager, Pacific Crops
Telephone:	(+679) 337-9392
Facsimile:	(+679) 337-0021
Postal Address:	ACIAR, c/- SPC, Private Mail Bag, Suva, Fiji Islands
Street Address:	3 Luke Street, Nabua, Suva, Fiji Islands

AusAID:

Contact:	Malcolm Bossley, Program Manager, Economic Growth and Rural Devpt.
Telephone:	(+679) 338 8386
Facsimile:	(+679) 338 2695
Postal Address:	AusAID, PO Box 214 Suva, Fiji Islands
Street Address:	Australian High Commission, Princes Road, Suva, Fiji Islands

Attachment 1

ACIAR Project Proposal (PC/2009/003)

Attachment 2

Co-funding Schedule

ACIAR AND AUSAID CO-FUNDING						
	JAN - JUNE 2011	JULY 11 – JUNE 2012	JULY 12 – JUNE 2013	JULY 13 – JUNE 2014	JULY 14 – JUNE 2015	TOTAL (AUD)
ACIAR	189,551	298,954	304,878	299,379	148,220	$1,240,982
AUSAID	265,000					$265,000
TOTAL	$454,551	$298,954	$304,878	$299,379	$148,220	$1,505,982

Attachment 3

Risk Management Matrix (if applicable)

Risk	Likelihood	Degree of Impact	Party Managing	Management Strategy
At Project/Activity level				
Implementation of Project/Activity impeded by deterioration in relations between governments of Fiji and Australia	Unlikely	Major	ACIAR (in consultation with AusAID)	SPC takes lead role in Project/Activity implementation, focusing on partnership with private sector entities (TTT); ACIAR makes greater use of Australian private sector in providing technical support and monitoring
Ability of Q-DEEDI to provide adequate technical support is compromised (e.g. by changing policy of Qld government or travel ban imposed by Fiji on Australian public service partners)	Rare	Major	ACIAR (in consultation with AusAID)	ACIAR makes greater use of Australian private sector in providing technical support (or in extreme case could use expertise from PNG to provide technical support)
Ability of SPC to provide adequate technical support compromised (e.g. by losses of key research staff)	Unlikely	Major	ACIAR	Q-DEEDI and USP could be asked to provide increased technical support (with proportionate re-allocation of resources)
Ability of SPC to provide adequate administrative support compromised (e.g. by losses of key admin. staff)	Unlikely	Major	ACIAR	ACIAR Pacific Crops office (at SPC) could strengthen SPC capacity to provide administrative support; in extreme case, Q-DEEDI could take over as Lead Organisation

At Objective/Output level				
Soil-related crop production problems at pilot sites are *not* successfully elucidated (e.g. because crop production problems are intractable or unrelated to soil issues)	Rare	Major	SPC and Q-DEEDI (in consultation with ACIAR)	The Small Research Activity (SRA) already conducted gives the Project team confidence that observed production problems are tractable and soil-related; diverse skills available to project team and flexible project design will allow team to respond effectively to any unknowns that come to light during Project implementation
Cost-effective indicators (physical, chemical and biological) *cannot* be developed for use of farmers, extension workers and local researchers (e.g. because tests prove too costly or complicated for use by these stakeholders)	Unlikely	Moderate	SPC and Q-DEEDI (in consultation with ACIAR)	The experience of the Q-DEEDI team with banana growers in Qld provide confidence that appropriate indicators can be developed for use of all stakeholders; management of this risk depends on flexibility of project design and of researchers in responding to any unexpected findings.
Best-bet tactics for improving soil health in taro production systems in Fiji are *not* successfully identified and evaluated	Rare	Severe	ACIAR, with Q-DEEDI and SPC	The preliminary observations carried out by the Project partners in the course of project design and of the SRA already conducted provide a high level of confidence that the production problems are tractable and soil-related (as above) and that therefore a solution (or range of solutions) can be found within the R&D

				skills and experience of the partners. The greatest risk relates to the possibility that a sufficient source of organic matter cannot be identified locally, at feasible cost, to achieve a decisive improvement in soil fertility/function. This risk is mitigated through a flexible project design that foresees the trialling of a range of options from well-proven ones offering modest gains to more radical ones offering potentially greater gains.
Smallholder taro producers in Taveuni are *unable* to gain a better understanding of soil health concepts	Possible	Minor	ACIAR with all project partners	Experience of project partners (especially Q-DEEDI working with banana farmers) provides confidence that the Project team will be able to communicate soil health concepts successfully to smallholders (and a number of extension approaches are already available in the project 'toolbox' to enable this). Strategy for further managing this risk will involve simpler 'do this' messages, which will enable farmers to improve soil health and ameliorate production problems without a full understanding of soil health issues.
Extension workers supporting smallholder taro producers in Taveuni are *unable* to gain a better understanding of soil health concepts	Possible	Minor	ACIAR with all project partners	As above, experiences elsewhere suggest that Project team members (especially DEEDI and SPC) have the capacity to communicate effectively with extension workers and have a range of options for

				doing so. However, in this case, if barriers to effective communication include the capacity or attitudes or extension staff, one means for managing this risk will be for the researchers to work directly with farmers
Smallholder taro producers are *unable* to gain the capacity to successfully apply soil health concepts and practices	Possible	Moderate	ACIAR with all project partners	

Suggested classifications:

Likelihood	Degree of Impact
Almost certain - expected to occur in most circumstances	Severe - would stop achievement of functional goals and objectives
Likely - will probably occur in most circumstances	Major - would threaten goals and objectives; requires close management
Possible - might occur at some time	Moderate - would necessitate significant adjustment to the overall function
Unlikely - could occur at some time	Minor - would threaten an element of the function
Rare - may occur only in exceptional circumstances	Negligible - routine procedures sufficient to deal with the consequences