

#### © Copyright Secretariat of the Pacific Community (SPC), 2013

All rights for commercial / for profit reproduction or translation, in any form, reserved. SPC authorises the partial reproduction or translation of this material for scientific, educational or research purposes, provided that SPC and the source document are properly acknowledged. Permission to reproduce the document and/or translate in whole, in any form, whether for commercial / for profit or non-profit purposes, must be requested in writing. Original SPC artwork may not be altered or separately published without permission.

Original text: English

Secretariat of the Pacific Community Cataloguing-inpublication data

## Land Resources Division: annual report 2012 / Secretariat of the Pacific Community

- 1. Secretariat of the Pacific Community. Land Resources Division Periodicals.
- 2. Agriculture Oceania Periodicals.
- 3. Agroforestry Oceania Periodicals.

I. Title II. Secretariat of the Pacific Community

341.246

AACR2

ISBN: 978-982-00-0614-0

#### SPC Headquarters

BP D598848 Noumea Cedex,

New Caledonia

Telephone: +687 26 20 00

Fax: +687 26 38 18

#### Suva Regional Office

Private Mail Bag, Suva, Fiji Islands

Telephone: +679 337 0733

Fax: +679 377 0021

#### Pohnpei Regional Office

Level 2, Pohnpei National Building Namiki,

P.O. Box Q, Kolonia, Pohnpei, FM 96941

Federated States of Micronesi Telephone: +691 3207 523

Fax: +691 3202 2725/6224





#### Produced by:

#### LRD Information, Communication Team

Land Resources Division, Secretariat of the Pacific Community, Nabua, Fiji Islands 2013

PHONE: +(679) 337 0733

EMAIL: Irdhelpdesk@spc.int

WEB: www.spc.int/Ird



## CONTENTS

□ EXECUTIVE SUMMARY	1
PRESENTATION OF THE DIVISION	4
DIVISIONAL FINANCE	5
DIVISIONAL STAFFING	5
STRATEGIC PLAN OBJECTIVES	6
☐ PROGRESS TOWARDS ACHIEVING STRATEGIC PLAN OBJECTIVES	7
☐ HIGHLIGHTS 2012	9
OBJECTIVE 1: FOOD AND NUTRITIONAL	
SECURITY	9
OBJECTIVE 2: INTEGRATED AND SUSTAINABLE	
AGRICULTURE AND FORESTRY RESOURCES MANAGEMENT	
AND DEVELOPMENT	12
<b>OBJECTIVE 3:</b> IMPROVED BIOSECURITY AND INCREASED	
TRADE IN AGRICULTURAL AND FORESTRY PRODUCTS	18
☐ SPC INDEPENDENT EXTERNAL REVIEW - LRD RECOMMENDATION	23
☐ 2012 WORK PROGRAMME AND BUDGET	24
☐ FUTURE DIRECTION, OPPORTUNITIES AND CHALLENGES	26
□ LRD – COUNTRY ACTIVITIES AND RESULTS	28
□ LRD - PUBLICATIONS BY THEMATIC TEAMS 2012	58
☐ LRD MAIN SECTORAL MEETINGS AND WORKSHOPS, 2012	61
□ LRD STRATEGIC FRAMEWORK	68
□ 3RD MOAF CONFERENCE	70
□ ANNEX 1	72
□ ANNEX 2	74
□ ANNEX 3	78





### EXECUTIVE SUMMARY

In the fourth year of implementing its second integrated strategic plan (2009–2012), the Land Resources Division (LRD) of the Secretariat of the Pacific Community (SPC) continued to align its activities to the 2008 and 2010 Heads of Agriculture and Forestry Services (HOAFS) recommendations and, as much as possible, to national priorities elaborated in the Joint Country Strategies (JCS).

SPC's independent external review noted that LRD is involved in a number of central economic and scientific issues facing the Pacific Islands region, and its services remains a core function of SPC.

LRD continued its facilitation role in policy, legislation and planning development. LRD also continued to ensure that the Pacific Islands' voice is heard beyond the region by actively engaging in important international fora, including:

- United Nations Convention to Combat Desertification (UNCCD)
- United Nations Convention on Biological Diversity
- the United Nations Framework Convention for Climate Change
- United Nations Forum on Forests
- World Organisation for Animal Health Annual General Sessions
- International Coconut Genetic Network, Asian Pacific Coconut Community
- Global Crop Diversity Trust Genebank Annual Meetings
- Consortium of International Agricultural Research Centres Meetings
- Commission on Genetic Resources Committee Meeting



#### **LAND RESOURCES DIVISION**

- Banana Asia-Pacific Network
- Bioversity International
- Nagoya Protocol
- European Union International Network for Edible Aroids
- International Society for Horticultural Science
- International Society for Tropical Root Crops
- International Treaty on Plant Genetic Resources for Food and Agriculture
- FAO Animal Genetic Resources for Food and Agriculture
- Regional Commission meetings.



LRD strengthened its partnership with the German Agency for Technical Cooperation (GIZ) with the continuation of the SPC/GIZ sustainable land-based resources management project. This project has expanded and is now known as the SPC/GIZ Coping with Climate Change in the Pacific Islands Region (CCCPIR) project. In addition, a new project on climate protection through forest conservation in the Pacific — focusing on reducing deforestation and forest degradation (REDD+) — is also being implemented by LRD through GIZ support.

The European Union (EU) continued to strongly support LRD's work to increase exports (in terms of quality, consistency, value, diversity of products and markets) of agricultural, forestry and aquaculture produce from Pacific ACP (African, Caribbean and Pacific) countries. This is being undertaken through two efforts: the Facilitating Agricultural Commodity Trade (FACT) project, which ended in December 2012; and the up-scaling of lessons learned through the new Increasing Agricultural Commodity Trade (IACT) project, which began in June 2011, and is now supporting 28 enterprises.

The Centre for Pacific Crops and Trees (CePaCT) and the Forests and Trees, and Forestry and Agriculture Diversification teams are based at SPC's Narere compound in Suva, Fiji. CePaCT plays an important role in implementing programmes and activities in agrobiodiversity conservation and use, climate change adaptation, improving food security, and increasing domestic and export trade in agriculture and forestry products.

Plant health, biosecurity trade facilitation and export development continued to be hallmarks of LRD's functions. Substantial assistance was provided to Pacific Island countries and territories, including facilitation of distribution of pathogen-tested improved planting material, pest and disease surveys; pest management, including invasive species, research and development on pest management and on identification of suitable quarantine treatments for fresh produce; harmonisation of national legislations to comply with the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures requirements; facilitation of inter-regional and international trade through market access support; and capacity building in a broad range of technical areas.

The regional quarantine awareness campaign, which targeted travellers to the Honiara Pacific Arts Festival with information awareness pieces distributed to national delegations, was successfully completed. National quarantine services facilitated training on quarantine issues and conducted pre-clearance of items prior to national delegations' departure for Honiara. Preliminary feedback recorded no new incursions. The Biosecurity and Trade Support team also conducted training to strengthen the capacity of Solomon Islands quarantine staff in the lead up to the Festival of Pacific Art particularly in fruit fly surveillance.



LRD initiatives that started in mid-2010 are ongoing and have eased some of the staffing and operational difficulties. These initiatives include:

- SPC-Australian Agency for International Development (AusAID)-funded Pacific Horticultural and Agricultural Market Access (PHAMA) initiative
- AusAID International Climate Change Adaptation Initiative (ICCAI)
- Australian Centre for International Agricultural Research (ACIAR)-funded Pacific Agribusiness Research and Development Initiative
- EU-funded Adapting Clonally Propagated Crops to Climate Change
- Global Crop Diversity Trust-funded Crop Regeneration and Safety Duplication
- Global Crop Diversity Trust Cryopreservation
- Bioversity International-funded Conserving
   Banana Diversity for Use in Perpetuity project
- European Development Fund (EDF) 10 Increasing Agriculture Commodity and Trade Project, which began in June 2011.

New initiatives that started in early and mid-2012, include:

- ACIAR-funded Strengthening Integrated Crop Management Research in the Pacific
- AusAID ICCAI Phase 2
- ACIAR-funded Development of advanced veneer and other product from coconut wood to enhance livelihoods in Pacific communities
- USA-funded Vegetation and land cover mapping and improving food security for building resilience to a changing climate in the Pacific Island Communities
- FAO-funded Agriculture Technical Cooperation Program (TCP) on pesticide alternatives
- French Pacific Fund-funded 'How an indigenous vegetable can contribute to sustainable development'
- European Commission-funded Improvement of Key Services to Agriculture in the Sugar Sector in Fiji
- EDF10 Pacific Agriculture Policy Project, which began in late 2012.

New initiatives planned for 2013, include the International Fund for Agricultural Development-funded Organic Agriculture Project; the establishment of the Centre of Excellence for Atoll Agriculture for the Marshall Islands; the continuation of the Centre of Excellence for Atoll Agriculture in Kiribati; and support for the development of soil schools.

LRD, through its Genetic Resources section, continues to receive long-term grant funding from the Global Crop Diversity Trust for conservation and safety duplication of a unique global collection of taro and yam cultivars.

# PRESENTATION OF THE DIVISION



The integrated mode of operation of the Land Resources Division (LRD) of the Secretariat of the Pacific Community (SPC) is based on seven thematic area teams (a-g) and three support teams (h-j), working together with stakeholders to identify and prioritise issues and jointly implement solutions. The teams are:

- a) Genetic Resources
- b) Forestry and Agriculture Diversification
- c) Forest and Trees
- d) Plant Health
- e) Animal Health and Production
- f) Biosecurity and Trade
- g) Crop Production Team
- h) Information, Communication and Extension
- i) Land Management and Resources Policy Support
- j) Administration and Finance.

LRD's goal is to assist the Pacific Community with improving food, nutritional and income security and managing agricultural and forestry resources in a sustainable way.

Work contributing to the achievement of these goals during 2012 was the basis of developing LRD's Report to the Committee of Representatives of Governments and Administrations (CRGA) for 2012. The report was updated at the end of 2012, and forms the basis of LRD's annual report for 2012.



#### **Divisional finance**

The 2012 budget is summarised in the following table.

Table 2: Land Resources Division budget for 2012 in French Pacific francs (CFP units).

Teams	Core	Program	Project	Total
Directors office	171000	0	0	171000
AHP	0	331600	0	331600
BAT	0	102100	1702900	1805000
СР	0	178000	1244300	1422300
FAD	0	0	2932200	2932200
FAT	0	209300	59100	268400
GRT	0	217100	850700	1067800
IKM	0	115100	0	115100
LMRPST	120600	112600	0	233200
AS	0	161600	73100	234700
PH	0	203600	645800	849400
Total	291600	1631000	7508100	9430700

As expected, funding was tight but full implementation of the Increasing Agricultural Commodity Trade (IACT) project in 2012 eased some funding constraints.

#### **Divisional staffing**

As of August 2012, LRD had 74 permanent staff and 5 attachment trainees.

Table 3: Land Resources Division staffing as of mid-2012.

	Director's office	AHP	BAT	СР	FAD	FAT	GR	ICE	LMRS	AS	PH	Total
Internationally recruited	1	4	2	3	10	2	3	2	3	1	3	34
Locally recruited	1	2	6	1	9	3	8	2	2	2	4	40
Total	2	6	8	4	19	5	11	4	5	3	7	74

Thirty-four positions with specialised technical skills are recruited internationally, of which five have yet to be filled. Forty positions are semi-specialised technical staff, laboratory assistants and administration and finance staff. One internationally recruited staff member is based in the Federated States of Micronesia (FSM) and two locally recruited staff are based in the Solomon Islands under the Facilitating Agricultural Commodity Trade (FACT) project. Two attachments are in the LMRS team and three in the Genetic Resources team.



#### **Strategic Plan objectives and outputs**

LRD is progressively implementing its 2009–2012 Strategic Plan, which was approved by CRGA 38. The Strategic Plan has 3 objectives and 13 outputs that are also being identified as its core functions. These are:

#### i) Improved food and nutritional security

- 1. Development of policies to support the production, utilisation and consumption of locally grown food sources.
- 2. Agrobiodiversity conserved, promoted and utilised.
- 3. Diverse food supply systems promoted.
- 4. Traditional knowledge preserved, enhanced, utilised and acknowledged.

## ii) Integrated and sustainable agriculture and forestry resources management and development

- 1. Sustainable forestry, agriculture and land use plans, policies and legislation supported.
- 2. Sustainable and appropriate forest, agriculture and land use management practices developed and promoted.

- 3. National and regional capacity to prepare, respond, and adapt to climate change and natural disasters developed and strengthened.
- 4. Invasive species, pest and disease problems identified and addressed and capacity to respond at national and regional level supported.
- 5. National and regional capacity of extension, outreach and information services strengthened.

### iii) Improved biosecurity and increased trade in agricultural and forestry products

- 1. National capacity to comply with international and other relevant standards strengthened.
- 2. National capacity to increase domestic and export trade developed and strengthened.
- 3. Sustainable and viable post-harvest technologies developed and promoted.
- 4. Improved information available on plant and animal health status.

### PROGRESS TOWARDS ACHIEVING STRATEGIC PLAN OBJECTIVES

Adetailed report on LRD's Strategic Plan for 2009–2012 and work implemented in 2011 and 2012 is attached as Annex 1. This section summarises some of the key achievements.

LRD's integrated mode of operation is based on seven thematic area teams and three support teams, working together with stakeholders to identify and prioritise issues, and jointly implement solutions. LRD has a well established platform from which it supports Pacific Island countries and territories (PICTs) in meeting the challenges of this century. These challenges — perhaps the most demanding the Pacific has had to address in recent years — include climate change, increasing food prices, and land management and conflict minimisation.

LRD personnel have been actively involved in the work of SPC missions to review Joint Country Strategies (JCS) in 2012. As with previous JCS missions, this has assisted LRD in focusing its activities at the national level on priority areas identified in national and sectoral strategic plans (and linked to LRD's integrated Strategic Plan).

LRD strengthened its partnership with the German Agency for Technical Cooperation (GIZ) with the continuation of the SPC/GIZ sustainable land-based resources management project, known as the SPC/ GIZ Adaptation to Climate Change in the Pacific Island Region (ACCPIR), which covers Fiji, Tonga and Vanuatu. This project has now expanded to cover an additional nine countries (Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Palau, Papua New Guinea (PNG), Samoa, Solomon Islands and Tuvalu) under the new SPC/ GIZ Coping with Climate Change in the Pacific Islands Region (CCCPIR) project. In addition, a new project on climate protection through forest conservation in the Pacific — focusing on reducing deforestation and forest degradation — is being implemented by LRD through the support of GIZ. These initiatives reflect LRD's commitment to its member countries to address climate change issues in agriculture, forestry and land use.

The European Union (EU) continued to strongly support the work of LRD in increasing exports (in terms of quality, consistency, value, diversity of products and markets) of agricultural, forestry and aquaculture produce from Pacific ACP (African, Caribbean and Pacific) countries. This is being undertaken through two efforts: the FACT project, and the new IACT project, a four-year effort with an EDF10 contribution of 8.54 million euros, which came into effect on 1 June 2011). In February 2011, the FACT pilot project received a highly favourable midterm review. FACT is increasingly viewed by donor and business communities as a model for how SPC can engage with both its traditional government partners, and new private sector partners, and foster public and private partnerships. The lessons learned from the FACT project will be used to inform both the design and implementation of IACT. The scope of IACT has been broadened to include aquaculture (through the Fisheries, Agriculture and Marine Ecosystems) and carbon trading, and geographically broadened to Timor Leste. The FACT project ended in December 2012

LRD, in collaboration with the United Nations Food and Agriculture Organization (FAO), the International Trade Centre and the United Nations Conference on Trade and Development, completed all of its activities associated with the EU-funded, All ACP Agriculture Commodity Project by December 2011. LRD has developed a strategic approach to smallholder market integration, identifying critical barriers such access to finance, policy support marketing or market information, and providing capacity support and technical assistance particularly in Fiji, Samoa and Solomon Islands. The lesson learned is reflected in the new EDF10 Pacific Agriculture Policy Project, which began in late 2012.

Ongoing liaison and reporting has been maintained with LRD's traditional donors and strategic partners, in particular, the EU, the Australian Agency for International Development, the New Zealand Aid Programme, French Pacific Fund, the German government and GIZ, the Australian Centre for International Agricultural Research (ACIAR), FAO, CTA and the International Fund for Agricultural Development.

During the last year of the current LRD integrated Strategic Plan, work progressed well, given limited available resources, in responding to the resolutions in the communiqué of the 2008 Regional Conference of Ministers of Agriculture and Forestry (MOAF) and the Meeting of Heads of Agriculture and Forestry Services (HOAFS), and 2010 HOAFS recommendations.



## PLANT HEALTH CLINICS TO IMPROVE DIAGNOSTIC SERVICES TO FARMERS

Farmers in the Pacific region will soon be able to take a sick plant to a plant health clinic in the town market for a diagnosis and recommended treatment — much like we visit a local medical clinic when we are not feeling well. Plant health clinics are being tested in Solomon Islands and if proven successful, the initiative will be scaled out to include other countries of the Pacific.

The operation and field-testing of the plant health clinics is an activity of the five-year AUD\$3.4 million project, Strengthening Integrated Crop Management (ICM) Research in the Pacific Islands in support of Sustainable Intensification of High-Value Crop Production. The project is funded by the Australian Centre for International Agricultural Research (ACIAR) with regional activities coordinated by the Secretariat of the Pacific Community (SPC) Land Resources Division.

SPC project counterpart and LRD plant health coordinator, Mr Tony Gunua said the project's aim is to build and sustain the capacity to develop integrated crop management (ICM) strategies to support the sustainable intensification of high-value crop production for export and domestic markets in the Pacific Islands. By strengthening the supply side of market chains for high-value crops, the project will complement the investments of the ACIAR Pacific Agribusiness Research and Development Initiative (PARDI) and the AusAID Pacific Horticulture and Market Access (PHAMA) project in agribusiness development and improved market access, respectively.

SPC Land Resources Division has been a partner in several past integrated pest management (IPM) projects that constitute the platform on which the new project is based. These include the Brassica IPM project in Fiji and Samoa, the squash Integrated Pest and Disease Management (IPDM) in Tonga, and the Improved Plant Protection in Solomon Islands (IPPSI) project.

Dr Mike Furlong, based at the University of Queensland (UQ) is the lead scientist for the research and development project. He said that important areas that have been overlooked in the past include identification of well-adapted varieties, development of locally relevant sustainable production technologies and serious threats to health and the environment (inappropriate use of hazardous pesticides, improper use of other inputs and degradation of the natural resource

base). Therefore, he said, a focus of the new project will be building regional and national R&D capacity for SPC and national partners and establishing a framework for a longer-term programme to begin problem-solving research focused on vegetable production.

The World Vegetable Centre (AVRDC) is a collaborating research partner.

High-value horticultural crops, including tomato, eggplant, chilli as well as bele are being studied under the project to find integrated and sustainable management strategies for pests and diseases. Finding alternative approaches to pesticide use is a major goal of the project.

Plant health veteran Dr Graham Jackson is the lead scientist pioneering the establishment of the plant health clinics. LRD's information and communication team will provide support in coordination and information for the pilot project.

Solomon Islands was chosen to trial the clinics because of its extensive range of supporting extension leaflets and reference materials. The clinics will operate in public places such as markets. 'Plant doctors' will receive training on pest and disease diagnostics, and NGOs like Kastom Garden Association (KGA) and Vois Blong Meri (VBM) play a significant role in recruiting 'plant doctors'. Training will be carried out on basic diagnosis, symptom description, how to establish and manage clinics, keeping records, and how to prepare samples for diagnosis. Diagnosis will be backed up by national, regional and international diagnostic centres.

The operation of the plant health clinics also addresses an important issue faced by national extension systems: staffing constraints result in very low farmer to extension officer ratios. Plant health clinics represent a bottom-up approach to improve national plant health services. They offer at least a partial solution to the challenge of lack of resources in formal extension services. Monitoring and evaluation will be in place for the plant health clinics and if proven successful at the end of the project, it is the intention to scale out this extension model to other project countries.

Mr Tony Gunua (plant pathologist) and Mr Fereti Atu (plant health specialist) of LRD plant health thematic team are the SPC main contacts for the ICM Project.

### 

#### **OBJECTIVE 1: Food and Nutritional Security**

## **Output 1.1:** Development of policies to support the production, utilisation and consumption of locally grown food sources

LRD continued to engage in the Pacific Food Secure Working Group, assisting in the development of the Framework of Action on Food Security in the Pacific project matrix and ensuring that project development and implementation was in line with the framework.

The European Commission, in partnership with the African, Caribbean and Pacific Secretariat, continued to support LRD as the Pacific Focal Point for the All Africa Caribbean and Pacific Agricultural Commodities Programme, which resulted in LRD providing support to the development of the Samoa Fruit and Vegetable Strategy, the Solomon Islands Coconut Industry Strategy, and capacity building for farmer networks, among other outputs. The project was completed in December 2011, but has been extended by the new EU-funded Pacific Agriculture Policy Project...



Rising sea levels and increased soil salinity are two impacts of climate change that have particular significance for people living on small atolls. Ms Takena Redfern, senior scientist from Kiribati, studied the impact of sea-level rise and soil salinity on swamp taro as a food crop.

## **Output 1.2:** Agrobiodiversity conserved, promoted and utilised

The Centre for Pacific Crops and Trees (CePaCT) has:

Distributed over 13,000 plants of Alocasia, banana, breadfruit, cassava, cowpeas, swamp taro, potato, sweet potato, taro, vanilla, xanthosoma and yam to 17 PICTs (American Samoa, Cook Islands, Fiji, French Polynesia, FSM, Guam, Kiribati, Nauru, New Caledonia, Palau, Pitcairn Islands, PNG, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu).

imported 651 accessions comprising of the following crops:

- a) 14 fei and iholena from French Polynesia;
- b) 9 accessions of drought-tolerant cowpeas from the International Institute of Tropical Agriculture in Nigeria; 34 accessions of swamp taro from FSM; 15 accessions of sweet potatoes from Vanuatu; 200 taro accessions from Indonesia, 7 accessions of sweet potato from the Department of Employment, Economic Development and Innovation in Australia; 30 accessions from Bioversity International in Belgium; 46 accessions of yam from New Caledonia; 52 accessions of swamp taro, xanthosoma and taro from the Philippines; 62 accessions of taro from Vietnam; 59 accessions of banana, sweet potato and breadfruit from Vanuatu; 8 accessions of banana from New Caledonia; 19 accessions of banana and yam from Tonga; 4 accessions of banana from Fiji; 92 accessions of taro and sweet potato from the backup collection held at the University of the South Pacific in Samoa.

The SPC/FAO Animal Genetics Project has continued with the DNA characterisation of blood samples to identify unique and adapted breeds of local chickens and pigs in the Pacific. A report has been completed to document the laboratory findings and the location of each local breed.

LRD promotes the use of agrobiodiversity to help farmers adapt to climate change. CePaCT's 'climate-ready' collection, established with funds from the



Inception Workshop for promotion of techniques to reduce hazardous pesticide use and to strengthen Integrated Pest Management in Pacific agriculture, a collaborative effort of FAO and ACIAR and research partners SPC and AVRDC.

Australian Agency for International Development (AusAID) International Climate Change Adaptation Initiative (ICCAI) and the US government, comprises crops and varieties that are tolerant to climate variability such as drought, salt and water logging. Eighteen PICTs (American Samoa, Cook Islands, Fiji, FSM, Guam, Kiribati, Nauru, New Caledonia, Norfolk Islands, Palau, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu and Wallis and Futuna) have received crop accessions (banana, cassava, swamp taro, sweet potato, taro and yam) from the 'climate-ready' collection.

The 'Pacific Islands Tree Seed Centre' (formerly called the 'Regional Tree Seed Center'), as recommended under the regional strategies and action plan for the conservation, management and utilisation of forest genetic resources in the region approved by the MOAF meeting in 2008, was established and operational beginning in 2012. Equipment and materials, including seed storage and laboratory facilities, were donated to the Centre by the Japan International Cooperation Agency (JICA). Country trainings were conducted in a number of member countries in collaboration with the Commonwealth Scientific and Industrial Research Organisation to develop knowledge of and skills in seed technology.

LRD, in collaboration with FAO, has continued to provide technical support to member countries on preparing their country report for the 'State of the World's Forest Genetic Resources' (SoW-FGR). A second series of regional synthesis workshops was organised in September 2012 to discuss the findings of the country reports with the specific objectives of sharing main findings and recommendations of country reports for SoW-FGR and

reviewing, identifying and finalising a regional synthesis report, including needs, priorities for action at regional and global levels, and options for follow-up to SoW-FGR. The workshops were an opportunity for FAO and its partners to provide technical assistance in the review of the initial drafts of country reports, assess progress made, discuss issues and limitations of their elaboration, and provide recommendations for finalisation.

LRD, in collaboration with the Forestry and Forest Products Research Institute of Japan is conducting collaborative research on tree improvement of dilo (*Calophyllum inophyllum*) for its resistance to cyclone and useful byproducts such as oil. Dilo seeds and leaf specimens were collected from Fiji, Tonga and Vanuatu and were brought to Japan for laboratory analysis. Test plantations were established in Okinawa, Japan and similar (replicate) test plots will be established in Fiji in 2013.

LRD, in collaboration with JICA, the ACP Forestry Research Network and Fiji's Forestry Department, organised a regional training workshop on tree propagation for agroforestry in the Pacific held at the Fiji Forestry Training Center at Colo-I-Suva, Fiji in March 2012. The workshop's objective was to share and exchange information between members of island nations to establish synergies in terms of techniques and species assemblages for agroforestry. The workshop was attended by 30 participants from 14 SPC member island countries (Cook Islands, Fiji, FSM, Kiribati, Marshall Islands, Nauru, Niue, Palau, PNG, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu) and representatives from non-governmental organisations in Fiji.

## **Output 1.3 :** Diverse food supply systems promoted.

LRD has continued to promote diversity in food supply systems by supporting the establishment of collections of food crop diversity and the exchange of that diversity. The focus in 2011 was specifically on the unique banana diversity found in the Pacific and the edible aroids. This diversity is being characterised and evaluated to support its use in food supply systems.

The Pacific Agribusiness Research and Development Initative taro project 'Developing a clean seed system for market-ready cultivars in Samoa' will identify which varieties should be used fresh, chips and/or snack food, thereby expanding the opportunities for using taro in food systems.

## **Output 1.4:** Traditional knowledge preserved, enhanced, utilized and acknowledged

A study on 'Indigenous agricultural knowledge in the Pacific', with special reference to Article 9 (which refers to farmers' rights) of the International Treaty for Plant Genetic Resources for Food and Agriculture was carried out in Cook Islands, Fiji and Samoa. A report has been published on the findings.

Stories on traditional knowledge of Pacific agricultural practices have been compiled in collaboration with the Pacific Island Extension Network (PIEN). The effort documents traditional knowledge in view of food security challenges, climate change impacts and sustainable agricultural practices.

#### **SPC BIOSECURITY AND QUARANTINE ASSISTANCE TO FOPA**

Major Pacific events attracting large numbers of Pacific islanders present a biosecurity challenge to national quarantine service. The Festival of Pacific Arts (FOPA) held in Solomon Islands in July involved the movement of people and cargo from Pacific neighbours into Solomon Islands. During such large gatherings quarantine is always an issue with overseas travellers, and the movement of pests to new areas is a concern.

SPC assisted with technical assistance to Solomon Islands Agriculture Quarantine Service (SIAQS), under the leadership of Director Francis Tsatsia. Awareness materials were developed and distributed to Pacific Island delegations about their responsibility not to move quarantine risk items when they travel. The focus is on public education and awareness to prevent the introduction of new pests, which can impact national biodiversity and food security. Technical assistance was also provided on pest surveillance and monitoring in and around the festival sites and venues to capture any exotic pests. The livelihoods of the majority of Solomon Islanders depend on subsistence agriculture; hence the importance of preventing the introduction of new pests that threaten livelihoods. Quarantine messages highlighted the biodiversity of Solomon Islands and the linkages to food sources, culture and pristine environment and the need to protect them. The awareness materials were sent to heads of cultural delegations for distribution to national representatives prior to departure to Solomon Islands. In addition, national quarantine helped provide information on quarantine risk items. To further prevent movement of pests participating countries were requested to send ahead a list of items they plan to take to the Festival. This crucial step allowed SIAQS to advice on proper treatment of items before leaving national shores. This effectively stopped any pest movement at source.

SIAQS seconded senior quarantine officer, Mr Akipu Patteson to the National Festival Planning Committee to provide advice on quarantine matters.

The SPC biosecurity team of Mr Feroz Khan and Mr Lesio Saurara assisted SIAQS in clearing flights and festival delegations. Various plant products were intercepted and either confiscated for destruction or fumigated with methyl bromide gas and released to the owners. Some animal products were declared and were confiscated as they



were prohibited items. Other animal products (such as feathers) were either treated with phosphine gas or confiscated. Live pests were also intercepted from some of the imported handicrafts. It was very promising to see that most of the delegations had already fumigated their handicrafts in the country of origin, and the team was able to clear these delegations much faster than those that did not take this step before departure.

SIAQS team worked together with the SPC biosecurity team to set up around 40 fruit fly traps in and around Honiara to record fruit fly data as well to intercept any new species. Weekly servicing of the traps was conducted and collected specimens were identified to species level with the assistance of the quarantine entomologist. Results indicated that only four economically important fruit flies were present. Other non-economically important fruit flies were also trapped. Continuous surveillance and identification of the fruit flies has indicated that no new species were introduced during the festival. Other information on fruit flies was also extracted from the trap collections.



## **OBJECTIVE 2: Integrated and sustainable agriculture and forestry resources management and development**

## **Output 2.1:** Sustainable forestry, agriculture and land use plans, policies and legislation supported

LRD, in collaboration with the SPC/GIZ Regional Project on Climate Protection through Forest Conservation in Pacific Island Countries organised a regional consultation for the Pacific Regional Policy Framework in April 2012. Over 30 participants from every PICT deliberated on the themes contained in the first draft of the Pacific Regional Policy Framework for Reducing Emissions from Deforestation and Forest Degradation (REDD+) prepared as a result of a regional consultation tour by SPC/GIZ between February and April 2012.

LRD, in collaboration with JICA, EU-ACP FORENET and the SPC/GIZ Regional Project on Climate Protection through Forest Conservation in Pacific Island Countries, organised a regional workshop on forest carbon assessment in Pacific Island countries in June 2012. Participants included forestry officers and project coordinators of governments, non-governmental organisations and community-based organisations from PICTs, including Fiji, FSM, Palau, PNG, Samoa, Solomon Islands, Tonga and Vanuatu, which are dealing with REDD+ as part of their terms of reference. The first three days of the workshop included technical presentations on international and regional case studies

on carbon assessment, national forest inventory, remote sensing and GIS (geographic information system), and panel discussions to share and exchange knowledge and experience among the participants. Training on the MAR database and forest carbon assessment (below ground tree biomass measurement) was conducted on the final two days of the workshop.

JICA, under a two-year partnership with SPC, posted a Regional Forestry Adviser to the LRD Forests and Trees team at the beginning of 2011. This assistance, which was provided through the Fiji bilateral agreement with the government of Japan, enabled LRD to provide members with technical support in important areas of forest inventory, forest carbon assessment and forest monitoring. This partnership also opened up opportunities for support in other areas, including the establishment of the tree seed centre and the overall support for the conservation, management and utilisation of forest genetic resources in the region. In this regard, a memorandum of understanding was signed and began to be implemented between SPC and the Japanese Forestry and Forest Products Research Institute (FFPRI) for collaborative research activities in forestry.

LRD with the support of GIZ, through the two climate change projects (CCCPIR and the Climate Protection through Forest Conservation in PICTs) supported Fiji, PNG,

Solomon Islands and Vanuatu in relevant areas of their REDD+ programmes. In Fiji, areas of support included the translation of their REDD+ policy into the local iTaukei language; establishment of a National REDD+ Steering Committee; drafting of the national REDD+ strategy; and the development of the national measurement, reporting and verification methodologies for REDD+ readiness. A current study is looking at 'carbon rights' in the four countries to clarify beneficiaries of potential results-based payments from emission reductions and to recommend law reforms if required.

LRD supported Fiji in developing its Land Use Capability Classification Guideline, which will be used widely in the Pacific. The guideline introduces the land capability classification system where land is categorised into eight classes according to their capability of sustaining production. In order to promote attention to the need for land use planning and sustainable agricultural developments, a land use capability classification is needed to assist land users in making informed decisions about farm planning. The classification scheme should recommend land use and conservation measures based on land use capability classes. This can be used as a basis for minimising land degradation.

## **Output 2.2:** Sustainable and appropriate forest, agriculture and land use management practices developed and promoted

LRD supported the Drawa community-based sustainable forest management project to secure funding from the Global Environment Facility small grants scheme. Despite the positive results that were reported for Drawa, significant work is still required to ensure sustainability of the community-based project in the long term. This funding will support the implementation of important activities previously delayed because of funding constraints.

LRD continued to coordinate the Pacific Organic and Ethical Trade Community (POETCom) activities, including the appointment of the POETCom officer under the IACT project in January 2012. POETCom members hosted an organic luncheon during the Pacific Forum Leaders Meeting in Rarotonga, Cook Island in August 2012, and have hosted events at three Pacific Island Forum Leaders Meetings and successfully advocated for organic agriculture to be highlighted in key documents such as the Waiheke Declaration. A policy brief on organic agriculture has been developed.

## KNOWLEDGE SHARING ON CROP DIVERSIFICATION FOR CLIMATE CHANGE

Twenty-six regional participants attended a consultation organised by SPC's Land Resources Division to evaluate crop diversity as a tool for managing climate variability. The meeting was held at SPC Suva from 26 - 30 March, 2012.

In 1996, Pacific Ministers of Agriculture recognised the importance of a regional effort in maintaining the unique diversity of Pacific crops to support food security. This led to establishing a climate-ready collection under the International Climate Change Adaptation Initiative (ICAAI), funded by the Australian Agency for International Development.

ICAAI provided funds to SPC's Centre for Pacific Crops and Trees (CePaCT), which houses the collection, to help farmers better manage climate change through crop diversity.

The collection consists of crops and varieties that have demonstrated climate tolerant traits; they are available to PICTs for distribution and evaluation to determine their effectiveness in their own local conditions.

SPC's Climate Change Engagement Strategy identifies ways in which SPC will apply its technical expertise across the different sectors to assist Pacific Island countries and territories (PICTs) in their climate change adaptation and mitigation efforts.

Strengthening local food production and consumption can significantly contribute to enhancing climate change resilience, through both increasing the diversity in farmers' fields and improving the nutritional status of Pacific communities. SPC highlights the important role that local crop diversity can play in addressing the nutrition and health concerns in the region, and as such contributing to the resilience of the community as a whole.

The wealth of information made available during the consultation highlighted the importance of sharing information, in particular for the evaluation of climate tolerant traits. It is very important that CePaCT gets information back on the plants they send out so they can discard material that is of no benefit to the countries. At the same time, they should be receiving plant material from countries for the collection, so that it can be widely shared. It is essential that crops and varieties evaluated in any climate change-focused project showing good climate resilience are transferred to CePaCT, where they can be virus-tested and then safely shared to other countries in the Pacific.

..... continues on page 20



LRD conducted a second paravet training session in Nauru (13 paravets) and FSM (8 paravets). In collaboration with the National Agriculture Quarantine and Inspection Authority, three training sessions were successfully conducted for PNG (76 paravets) and, in collaboration with the Rural Development Programme, three training sessions were successfully conducted in Solomon Islands (54 paravets) during 2010-2011. Both the Solomon Islands College of Higher Education and the Fiji National University have been incorporating the SPC paravet training module into their national training curriculum for a Certificate in Paravet Studies and a Diploma in Animal Health in January 2012. In total, 153 paravets were certified during this reporting period, of whom 19 were female. Since the inception of the LRD-coordinated paravet training in 2003, 385 paravets, of whom 59 were female from 16 PICTs have been trained and certified. LRD continues to seek funding for more paravet trainings in the Pacific.

Agriculture rehabilitation in Fiji under the AusAID seedling nursery project is becoming a routine event, given the increasing frequency of natural disasters. Vegetable seeds and seedlings are the common commodities used for this rehabilitation programme. Thirteen vegetable nurseries were distributed around the country at strategic sites to cater for the increasing demand aimed at providing a quick and sustainable source of vegetable seedlings for rehabilitation purposes. The project envisages ending the shortage and delayed supplies of vegetable planting materials in times of high demand.

LRD carried out monitoring and evaluation and developed a final evaluation report on the United Nations Convention to Combat Desertification, Venezuela-funded Sustainable Land Management project for the 14 project countries (Cook Islands, Fiji, FSM, Kiribati, Marshall Islands, Nauru, Niue, PNG, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu and Timor Leste), and submitted the report to the United Nations Convention to Combat Desertification Secretariat. The Secretariat has been requested to transfer the second phase of funding to the countries.

LRD continued to work on economic research and economic analysis of land use, agriculture and forestry projects (cost–benefit analysis of sugar cane fair trade certification in Fiji, and cost–benefit analysis of cocoa project in Solomon Islands). LRD, with the support of GIZ, conducted a cost–benefit analysis training for staff of both LRD and Fiji's Ministry of Primary Industries.

## COST BENEFIT ANALYSIS, A TO AGRICULTURAL PROJECTS

Every time we go to the supermarket to buy a few groceries we look for answers to several questions about a product before committing to a purchase. How much does the item cost? What is the volume? How quick is it to prepare? What is its nutritional value? Where is it made? What are the ingredients? Unknowingly, we are conducting a cost-benefit analysis of the product, examining its dollar value stacked up against the inputs that went into producing the product, and making an informed decision about whether to buy it or not.

This is similar to the way we might appraise an agricultural project. However in this case we can carry out an economic assessment and the net value of a project.

A workshop taking place this week at the Secretariat of the Pacific Community (SPC) Suva office is examining just this practice: the use of cost-benefit analysis as a tool and an economic framework to appraise agricultural projects. More than 15 staff of the Fiji Ministry of Primary Industry requested SPC Suva to conduct training in this key decision–making tool. Colleagues from Land Resources Division are also attending the workshop. The workshop is facilitated by the SPC Land Resources Division in collaboration with GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) and SPC's Applied Geoscience and Technology (SOPAC) Division and funded by the Fiji Ministry of Primary Industry.

Workshop trainer and SPC-SOPAC Economic Analysis Adviser Dr Paula Holland commented in her opening remarks that cost benefit analysis is a tool designed to answer the question, Is this project worth doing? She said that it is a tool that aids decision-makers to maximise the economic impact of their work and that it is used to analyse the merits of a project from the perspective of society, rather than the individual.

Cost benefit analysis is not all about numbers. It takes into account socioeconomic as well as environmental costs. It is a crucial additional tool for



#### **OL TO PLAN AND EVALUATE**

governments, regional organisations and donor agencies, and can be used at the project design stage, when prioritising the allocation of resources among projects, and for monitoring and evaluation.

In the Pacific the agriculture and forestry sector contributes a significant proportion of the Gross Domestic Product and export earnings, and provide subsistence production, cash income, customary gifts and livelihoods for rural communities. Resources including people, time, money and skills are scarce thus the need to weigh the benefits and costs of different policy and project options available to avoid wasted public and donor funds.

From an economic perspective, the agriculture and forestry sector faces many challenges. One such challenge is stagnant or declining growth. In addition, a significant number of Pacific Islanders face food security issues, and land degradation and soil erosion are impacting sustained yields, revenues and livelihoods. Increased imports and consumption of imported food and agricultural products leads to higher trade deficits and poor nutrition.

However, our land resources are not being used to their fullest potential. Farmers often do not have access to credit to buy inputs. Climate change could bring significant costs. Given all of these factors, there has never been a greater need to pick projects that make good use of available resources to bring about sustainable development. Cost benefit analysis can help decision-makers make rational choices about distribution of resources; however it is not widely carried out in the Pacific. The workshop will empower agricultural workers to conduct their own cost benefit analyses.

Workshop presenters include Jonathan Bower, United Kingdom Overseas Development Institute Resource Economist working with SPC's Land Resources Division, and Marita Manley, GIZ Climate Change Adviser and Resource Economist.

The ACIAR-funded small research activity (SRA) to address soil fertility issues on Taveuni was completed in 2011. Taro plants grown in soil under Mucuna bean showed significantly higher yields than soil without Mucuna. Best treatment combinations have been identified for further testing in the soil health project before recommendation to farmers.

At the request of the Wallis and Futuna Rural Affairs Department, LRD undertook a country visit to Wallis and Futuna in November 2012. The objective was to look at Wallis and Futuna's forestry issues and identify areas of assistance that SPC can provide to the Territory. A brief training course on forest inventory and tree propagation was conducted for the forestry staff. Following this visit, both institutions agreed on a joint forestry programme for 2013 that is consistent with the forestry part of the 2009–2013 SPC-Wallis and Futuna JCS. The IACT project contributed to the tree crops value adding (breadfruit).

LRD continued to provide technical assistance to Nauru by conducting follow-up training and technical advice to staff of the Nauru Rehabilitation Corporation on the rehabilitation of their phosphate-mined areas. Eight nursery staff members of the Nauru Rehabilitation Corporation were provided with further training on nursery operations and tree propagation techniques. Similar training was provided to eight staff of the Department of Agriculture and two staff of the Taiwan Technical Mission.

LRD continued to support the Hango Agricultural College in Tonga by providing technical advice and support on the establishment of an agroforestry demonstration area and conducting training for 30 students in order to enhance their knowledge and skills on plant propagation techniques.

LRD facilitated development and publication of the Soil Manual for Fiji, which provides all relevant soil data in farmer-friendly language. The manual is a field guide to Fiji's soils, their attributes to support plant growth, and information on soil fertility. Target users are agricultural workers, including extension officers and researchers, land use planners, agribusiness managers, farmers and others working in rural environment.

LRD, with the support of GIZ, conducted a GIS and global positioning system (GPS) consultation and training exercise in collaboration with Fiji's Ministry of Primary Industries. The consultation and training gave the opportunity for staff of both LRD and the Ministry of Primary Industries to learn about the potential uses of GIS in their climate change activities and to provide useful information to help identify risks, vulnerabilities and adaptation strategies.

# **Output 2.3:** National and regional capacity to prepare, respond, and adapt to climate change and natural disasters developed and strengthened

LRD, with support from the AusAID ICCAI, continued to work with countries in strengthening their resilience to climate change through evaluating crop diversity in different climatic zones and improving access to diversity with known climate tolerant traits. Accessions from CePaCT 'climate-ready' collections (132 accessions) are being evaluated in 14 countries. Selected countries are working with LRD to establish national collections of specific crops to be evaluated for water-logging and salinity tolerance. The Taro Improvement Programme in Samoa has expanded its breeding programme to include breeding for drought tolerance. It also supports CSIRO and Fiji's Ministry of Primary Industries in finalising research analysis on the development of the cassava crop model. The model will provide predictions on cassava responses to various climate regimes.

LRD, through the support of SPC/GIZ CCCPIR, supported the participation of Fiji REDD+ national focal point at the United Nations Framework Convention on Climate Change and the17th and 18th Conference of the Parties (COP17 and COP18) held. The representative was the lead negotiator for REDD. Support was also provided to Fiji delegates in negotiation preparation for REDD prior to both COP17 and COP18.

LRD, through support from the EU Adapting Clonally Propagated Crops to Climatic and Commercial Change project is assisting PNG, Samoa and Vanuatu through participatory breeding to improve taro diversity (thereby sustaining production in the face of climate change), and promoting commercialisation for improved livelihoods. Relevant technologies such as virus diagnostic methods and climate resilient lines will be shared by these countries and others in the Pacific, as well as project partners.

In the Solomon Islands, SPC in collaboration with GIZ, the US Agency for International Development, the Pacific Regional Environment Programme and the United Nations Development Programme, is supporting the government of Choiseul Province, the Ministry of Agriculture and Livestock and other ministries and agencies in the implementation of a province-wide, integrated 'ridge to reef' approach to climate change adaptation. The vulnerability and adaptation assessment of Choiseul has been completed.

LRD has developed a training manual in animal disease survey planning and design for PICTs called 'Livestock disease survey planning manual for Pacific Island countries and territories'. Pilot training sessions were conducted in Samoa and Vanuatu. In total, 64 paravets and biosecurity officers, of which nine were female, were trained in active surveillance techniques from the three countries.

After the successful completion of the integrated pest management project on *Brassica* in Samoa and Fiji, which ended in June 2011, a new ACIAR-funded integrated crop management and integrated pest management project on the production of high value crops was launched in February 2012 at the Sigatoka Agriculture Research station in Fiji. Fiji, Samoa, Solomon Islands and Tonga are collaborators on this project. The University of Queensland, the Asian Vegetable Research and Development Ceter, Terra Circle and SPC are institutional collaborators.

# **Output 2.4:** Invasive species, pest and disease problems identified and addressed and the capacity to respond at national and regional levels is supported

Component 4 of the Pacific Horticultural and Agricultural Market Access (PHAMA) project continued to provide technical assistance and equipment for FF surveillance trapping in Cook Islands, Fiji, Kiribati, Niue, Solomon Islands, Tokelau and Tuvalu.

LRD, with national counterparts in Kiribati, Fiji, Marshall Islands, PNG (Bougainville, and five Highlands provinces), Solomon Islands, Tonga and Vanuatu have conducted plant health surveys and updated the Pest List Database of those countries. Control options were recommended for the incursion of an invasive moth that attacked an ornamental tree (kou) in Tuvalu. LRD supported PNG's National Agriculture Quarantine and Inspection Authority and PNG's Chamber of Commerce and Industry with the collection of coconut leaf samples and paid for the diagnostics and authentication of its causal pathogen of the Bogia coconut wilt. LRD's Plant Health Section will be an active partner in later studies of this disease, its vector complexes and mode of spread. In collaboration with Tonga's Ministry of Agriculture and Food, Forests and Fisheries, a varietal screening of yams for anthracnose disease was initiated, which will include screening fungicides for their efficacy on susceptible varieties. Advice was given on controlling coconut scale



The Food Animal Biosecurity Network (FABN) project, currently implemented by the LRD Animal Health and Production Team and the School of Biomedical and Veterinary Sciences at James Cook University in Australia, aims to improve field and laboratory capability for animal disease surveillance in Fiji, Papua New Guinea (PNG), Vanuatu and Solomon Islands. Such an improvement will allow assessment under World Organisation for Animal Health (OIE) guidelines for trade in animals and animal products.

and mealy bug infestations and sooty mould spread on coconut, breadfruit and banana on some islands of the Marshall Islands.

In collaboration with the ACIAR papaya project, LRD isolated, cultured and authenticated the causal pathogen of a disorder reported on papaya plants on two sites in Fiji (Dawasamu and Volivoli), where it was proved that it was not the exotic *Erwinia* papaya bacteria responsible for crown rot; this greatly benefited Fijian papaya growers and exporters.

A general plant health survey was completed in seven countries (Fiji, FSM, Marshall Islands, Pitcairn Islands, PNG, Samoa and Tonga) and also completed delimiting surveys in six countries: Tonga for papaya crown rot (Erwinia papaya), Solomon Islands (Guadacanal) for citrus canker (*Xanthomonas anapoxidis* pv. citri), American Samoa and Samoa for citrus psyllid (*Diaporthe citri*), Fiji for chilli pod rot (*Colletotrichum acutatum*), and FSM and Marshall Islands for papaya mealy bug (*Paracoccus marginatus*).

## **Output 2.5:** National and regional capacity of extension, outreach and information services strengthened

LRD coordinated the Pacific Islands Extension Summit assistance to the Pacific Agribusiness Research for Development Initiative (PARDI) project, which links smallholder farmers to extension networks and to markets. LRD also developed systems to promote information communication technology for sustainable agriculture and forestry.

LRD coordinated a regional quarantine awareness campaign for the 2012 Pacific Festival of Arts in Solomon Islands in consultation with Solomon Islands' quarantine service, BATS and the Pacific Plant Protection Organization. LRD produced a quarantine brochure, poster and airport banner, and distributed these to heads of quarantine who met with team officials and gave out materials.

LRD continued consultations with regional stakeholders on the Pacific Youth in Agriculture Strategy and SPC Human Development Programme to identify activities for collaboration and for funding assistance from donor partners. Many of the activities identified in the Strategy are already addressed in national programmes that target youth.

## **OBJECTIVE 3: Improved biosecurity and increased trade in agricultural and forestry products**



## **Output 3.1:** National capacity to comply with international and other relevant standards strengthened

LRD provided interventions and support activities for capacity building, reporting mechanisms and increasing awareness among Pacific ACP member countries in addressing and complying with the World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures and the Technical Barriers to Trade Agreement in support to international trade and regional cultural events.

LRD continued to provide technical and scientific advice to PICTs on import risk analysis for livestock and livestock products. This included Fiji (imports of frozen poultry from Brazil, and imports of sheep, goats and dairy cattle from New Zealand), Kiribati (imports of various meat types from the USA), and Niue (Niue as a transit point for zoo animals into New Zealand). LRD also assisted in exporting pet animals from the Cook Islands.

LRD, in collaboration with the World Organisation for Animal Health (OIE), conducted a training workshop in Fiji in June 2012 on animal disease reporting using the World Animal Health Information System (WAHIS). The meeting brought together 18 participants who

were veterinarians, paravets, animal health specialists, aquaculture officers and biosecurity officers from Cook Islands, Fiji, French Polynesia, FSM, Kiribati, PNG, Samoa, Solomon Islands, Tonga and Vanuatu. They joined SPC representatives (from Animal Health and Production; IACT; Fisheries, Aquaculture and Marine Ecosystems; and Biosecurity and Trade Support) and representatives from regional organisations and OIE to strengthen capacity to submit and regularly update animal health reports to OIE using WAHIS. The training workshop was funded by LRD's Animal Health and Production Section, BATS (PHAMA, Component 4), IACT and FAME.

LRD, through its FACT and IACT projects, provided assistance to several enterprises for achieving Hazard Analysis and Critical Control Points (HACCP) certification. As a result, two enterprises are now HACCP certified. This has fulfilled one of the market demands and the enterprises will continue exporting to an important US market. Other enterprises received assistance from LRD through training or technical assistance as part of the pre-auditing steps.

LRD, under the Australian-funded Pacific Horticultural and Agricultural Market Access Project, continued to provide national training and technical advisory support and equipment to facilitate the implementation of the Biosecurity Information Facility (BIF) during this reporting period. Assistance was provided to SPC members, including Fiji, French Polynesia, FSM, Kiribati, Marshall Islands, Niue, Palau, PNG, Tuvalu, Samoa, Solomon Islands and Vanuatu. The Cook Islands and Fiji BIFs are now operational and operators can use their online operations manual to undertake import permit and export certifications using the system. Quarantine training was provided to FSM, Guam, Marshall Islands, Northern Mariana Islands and Palau to help them understand and comply with international standards.

LRD, under the IACT project, continued to progress trade arrangements between Rotuma and Tuvalu.

LRD, in response to the military build up in Guam and in collaboration with the US Department of Defence, is actively involved in the development of policy guidelines for the Micronesia Biosecurity Plan, a management strategy to minimise the likelihood of entry, establishment, spread and effects of invasive species and pests on plants, animals, human life and the environment. This will benefit SPC members in the North Pacific.

## SUSTAINABLE FOREST MANAGEMENT FOR REDD+

The Nakavu Village Pilot Site near Navua in southern Viti Levu is 315 hectares of land leased from Fiji's Forestry Department. It is the site of a forest management project that began in 1991 with the aim of developing, testing and promoting a sustainable forest management system as an alternative to conventional logging. Guidelines to the 'Nakavi Model' system have been developed, which incorporate the Fijian context of communal forest ownership and the need to involve forest owners more in the management process.

Sustainable forest management (SFM) describes a type of management that 'aims to ensure that the goods and services derived from the forest meet present-day needs, while at the same time securing their continued availability and contribution to long-term development. Conventional logging, on the other hand, is the practice of cutting down all commercial trees with a diameter at breast height (DBH) of more than 35 cm. It is widely considered unsustainable in the long term.

The Nakavu Pilot was presented as a case study at the Regional Workshop on Forest Carbon Assessment and Monitoring for Pacific Island Countries, held from 18 to 22 June 2012 in Nadi, Fiji. This technical consultation brought over 60 regional forest managers and international organisations to deliberate on carbon assessment of forest biomass and carbon stocks. These data are needed to support the programme to reduce deforestation and degradation (REDD).

Protection of primary forest, wetlands and soils as carbon reservoirs — previously not included in the Kyoto Protocol — is now accepted by the United Nations Framework Convention on Climate Change (UNFCCC) and promoted. In the global context, forest soils contain significant amount of carbon — approximately 700 billion tons of carbon globally. Soils can become sources or sinks of carbon from land uses and land-use changes in agriculture and forestry. But we can

Proponents of SFM assert that it maintains forests as carbon sinks, increases forest productivity, supports sustainable wood products, and ensures local livelihoods. SFM can be seen as an effective tool to mitigate the 20% of global greenhouse gas emissions resulting from forest destruction and degradation. It is, therefore, an integral part of the REDD+ incentive system, which rewards reduction in greenhouse gas emissions.

Professor Yoshiyuki Kiyono of Japan's Forestry and Forest Products Research Institute (FPRI) in his keynote opening presentation at the Regional Workshop on Forest Carbon Assessment and Monitoring for Pacific Island Countries, looked at accepted methods for estimating national carbon stocks with supporting case studies. He pointed out parameters for estimating biomass and ecosystem carbon stock among various plant communities — including rainforest, seasonal evergreen forest, savannah forest and deciduous seasonal forest.

'Human-induced global drivers of deforestation and forest degradation are mainly activities related to conversion of forest land into crop lands (such as for sugar, coffee plantations), road construction for commercial logging or pasture development, and cutting down of forests for fuel. REDD+ will not only conserve forest, but also replace people's land use systems with different systems that help reduce green house gasses.'



Speaking as a proponent of conventional logging, Dr Hitofumi Abe, SPC/JICA Regional Forestry Advisor, advanced the argument of logging versus REDD+. 'Logging,' he said, 'creates jobs, advances national development, and earns income.

Conversely, REDD+ argues for conservation, safeguarding the environment for future generations, and earning revenue from carbon stocks.'

He presented studies indicating that only a small portion of forest carbon is emitted to the atmosphere as a result of logging. Dr Abe said, however, that good forestry practices should be adhered to when logging, such as following the national logging code (cutting cycle, tree size limit, and good harvesting practices), thereby reducing the impact of logging, improving capacity for wood processing, and increasing public awareness on safe logging. Capacity should also be built to improve forest monitoring.

Dr Joel Scriven of FAO Forestry and UN REDD Programme presented the UN Framework Convention on Climate Change (UNFCC), the international environmental treaty launched at the Earth Summit in Rio de Janeiro (1992), which sets an overall framework for intergovernmental efforts to tackle the challenges posed by climate change. IPCC recognises the contribution of emissions from the forestry sector in developing countries at 17.4% (agriculture at 13.5%). Research shows that reducing emissions from the forest sector is an opportunity to reduce emissions and increase removals cost-effectively. This has led to addressing the forest sector in developing countries under the Bali Action Plan (Decision 1/CP.13) as a means to mitigate climate change, informally known as REDD+.

Five activities are eligible under REDD+ for developing countries: (a) reducing emissions from deforestation; (b) reducing emissions from forest degradation for REDD; (c) conservation of forest carbon stocks; (d) sustainable management of forests; and (e) and enhancement of forest carbon stocks for REDD+. Activities are separate, allowing each country to focus on those that are most applicable to national circumstances. Robust and transparent national forest monitoring systems that measure greenhouse gas emissions from the forestry sector must comply with IPPC good practices and guidelines.

Dr Karl P. Kirsch–Jung of the SPC/GIZ Regional project presented development of the regional policy framework for REDD+. Current climate change negotiations under the UNFCC have put forestry at centre stage of international policy discussions. The current fund-based grant financing mechanism for REDD+ readiness activities offers an excellent opportunity for forestry support in Pacific Island countries. The regional policy framework aims to support REDD+ policy strategy development in the region. A final draft is expected to be ready for the HOAFS meeting in September.

The technical consultation was organised by SPC with funding support provided by FAO and JICA.

<sup>1.</sup> http://www.fao.org/forestry/sfm/en/

## **Output 3.2:** National capacity to increase market access for domestic and export trade developed and strengthened

LRD completed the remaining activities under the Pacific Agreement of Closer Economic Relations (PACER) project, with technical assistance for market access of island cabbage and Polynesian plum from Cook Islands, Fiji, Samoa, Tonga and Vanuatu; and plantain and training on cured vanilla for Niue. Support was also provided to trade facilitation efforts for Fiji and Tuvalu to initiate inter-island trade between Rotuma and Tuvalu. Assistance provided included marketing missions for a Fiji delegation to Tuvalu, and a Tuvalu delegation to Rotuma; and import

risk analysis for access of taro, sweet potato and cassava to Tuvalu market. A market research report on the potential trade between Tuvalu and Viti Levu/ Rotuma was completed and distributed. The report confirmed that taro and other potential products (e.g. yams, cassava, kumala, pineapple and watermelon) from Rotuma are in demand in Tuvalu.

The government of Australia, through ACIAR has provided resources to LRD under PARDI to assist with the development of taro cultivars, support the development of sustainable and effective supply chain system for breadfruit, facilitate niche market access for Pacific cocoa growers, and enable smallholders to supply the growing export markets for fresh breadfruit. Other assistance included the launching of the coconut veneer project, and providing assistance to hold a regional coconut meeting to develop a strategy on coconut research and development (held in Apia, Samoa in October 2012).

.....continued from page 13

#### **KNOWLEDGE SHARING ON CROP DIVERSIFICATION FOR CLIMATE CHANGE**

.... The meeting heard of national crop evaluations, as well as other components of the ICCAl-funded project, such as developing a methodology for screening for drought and salinity tolerance, and breeding for drought tolerance. In addition, presentations were made by country delegates who have been conducting agrobiodiversity studies, working with local communities to record their observations on climate variability and the response of local crop varieties and imported material to this variability.

Scientific Officer from the Caribbean Agricultural Research and Development Institute (CARDI), Mr Norman Gibson said that the Pacific and the Carribean share similar problems in relation to climate change, loss of agro-biodiversity, salt intrusion, extreme weather variations, and changes in pest and disease regimes. He said, as a result of these increases, it is important that CARDI and SPC collaborate and share knowledge and expertise to meet these challenges. CARDI will be evaluating some of the climate-change varieties developed at CePaCT, evaluating not only for survivability but looking at the whole value chain, including taste and marketability.

Presentations covered the Pacific Climate Change Science Programme, and two reports from studies funded by the Department of Climate Change and Energy Efficiency under the Pacific Adaptation Strategy Adaptation Programme (PASAP). Both studies have produced some very interesting results; one assessed the economic value of germplasm and crop improvement as a climate change adaptation strategy, while the other considered the key drivers for determining the uptake of crop diversity within the context of adaptive capacity analysis.

The meeting strongly supported the use of farmer household surveys to develop simple, comparable cross-site household level indicators. The results of such surveys will provide an overview of the farming practices, livelihoods and food security status of the households in these sites and, importantly, highlight the changes farmers have been making in recent years and why. This approach will be evaluated in a few countries supported by funding from the AusAID International Climate Change Adaptation Initiative.



LRD (through IACT) co-sponsored the 2012 Trade Pasifika. Ten enterprises attended, including Tanna Coffee (Vanuatu), Nature's Finest (Fiji), Cocker Enterprises (Tonga), Solar Salt (Christmas Island), TH Plantation (Samoa), Kahuna Herbal (Fiji), Kokonut Pacific (Solomon Islands), Lapita Café (Vanuatu), Tokino Pearls (Fiji), and Pacific Green (Fiji). The total value of business generated by the IACT-funded enterprises over the three-day event, was around FJD 62,000. Selected small- and medium-scale (SMEs) enterprises in the Pacific had the opportunity to showcase some of their value-added products to domestic and international buyers.

IACT, in partnership with Pacific Islands Trade and Invest Australia, facilitated the participation of IACT partner enterprises, including Heilala Vanilla (Tonga), Jones Enterprises (Tonga), Origins Pacific (Fiji) and Apia Bottling (Hot Samoan Boys Chilli Sauce) to the Fine Food Show held at the Melbourne Exhibition Centre in Australia in September 2012. The participation of the above four IACT partner enterprises at the show was every successful. Approximately 265 new contacts and more than 30 existing contacts were established, and the total estimated value of potential business generated was around AUD 418,000.

Successful coordination of the Regional IACT Enterprise Training and Consultation Workshop held at the Tanoa International Hotel, Nadi from 21–23 November 2012. Twenty-seven IACT partner enterprises received training in marketing through presentations, panel discussions and one-on-one consultation sessions to identify key marketing needs of the enterprises. The event was a joint initiative by IACT and all four Forum Trade Offices.

LRD helped to increase the role and engagement of its private sector partners in participating in regional and international trade. Capacity building and increased awareness of the Food Safety Programme with private sector partners have resulted in international HACCP accreditation for enterprises (a requirement for trade); other SMEs are also progressing towards international auditing.

To be qualified for a package of financial and technical services, SMEs must apply through an expression of interest process. The Technical Advisory Group approved 30 enterprises (out of 166 applications received from Pacific ACP countries) for funding support under EU IACT.

Support was provided to enterprises through EU FACT, as well as those enterprises that have been selected

to receive assistance for IACT projects. This assistance includes:

- co-funding of processing and laboratory equipments;
- graphic designing in product labelling, plus packaging of products;
- assisting enterprises to improve their marketability and trade shows, including the publication of banners, brochures and promotional media articles; and
- assisting with the augmenting the raw materials supply and quality bases for a number enterprises in farmers fields (mainly banana, balsa, cocoa, coconut, ginger, sandalwood and other timber species).

LRD assisted in the production of Coconut Sugar in Kiribati, which is now being marketed in South Tarawa and from the outer islands. This product has a low glycemic index, and the next step is to assist in its export. Assistance has resulted in the increase of export volumes and values of a number of enterprises that are supported through LRD. Niche export markets include Australia, Canada, Germany, Holland, Japan, New Zealand, Slovenia and the USA.

The French Pacific Fund assisted LRD with implementing a bele project on 'How an indigenous vegetable can contribute to sustainable development', in five countries (Fiji, New Caledonia, PNG, Solomon Islands and Vanuatu). The project aims to develop an optimum production system for selected varieties of bele to help support both local and export markets. A regional inception meeting was held in October 2012 and was attended by participants from these countries and LRD staff.

Fruit flies are serious pests. The presence of a quarantine pest of economic importance in a country often constitutes a trade barrier between it and countries that are free of the pest. LRD has assisted biosecurity authorities in Fiji, FSM and Pitcairn Islands by providing traps, lures and wicks for surveillance. Two parasitoids were released in Pitcairn Islands to control the Queensland fruit fly there. These parasitoids were recommended after results had shown that at least one of them had effectively caused 65% mortality in Queensland fruit flies in French Polynesia. The first release of both parasitoids was in 2010. The second release of the effective parasitoid was made in June 2012. Monitoring parasitoid establishment is still ongoing.

## **Output 3.3 :** Sustainable and viable post-harvest technologies developed and promoted

In collaboration with ACIAR and the Ministry of Primary Industries, LRD implemented a new project to improve pathways for exports of taro to Australia and New Zealand. This project aims to engage quarantine authorities in Australia, Fiji, New Zealand and Samoa in active and consistent dialogue to define current problems with taro and foliage export pathways.

With assistance under the PACER project, LRD's BATS participated in the final design missions for the AusAID PHAMA project in Fiji, Samoa, Solomon Islands, Tonga and Vanuatu, and implementation of Component 4 to provide regional market access support services.

LRD, through IACT, facilitated arrangements between Fiji's Ministry of Primary Industries and PNG Amruqa (private enterprise) to purchase virgin coconut oil (VCO) equipment from a Malaysian Company (fully funded by Fiji's Ministry of Agriculture) for establishing the Fiji VCO training hub. The understanding is that Amruqa will also assist in marketing VCO produced in the hub. Such arrangements are important to ensure sustainability, and that equipment is purchased from reliable sources and already tested in the region.

The Department of Agriculture and Food in Western Australia undertook a scoping study of hot water treatment of taro and cut flowers, and also looked at other quarantine treatments. The report was submitted to ACIAR, which approved an SRA titled 'Developing cleaner export pathways for Pacific commodities'. A

LRD is engaged in a number of central economic and scientific issues facing the Pacific, and its services should remain a core function of SPC.

revised proposal was submitted on completion of the SRA. To support this initiative, LRD undertook a scoping study to review and identify research issues in the export commodity pathways for taro and cut flowers and foliage.

LRD, through POETCom, continued to support the development of participatory guarantee systems for enhancing local organic markets and improving compliance with recognised organic standards, including the development of a regional organic trademark scheme for promotional purposes. LRD has successfully negotiated equivalence for the Pacific Organic Standard (POS) with the International Federation of Organic Agriculture Movements (IFOAM), allowing POS to be used to access key export markets.

LRDcontinued to provide technical and administrative support for the implementation of the ACIAR-funded project on 'Development of advanced veneer and other product from coconut wood to enhance livelihoods in South Pacific communities'. Participating countries on this project include Fiji, Samoa and Solomon Islands.

## **Output 3.4:** Improved information available on plant and animal health status

Compilation of available 2008–2011 animal disease reports provided by Fiji, FSM, Kiribati, New Caledonia, Samoa, Solomon Islands, Tonga and Vanuatu. Data were recorded and submitted to OIE through the OIE WAHIS online disease reporting system, which will be used as reference for exportation of terrestrial and aquaculture products from the Pacific Islands region to EU countries. Quarantine awareness materials were provided to Fiji, PNG and Samoa for various plant pests. Ongoing circulation of relevant animal health information was undertaken through the PARAVET and Pacific Heads of Veterinary and Animal Health Production Services mailing lists.

The PHAMA project supported SPC membership at the Centre for Agricultural Bioscience International and access to the five different compendia, including the soon-to-be-released Invasive Species Compendium which, from 2010, will include significant sections of the current Crop Protection Compendium. LRD continued to maintain the PPPO website on the international phytosanitary portal; the Pacific fruit fly website (www. spc.int/pacifly) is also serviced and updated regularly, as is the regional Pacific Plant Pest List Database, which is used in import risk analysis and negotiations for market access; authenticated pest records from plant health surveys are regularly updated in the database.



# SPCINDEPENDENT EXTERNAL REVIEW LRD RECOMMENDATION

RD's objective is to improve the food and nutritional security of Pacific Island people through the sustainable management and development of land, agriculture and forestry resources. LRD has three thematic sectors (biosecurity and trade, food and nutrition security and sustainable agriculture and forestry), and provides technical support and training in the areas of plant protection, conservation and use of genetic resources, animal health, agroforestry, forestry and land management, biosecurity and trade facilitation. LRD also hosts a number of bilateral regional programmes that operate in parallel to its own.

LRD's work is of economic importance because agriculture underpins economies across the entire Pacific. The challenges of improving food security, ensuring nutritional value, facilitating trade and developing capacity are relevant to the development efforts within the region. Forestry is also a key economic resource in a number of SPC member countries. The external review group was clear that most of LRD's work was fundamentally important to the region; in particular, feedback from PICTs and the external review group highlighted the value of SPC's germplasm work. Interestingly, more of LRD's work today is engaging the private sector. The independent external review saw a clear example of that in the Solomon Islands with a project directed at revitalising the cocoa sector. This trend should be encouraged. The independent external review is concerned, however, that some of LRD's programmes have some significant variations in funding over time, and there is particular concern with the variability of financing for the germplasm work.

In most areas of its work, LRD is the only provider of services in the Pacific Islands region, and the variety of skills it brings is an asset. It is recommended that LRD lead cross-sectoral work on nutrition in view of its capacity in this area, and it would be beneficial if LRD sought the appropriate support from other SPC divisions. In the future, LRD will also have a key role in contributing to climate change concerns. The one issue raised by the independent review was the long absence of permanent leadership of LRD. Given the key role of this division, it is hoped that rapid action will be taken to identify a new Director of LRD.

LRD is engaged in a number of central economic and scientific issues facing the Pacific, and its services should remain a core function of SPC. Moreover, the independent review noted that in view of CePaCT's important and significant regional work, it should be funded with a stable and appropriate level of core funding. The review also reported that LRD should work to consolidate synergies between its work programmes and those of bilateral regional programmes so that there is an alignment of priority setting and service delivery to PICTs.



RD will provide a new Strategic Plan for 2013–2016 inearly 2013. This plan will be based on the new SPC Corporate Plan, which is currently being developed.

LRD will change its mode of operation through the review of its structure, from the current flat structure to a more hierarchical structure. This is in line with the new corporate decision, where SPC will strengthen its 'one organisation, one image focus, and all divisions will function on a similar structure. LRD will be managed by a director who will in turn be supported by three programme managers who will lead the programmes based on the division's three objectives. The three objectives under LRD's Strategic Plan for 2009–2012, have been slightly modified to be in line with the recommendation of the independent external review, where there will be more emphasis on the nutritional value of food and the facilitation of trade, as well as ensuring alignment with the three key SPC development outputs: sustainable socio and human resources development; sustainable natural resources development; and sustainable economic development. The three proposed objectives are: sustainable food and nutritional security development; sustainable land, agriculture and forestry resources development; and sustainable agriculture and forestry trade development. The composition of the three programmes will be based on the combination of the current thematic teams (which have close working relationships) and which deliver similar integrated outputs at regional, national and local levels. This will be fully supported by the finance and administration team and the policy advisory team.

In line with the LRD Strategic Plan objectives, the director and supporting staff will concentrate on strengthening relationships with stakeholders, including colleagues in agriculture and forestry departments, other regional agencies, partners that provide funding support, and international organisations. The director has oversight of the implementation of LRD's work programme and the management of major projects that involve LRD's three programmes.

The first strategic objective, 'Sustainable food and nutritional security development', will be achieved through the implementation of a number of outputs. with a focus on activities that will be in line with the Framework of Action for Food Security in the Pacific. The focus on facilitating access to traditional and improved crop and animal diversity will continue in order to address the challenges of climate change and to meet market place demands. Value chain development will be supported through projects that identify suitable diversity and improve propagation and production. Policy development will address the need to raise awareness on the importance of traditional foods and nutritional data will be sourced to help with policy development. . Efforts will focus on documenting traditional practices that support sustainable and resilient food supply systems. There is a need to look for less expensive animal feed sources for livestock using locally available raw feed ingredients, and the identification of climate change adapted livestock breeds. Capacity building of PICTs stakeholders

LRD's second strategic objective, 'Sustainable land, agricultural and forestry resources development' is implemented through a number of outputs and activities: climate change-adapted crop varieties established and accessed; a mechanism in place for rapid seedling production and distribution in times of disaster; strengthened pest incursion response and quarantine pest surveillance in most PICTs; development of national

agriculture strategic plans supported; legislation and regulations on the use of pesticides reviewed and harmonised in PICTs; a national Land Use Policy for some PICTs developed; support for the review and development of an agriculture policy for some countries; mainstreaming of climate change into agriculture and forestry sector plans; and capacity building of PICT

stakeholders on agriculture, forestry and land policies and sustainable practices aspects.

LRD's third objective, 'Sustainable agricultural and forestry trade development', is carried out through a number of outputs and activities such as market access for key commodities to New Zealand and Australia; inter-PICT trade facilitated, especially between Rotuma and Tuvalu; public awareness campaign on the safe movement of trade commodities; trading of improved live animals, such as with the importation of dairy cattle from New Zealand to help Fiji's dairy industry development programme. In addition, ongoing assistance was provided to member countries

in updating their animal disease status through the OIE WAHIS system. SPC/LRD pest list data base well resourced to strategically place PICTs trade regionally and internationally. Capacity building of PICTs stakeholder on biosecurity and trade facilitation aspects.

LRD is effectively integrating climate change into its work programme, and this will be emphasised much more in its new Strategic Plan. Funding from AusAID though ICCAI and, more recently, the US government is enabling LRD to strengthen the capacity of member PICTs to respond to climate change. The central focus of LRD's work in these projects is to assist PICTs in building their resilience to climate change.

LRD will continue to support its various ongoing projects including, the GIZ CCCPIR project, AusAID Forests and Trees Programme, EU-funded IACT and Pacific Agriculture Development Program, AusAID ICCAI project, the AusAID PHAMA project, ACIAR PARDI project and other interventions. These initiatives have been integrated into LRD's framework in terms of implementation and reporting to donors, HOAFS, and CRGA).

LRD's 2013 work programme, which will be developed in detail in early 2013, will be in line with recommendations of HOAFS, Ministers of Agriculture and Forestry (MOAFS)

and CRGA, and will include any new priorities that have been identified. Results and activities are assigned to individual staff.

LRD's 2013 budget is summarised in the following table.

Table 4: Land Resources Division budget for 2013 in French Pacific francs (CFP units)

	Recurrent	Project	Total
Director's office	182,600	-	182,600
AHP	367,700	-	367,700
BAT	111,800	1,001,300	1,113,100
СР	161,700	658,100	819,800
FAD	-	4,077,100	4,077,100
FAT	268,800	57,600	326400
GR	208,800	1,550400	1J59,200
ICE	90,700	-	90,700
LMRS	252400	1,071,900	1,324,300
AS	168,100	178,600	346,700
PH	144,300	391,200	535,500
Total	1,956,900	8,986,200	10,943,100

These budget figures are broadly similar to those of 2012, but project funding has increased with the inclusion of a full-year budget for the: EU-funded IACT and 'Improvement of key services to agriculture in the sugar sector' projects; USA-funded 'Vegetation and land cover mapping and improving food security for building resilience to changing climate in Pacific Island communities' project; ACIAR-funded 'Strengthening of integrated crop management research in the Pacific' project; FAO-funded 'Agriculture technical cooperation' project on pesticide alternatives; and the EU Pacific Agriculture Policy Development Projects.

There has been progress in mobilising resources for the work of 2012, and the staff who have contributed to the design and development of proposals should be commended. This work will increase the proportion of LRD funding for projects in all sections of the division. All projects are of three to five years in duration, and while these projects address key issues (as identified by PICTs), there remains a need for more sustained finance in order to support the technical capacity that is often called upon by PICTs over the course of a year, and which are likely to be increasingly requested to meet the unpredictability of food production in the coming year.

# FUTURE DIRECTION OPPORTUNITIES & CHALLENGES

RD's Agriculture and Forestry programme has been one of SPC's core programmes since the organisation's inception. Now, with the direction provided by SPC's independent external review, HOAFS and MOAF meetings, and guidance by CRGA, the focus of the Agriculture and Forestry programme's role has significantly broadened from crop protection, animal health and quarantine, to also include crop and animal production and extension, soils management, genetic resources, forestry and agroforestry, land resources management, and more recently, trade.

PICT ministers of agriculture have always seen the services provided by LRD as essential to complementing their own, given the limited technical and financial resources at their disposal. Emphasis on plant protection support has broadened from border control and strengthened pest and disease control to include biosecurity and trade facilitation. Over the last year, LRD has built a strong information and knowledge management focus, directed at both the development of information communication technology and information communication management capability in PICTs. These are enhanced to support land, agriculture and forestry development interventions at national and community levels.

With the corporate initiative of moving services closer to, and engaging more directly with, beneficiaries through JCS, a strong integrated regional service comprising professionals in diverse thematic areas and backed by an effective outreach service is crucial. In addition, there are services that can only be effectively provided regionally. For example, conservation of, and ability to further develop, the region's genetic resources for food and agriculture cannot effectively be undertaken at the national level (without regional support) or by any other regional and/or international agency.

SPC has introduced the Integrated Reporting Information System as a monitoring and evaluation tool for all of its programmes. Likewise, LRD has initiated a new focus of accountability, transparency and good governance in implementing work programmes both for its development partners, member countries and the organisation.

Work to integrate the Agriculture and Forestry programmes started in 2004, following the review of the division in 2002. The new divisional structure has been in place since 2005, and has developed into a sustainable delivery mechanism under LRD's integrated

system. The thematic and support areas of the LRD structure represent the core services provided by LRD to its membership. The focus may vary over time, thus influencing resource allocation. Crucial in LRD's ability to have an impact, is the ability to maintain key positions (professionals who double as coordinators) in the division's organisational structure. Other key personnel (professional positions absent in most member

LRD has built a strong information and knowledge management focus, directed at both the development of information communication technology and information communication management capability in PICTs.





Pacific Plant Protection Organisation (PPPO) is mandated to provide advice on phytosanitary measures in order to facilitate trade without jeopardizing the plant health status of the importing members and countries. PPPO is one of the Regional Plant Protection Organisation recognised by the International Plant Protection Convention.

PICTs, such as plant pathologists, entomologists, veterinarians, soil scientists) need to be maintained for the long term.

While the human resources strength of the division to deliver its assistance to PICTs has been fair over the last decade and stronger in the last two years, maintaining LRD's science and technology capacity will be a considerable challenge in the coming years. PICTs face major challenges, particularly in the areas of climate change adaptation, food security and land management, as highlighted by the Forum Leaders in their communiqués released after their 2010, 2011 and 2012 meetings in Cairns, Australia; Auckland, New Zealand; and Rarotonga, Cook Islands. LRD's science and technology capacity must be adequately robust to effectively deliver to its beneficiaries (i.e. PICTs), the outputs articulated in LRD's new integrated Strategic Plan for 20013–2016.

Most, if not all the services provided regionally by LRD are driven by, or developed in response to, national priorities. Although many of these services constitute LRD's core business in the agriculture and forestry sectors, the level of core, programme and project funding support for these core services collectively in 2011 and 2012 consisted of only 7% from core funding, 17% from programme funding and 76% from project funding.

Project funding enables implementation of projects that achieve development objectives and outcomes. The major pitfall of this type of funding, however, is its non-continuity, which is a significant disadvantage in implementing core business that needs to be sustained over longer time frames. Therefore, the need for a long-term sustainable financing strategy is warranted.

2012 is the fourth and last year of the implementation of the current LRD Strategic Plan. Services were generally delivered in line with expectations, but the Land Management and Resources Policy Support team functions were limited due to the team leader taking on the Acting Director position.

The SPC independent external review confirmed that LRD is a core function of the Secretariat of the Pacific Community.

The introduction of the Integrated Reporting Information System as a monitoring and evaluation tool for all SPC programmes reaffirms the need to be accountable, transparent and practice good governance throughout the organisation.

The new LRD Strategic Plan for 2013–2016 will create a new way to conduct business but will also enhance LRD's integrated mode of operation. The creation of the three programmes with three programme managers, will attempt to deliver additional results in 2013.

## LRD – COUNTRY ACTIVITIES AND RESULTS

#### **American Samoa**

		JCS	Cost	
No.	2012 Activities		FJD	Results
	Inventory of Paravet trainees	(y/n)	online	Paravet training list updated
	SPC LRD participated at the 14 <sup>th</sup> Oceania Customs Organisation (OCO) Annual Conference to encourage regional collaboration on border control issues.	у	4,561	Ongoing collaboration between OCO and SPC on the Trade Facilitation Database
	Support two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	у	7,076	
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July.	у	-	Ongoing – work currently in progress on country manuals update
	Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	у	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
	Provided technical advisory support through the internet based LRD Helpdesk	у	-	Ongoing, timely advice provided to PICTs
	Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
	Regional quarantine awareness for Festival of Pacific Arts		500	Travellers educated on quarantine issues, no new pest incursions
	Supported attendance of three staff from both Department of Agriculture and Am Samoa Community College to attend regional meeting on Crop Diversity: a tool for managing climate change, Suva, Fiji		8,243	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity as well as evaluation of climate ready collection from SPC
	In collaboration with the University of South Pacific, Alafua Campus, organised training held in July 2012 at USP, Alafua for both American Samoa and Samoa. Eight research staff from American Samoa Department of Agriculture and the Community College attended training on "Taro breeding: building capacity and resilience of countries to taro leaf blight and climate change through utilisation of new diversity". Supported the logistics of the training as well as funding for attendance by four staff only.		13,001	Training conducted successfully and SPC received good feedback from participants, This is the first time both Samoa have been engaged much on building capacity in taro breeding. Taro breeding is always focused on TLB tolerance, now the focus includes drought tolerance.
	Provision of climate ready crops and taro leaf resistant taro (92 plantlets from 20 accessions) for evaluation by the Department of Agriculture		2,500	American Samoa has received for the first time some new taro leaf blight resistant taro (Cycle 5 & Cycle 6) as well as some of `the bananas that are included in the climate ready collection.

#### **Cook Islands**

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	In collaboration with SPC division of Fisheries, Aquaculture and Marine Ecosystems (FAME) supported one participant to attend the WAHIS training in Nadi, Fiji.	у	4,700	Increased capacity of 6 PACP to be compliant with the OIE Reporting of WAHIS on Aquatic/Marine/Terrestrial
	Provided technical advice on the fumigation requirements of purple taro into New Zealand and Japan with NZ Biosecurity	n	-	Increased awareness for the exportation of purple taro
	Compilation of the full regional AnGR conservation proposal (extension component)	У	-	Project proposal completed and submitted to FAO
	Conducted IRA for goat semen from New Zealand	У	-	Draft import protocol completed
	Completed proposal on ICT for Pacific Youth in agriculture	У	-	Proposal completed and sent to CTA for funding. Awaiting feedback
	Provided assistance in auditing the Cooks Islands export pathway and renovation work for Rarotonga HTFA facility in February.	У	13,630	Ongoing technical support in facilitating market access and import risk analysis on agricultural commodities.
	Supported the participation of Cook Islands National Plant Protection Organisation (NPPO) office to the 7 <sup>th</sup> Commission on Phytosanitary Measures (CPM) meeting in Rome, Italy.	У	2,213	
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	7,666	
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	У	-	Ongoing – work currently in progress on country manuals update
	Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	у	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
	Provide technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
	Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	У	-	Completed, PICTs can put forward story items to be included in the newsletter
	Supported one participant to the regional training workshop on tree propagation for agroforestry in the Pacific	у	3,598	Enhanced skills and knowledge of tree propagation and agroforestry
	Supported one participant to the regional consultation on the draft regional policy framework for REDD+	У	4,321	Draft regional policy framework is relevant to the needs of all PICTs
	Regional quarantine awareness for Festival of Pacific Arts.		500	Travellers educated on quarantine issues, no new pest incursions
	Supported one staff from Department of Agriculture to attend regional meeting on Crop Diversity: a tool for managing climate change, held in Suva, Fiji in March 2012		5,663	Produced recommendations in particular the way forward in addressing climate change variability through more research on crops withstanding waterlogging conditions. Evaluation of of crop diversity as well as evaluation of climate ready collection from SPC

In collaboration with the University of South Pacific Alafua Campus in Samoa, organised training held in May 2012 at USP, Samoa for Cook Islands, Fiji an Tonga under AusAID ICCAI phase 2. Two research staff from Cook Islands Department of Agriculture attended the training on "Taro breeding: building capacity and resilience of countries to taro leaf blight and climate change through utilisation of new diversity". Supported the logistics of the training as well as funding for attendance by two staff		13,001	Training conducted successfully and SPC received good feedback from countries. This is the first time for Cook Islands to be engaged in this training especially Cook Island is very vulnerable to TLB. Taro breeding is always focused on TLB tolerant traits, now the focus included breeding for drought tolerance.
Provision of climate ready crops of banana, swamp taro and sweet potato and taro leaf resistant taro (165 plantlets from 29 accessions provided) for evaluation by the Department of Agriculture		2,500	Cook Islands have received climate ready crops for evaluation under AusAID ICCAI Phase 2 project.
Conservation of traditional varieties (taro, banana and sweet potato) at the Centre for Pacific Crops and Trees		2,500	Continued safety conservation of traditional varieties for future generations
Supported one participant to the Regional Workshop on Forest Genetic Resources in the Paci held in Nadi, Fiji in September 2012	ĥc	4,300	Shared experiences and challenges during the preparation of the FGR country report for the State of the World's Forest Genetic Resources (SOW FGR) and participated in the preparation of a regional synthesis

#### **Federated States of Micronesia**

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	Provided Biosecurity technical advice on the requirements and procedures of exporting produce to Guam	n		Facilitated trade compliance between FSM/Palau and Guam on quarantine issues
	In collaboration with SPC division of Fisheries, Aquaculture and Marine Ecosystems (FAME) supported one participant to the WAHIS training in Nadi, Fiji. Only the Aquatic focal point attended the training	У	6,879	Increased capacity of 1 PACP to be compliant with the OIE Reporting of WAHIS on Aquatic/Marine/Terrestrial
	Completed proposal on ICT for Pacific Youth in agriculture	У		Proposal completed and sent to CTA for funding. Awaiting feedback
	Inventory of Paravet trainees - online	У		Paravet training list updated
	Supported four Quarantine officers representing FSM Island States of Kosrae, Ponphei, Chuuk and Yap, at the 10 <sup>th</sup> Annual Quarantine Training Workshop in Guam. A workshop facilitated and conducted in collaboration with University of Guam and US Department of Agriculture.	У	6,629	
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	7,837	
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	У	-	Ongoing support – work currently in progress on country manuals and linkages

			_
Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	У	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
Provided Biosecurity technical advice on the requirements and procedures of exporting produce to Guam	У	-	Facilitate trade between FSM / Palau and Guam
Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
Supported one participant to the regional training workshop on tree propagation for agroforestry in the Pacific	У	5,321	Enhanced skills and knowledge of tree propagation and agroforestry
Regional quarantine awareness for Festival of Pacific Arts.			Travellers educated on quarantine issues, no new pest incursions
Giant African Snail poster		1,000	Awareness materials developed
Northern Pacific Invasive species calendar		1,000	Developed and distributed
Agrobiodiversity poster		500	Developed and distributed
Evaluation report of the SLM Venezuela funded project submitted to UNCCD secretariat	у		Commitment of the country to the UNCCD convention and enable the country to request for funding to support further SLM activities
Supported attendance of two staff from both the Department of Agriculture and College of Micronesia, one SPC staff based in the regional office that is involved in coordinating activities in the North to attend a regional meeting on Crop Diversity: a tool for managing climate change, held in Suva, Fiji in March 2012		29,327	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity, develop evidence based adaptation strategies, as well as improve resilience of food systems through crop diversity especially the evaluation of climate ready collection by SPC
Conservation of traditional varieties (taro, banana, swamp taro and yam) at the Centre for Pacific Crops and Trees		2,500	Continued safety conservation of traditional varieties for future generations
Supported one participant to the Regional Workshop on Forest Genetic Resources in the Pacific held in Nadi, Fiji in September 2012	у	5,300	Shared experiences and challenges during the preparation of the FGR country report for the State of the World's Forest Genetic Resources (SOW FGR) and participated in the preparation of a regional synthesis

### Fiji

		JCS	Cost	
No.	2012 Activities	(y/n)	FJD	Results
	In collaboration with SPC division of Fisheries, Aquaculture and Marine Ecosystems (FAME) supported two participants to the WAHIS training in Nadi, Fiji.	У	2,728	Increased capacity of 2 PACP to be compliant with the OIE Reporting of WAHIS on Aquatic/ Marine/Terrestrial
	Provided Biosecurity technical advice on the Rotuma – Tuvalu Market Access especially on the experiment data of non host status of pineapple and watermelon on fruit fly (Bacterocea Kirki) etc	У	-	Increased awareness on market access and pathways for trade of Rotuma commodities to Tuvalu
	Assessed REMCOL operations and facilitated dialogue between Governments of Fiji and of Tuvalu in strengthening the implementation of the Bilateral Trade Agreement	у	2,600	Determined bottlenecks in the value chain/trade between GoF and GoT; initiated bilateral discussions to address the issues
	Provided technical advice product costing, Quality assurance and HACCP on VCO for Wailevu Cooperative group.	у	-	Increased awareness on the international standard geared towards compliance.
	Successful International HACCP Auditing of Kaiming Agro Processing, Agrana Fruits Ltd and Natures Way on HACCP documentation and preparation for auditing ongoing.	У	-	HACCP accreditation for Kaiming Agro completed, and International Auditing for Natures Way with Accreditation on going
	Meeting and consulting NUJU Ltd on the processing of Coconut water/drink and appropriate type of machinery, process method and temperatures. Sampling Testing of Coconut water/drink for NUJU Ltd on pH and TDS and liaising with Mr Kete on results of coconut survey carried out. Ongoing consultation with NUJU Ltd on chemical constituents, quality and process aspects.	У	-	Provided alternative process methods and chemical characteristics for identification of appropriate equipment
	Ongoing consultancy on Natures Way for the sampling and testing of papaya, breadfruit, eggplant and mangoes for microbiological level before and after HTFA treatment, samples to be send every 12 months for verifications purposes and for nutritional data for packaging purposes.			Part of validation process for the HTFA for HACCP accreditation
	Provided technical advice to Kaiming Agro Processing on ginger products for nutritional analytical tests for the purpose of nutritional labelling on the packaging.			Part of validation on labelling for HACCP accreditation
	Provided technical assistance to Popular Kava towards HACCP certification and to take lead and set the standard in re-establishing Kava exports from the pacific for pharmaceutical use in Germany.	у		Popular Kava in preparation HACCP mode and ongoing.
	Inventory of Paravet trainees - online	У	-	Paravet training list updated
	Continue to provide inputs into Brucellosis eradication - online	у	-	Inputs adopted
	Technical advise into management of imported cattle from NZ - online	У	-	Inputs adopted
	Develop draft MOU framework and under review	У	-	Consultations ongoing
	Conducted risk assessment exercise with Diploma in Animal Health students (Fiji National University) – under FABN	у	100	Workshop conducted. Students gained experience in farmer and market risk assessment surveys
	Brucellosis eradication mapping exercise - consultations	У	С	Distribution maps completed

Provided GIS consultation and training workshop for Ministry of Primary Industries staff (4 weeks duration)	У		60 participants trained
Conducted two Animal Waste management awareness workshops	У	3,000	47 participants attended and trained
Animal waste composting trial with mustard cabbage at Koronivia research station (KRS)	У	2,000	Trial commenced
Compilation of the full regional AnGR conservation proposal (extension component)	У		Project proposal completed and submitted to FAO
Inventory of Paravet trainees - online	У		Paravet training list updated
Completed proposal on ICT for Pacific Youth in agriculture	У		Proposal completed and sent to CTA for funding. Awaiting feedback
Completed ICT – Social media and web 2.0 learning opportunity training contract for funding	У		Contract finalised, signed by LRD and CTA for implementation in October
In collaboration with Fiji Ministry of Primary Industries and Biosecurity Authority of Fiji conducted a pest and disease survey for the Yasawa Group of Islands in April.	У	-	
Supported four participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	2,520	
Participated in the ACIAR project planning meeting in March	У	10,913	Remaining transport trials to be completed for Namosi and Naitasiri; these have been
- hot water treatment trial planned for July; completed and assessment currently ongoing			completed
-working closely with ACIAR Soil Health Team on selection of sites for planting trials			
-Samoa yet to begin planting trials			
-pathway Information DVD already shot and awaiting script.			
-2 <sup>nd</sup> planning meeting to be held in Aug 28and 29.			
SPC LRD through the participation of the Market Access Specialist to the Melanesian Spearhead Group (MSG) Customs & Quarantine Sub-Committee meeting in March presented a paper on assistance rendered by SPC to the 4 MSG countries namely, Vanuatu, PNG, Solomon Is and Fiji	у	731	
SPC LRD in collaboration with NZMPI and Biosecurity Authority of Fiji facilitated the implementation of a weeklong NZAID Pest Diagnostics Training for Fiji and	У	-	Ongoing capacity building assistance on pest diagnostics.
Tuvalu in June. The four-phase training commenced in June and will continue until September. 15 Participants included officers from Biosecurity, Research, Forestry and SPC.			Funding for the 4 training provided by NZ MPI
Assisted PHAMA consultant in auditing the export systems pathway for Fiji. A brief outcome of the audit was presented to stakeholders and farmers.	у	-	
Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server	У	-	Ongoing – work currently in progress on country manuals and linkages
to SPC was completed in July			

Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	у	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
Provided technical advisory support through the internet based LRD Helpdesk	У	+	Ongoing, timely advice provided to PICTs
Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
Planning for launching of the USAID Climate change project on Vegetation and Land Cover Mapping and Improving Food Security for Building Resilience to a Changing Climate in Pacific Island Communities	n		PRA tools developed and site selection in progress
Development of germplasm supply and production for export crops (dalo, ginger, banana)	У	20,000	Export trials of new varieties of dalo and banana. Increased ginger exports
Supported four participants to the regional training workshop on tree propagation for agroforestry in the Pacific	У	600	Enhanced skills and knowledge of tree propagation and agroforestry
Supported six participants to the regional workshop on forest carbon assessment and monitoring	у	6,700	Enhanced knowledge and understanding of forest carbon assessment and monitoring
Planning for launching of the USAID Climate change project on Vegetation and Land Cover Mapping and Improving Food Security for Building Resilience to a Changing Climate in Pacific Island Communities	n	500	PRA tools developed and site selection in progress
Regional quarantine awareness for Festival of Pacific Arts.		100	Travellers educated on quarantine issues, no new pest incursions
Organised SPC information booth at Fiji AgShow	У	2,000	Raise the profile of SPC to general public and farmers
Organised SPC information booth at Trade Pasefika 2012		500	SPC assistance to marketing agricultural products
Developed Fiji Forest Leaflets		1,000	Distributed
Supported and provided technical assistance in the finalisation and publication of the Land Use Capability classification Guideline	у	700	Improve land use planning for sustainable agriculture development
Supported and facilitated three stakeholder workshops on land use capability classification	У	3,000	Improve awareness on the land classification system
Organised geographic information system training for MPI staff	У		Increase capacity building in the use of spatial information for land resource assessments
Organised meeting and presentation on the new soil resources interpretive manual to Department of agriculture	у		Better understanding of the Fiji soil resources manual
Evaluation report of the SLM Venezuela funded project submitted to UNCCD secretariat	У		Commitment of the country to the UNCCD as a party to the convention and enable the country to request for funding to support further SLM activities
An economic assessment of Fairtrade certification of sugar cane in Vanua Levu	У		Improved understanding of the economic benefits of activities for decision and policy makers
Provided advice on data to be collected for the ICM project in Sigatoka	У		Improved understanding of the collection of reliable research data

Supported appointment of a new Chandcare Steering Committee	airperson for the	У		Strengthen the promotion of land care principles and concepts
Presented the Fiji Landcare concept to Land care Conference in New Zealand		У		SPC's technical assistance towards the promotion of land care concept recognised
Support the review of SLM National a (Nap)	ction programme	у		Fiji SLM Nap aligned to UNCCD 10 year strategy shows commitment of the country as party to the convention
Supported one staff from the Departr to attend a regional meeting on Crop managing climate variability held in S 2012.	Diversity: a tool for		235	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity, develop evidence based adaptation strategies, as well as improve resilience of food systems especially the evaluation of climate ready collection from SPC
In collaboration with the University of Alafua Campus in Samoa, organised to May 2012 at USP, Samoa for Cook Island under AusAid ICCAI phase 2. Two resestijis Department of Agriculture attendon "Taro breeding: building capacity accountries to taro leaf blight and clima utilisation of new diversity". Supported the training as well as funding for attestaff	raining held in nds, Fiji and Tonga earch staff from ded this training and resilience of te change through d the logistics of		7,493	Training conducted successfully and SPC received good feedback from countries. Fiji is vulnerable to TLB and this training is very important to build local capacity to do breeding. Taro breeding is always focused on TLB tolerant traits, now the focus has included breeding for drought tolerance.
Continued providing support on tech well as training of staff at the Koronivi new tissue culture laboratory			3,500	Training provided by SPC continued once every two weeks at Koronivia new lab until staff are well acquainted with tissue culture skills
Ordering of major equipment and co new tissue culture laboratory based a funds received by the AusAID Flood R	t Koronivia, using		5,000	Lab is operational and training provided will help improve efficiency of work
Continued funding of two temporary for one Phd studies for staff of Koroniv ACIAR CSIRO project			8,200	Building capacity of Pacific staff to do research on carbon fertilisation crop modelling.
Under ACIAR PARDI breadfruit project funding for one field technical staff to propagation work but based in Nadi v	assist with field		16,800	Building capacity and experience on field propagation as well as assisted with implementation of the project
Under ACIAR PARDI breadfruit project research on optimisation a microprop breadfruit using a liquid bioreactor sy	agation system for		5,500	Establishment and optimisation of a rapid multiplication system for breadfruit to supply enough planting material to commercial farms under PARDI project as well as to meet requests from PICTs
Provided tissue culture varieties of po field trials at Sigatoka Research Station			2,500	Evaluation of these varieties still progressing to select varieties more suitable as import substitution

1	Under the French Pacific Fund, worked with MPI Koronivia Research Station on "How an indigenous vegetable can contribute to sustainable development".		5,000	Consultation in progress on implementation of the project Expected outputs include better management of national bele collections as well as establishment of a regional bele collection.to be shared byPacific island countries
i	Under the Bioversity/Trust global banana strategy for improvement of Musa collections, collected four maolipopoulu accessions for virus testing and culturing by SPC CePaCT		2,500	Established of these varieties in SPC tissue culture awaiting virus indexing, and virus free varieties will be sent to French Polynesia for the field genebank
9	Conservation of traditional varieties (taro, banana, swamp taro, yam, vanilla, cassava, breadfruit, alocasia, xanthosoma, kava and sweet potato) at the SPC CePaCT.		5,000	Continued safety conservation of traditional varieties for future generations
1	Two workshops provided for building resilience of communities in Vunicuicui Womens Community in February 2012 and June 2012, Labasa, Fiji. One staff of SPC CePaCT carried out community work in Labasa with Vunicuicui womens group in collaboration with Fiji's Ministry of Primary Industries and Pacific Centre for Peacebuilding. Crops provided by CePaCT were climate ready crop (sweet potato) and taro, and Fijian traditional taro varieties.		2,899	Evaluation of 10 climate ready sweet potato accessions from CePaCT and one variety was highly preferred by the womens group
1	Supported one participant to the Regional Workshop on Forest Genetic Resources in the Pacific held in Nadi, Fiji in September 2012	у	2,300	Shared experiences and challenges during the preparation of the FGR country report for the State of the World's Forest Genetic Resources (SOW FGR) and participated in the preparation of a regional synthesis

# French Polynesia

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	IACT in collaboration with Government of French Polynesia co-hosted POETCom'general assembly' meeting in Tahiti.	У	65,000	POETCom Advisory Board elected. Design of Pacific Organic Guarantee System approved. Enhanced cooperation and coordination across regional organic movement.
	In collaboration with SPC division of Fisheries, Aquaculture and Marine Ecosystems (FAME) supported one participant to the WAHIS training in Nadi, Fiji.	у	7,308	Increased capacity of PACP to be compliant with the OIE Reporting of WAHIS on Aquatic/Marine/ Terrestrial
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	9,497	

Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July.	у	-	Ongoing – work currently in progress on country manuals and linkages
Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	У	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
Regional quarantine awareness for Festival of Pacific Arts.		500	Developed and distributed awareness materials
Supported attendance of one staff from the Ministry of Agriculture to attend regional meeting on Crop Diversity: a tool for managing climate change in March 2012, Suva, Fiji		5,620	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity.
In collaboration with Bioversity International and the Global Crop Diversity Trust continued to collect and virus test Pacific banana collection and sent over to Ministry of Agriculture, host of the Pacific regional banana field collection		4,138	Banana accessions from PNG, Cook Islands, New Caledonia, Fiji as well as accessions from the United States were received from SPC for field establishment
Conservation of traditional varieties (taro, and banana) at the SPC Centre for Pacific Crops and Trees		2,000	Continued safety conservation of traditional varieties for future generations

# Guam

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	Provided Biosecurity technical advice on the requirements and procedures of exporting produce to Guam	n	-	Facilitated trade compliance between FSM/Palau and Guam on quarantine issues
	Inventory of Paravet trainees - online	У	-	Paravet training list updated
	Supported participants to the 10 <sup>th</sup> Annual Quarantine Training Workshop in Guam. A workshop facilitated in collaboration with University of Guam and US Department of Agriculture	У	13,257	
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	12,929	
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	у	-	Ongoing – work currently in progress on country manuals and linkages
	Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	У	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders

Provided Biosecurity technical advice on the requirements and procedures of exporting produce to Guam	У	-	Facilitate trade between FSM / Palau and Guam
Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	У	-	Completed, PICTs can put forward story items to be included in the newsletter
Regional quarantine awareness for Festival of Pacific Arts.		500	Developed and distributed awareness materials
Supported attendance of one staff from the University of Guam to attend regional meeting on Crop Diversity: a tool for managing climate change in March 2012, Suva, Fiji		6,707	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity.
Received 14 yam accessions for evaluation including one variety from the climate ready collection		1,500	New yam diversity introduced into Guam for evaluation
Provided technical advice and support on tissue culture aspects of banana and yam with the University of Guam		1,500	Improved efficiency of culturing of crops in tissue culture to support mass propagation of plant material to supply field trials

# Kiribati

		JCS	Cost	
No.	2012 Activities			Results
		(y/n)	FJD	
	In collaboration with SPC division of Fisheries, Aquaculture and Marine Ecosystems (FAME) supported two participants to the WAHIS training in Nadi , Fiji	У	10,762	Increased capacity PACP to be compliant with the OIE Reporting of WAHIS on Aquatic/Marine/ Terrestrial
	Provided technical advice on importation requirements of processed coconut syrup, crystallized sugar from Kiribati to Fiji/NZ/Australia	n	-	Increased awareness of quarantine requirements on processed coconut syrup and crystallised sugar
	Provided technical advise and information on the diagnosis of chicken death investigations - online	У	-	Tentative diagnosis made – Fowl pox suspected
	Completed proposal on ICT for Pacific Youth in agriculture	У		Proposal completed and sent to CTA for funding. Awaiting feedback
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	3,789	
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	у	-	Ongoing – work currently in progress on country manuals and linkages
	Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	У	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders

Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	У	-	Completed, PICTs can put forward story items to be included in the newsletter
Planning for launching of the USAID Climate change project on Vegetation and Land Cover Mapping and Improving Food Security for Building Resilience to a Changing Climate in Pacific Island Communities	n		PRA tools developed and site selection in progress
Supporting development of an agricultural strategy	У		Draft logframe has been developed
Supported one participant to the regional training workshop on tree propagation for agroforestry in the Pacific	у	4,395	Enhanced skills and knowledge of tree propagation and agroforestry
Supported one participant to the regional consultation on the draft regional policy framework for REDD+	У	3,622	Draft regional policy framework is relevant to the need s of all PICTs
Planning for launching of the USAID Climate change project on Vegetation and Land Cover Mapping and Improving Food Security for Building Resilience to a Changing Climate in Pacific Island Communities	n		PRA tools developed and site selection in progress
Supporting development of an agricultural strategy	У		Draft logframe has been developed
Evaluation report of the SLM Venezuela funded project submitted to UNCCD secretariat	у		Commitment of the country to the UNCCD convention and enable the country to request for funding to support further SLM activities
Supported attendance of one staff from MELAD to attend regional meeting on Crop Diversity: a tool for managing climate change in March 2012, Suva, Fiji		4,229	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity, especially the evaluation of climate ready collection from SPC
Conservation of traditional varieties (swamp taro and breadfruit) at the SPC Centre for Pacific Crops and Trees		7,000	Continued safety conservation of traditional varieties for future generations
Supported one participant to the Regional Workshop on Forest Genetic Resources in the Pacific held in Nadi, Fiji in September 2012		4,300	Shared experiences and challenges during the preparation of the FGR country report for the State of the World's Forest Genetic Resources (SOW FGR) and participated in the preparation of a regional synthesis

# **Mariana Islands**

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	Inventory of Paravet trainees - online	У	-	Paravet training list updated
	Supported four quarantine officers to the 10 <sup>th</sup> Annual Quarantine Training Workshop in Guam. A workshop facilitated in joint collaboration with University of Guam and US Department of Agriculture for Micronesian region.	У		
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July.	У	-	Work is currently in progress on country manuals and linkages
	Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	У	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
	Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
	Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	У	-	Completed, PICTs can put forward story items to be included in the newsletter
	Regional quarantine awareness for Festival of Pacific Arts.		500	Developed and distributed awareness materials

# **Marshall Islands**

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	Provided Technical advice on the importation of coffee beans from PNG into Marshall Is through LRD/IACT	n	0	Increased awareness on the requirements of importing PNG Coffee into Marshall Islands
	Provided advice to officials at Tobolar Coconut processing plant at Marshall Is on HACCP practices and organise future training session and HACCP.	у	0	Developed Food safety system and TQM to enable product acceptable through AQIS, in cooperation with PHAMA
	Facilitated linkages with RRE at RMI for the supply/export of frozen foods (roots and vegetables).	У	0	Order received and price negotiated with Food Processor (Fiji) for export of frozen foods
	Completed proposal on ICT for Pacific Youth in agriculture	У	-	Proposal completed and sent to CTA for funding. Awaiting feedback
	Inventory of Paravet trainees - online	У	-	Paravet training list updated
	Supported two quarantine officers to the 10 <sup>th</sup> Annual Quarantine Training Workshop in Guam. A workshop facilitated in joint collaboration with University of Guam and US Department of Agriculture for Micronesian region.	У	6,629	
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	16,124	

Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	у	-	Ongoing – work currently in progress on country manuals and linkages
Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	у		Ongoing support in ensuring timely delivery of information to and amongst stakeholders
Provide technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	У	-	Completed, PICTs can put forward story items to be included in the newsletter
Supported one participant to the regional consultation on the draft regional policy framework for REDD+	у	8,634	Draft regional policy framework is relevant to the need s of all PICTs
Supported one participant to the regional training workshop on tree propagation for agroforestry in the Pacific	У	5,239	Enhanced skills and knowledge of tree propagation and agroforestry
Regional quarantine awareness for Festival of Pacific Arts.		500	Developed and distributed awareness materials
Evaluation report of the SLM Venezuela funded project submitted to UNCCD secretariat	у		Commitment of the country to the UNCCD convention and enable the country to request for funding to support further SLM activities
Supported attendance of two staff from the Ministry of Resources and Development to attend regional meeting on Crop Diversity: a tool for managing climate change in March 2012, Suva, Fiji		16,865	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity, especially the evaluation of climate ready collection from SPC
Provided climate ready collection of banana and sweet potato, 22 accessions with a total of 172 plants		363	Never reached destination. Was left with the Marshall Islands Embassy in Nadi during the worst floodings in March 2012 in Fiji.
With support from the Treaty Secretariat provided consultation on the Ratification of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)		500	Discussions in progress and technical assistance provided on cabinet paper submission

# Nauru

No.	2012 Activities	JCS	Cost	Results
140.	2012 Activities	(y/n)	FJD	Nesuits
	Paravet certificates issued			13 certified Paravets
	Inventory of Paravet trainees - online	У		Paravet training list updated
	Completed proposal on ICT for Pacific Youth in agriculture	У		Proposal completed and sent to CTA for funding. Awaiting feedback
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	12,774	

Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	у	-	Ongoing – work currently in progress on country manuals and linkages
Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	у	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
Provide technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	У	-	Completed, PICTs can put forward story items to be included in the newsletter
Plan for development of an agricultural strategy	У		Plan has been approved to support Nauru in this
Supported one participant to the regional training workshop on tree propagation for agroforestry in the Pacific	у	4,992	Enhanced skills and knowledge of tree propagation and agroforestry
Supported one participant to the regional consultation on the draft regional policy framework for REDD+	У	6,768	Draft regional policy framework is relevant to the need s of all PICTs
Organised national training workshops on tree propagation and nursery practices.	У	8,185	Increased knowledge and understanding of tree propagation
Plan for development of an agricultural strategy	У		Plan has been approved to support Nauru in this
Regional quarantine awareness for Festival of Pacific Arts.		500	Developed and distributed awareness materials
Supported one staff from the Agriculture Division to attend a regional meeting on Crop Diversity: a tool for managing climate variability held in Suva, Fiji in March 2012.		8,774	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity, especially the evaluation of climate ready collection from SPC
Provided climate ready crops of banana, sweet potato and yam (134 tissue culture plantlets (83 bottles)		1,813	Evaluation continued and outcome will be broadened genetic diversity and increased resilience to climate change and food security enhanced
Supported one participant to the Regional Workshop on Forest Genetic Resources in the Pacific held in Nadi, Fiji in September 2012	у	8,300	Shared experiences and challenges during the preparation of the FGR country report for the State of the World's Forest Genetic Resources (SOW FGR) and participated in the preparation of a regional synthesis

# **New Caledonia**

No.	2012 Activities	JCS (v/n)	Cost FJD	Results
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	3,476	

Port Biolo	gration of Regional Biosecurity Information Facility tal from the University of Queensland Centre for logical Information Technology Group (QBIT) server SPC was completed in July	У	-	Ongoing – work currently in progress on country manuals and linkages
list a info Nati	ific Plant Protection Organisation (PPPO) mailing and contacts updated and maintained to facilitate ormation exchange between the secretariat and ional Plant Protection Organisations (NPPO) in the th west pacific region.	У	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
	vided technical advisory support through the ernet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
new	nching of the first ever electronic quarterly vsletter titled "Pacific Biosecurity e-news" to facilitate ormation exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
Reg	gional quarantine awareness for Festival of Pacific Arts.		1,000	Developed and distributed awareness materials
Cale Dive	oported one staff from the Institut Agronomique neo edonient (IAC) to attend a regional meeting on Crop ersity: a tool for managing climate variability held in va, Fiji in March 2012.		3,437	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity.
ban	laborated with IAC under the Bioversity/Trust nana project, provided leaf samples of twenty five ific banana accessions for DNA fingerprinting		1,269	DNA fingerprinting of Pacific collection continued. A core collection will be selected based on DNA and morphological study
an ir	der the French Pacific Fund, worked with IAC on "How ndigenous vegetable can contribute to sustainable relopment".		12,000	Consultation in progress on implementation of the project Expected outputs include better management of national bele collections as well as establishment of a regional bele collection.to be shared by Pacific countries
	nservation of traditional varieties (taro, banana and n) at the SPC Centre for Pacific Crops and Trees		2,500	Continued safety conservation of traditional varieties for future generations

# Niue

No.	2012 Activities	JCS (v/n)	Cost FJD	Results
	Compilation of the full regional AnGR conservation proposal (extension component)	у	130	Project proposal completed and submitted to FAO
	Completed proposal on ICT for Pacific Youth in agriculture	У		Proposal completed and sent to CTA for funding. Awaiting feedback
	Supported participation of Niue National Plant Protection Organisation (NPPO) officer to the 7 <sup>th</sup> Commission on Phytosanitary Measures (CPM) meeting in Rome, Italy.	У	2,213	
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	11,180	

Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	у	-	Ongoing – work currently in progress on country manuals and linkages
Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	у	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	У	-	Completed, PICTs can put forward story items to be included in the newsletter
Supported one participant to the regional training workshop on tree propagation for agroforestry in the Pacific	У	3,403	Enhanced skills and knowledge of tree propagation and agroforestry
Regional quarantine awareness for Festival of Pacific Arts.		500	Developed and distributed awareness materials
Evaluation report of the SLM Venezuela funded project submitted to UNCCD secretariat	У		Commitment of the country to the UNCCD convention and enable the country to request for funding to support further SLM activities
With support from the Treaty Secretariat provided consultation on the Ratification of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)			Discussions in progress
Consultation and preparation on a proposed training on crop diversity as a tool for managing climate change as well as awareness on climate change issues.		9,885	Positive collaboration and approval received for this training. First time for Niue to have received new diversity of climate ready crops of sweet potato and cassava as well as tolerant varieties of taro to taro leaf blight disease
Conservation of traditional varieties (taro) at the SPC Centre for Pacific Crops and Trees		2,500	Continued safety duplication and conservation of traditional varieties for future generations

# Palau

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	Provided Biosecurity technical advice on the requirements and procedures of exporting produce to Guam	n	-	Facilitation of trade between FSM/ Palau and Guam on quarantine issues
	Completed proposal on ICT for Pacific Youth in agriculture	У		Proposal completed and sent to CTA for funding. Awaiting feedback
	Inventory of Paravet trainees - online	У		Paravet training list updated
	Supported two quarantine officers to the 10 <sup>th</sup> Annual Quarantine Training Workshop in Guam. A workshop facilitated in joint collaboration with University of Guam and US Department of Agriculture for Micronesian region.	У	6,629	

Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	у	13,926	
Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	У	-	Ongoing – work currently in progress on country manuals and linkages
Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	у	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
Provided Biosecurity technical advice on the requirements and procedures of exporting produce to Guam through SPC LRD/IACT	n	-	Ongoing, facilitation of trade between FSM/Palau and Guam on quarantine issues
Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
Supported one participant to the regional training workshop on tree propagation for agroforestry in the Pacific	У	5,786	Enhanced skills and knowledge of tree propagation and agroforestry
Supported one participant to the meeting of the drafting committee to finalise the draft regional policy framework on REDD+	у	6,747	Regional policy framework is technically sound and is relevant to the needs of all PICTs
Supported one participant to the regional workshop on forest carbon assessment and monitoring	у	8,062	Enhanced knowledge and understanding of forest carbon assessment and monitoring
Regional quarantine awareness for Festival of Pacific Arts.		500	Developed and distributed awareness materials
Evaluation report of the SLM Venezuela funded project submitted to UNCCD secretariat	у		Commitment of the country to the UNCCD convention and enable the country to request for funding to support further SLM activities
Supported attendance of one staff from Palau Community College to attend a regional meeting on Crop Diversity: a tool for managing climate change in March 2012, Suva, Fiji		9,848	Produced recommendations in particular the way forward in addressing climate change variability using research on crop diversity, especially the evaluation of climate ready collection from SPC
Consultation and preparation for AusAID ICCAI Phase 2 has started building on work carried out in Phase 1. Aim was to look at screening of taro varieties to salinity.		96,067	Paperwork finalised and implementation of activities to be implemented in September 2012
Conservation of traditional varieties (taro) at the SPC Centre for Pacific Crops and Trees		2,500	Continued safety duplication and conservation of traditional varieties for future generations
Supported one participant to the Regional Workshop on Forest Genetic Resources in the Pacific held in Nadi, Fiji in September 2012	у	5,800	Shared experiences and challenges during the preparation of the FGR country report for the State of the World's Forest Genetic Resources (SOW FGR) and participated in the preparation of a regional synthesis

# Papua New Guinea

No.	2012 Activities	JCS	Cost	Results
110.	2012 Activities	(y/n)	FJD	nesures
	In collaboration with SPC division of Fisheries, Aquaculture and Marine Ecosystems (FAME) provided support to two participants to the WAHIS training in Nadi , Fiji	У	13,405	At least for 6 PACP to be compliant with the OIE Reporting of WAHIS on Aquatic/Marine/Terrestrial
	Inventory of Paravet trainees - online	У	-	Paravet training list updated
	Monitoring sea bird case - online	у	-	In progress
	Completed proposal on ICT for Pacific Youth in agriculture	у	-	Proposal completed and sent to CTA for funding. Awaiting feedback
	SPC LRD through the participation of the Market Access Specialist to the Melanesian Spearhead Group (MSG) Customs & Quarantine Sub-Committee meeting in March presented a paper on assistance rendered by SPC to the 4 MSG countries namely, Vanuatu, PNG, Solomon Islands and Fiji	у	731	
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	у	-	Ongoing – work currently in progress on country manuals and linkages
	Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	у	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
	Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
	Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
	Provided Technical advice on the exportation of coffee beans from PNG to Marshall Islands	n	-	Increased awareness on the requirements of exporting PNG Coffee into Marshall Islands
	Development of Certified coffee supplier groups	n	19,500	New certified network of 250 coffee farmers in Eastern Highlands Province
	Centrifuge production of Virgin coconut oil (VCO) in East New Britain.	n	74,000	Higher quality of VCO produced, and first centrifuge VCO produced in Pacific Islands. Expected doubling of VCO exports by Amruqa to 1 M PNG Kina in 2012
	Supported four participants to the regional workshop on the forest carbon assessment and monitoring	У	23,227	Enhanced knowledge and understanding of forest carbon assessment and monitoring
	Supported two participants to the regional consultation on the draft regional policy framework for REDD+	У	13,801	Draft regional policy framework is relevant to the need s of all PICTs
	Supported two participants to the meeting of the drafting committee to finalise the draft regional policy framework for REDD+	У	11,130	Regional policy framework is technically sound and is relevant to the needs of all PICTs

Supported two participants to the regional training workshop on tree propagation for agroforestry in the Pacific.	у	11,144	Enhanced skills and knowledge of tree propagation and agroforestry
Regional quarantine awareness for Festival of Pacific Arts.		1,000	Developed and distributed awareness materials
Supported two staff from the National Agricultural Research Institute (NARI) to the regional meeting on Crop Diversity: a tool for managing climate variability held in Suva, Fiji in March 2012.		15,088	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity, especially the evaluation of climate ready collection from SPC
Under the French Pacific Fund, worked with the National Agricultural Research Institute (NARI) on "How an indigenous vegetable can contribute to sustainable development".		12,000	Consultation in progress on implementation of the project Expected outputs include better management of national bele collections as well as establishment of a regional bele collection.to be shared by Pacific countries
Conservation of traditional varieties (taro, banana, yam and sweet potato, ) at the SPC Centre for Pacific Crops and Trees		2,500	Continued safety conservation of traditional varieties for future generations
Supported one participant to the Regional Workshop on Forest Genetic Resources in the Pacific held in Nadi, Fiji in September 2012		5,800	Shared experiences and challenges during the preparation of the FGR country report for the State of the World's Forest Genetic Resources (SOW FGR) and participated in the preparation of a regional synthesis

# Pitcairn Island

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	Carried out Fruit Fly surveillance activities by SPC LRD Entomologist	у	13,255	
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	У	-	
	Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region	у	Ť	
	Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
	Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
	Regional quarantine awareness for Festival of Pacific Arts.		500	Developed and distributed awareness materials
	Supplied 211 tissue culture plantlets of climate ready crops of banana, cassava, sweet potato, taro as well as taro leaf blight tolerant varieties. Pitcairn has received for the first time this new diversity of material from SPC.		2,538	Crops still nursing in the screenhouse prior to evaluation in the field. Crops are for building resilience to climate change and enhancing food security through crop diversity

# Samoa

No.	2012 Activities	JCS	Cost	Results
140.	2012 Activities	(y/n)	FJD	Results
	In collaboration with SPC division of Fisheries, Aquaculture and Marine Ecosystems (FAME) supported two participants to the WAHIS training in Nadi, Fiji	У	4,854	At least 6 PACP to be compliant with the OIE Reporting of WAHIS on Aquatic/Marine/Terrestrial
	Inventory of Paravet trainees - online	У	-	Paravet training list updated
	Completed proposal on ICT for Pacific Youth in agriculture	У	-	Proposal completed and sent to CTA for funding. Awaiting feedback
	Provided audit to the Samoa Quarantine and Inspection Database (SQUID) on improvements to their Biosecurity Information Facility database	У	1,371	Ongoing support customisation of quarantine templates in progress with the inclusion of pesticide module and improvements to reporting facility into Samoa's Quarantine Database
	Provided a weeklong national training to Quarantine and Research Officers on the Pest List Database	У	1,371	
	Provided training on the international phytosanitary portal (IPP) to enhance compliance to national pest reporting obligations as outlined in the International Plant Protection Convention and thus enhanced information exchange between NPPO Samoa and the IPPC	у	1,371	
	Supported participation of Samoa National Plant Protection Organisation (NPPO) officer to the 7 <sup>th</sup> Commission on Phytosanitary Measures (CPM) meeting in Rome, Italy.	У	2,213	
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	3,640	
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	у	-	Ongoing – work currently in progress on country manuals and linkages
	Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	у	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
	Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
	Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
	Supported one participant to the regional consultation on the draft regional policy framework for REDD+	У	2,660	Draft regional policy framework is relevant to the need s of all PICTs
	Supported one participant to the meeting of the drafting committee to finalise the draft regional policy framework on REDD+	У	2,208	Regional policy framework is technically sound and is relevant to the needs of all PICTs

n	supported two participants to the inception neeting of the regional project on senile coconut palm peeling	У	4,355	Enhanced knowledge of the project to ensure effective implementation.
W	supported two participants to the regional training workshop on tree propagation for agroforestry in he Pacific.	У	4,742	Enhanced skills and knowledge of tree propagation and agroforestry
	Regional quarantine awareness for Festival of Pacific Arts.		1,000	Developed and distributed awareness materials
F	acilitated production of 28 extension leaflets		5,000	Printed and distributed
	ivaluation report of the SLM Venezuela funded project submitted to UNCCD secretariat	У		Commitment of the country to the UNCCD convention and enable the country to request for funding to support further SLM activities
a C a m	supported one staff from the Ministry of Agriculture and Fisheries (MAFF) and a staff from USP, Alafua Campus, and a consultant (Laisene), to attend regional meeting on Crop Diversity: a tool for nanaging climate variability held in Suva, Fiji in March 2012.		12,933	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity, especially the evaluation of climate ready collection from SPC
U c a	Under AusAID ICCAI Phase 2, collaborated with USP on research for further evaluation of crops to climate variability based on work in Phase 1 as well as screening 5 varieties for drought tolerance. This			Implementation of Phase 2 is for 18 months and activities beginning in September 2012
	lso includes breeding for drought resistance.		40.000	(approx. F\$154,000)
O SI	Under ACIAR PARDI taro project carried out research on optimising a micropropagation system to upport the export market for Samoa using a liquid pioreactor system		40,000	Research is progressing well aimed to develop a rapid multiplication system to supply selected exported varieties to commercial farms in Samoa
W	Under ACIAR PARDI taro carried out consultation with MAFF and USP on responsibilities of partners in objectives and expected output of the projects		5,749	Inception meeting held and activities in progress
a to Cu u	n collaboration with the Global Crop Diversity Trust and CIRAD coconut specialist, provided guidance of MAF on the implementation of the 'polymotu' concept for conserving 'Niu afa' coconut variety, a unique variety globally that produces longest fruits in the world.		45,000	Consultation and discussions with partners on this polymotu concept continued and implementation to take place in October/November 2012
Ir A ir To st th a C S	n collaboration with the University of South Pacific, Alafua Campus in Samoa, organised training held May 2012 at USP, Samoa for Cook Islands, Fiji and Jonga under AusAID ICCAI phase 2. Two research taff from Fijis Department of Agriculture attended his training on "Taro breeding: building capacity and resilience of countries to taro leaf blight and dimate change through utilisation of new diversity". Supported the logistics of the training as well as unding for attendance by two staff		2,902	Training conducted successfully and SPC received good feedback from countries. Fiji is vulnerable to TLB and this training is very important to build local capacity to do breeding. Taro breeding is always focused on TLB tolerant traits, now the focus has included breeding for drought tolerance.
	supply of 18 accessions (9 varieties) of climate ready weet potato to USP Alafua campus for evaluation		816	Evaluation continued and to be further evaluated in other drought stricken areas
re lo	supply of 17 accessions (15 varieties) of climate eady bananas together with repatriation of 2 ocal bananas to MAFFM. A total of 79 plants were provided.		1,396	Evaluation of this crop diversity in the field for increased resilience and food security.

Conservation of traditional varieties (taro, banana, swamp taro, yam, vanilla, breadfruit, alocasia, xanthosoma and sweet potato) at the SPC Centre for Pacific Crops and Trees	2,500 Continued safety duplication a conservation of traditional vari future generations	
Safety duplication of SPC Pacific crop collections at the University of the South Pacific, Alafua Campus in Samoa	15,000 Ensure safety duplication of SF CePaCT backup collection of important food crops of the P	
Supported one participant to the Regional Workshop on Forest Genetic Resources in the Pacific held in Nadi, Fiji in September 2012	Shared experiences and challe during the preparation of the local country report for the State of World's Forest Genetic Resource (SOW FGR) and participated in preparation of a regional synth	FGR the ces the

# **Solomon Islands**

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	Documented Biosecurity facilitation during the Festival of Pacific Arts, and provided technical advice on Biosecurity facilitation	У	0	Facilitated movement of people and cargo between Pacific Island of Country States that attended the 11 <sup>th</sup> Pacific of Festival Arts 2012
	In collaboration with SPC division of Fisheries, Aquaculture and Marine Ecosystems (FAME) provided support to one participant to the WAHIS training in Nadi , Fiji	У	3,509	At least for 6 PACP to be compliant with the OIE Reporting of WAHIS on Aquatic/Marine/ Terrestrial
	Identification of Termite species in the Iron Bottom Sound Hotel and liaison with the Quarantine and Forestry department for its authentication and reporting to the IPPC	n	-	Increased capacity to comply with international requirements on pest/disease reporting
	Conducted training for 36 Kokonut Pasifika Solomon Island VCO producers on quality assurance and food safety program (HACCP).	у	-	Increased awareness of the International standard requirements.
	Capacity building provided to Guadalcanal cocoa farmers a St Martin Tenaru on fairtrade certification and the formation of a democratic farming body.	n	-	Cocoa growers organized and working towards complying with Fairtrade standards for certification.
	In-country consultation with Ministry of Agriculture and Livestock officials, SICHE and RDP	У	8,000	Assistance framework established
	Inventory of Paravet trainees - online	У	-	Paravet training list updated
	In-country Brucellosis sampling framework and prioritisation of diseases and diseases field surveillance training	у	6,000	MAL officers trained in sampling and disease surveillance. Disease prioritisation completed.
	Completed proposal on ICT for Pacific Youth in agriculture	у	-	Proposal completed and sent to CTA for funding. Awaiting feedback
	Facilitated quarantine awareness during Festival of Pacific Arts: pest surveillance by installation of fruit fly traps; flight and passenger clearance; and providing technical advisory to quarantine officers. 1,000 posters and brochures both in English and French distributed to national contact points for each PICTs delegation to the Festival prior to the event and displayed at the arrival terminal. In addition, two pull up banners.	У	10,670	

Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	6,338	
SPC LRD through the participation of the Market Access Specialist to the Melanesian Spearhead Group (MSG) Customs & Quarantine Sub-Committee meeting in March presented a paper on assistance rendered by SPC to the 4 MSG countries namely, Vanuatu, PNG, Solomon Islands and Fiji	у	731	
Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	у	-	Ongoing – work currently in progress on country manuals and linkages
Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	У	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
Planning for launching of the USAID Climate change project on Vegetation and Land Cover Mapping and Improving Food Security for Building Resilience to a Changing Climate in Pacific Island Communities	n		PRA tools developed and site selection in progress
Fair Trade cocoa producer associations established	n	12,000	Two fair trade cocoa associations under development in Makira and Guadalcanal
Supported three participants to the regional consultation on the draft regional policy framework for REDD+	у	9,971	Draft regional policy framework is relevant to the need s of all PICTs
Supported two participants to the regional workshop on forest carbon assessment and monitoring	у	9,700	Enhanced knowledge and understanding of forest carbon assessment and monitoring
Supported two participants to the inception meeting of the regional project on senile coconut palm peeling.	У	6,547	Enhanced knowledge of the project to ensure effective implementation.
Supported three participants to the regional training workshop on tree propagation for agroforestry in the Pacific.	у	6,033	Enhanced skills and knowledge of tree propagation and agroforestry
Evaluation report of the SLM Venezuela funded project submitted to UNCCD secretariat	у		Commitment of the country to the UNCCD convention and enable the country to request for funding to support further SLM activities
Provided support in the development of a land use policy	у		Shares lessons learnt and improved understanding on land use policies and guidelines
Supported three staff, one from the Ministry of Agriculture and Livestock (MAL) and two staff from Kastom Garden Association (KGA) to attend a regional meeting on Crop Diversity: a tool for managing climate variability held in Suva, Fiji in March 2012.		13,602	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity.

Consultation and follow up on the agreement for Solomon Is participation on the banana regional project funded under the Bioversity/Trust Pacific banana project		2,500	No agreement signed by MAL Only countries who have signed up the agreement will have access to new banana diversity from other PICTs.
Conservation of traditional varieties (taro, sweet potato and banana) at the SPC Centre for Pacific Crops and Trees		2,500	Continued safety conservation of traditional varieties for future generations
Under the French Pacific Fund, worked with Kastom Garden Association (KGA) on "How an indigenous vegetable can contribute to sustainable development".		8,000	Consultation in progress on implementation of the project Expected outputs include better management of national bele collections as well as establishment of a regional bele collection.to be shared byPacific countries
Supported one participant to the Regional Workshop on Forest Genetic Resources in the Pacific held in Nadi, Fiji in September 2012	у	3,300	Shared experiences and challenges during the preparation of the FGR country report for the State of the World's Forest Genetic Resources (SOW FGR) and participated in the preparation of a regional synthesis

# Tokelau

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	у	-	Ongoing – work currently in progress on country manuals and linkages
	Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	У	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
	Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
	Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
	Regional quarantine awareness for Festival of Pacific Arts.		500	Developed and distributed awareness materials
	Conservation of traditional varieties (swamp taro) at the SPC Centre for Pacific Crops and Trees		2,500	Continued safety duplication and conservation of traditional varieties for future generations

# Tonga

		JCS	Cost	
No.	2012 Activities	(y/n)	FJD	Results
	In collaboration with SPC division of Fisheries, Aquaculture and Marine Ecosystems (FAME) supported two participants to the WAHIS training in Nadi , Fiji	у	4,634	At least for 6 PACP to be compliant with the OIE Reporting of WAHIS on Aquatic/Marine/ Terrestrial
	In-country consultation on national climate change adaptation strategy (NCCAS) for Tonga	У	3,000	Adoption of draft strategy
	Completed proposal on ICT for Pacific Youth in agriculture	У	-	Proposal completed and sent to CTA for funding. Awaiting feedback
	Inventory of Paravet trainees - online	У	-	Paravet training list updated
	Supported the participation of Tonga National Plant Protection Organisation (NPPO) officer to the 7 <sup>th</sup> Commission on Phytosanitary Measures (CPM) meeting in Rome, Italy.	у	2,213	
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	4,066	
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	У	-	Ongoing – work currently in progress on country manuals and linkages
	Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	у	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
	Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
	Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	У	-	Completed, PICTs can put forward story items to be included in the newsletter
	Developing an ACIAR project for scoping the potential for commercialization of the tropical fruit tree sector	У	-	Plan has been approved by ACIAR and consultants for the scoping studies are being recruited
	Supported national training in agroforestry	У	4,202	Enhanced skills and knowledge on agroforestry
	Supported one participant to the meeting of the drafting committee to finalise the draft regional policy framework for REDD+	У	2,686	Regional policy framework is technically sound and is relevant to the needs of all PICTs
	Supported national consultation s on the status report for FGR	У	4,202	Draft report on FGR completed.
	Supported national training on implementation of Code of Forestry	у	29,355	Enhanced national capacity to effectively implement the Code of Forestry
	Supported three participants to the regional workshop on forest carbon assessment and monitoring.	у	7,521	Enhanced knowledge and understanding of forest carbon assessment and monitoring
	Supported one participant to the regional consultation on the draft regional policy framework for REDD+	У	4,814	Draft regional policy framework is relevant to the need s of all PICTs
	Supported one participant to the regional training workshop on tree propagation for agroforestry in the Pacific	у	2,345	Enhanced skills and knowledge of tree propagation and agroforestry

Fruit tree extension materials (ACIAR fruit tree project)		5,000	Developed and distributed
Evaluation report of the SLM Venezuela funded project submitted to UNCCD secretariat	У	-	Commitment of the country to the UNCCD convention and enable the country to request for funding to support further SLM activities
Supported attendance of one staff from Ministry of Agriculture& Food, Forest and Fisheries (MAFFF) to attend regional meeting on Crop Diversity: a tool for managing climate change in March 2012, Suva, Fiji		2,915	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity as well as the evaluation of climate ready collection from SPC
In collaboration with the University of South Pacific, Alafua Campus in Samoa, organised training held in May 2012 at USP, Samoa for Cook Islands, Fiji and Tonga under AusAid ICCAI phase 2. Training on "Taro breeding: building capacity and resilience of countries to taro leaf blight and climate change through utilisation of new diversity". Supported the logistics of the training as well as funding for attendance by two staff		8,840	Training conducted successfully and SPC received good feedback from countries. Fiji is vulnerable to TLB and this training is very important to build local capacity to do breeding. Taro breeding is always focused on TLB tolerant traits, now the focus has included breeding for drought tolerance.
Conservation of traditional varieties (taro, alocasia, xanthosoma, banana, yam and sweet potato) at the SPC Centre for Pacific Crops and Trees		5,000	Continued safety duplication and conservation of traditional varieties for future generations
Final meeting and wrap up activities for the Tonga Fruit Tree Project funded by ACIAR.		4,214	Project activities implemented and report submitted.
Collection of traditional banana varieties in Tonga (including 3 outer islands Vava'u, Ha'apai and Eua Islands 16 – 29 July 2012) as well as other climate ready crops funded by Global Crop Diversity Trust and Bioversity International.		7,101	Transferred of 13 unique banana accessions and 6 yam accessions during the collection mission
Supported one participant to the Regional Workshop on Forest Genetic Resources in the Pacific held in Nadi, Fiji in September 2012	у	2,300	Shared experiences and challenges during the preparation of the FGR country report for the State of the World's Forest Genetic Resources (SOW FGR) and participated in the preparation of a regional synthesis

# Tuvalu

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	Supported one participant to the regional consultation on the draft regional policy framework for REDD+	У	4,814	Draft regional policy framework is relevant to the need s of all PICTs
	Supported one participant to the regional training workshop on tree propagation for agroforestry in the Pacific	У	2,345	Enhanced skills and knowledge of tree propagation and agroforestry
	Regional quarantine awareness for Festival of Pacific Arts.		500	Developed and distributed awareness materials
	Supported one staff from the Department of Agriculture to attend a regional meeting on Crop Diversity: a tool for managing climate variability held in Suva, Fiji in March 2012.		3,888	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity.

Consultation carried out under AusAID ICCAI Phase 2 for establishment of nurseries to support conservation and distribution of staple food crops and climate ready diversity		ctivities approved for tion in September
Under FAO Food security project for the atolls, SPC continued to supply 32 banana accessions containing 1,067 plants	introduced a some access climate read	f new bananas and also including ions from the y collection with and tolerance to atoll
Supplied a total of 429 plants from 46 accessions of climate ready crops of sweet potato, swamp taro, cassava and yam for food security	climate read	f new diversity of y crops for increased various climatic
Conservation of traditional varieties (swamp taro) at the SPC Centre for Pacific Crops and Trees	and conserva	afety duplication ation of traditional uture generations.

# Vanuatu

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	In collaboration with SPC division of Fisheries, Aquaculture and Marine Ecosystems (FAME) supported two participants to the WAHIS training in Nadi , Fiji	У	5,535	At least for 6 PACP to be compliant with the OIE Reporting of WAHIS on Aquatic/Marine/ Terrestrial
	POETCom Coordinator participated and facilitated meeting of Vanuatu Organic movement stakeholders (Vanuatu POETcom Committee).	У	4,900	Improved coordination of Vanuatu POETCom Committee and alignment with regional objectives.
	Provided design expertise in creating packaging, brochure as well as technical assistance in attaining nutritional labelling information for Lapita	У	-	Improved labelling and packaging that will facilitate Lapita's marketing activities overseas to be retail/private sector
	Inventory of Paravet trainees - online	У	-	Paravet training list updated
	Completed proposal on ICT for Pacific Youth in agriculture	У	-	Proposal completed and sent to CTA for funding. Awaiting feedback
	Supported two participants to the 7 <sup>th</sup> Technical Board Meeting of the Plant Protection Organisation and 15 <sup>th</sup> Regional Meeting on Plant Protection in Fiji in June	У	4,800	
	SPC LRD through the participation of the Market Access Specialist to the Melanesian Spearhead Group (MSG) Customs & Quarantine Sub-Committee meeting in March presented a paper on assistance rendered by SPC to the 4 MSG countries namely, Vanuatu, PNG, Solomon Islands and Fiji	У	731	
	In collaboration with Vanuatu National Plant Protection Organisation and NZ MPI under the Enhancement of Biosecurity and Quarantine Services in the Pacific facilitated discussions on the implementation of the Pest Diagnostic training for 15 Quarantine, Extension, Forestry and Research Officers from Vanuatu using the USP Laboratory facility in July.	У	-	

Ir B	Provided ongoing support on the Biosecurity of their Biosecurity of their Biosecurity Operations manual and French Translation currently undertaken by SPC.	У	-	
Po B	Aligration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server o SPC was completed in July	У	-	Ongoing – work currently in progress on country manuals and linkages
lis ir N	Pacific Plant Protection Organisation (PPPO) mailing st and contacts updated and maintained to facilitate information exchange between the secretariat and slational Plant Protection Organisations (NPPO) in the outh west pacific region.	У	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
	Provided technical advisory support through the nternet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
n	aunching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
	supported two participants to the regional workshop on forest carbon assessment and monitoring	у	5,866	Enhanced knowledge and understanding of forest carbon assessment and monitoring
	supported two participants to the regional consultation on the draft regional policy framework for REDD+	У	6,172	Draft regional policy framework is relevant to the need s of all PICTs
W	supported three participants to the regional training vorkshop on tree propagation for agroforestry in the Pacific	у	8,805	Enhanced skills and knowledge of tree propagation and agroforestry
R	Regional quarantine awareness for Festival of Pacific Arts.	У	500	Developed and distributed awareness materials
Ir	nvasive weeds poster	У	1,000	Developed and distributed
E	valuation report of the SLM Venezuela funded project ubmitted to UNCCD secretariat	у	-	Commitment of the country to the UNCCD convention and enable the country to request for funding to support further SLM activities
	Presented the Land Use Policy concepts to the Land Use Policy Committee	у	-	Shares lessons learnt and improved understanding on land use policies and guidelines
R re	supported one staff from the Vanuatu Agricultural Research & Technical Centre (VARTC) to attend a egional meeting on Crop Diversity: a tool for managing limate variability held in Suva, Fiji in March 2012.		3,837	Produced recommendations in particular the way forward in addressing climate change variability using crop diversity, especially the evaluation of climate ready collection from SPC
tc b aı 2	supported travel of SPC staff on a collection mission o prepare and transfer crop collections of banana, breadfruit and sweet potato for culturing, virus indexing and conservation at SPC. Activity carried out in June 2012 and funded by the Global Crop Diversity Trust and Bioversity International.		5,967	Vanuatu unique crop collections transferred to SPC CePaCT and planted in the screenhouse for generating tissue cultures
С	Conservation of traditional varieties (taro, yam, sweet potato, breadfruit and banana) at the SPC Centre for Pacific Crops and Trees.		2,500	Continued safety duplication and conservation of traditional varieties for future generations

Under the French Pacific Fund, worked with Vanuatu Agricultural Research and Training Centre (VARTC) on "How an indigenous vegetable can contribute to sustainable development".		8,000	Consultation in progress on implementation of the project Expected outputs include better management of national bele collections as well as establishment of a regional bele collection.to be shared byPacific countries.
Supported one participant to the Regional Workshop on Forest Genetic Resources in the Pacific held in Nadi, Fiji in September 2012	у	3,300	Shared experiences and challenges during the preparation of the FGR country report for the State of the World's Forest Genetic Resources (SOW FGR) and participated in the preparation of a regional synthesis

# Wallis and Futuna

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	Provided technical advice on biosecurity issues such as passenger clearance, awareness materials, treatment options, monitoring and surveillance of pest and disease for the upcoming Mini Pacific Games in September 2013	n	-	An official request from Wallis & Futuna to increase awareness on biosecurity
	Migration of Regional Biosecurity Information Facility Portal from the University of Queensland Centre for Biological Information Technology Group (QBIT) server to SPC was completed in July	У	-	Ongoing – work currently in progress on country manuals and linkages
	Pacific Plant Protection Organisation (PPPO) mailing list and contacts updated and maintained to facilitate information exchange between the secretariat and National Plant Protection Organisations (NPPO) in the south west pacific region.	у	-	Ongoing support in ensuring timely delivery of information to and amongst stakeholders
	Provided technical advisory support through the internet based LRD Helpdesk	У	-	Ongoing, timely advice provided to PICTs
	Launching of the first ever electronic quarterly newsletter titled "Pacific Biosecurity e-news" to facilitate information exchange within SPC and the region	у	-	Completed, PICTs can put forward story items to be included in the newsletter
	Supported the Wallis and Futuna agriculture/forestry mission team to Fiji		1,120	Enhanced collaboration between W&F and SPC
	Regional quarantine awareness for Festival of Pacific Arts.		500	Developed and distributed awareness materials
	Provided technical advise on forest management with emphasis on forest genetics and forest inventory in Wallis and Futuna		10,200	Enhanced collaboration between W&F and SPC in the field of forest management

# **Timor Leste**

No.	2012 Activities	JCS (y/n)	Cost FJD	Results
	Through SPC IACT project provided technical advice on	n	-	Increase awareness of Timor Leste
	Biosecurity importance and requirements as there are			on biosecurity importance and
	currently no Quarantine service in Timor Leste			requirements

# LRD - PUBLICATIONS BY THEMATIC TEAMS, 2012//

#### **Forests and Trees** team

#### Poster:

"Why Should We Use Treated Timber". Produced by SPC Land Resources Division in collaboration with the Fiji Department of Forestry.

#### Proceedings

"Sandalwood Resource Development, Research and Trade in the Pacific and Asian Region": Proceedings of the Regional Workshop held in Port Vila, Vanuatu on 22-25 November 2010. Edited by Lex Thomson, Cenon Padolina, Rajan Sami, Vinesh Prasad and John Doran. Secretariat of the Pacific Community, Suva. Fiji. 140 pages.

#### Forest and **Agriculture** Diversification team

#### Posters:

- IACT flyers and pull up banners for the enterprises
- Awareness for Pasifika Trade Show 2012
- Designed awareness materials to showcase enterprises to increase visibility

#### Manuals

- Sandalwood
- Fair trade certification of sugarcane in Vanua Levu, Fiji

#### Packaging:

• TH plantation packaging

#### **Plant Health team** Serials:

- Pest Advisory on Slippery Cabbage Flea Beetle
- Pest Alert on Papaya Mealybug in Federated States of Micronesia (FSM) and Marshall Islands

#### Leaflets:

100 plant pest fact sheets (http://adderii.cbit.uq.edu.au/project\_files/)

#### **Crop Production** team

#### Information, Communication and Extension team

#### Book:

Indigenous Agricultural Knowledge (plant genetic resources)

#### Serials:

- LRD newsletter
- LRD 2012 Calendar
- Invasive Species Northern Pacific Calendar 2012
- LRD 2011 Annual Report
- PHAMA Newsletters (Tonga, Samoa, Fiji, Solomon Islands)

#### Leaflets:

- FSM Agrobiodiversity brochure
- Animal Health leaflets

#### Posters:

- Fruit Trees of Tonga
- **Ouarantine Awareness**

#### Information, Communication and Extension team (cont.)

#### LRD websites:

- Oversight on LRD websites to maintain consistency, accuracy and corporate brand-
- Incorporate PARDI website into LRD

#### LRD Helpdesk

Over 200 gueries logged and responded

#### Media Releases

- Cost benefit analysis, a tool to plan and evaluate agricultural projects
- Sustainable forest management for REDD+
- SPC biosecurity assistance to FOPA
- SPC hosts regional consultation on plant protection and quarantine
- SPC strengthens collaboration with FAO and ACIAR on ICM

#### Land Management and **Resources Policy** team

#### Poster:

- Poster on Sustainable Land Management Manual:
- Fiji Land Use Capability Classification Guideline
- Utilising and Managing the Soil Resources of Fiji: a reference manual Newspaper and LRD website articles:
- 2 land use planning articles (English and Fijian translation)
- Land Use capability workshop in Fiji

#### Genetic Resources Poster: team

- Diversity and nutrition posters on (a) banana (b) swamp taro and (c) breadfruit in collaboration with the Island Food Community of Pohnpei
- Climate ready collection
- Fruit Tree Project (Tonga)

#### Documentaries (DVD):

• Centre for Pacific Crops and Trees (CePaCT)

#### Articles:

- Cryopreservation: The future in conservation
- Crops for the future; surviving climate change
- Caribbean Pacific collaboration on crop diversity
- Pacific breadfruit could be an export earner
- Vulnerability of Pacific crops addressed by the Centre of Pacific Crops and Trees (CePaCT)
- Keeping Pacific Food Crops Secure
- Ensuring safe movement of plant material
- Frozen tissues another key to Pacific crops conservation
- Establishing a core collection of unique Pacific banana
- Building resilience of communities using crop diversity
- SPC Swamp taro research for Pacific atoll countries
- SPC deserves world wide recognition
- SPC assists post drought Tuvalu with food security

# Animal Health and Production team

#### Manual:

- Livestock Disease Survey Planning Manual for Pacific Island Countries and Territories
- Documentary / DVD:
  - Paravet Training in the Pacific Islands
  - Livestock Disease Survey (DVD)

LRD newsletter articles and Animal Health & Production website articles:

- Participatory training workshop on animal waste management held in Fiji villages
- Animal disease reporting crucial to trade in the SPC region
- Promoting youth in agriculture through animal health activities
- Brucellosis eradication and rehabilitation of cattle in Fji
- Using information and communication technology (ICT) to strengthen youth opportunities in agriculture
- Paravet training in the Pacific Island region

#### Proceedings:

- Animal waste management awareness workshop report
- Importance of WAHIS Animal Disease Reporting in the SPC Region in support of Trade

# Biosecurity and Trade

#### **Publications:**

Pest advisory leaflets, Pest Alerts

#### Posters:

- Giant African Snail (FSM),
- Regional quarantine awareness campaign Pacific Games in New Caledonia; Festival
  of Pacific Arts in Solomon Islands.
- Quarantine posters (Samoa)
- Quarantine posters (PNG)
- Quarantine posters (Kiribati)

#### Documentaries (DVD):

 IACT Biosecurity in collaboration with LRD BATS and the Regional Media Centre (RMC) made documentary of the Importance of Biosecurity Facilitation during the 11<sup>th</sup> Pacific Festival of Arts in Solomon Islands on passenger, cargo clearances, inspection and monitoring and surveillance of fruit flies and its importance to trade.

# LRD MAIN SECTORAL MEETINGS & WORKSHOPS. 2012

Regional Training Workshop on Tree Propagation for Agroforestry in the Pacific, 5-8, March 2012, Forestry Training Centre, Colo-i-Suva, Fiji.

LRD, in collaboration with JICA, the ACP FORENET and the Forestry Department of Fiji, organized the "Regional Training Workshop on Tree Propagation for Agroforestry in the Pacific" held at the Fiji Forestry Training Center at Colo-I-Suva, Fiji from the 5<sup>th</sup> to the 8<sup>th</sup> of March 2012. The objectives of the workshop were to share and exchange information between members of the island nations to establish synergies in terms of techniques and species assemblages for agroforestry. It was attended by 30 participants from 14 SPC member island countries in the Pacific (Cook Islands, Fiji, Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Nuie, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu) and representatives from NGOs in Fiji.

A synthesis of agroforestry country reports was done on the first day of the workshop to highlight practices and potential synergies. There were technical presentations on organic farming, climate change ready (resilient) crops and trees, livestock production and supply and exchange of tree germplasm by SPC staff during the second day. The third day of the workshop was composed of nursery training at Fiji Forestry Nursery and a field visit to agroforestry plots managed by Pacific Reforestation (Fiji) Ltd at Naitasiri. Technical works with seed conservation, substrate preparation, cuttings and marcotting were conducted by participants at the Fiji Forestry nursery with qualified trainers enabled members hand on experience with nursery practices essential for a successful agroforestry program. Participants with experience in nurseries or agroforestry test sites were thus able to exchange techniques with those unfamiliar with these operations. Members participated on the fourth day of the workshop on an agroforestry project development exercise.

Crop Diversity: A tool for manageing climate variability in the Pacific, 26-30 March 2012, Pasefika Meeting Room, SPC, Suva, Fiji.

The regional meeting was coordinated by SPC LRD with funding assistance provided by AusAID ICCAI. Forty-one participants represented 18 PICTs with representatives from India and Caribbean. The meeting was mainly to share results from various activities implemented under the ICCAI Phase 1 – enhancing understanding and use of crop diversity as a means of enhancing climate resilience of food crop production systems. This has led to establishment of the Climate Ready Collection (CR) of traditional crops, including varieties that exhibit greater tolerance to drought, water logged soils, salinity and plant diseases; development of screening methods for drought and salt tolerant crops; assessing impacts of increased carbon dioxide concentrations on Pacific staple crops; assessing the status of agro-biodiversity in the Pacific agricultural production and strengthening the ability of CePaCT to establish and maintain the CRC.

Meeting objectives discussed were:

- 1. To learn about climate change projects being implemented in other regions.
- 2. To enhance the implementation of ICCAI Phase 2 through identifying knowledge gaps, constraints etc
- 3. To identify and make recommendations about areas where knowledge and information is required, specifically in the area of crop diversity and climate change

The meeting also provided an opportunity to share information from other regions and other projects, as such the participants heard from the Caribbean Agriculture Research and Development Institute (CARDI) on adaptation approaches in the Caribbean and Bioversity International who presented on the activities being implemented under the Consultative Group on International Agricultural Research (CGIAR) programme of Climate Change, Agriculture and Food Security (CCAFS). Other presentations included a report on the Pacific Climate Change Science Programme (PCCSP), and reports from the two studies funded by the DCCEE

under the PASAP. Both studies have produced some very interesting results; one assessing the economic value of germplasm and crop improvement as a climate change adaptation strategy, while the other considered the key drivers for determining the uptake of crop diversity within the context of adaptive capacity analysis.

The meeting also provided an excellent opportunity to discuss ICCAI Phase 2 projects and to ensure that the lessons learnt during Phase 1 were taken on board and utilized to ensure an effective implementation of Phase 2 projects. Detailed reports for all the ICCAI Phase 1 funded activities can be accessed on <a href="http://www.spc.int/lrd/index.php?option=com\_docman&Itemid=114">http://www.spc.int/lrd/index.php?option=com\_docman&Itemid=114</a>



# Improving animal disease surveillance field capacity for Fiji, 5 April, SPC, Suva

The Animal Health and Production Team from the Land Resources Division (LRD) of SPC hosted field officers from Fiji's Animal Health and Production Division to a one-day classroom exercise to create a random sampling frame for determining the prevalence of Brucellosis among the existing beef farms in the Naitasiri Province of Fiji.

The exercise was carried out in association with the Food Animal Biosecurity Network (FABN) project, which is currently being implemented by the LRD Animal Health and Production Team and the School of Biomedical and Veterinary Sciences at James Cook University in Australia.

The objectives of the FABN project include improving field and laboratory capability for animal disease surveillance in Fiji, Papua New Guinea (PNG), Vanuatu and Solomon Islands. Such an improvement will allow assessment under World Organisation for Animal Health (OIE) guidelines for trade in animals and animal products.

The FABN project builds on the recent Pacific Regional Influenza Pandemic Preparedness Project (PRIPPP). Existing networks in PICTs are utilised and current capacities built on to make further improvements for animal disease surveillance. The FABN project aims to develop Fiji and PNG as sub-regional animal health laboratories with links to reference laboratories in Australia for confirmation of diagnoses of animal samples and specimens. The project is expected to finish at the end of 2013.



# Regional Consultation for the Pacific Regional Policy Framework for REDD+, 24-26 April 2012, Lami, Fiji,

The Pacific Regional Consultation Workshop for the Pacific Regional Policy Framework for REDD+ (24-26 April, in Lami, Fiji) encompassed the execution of the Pacific Regional REDD+ Policy Framework Roadmap adopted by the Regional Forestry Technical Meeting (September 2011 in Nadi, Fiji), and mandated by the Pacific Heads of Forestry Meeting (September 2009 in Nadi, Fiji). 'REDD+' refers to Reducing Emissions from Deforestation and forest Degradation (REDD), the conservation of forest carbon stocks, sustainable management of forest, and the enhancement of forest carbon stocks (+).

The thirty one participants from all PICS deliberated on the themes contained in the first draft of the Pacific Regional Policy Framework for REDD+ prepared as a result of a regional consultation tour by SPC/GIZ between February and April 2012.



# Regional Organics Meeting, Papeete, 3 – 8 May 2012, French Polynesia.

The meeting progressed the work of the Pacific organic and ethical trade movement and coordinated by the Pacific Organic and Ethical Trade Community (POETCom) under SPC's Increasing Agricultural Commodity and Trade (IACT) project. The meeting was jointly funded by the Government of French Polynesia (French Pacific Fund) and the European Union funded IACT project.

POETCom members from 10 Pacific Island countries, representing various parts of the organic and ethical trade movement from smallholder producers to exporters, certifiers and ministries of agriculture, attended the meeting.

The vision of the Pacific organics movement is "Pacific organics and ethical trade – the key contributor to sustaining our cultures and improving farmer livelihoods, communities, people's health and the environment in the Pacific".

French Polynesia's Minister of Agriculture, the Hon. Kalani Teixeiria, was the official guest at the workshop opening.

This is the first regional meeting on organic agriculture to be instigated and supported to such a large extent by a Pacific Island government. SPC noted the example of a successful public-private partnership demonstrated by the Government of French Polynesia in working together with local POETCom members to plan and run the event.



#### Pacific Breadfruit Project, Technical Advisory Board Meeting, 13th June 2012, SPC CePaCT, Narere, Suva, Fiji

SPC hosted this meeting to review progress of activities of a four-year pilot project 'Developing commercial breadfruit production systems for the Pacific Islands' testing the viability of growing breadfruit as a commercial crop and thereby enhancing livelihoods through the development of an effective and sustainable breadfruit supply chain at the commercial level. The breadfruit project is funded by ACIAR and implemented by Koko Siga (Fiji), in collaboration with SPC, Fiji's Ministry of Primary Industries Research Division, and private sector partners (exporters, farmers and commercial nurseries). The PARDI breadfruit project is based on the model that was developed for the successful Australian Centre for International Agricultural Research (ACIAR) Fiji Papaya Project, which is based at Nature's Way Cooperative in Nadi and managed by Koko Siga Fiji.

The project initially focused on Fiji, and its first stage is to address the major constraints to commercial production by working to establish viable small-holder orchard production systems, ensuring the ready availability of market-preferred planting material that allows for yearround production, and implementing best practice post-harvest handling for fresh exports. The role of SPC CePaCT in the project is to develop a rapid multiplication system for breadfruit in tissue culture to supply planting material to farmers, using a bioreactor system, reported to work well with commercial propagation of breadfruit and other crops. The second stage of the project will deal with commercial processing of the breadfruit. Breadfruit has also been identified as a priority product for market access by the Pacific Horticultural and Agricultural Market Access Project funded by the Australian Agency for International Development.

Fifteen participants attended the meeting with presentations from Kokosiga, Natures Way, private sector, Biosecurity of Fiji, Ministry of Primary Industries Koronivia Research Station and SPC CePaCT. Research from SPC using the bioreactor system showed promising results releasing breadfruit tissue culture material to Fiji for evaluation by the project and for establishment of commercial nurseries. Activities implemented by Natures Way and Kokosiga progressed very well with research on different propagation methods such as using marcotting, root suckers, grafting etc, establishment of breadfruit orchards in Sabeto and Legalega, working with seven villages inVanualevu sourcing and training of communities in evaluating fruiting patterns of

breadfruit varieties as well as sourcing of material for the project. Manuals and information produced for food safety, processing of low cost of breadfruit flour, statistics on exports of fresh produces, recipes produced from breadfruit and using breadfruit inflorescences as mosquito repelant. Benefits of this pilot project would be shared with other Pacific Island countries.



#### Regional Workshop on Forest Carbon Assessment and Monitoring in Pacific Island Countries, 18-22 June 2012, Nadi, Fiji,

The workshop was organized by Land Resources Division in collaboration with JICA, EU-ACP FORENET and the SPC GIZ Regional Project on Climate Protection Through Forest Conservation in Pacific Island Countries, who provided funding and technical support to the Workshop. The objectives of the workshop were to:

- 1. Build capacity of key personnel on forest carbon assessment and monitoring in PICs
- 2. Share information on the latest methodologies and technologies for forest carbon monitoring
- 3. Identify common challenges
- 4. Discuss the regional standard methodologies
- 5. Establish a regional forest carbon monitoring technical group
- Contribute into the discussions towards the formulation of the draft Regional Policy Framework for REDD+.

Regional participants were forestry officers and project coordinators of governments, NGOs and community-based organizations from countries in the Pacific Island Countries including Federated States of Micronesia, Fiji, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu, who are dealing with Reducing Emissions from Deforestation and Forest Degradation (REDD+) as part of their terms of reference.

The first three days of the programme included technical presentations on international and regional case studies on carbon assessment, national forest inventory, remote sensing and GIS and panel discussions to share and exchange knowledge and experience among the participants.

Training on MAR Database and forest carbon assessment (below ground tree biomass measurement) was conducted on the final two days.



# 7th PPPO and 15th RTMPP, 25 – 29 June, 2012, Nadi, Fiji

Pacific Plant Protection Organisation (PPPO) is mandated to provide advice on phytosanitary measures in order to facilitate trade without jeopardizing the plant health status of the importing members and countries. PPPO is one of the Regional Plant Protection Organisation recognised by the International Plant Protection Convention.

The Regional Technical Meeting on Plant Protection (RTMPP) comprise primarily of plant protection officers. The two bodies have for a long time guided the work of plant protection, biosecurity and trade facilitation agencies in Pacific Island Countries and Territories both at the policy and operational levels.

Most Pacific Island countries and Territories are parties to various trade agreements and arrangements, thus it is imperative that PPPO continues to ensure that bio-security needs of member countries comply with international standards to facilitate regional and international trade. PPPO assist in the development and implementation of effective and justified phytosanitary measures.



Inception Meeting for the ACIAR Project FST/2009/062 "Development of Advanced Veneer and Other Products from Coconut Wood to Enhance Livelihoods in South Pacific Communities, 31st July 2012

LRD, in collaboration with the University of Tasmania, held the inception meeting for the ACIAR funded project on "Development of Advanced Veneer and Other Products from Coconut Wood to Enhance Livelihoods in South Pacific Communities". The ACIAR funded project aims to develop the technologies processes and expertise to produce veneer and veneer-based products of various grades from senile coconut stems. Collaborating partners and collaborators in the project include: University of Tasmania, the Queensland Department of Employment, Economic Development and Innovation (DEEDI), Department of Forests of Fiji, Forestry Division, Ministry of Natural resources of Samoa, the Ministry of Forestry of the Solomon Islands, and industry in Australia and Pacific Islands.



Regional workshop looking developing an integrated workplan for the ACIAR and FAO TCP project. Project countries are Fiji, Samoa, Solomons Islands, and Tonga. The workshop examined the farmer field school extension method allowing participants to study a crop throughout its production cycle. Participants gave updates on vegetable production (Brassica crops), pesticide use, and IPM status and priorities. The meeting also looked at the status of diamond back moth (DBM) resistance in Fiji, and measuring DBM resistance in other countries. Possible insecticide resistance management strategies was also discussed. Farmers access to biocontrol agents made available through local pesticide resellers was examined as part of alternative to pesticides in managing pests.



# 24th Techincal Consultation amongst Regional Plant Protection Organisation, 27 – 31 August 2012, Nadi, Fiji

Ten RPPO's attended the consultation hosted by the Pacific Plant Protection Organisation (PPPO). RPPO's are mandated by the International Plant Protection Convention (IPPC) to provide advice on phytosanitary measures to facilitate trade without jeopardising the plant health status of the importing members and countries. RPPOs work to ensure views and concerns of members are adequately addressed in the development and implementation of global phytosanitary measures, as well as provide a framework for regional and global co-operation in phytosanitary matters consistent with international principles for trade in plants and plant products.

The work programme for RPPO include Technical Consultations on emerging pest issues such as HLB, cassava pink mealybug, and red palm weevil; priority national pests; developments for Pest Risk Analysis particularly for potential new pests from climate change and new invasive species. Emergency response contingency plans were also discussed.



#### Regional Workshop on Forest Genetic Resources in the Pacific, Nadi, Fiji, 4-6 September 2012

LRD, in collaboration with the Food and Agriculture Organization (FAO) of the United Nations, held a second series of regional synthesis workshop organized from 4<sup>th</sup> to 6<sup>th</sup> of September 2012 in Nadi, Fiji to discuss the findings of the country reports with the following specific objectives:

To share main findings and recommendations of country reports for the SoW-FGR

To review to review, identify and finalize a regional synthesis report including needs, priorities for action at regional and global levels, and options for follow-up to the SoW-FGR

Participants from 12 Pacific Island countries and territories; Australia, Cook Islands, Fiji, Federated State of Micronesia, Kiribati, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu shared information from their country reports on Forest Genetic Resources (FGR) including priorities and recommendations. Subregional groups developed priorities and actions for the Polynesian, Micronesian and Melanesian regarding FGR conservation, management and utilisation.



# ISPM Standards Review Meeting, Tanoa Nadi – 17 – 21 September 2012

SPC Land Resources Division hosted the ISPM Review Meeting for the International Plant Protection Convention (IPPC). IPPC provides an international framework for plant protection that includes developing International Standards for Phytosanitary Measures ISPMs for safeguarding plant resources. ISPMs are prepared by the Secretariat of the International Plant Protection Convention as part of the United Nations Food and Agriculture Organization's global programme of policy and technical assistance in plant guarantine. This programme makes available to FAO Members and other interested parties these standards, guidelines and recommendations to achieve international harmonization of phytosanitary measures, with the aim to facilitate trade and avoid the use of unjustifiable measures as barriers to trade.

The IPPC allows countries to analyze risks to their national plant resources and to use science-based measures to safeguard their cultivated and wild plants. By protecting

plant resources from pests and diseases, the IPPC helps:

- 1. Protect farmers from economically devastating pests & disease outbreak
- 2. Protect the environment from loss of species diversity
- 3. Protect ecosystems from loss of viability and function as a result of pest invasions, and
- 4. Protect industries and consumers from the costs of pest control or eradication.

Contracting parties to the IPPC share the same goal: to protect the world's cultivated and natural plant resources from the spread and introduction of plant pests while minimizing interference with the international movement of goods and people. ISPMs are the standards, guidelines and recommendations recognized as the basis for phytosanitary measures applied by Members of the World Trade Organization under the Agreement on the Application of Sanitary and Phytosanitary Measures.



#### 5th Regional Meeting of Heads of Agriculture and Forestry Services and Ministers of Agriculture and Forestry, 24 – 27 September 2012, Nadi, Fiji

The Fifth Regional Meeting of Heads of Agriculture and Forestry Services (HOAFS) was held in Nadi, Fiji Islands 24-27 September 2012 on the theme of 'Managing Strategic Risks to Agriculture and Forestry in the Pacific'.

Participants attended from the member countries and territories of the Pacific Community, development partners, regional and international organisations and public and private sector bodies. The meeting was chaired by Mr Kanawi Pouru from Papua New Guinea. International and public sector and regional media attended the meeting.

The Third Regional Conference of Ministers of Agriculture and Forestry (MOAF) was held in Nadi, Fiji on 28 September 2012 on the theme of 'Managing strategic risks of Agriculture and Forestry in the Pacific Region'.

Delegates attended from the member countries and territories of the Pacific Community, together with invited development partners, regional and international organisations, and public and private sector bodies. The meeting was chaired by Papua New Guinea.

Fiji's Minister for Primary Industries and Acting Minister for Defence, National Security & Immigration, Hon. Joketani Cokanasiga, welcomed delegates and said regional co-operation and support is critical to help face a complex array of challenges from without and within the region. Strong regional leadership is needed

in facilitating such co-ordination, as well as providing capacity building and supplementation. The Secretariat of the Pacific Community is leading the way with research into agriculture and forestry issues in the Pacific. It also has systems for effectively sharing those lessons and designing programs for implementation.

Outgoing Chair, Samoa Minister for Agriculture, Forests and Fisheries, Hon. Le Mamea Ropati, thanked the members, SPC and development partners for their support during his tenure. The Minister said close collaboration was needed to help meet the challenges facing the region. These include food and nutritional security threats; increasing urbanisation; rising fuel and food prices; climate change impacts; biosecurity issues; sustaining research; development of value-added products; and access to funding and finance.

Incoming Chair, the Minister for Agriculture and Livestock for Papua New Guinea, Hon. Tommy Tomscoll, acknowledged the presence of participants and looked forward to their support and contributions. He said Pacific farmers and foresters must be smart, innovative and progressive if their industries are to remain productive and economically viable in fast changing times. The Chair noted the great diversity within the region and said the solutions lie with the people of the Pacific. While land available for agriculture and forestry is decreasing, the Pacific population is projected to double by 2050.

Regional Inception Meeting on Bele (Abelmoschus manihot) How an indigenous vegetable can contribute to sustainable development, 9-10 October 2012, SPC CePaCT, Narere, Suva, Fiji.

The French Pacific Fund assisted LRD to implement the bele project for five countries (New Caledonia, Fiji, PNG, Vanuatu and Solomon Islands). The meeting was attended by 13 participants from four countries (New Caledonia, Fiji, PNG and Fiji) including LRD staff. The meeting was to share ideas and as well as made countries aware of their responsibilities in the project and timelines in achieving the expected outputs. Overall the project aims to explore untapped potential of indigenous vegetables such as bele to sustainable development utilising a significant diversity of bele existing in Melanesian countries in support of food security, both local and export markets.

The objectives and expected outputs discussed in the meeting were, increased sharing of information and expertise between countries with significant bele diversity, better managed national bele collections/ optimising resources, establishment of a regional core collection for conservation and sharing with PICTs through SPC CePaCT, optimum production system identified for upscaling production of bele, varieties identified for production and processing, standardised user-friendly descriptors so that existing national collections be rationalised, increased understanding on factors that influence acceptability of bele eg slimy taste and cost benefit analysis (CBA) developed for commercial development of bele (food and as ornamental).

Presentations were prepared by participants from PNG, New Caledonia, Fiji and Solomon Islands on the diversity and progress of bele activities in their countries. In line with new niche markets opening for some Pacific countries for export of bele as leaf vegetables to NZ, LRD made presentations on conditions required by NZ Biosecurity. Other presentations by LRD involved optimising bele protocols for tissue culture, virus indexing, cryopreservation as well as providing guidance on taking pictures intended for making posters as part of information sharing and promotion of the use of bele in the region. It is expected countries will start sending bele cuttings to SPC in June 2013 for establishment for the regional collection at CePaCT after consultation and approval by Fiji Quarantine.

# Regional Workshop on Forest Carbon Rights in Melanesia, Nadi, Fiji, 22-23 October 2012

A regional workshop on Forest Carbon Rights in Melanesia was convened by the SPC\GIZ Regional REDD+ Project "Climate Protection through Forest Conservation in Pacific Island Countries" from 22<sup>nd</sup> to 23<sup>rd</sup> of October 2012 in Nadi, Fiji. The workshop discussed the legal position as to how carbon rights are treated under existing legal frameworks in four Melanesian countries (Fiji, Papua New Guinea, Solomon Islands and Vanuatu) including options for law reform.

# Seminar on "Improvement of Dilo (Calophyllum inophyllum), especially on tolerance to cyclone strength winds", SPC Narere, 20<sup>th</sup> November 2012

LRD, in collaboration with the Forestry and Forest Products Research Institute (FFPRI), conducted a short seminar on the "Improvement of Dilo *(Calophyllum inophyllum)*, especially on tolerance to cyclone strength winds" held at SPC Narere on the 20<sup>th</sup> of November 2012. Speakers from FFPRI, SPC and the Forestry Department of Fiji presented their activities relating to research, management and utilization of Dilo.



Delegates at the opening of the Regional Workshop on Forest Carbon Assessment and Monitoring for Pacific Island Countries. Sustainable forest management (SFM) describes a type of management that 'aims to ensure that the goods and services derived from the forest meet present-day needs, while at the same time securing their continued availability and contribution to long-term development'.

# Training on the application of cost-benefit analysis tool, August, Suva, Fiji

It is to examine the use of cost-benefit analysis as a tool and an economic framework to appraise agricultural projects that more than 10 staff of the Fiji Ministry of Primary Industry as well as from the Land Resources Division received training on how to use this economic tool. The workshop was facilitated by SPC Land Resources Division in collaboration with GIZ and SPC-SOPAC.

Workshop trainer and SOPAC economic analysis adviser, Dr Paula Holland said cost benefit analysis is a tool designed to answer the question, is this project worth doing? It is a tool that aids decision-makers to maximise economic impact of their work and used to access merits of a project from the perspective of society (not as an individual), said Dr Holland.

CBA is not all about numbers. CBA takes into account socio-economic as well as environmental costs. It is an additional and crucial tool for governments, regional organisations and donor agencies. It can be used at the project design stage, when allocating resources to certain projects over others, and for monitoring and evaluation purposes.

# Web2.0 Learning Opportunity, 22-26 October, USP-JICA ICT Centre, Suva, Fiji

This is a follow-up workshop to the first Web 2.0 Learning Opportunity and Training workshop in 2011. SPC, in collaboration with the EU-funded Technical Centre for Agricultural and Rural Cooperation (CTA) and the University of the South Pacific (USP), is committed to strengthening collaboration in facilitating technology-driven services in the dissemination and sharing of information.

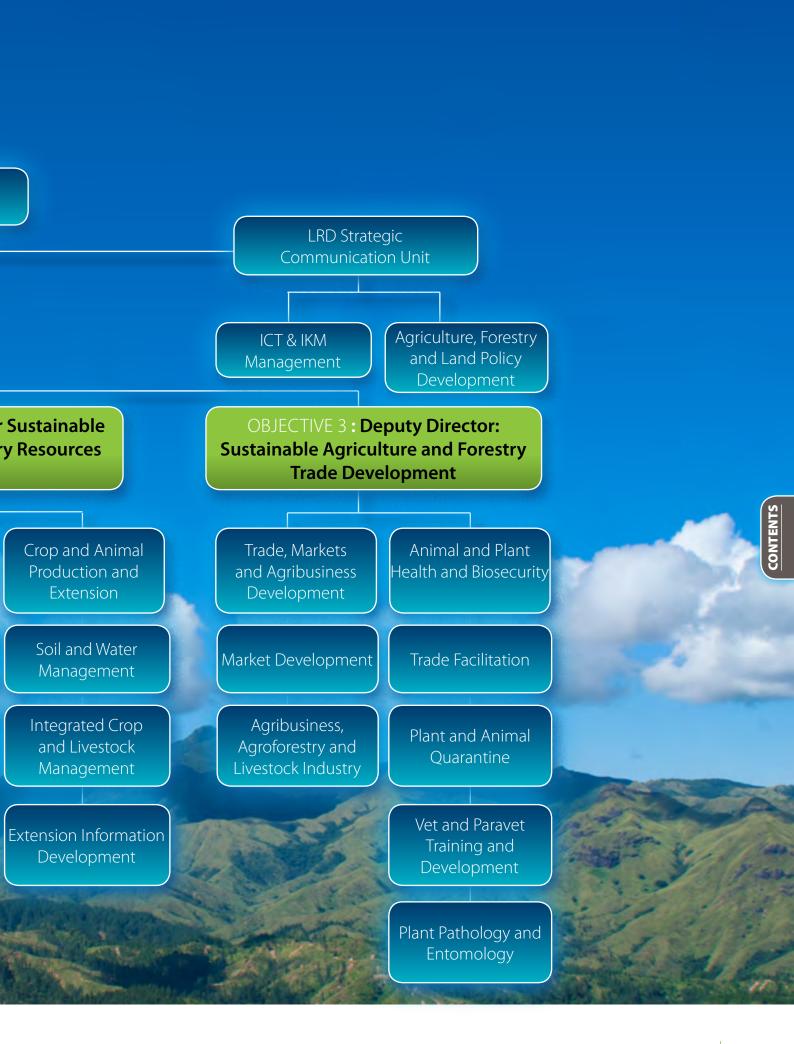
It was once about viewing information on static web pages but now people can publish their own content through the use of Web 2.0 tools such as blogs, wikis, image share, video sharing sites, social networking sites like facebook and twitter, and remote collaboration using google docs, google +, etc.

The use of Web 2.0 tools for communicating with stakeholders and sharing information can bring advantages to any organisation. The social media and a collaborative approach are changing the way organisations meet the needs of its stakeholders.

The workshop was a collaborative effort supported by the European Union, CTA and SPC.

# Production of Extension Materials Workshop, 3-7 December 2012, Apia, Samoa.

Samoa Women in Business had requested SPC for capacity training in the production of extension materials for farmers using desktop publishing software. Fifteen participants received training with representatives from MAFF (information, extension, quarantine, and IT), government research organisation SROS, and Samoa Farmers Association. Participants developed brochures, leaflets, posters to market their services, using desktop publishing softwares Photoshop and Indesign. Participants learned techniques in putting together text and graphics to produce and attractive designs to ensure message is packaged to specific target audiences. The training was conducted by the LRD Information and Communications. Samoa Quarantine is acknowledged for providing the free venue.



# 3RD MOAF CONFERENCE

The Third Regional Conference of Ministers of Agriculture and Forestry (MOAF) was held in Nadi, Fiji on 28 September 2012 on the theme of 'Managing strategic risks of Agriculture and Forestry in the Pacific Region'.

Delegates attended from the member countries and territories of the Pacific Community, together with invited development partners, regional and international organisations, and public and private sector bodies. The meeting was chaired by Papua New Guinea.

Fiji's Minister for Primary Industries and Acting Minister for Defence, National Security & Immigration, Hon. Joketani Cokanasiga, welcomed delegates and said regional co-operation and support is critical to

help face a complex array of challenges from without and within the region. He said the Secretariat of the Pacific Community is leading the way with research into agriculture and forestry issues in the Pacific.

Incoming Chair, the Minister for Agriculture and Livestock for Papua New Guinea, Hon. Tommy Tomscoll, said Pacific farmers and foresters must be smart, innovative and progressive if their industries are to remain productive and economically viable in fast changing times. The Chair noted the great diversity within the region and said the solutions lie with the people of the Pacific. While land available for agriculture and forestry is decreasing, the Pacific population is projected to double by 2050.



Outgoing Chair, Samoa Minister for Agriculture, Forests and Fisheries, Hon. Le Mamea Ropati, thanked the members, SPC and development partners for their support during his tenure. The Minister said close collaboration was needed to help meet the challenges facing the region. These include food and nutritional security threats; increasing urbanisation; rising fuel and food prices; climate change impacts; biosecurity issues; sustaining research; development of value-added products; and access to funding and finance.

SPC Director General, Dr Jimmie Rodgers outlined the vision and resources of LRD in three areas: (i) food and nutrition security, (ii) resources management, and (iii) biosecurity. SPC has undergone a number of reforms aimed at strengthening the organisation and improving the delivery of services. Following the merger of the Secretariat of the Pacific Applied Geoscience Commission (SOPAC) and the South Pacific Bureau for Educational Assessment (SPBEA) into SPC, the MOAF and Heads of Agriculture and Forestry Services (HOAFS) meetings were important in terms of guidance and governance.

The Ministers acknowledged with sincere gratitude support provided by development partners including European Union, GIZ, Australia, ACIAR, IFAD, UN agencies (including FAO), JICA, New Zealand, France, CTA, Global Crop Diversity Trust, and United States of America.



### **ANNEX 1**

#### **RESOLUTIONS OF THE 5TH HOAFS MEETING**

The Third Regional Conference of Ministers of Agriculture and Forestry (MOAF) endorse the following recommendations from the  $5^{th}$  Heads of Agriculture and Forestry Services (HOAFS) Meeting:

#### 1. Director's Report

- note with appreciation and commendation the progress made by LRD towards achieving its strategic objectives;
- ii. note the ongoing initiatives from 2010, 2011 and 2012 have helped bridge some of the funding gaps for LRD programs;
- iii. support the development of a Long Term Sustainable Financing Strategy;
- iv. approve the outline of the 2013 work program.
- v. endorse in principle and thank IFAD for the new initiatives that have been proposed notably;
  - IFAD funded Organic Agriculture Project.
  - IFAD funded establishment of the Centre for Excellence for Atoll Agriculture for the Republic of Marshall Islands and continuation of the Centre of Excellence for Atoll Agriculture for Kiribati
  - IFAD funded development of soil schools in PICTs.
- vi. endorse in principle LRD Strategic Framework 2013-2016 Outline
- vii. note in order for LRD to fully deliver service envisaged in its new strategic plan it will require greater resources in order to maintain/strengthen its professional and technical capacity.

### 2. Pacific Agricultural Policy Programme

i. note and support the implementation of this important project.

### 3. Regional policy framework on REDD+ in the Pacific

- i. endorse the Pacific Islands Regional Policy Framework for REDD+
- ii. support and assist Pacific Island countries to participate in international forest carbon financing regimes such as REDD+

### 4. Improvement of Key Services to Agriculture

- i. note and support the implementation of this important project.
- 5. Enhancing resilience of Pacific islands agriculture to climate change
- i. take note of the progress made in the establishment of the Pacific Island Tree Seed Centre and to endorse support for its operation, including the need for PICTs to sign the Material Transfer Agreement (MTA) with SPC, to facilitate the safe and efficient exchange of tree germplasm in the region.
- ii. endorse and welcome the support for regional and global activities that are implemented through the AusAID International Climate Change Adaptation Initiative Phase 2 and EU Adapting clonally propagated crops to climatic and commercial changes, to build resilience of Pacific agriculture and addressing knowledge gaps to climate change;
- iii. endorse and support the need for PICTs that have not yet ratified the International Treaty on Plant Genetic Resources for Food and Agriculture to do so and enable the Pacific to access more diverse climate resilient germplasm available within the Treaty's Multilateral System.

# 6. Informing Evidence-Based Policy in the Agriculture and Forestry sector

- work in partnership with SPC's Land Resources Division and the Statistics for Development Division to improve national and regional systems for the collection and analysis of agriculture and forestry data;
- ensure Agriculture and Forestry NMDIs are integrated into census and survey questions; for smaller PICSD, integrate Population Census and Agriculture Census as discussed and recommended at the SPC-FAO workshop in June 2012;
- iii. advance the evidence-based policy approach and the increased use of key indicators to design and track progress of evidence-based national agricultural policy, with the support of SPC Pacific Agriculture Policy Programme.

### 7. Pacific Organics and Ethical Trade

i.

- ii. delegate to the POETCom Advisory Board the management and implementation of the POS and POGS;
- iii. promote and mainstream organic agriculture into SPC and national agriculture strategies in recognition of its role in food and nutritional security, climate change adaptation and mitigation, enhancement of biodiversity and the livelihood opportunities it can provide.
- 8. Reference Manual for utilising and managing the soil resources of the Republic of Fiji
- note the new publication: Reference Manual for Utilizing and Managing the Soil resources of the Republic of Fiji.
- ii. request SPC to replicate this work in other PICTs and urge donors to assist.

- 9. Pacific Plant Protection Organisation (PPPO) Strategic framework and workplan, 2012-2018 / Membership towards CABI
- endorse the PPPO Strategic Framework for 2012-2018;
- ii. endorse the PPPO work plan and budget for 2012-2018 (US\$1.7m);
- iii. endorse reallocation of CABI membership fees to PPPO.

## 10. Secretariat of the Rotterdam Convention (FAO)

i. members who have not signed up to consider the ratification and implementation of the Rotterdam Convention.

## 11. International Fund for Agricultural Development (IFAD) Strategic Plan

i. note the proposal for a new IFAD Strategic Plan for the Pacific.

### 12. International Society for Tropical Root Crops (ISTRC)

i. endorse in principle for SPC to become a sustaining member of the International Society for Tropical Root Crops.

### ANNEX 2

#### PROGRESS OF IMPLEMENTATION OF 2010 HOAFS RECOMMENDATIONS

The key to the four areas of recommendations are as follows;

1. FN: Improved Food and Nutrition Security

2. SLFPS: Strengthening Local Food Production System

3. LAFM&D: Integrated and Sustainable Land, Agriculture and Forestry Management and

Development

4. MTI: Maximising Income from Agriculture and Forestry Products and their Trade.

NO.	RECOMMENDATION	PROGRESS OF IMPLEMENTATION
FN 1	Endorse the scheme for SPC to provide services on an agency basis to PICTs that are Parties to ITPGRFA in the implementation of the multilateral system.	Scheme has been endorsed and SPC LRD provides services to Parties to the ITPGRFA.
SLFPS 1	Revise national legislation to have a common platform for pesticide management across the region.	TCP was developed and submitted for FAO funding in September 2011
SLFPS 2	Develop a harmonised system for registration at SPC in consultation with national regulators and with technical support from FAO.	TCP was developed and submitted for FAO funding in September 2011
SLFPS 3	LRD to request FAO for resources through its Technical Cooperation Programme (FAO TCP) to support Integrated Pest Management and low input agriculture, based on a review of existing initiatives, and to develop communication tools to assist farmers in pesticide management and safe use of chemicals.	TCP was developed and submitted for FAO funding in September 2011
SLFPS 4	SPC LRD to seek funding to produce fact sheets and other relevant information in multiple formats on pests and diseases of crops for other PICTs, based on the work undertaken in Solomon Islands.	Fact sheets for Plant Health Clinic-Plant/ Doctor concept for the Solomon Islands developed.
SLFPS 5	International Society of Horticultural Science, SPC and partner organisations to promote collaboration in the development of horticulture in the Pacific Islands and showcase Pacific horticulture at the International Horticultural congress in 2014.	Ongoing
SLFPS 6	SPC LRD to nominate focal points in each country to promote exchange of information for further development of horticultural research and development.	Ongoing

LAFM&D 1	SPC LRD to institutionalise and implement the Pacific Organic Standard (POS) and POETCom through establishing a small POETCom secretariat within SPC to provide the administrative structure and support.	<ol> <li>POETCom Coordination Officer appointed through SPC/EU IACT Project.</li> <li>Equivalence negotiations ongoing successfully for international recognition of POS.</li> <li>Development of Pacific Organic Guarantee System under way to allow POS to be used for certification and market access.</li> <li>First POETCom Advisory Board elected to provide sound governance for POGS.</li> </ol>
LAFM&D 2	SPC LRD to provide support to organic initiatives at the national level.	<ol> <li>POETCom has provided support to national level organic industry governance developments.</li> <li>Support provided to participatory guarantee system (PGS) development and regional accreditation and labelling system for PGS implementation.</li> <li>Support provided for an organic display at the Pacific Forum Leaders Meeting, and Pacific Showcase trade show in Auckland, NZ, in 2011.</li> </ol>
LAFM&D 3	SPC LRD to conduct regional activities to celebrate the International Year of Forests (IYF) in 2011.	<ol> <li>LRD organised the Regional Technical Meeting on Forestry as the highlight of the regional celebration of IYF 2011</li> <li>LRD published the book Forests of the Pacific Islands: Foundation for a Sustainable Future to commemorate the IYF 2011. Awards and essay and poster competitions were also held. The book was launched and awards and prizes were presented during the Regional Technical Meeting on Forestry.</li> </ol>
LAFM&D 4	SPC LRD to organise complementary national activities in support of regional activities	LRD supported Fiji in IYF national celebration launching

LAFM&D 5	SPC LRD to conduct ICT initiatives in agriculture and rural development.	<ol> <li>LRD continues to improve agriculture and forestry knowledge management and ICT initiatives and strategies in the Pacific.</li> <li>LRD is currently working closely with FAO, CTA, UNCTAD and ITC on a number of ICT and IKM initiatives highlighted in the LRD objectives and achievements such as web 2.0 for agriculture, GIS mapping (agriculture and forestry), IKM-ICM strategies, IKM workshops, Youth/agriculture and ICT competitions and market information systems.</li> <li>Work is in progress to seek funding and donor partnership on other e-agriculture activities highlighted in the e-agriculture proposal (currently changing the status of the proposal to complement the Joint Country Strategies and priorities).</li> </ol>
LAFM&D 6	SPC LRD to be the representative of the nations within the Oceania node of the Global Soil Mapping initiative.	Oceania node of the Global Soil Mapping Initiative was launched in Bogor, Indonesia in February, 2011. Currently awaiting the MOU to begin the implementation.
LAFM&D 7	SPC LRD to note the decision of the Pacific Islands Forum Leaders to prioritise land management and conflict minimisation in the Pacific Plan.	Work is in progress on the project proposal to source funding from donors to begin the implementation.
LAFM&D 8	SPC LRD to endorse the joint development by SPC, PIFS and USP – with the support of national, regional and international partners – of a regional initiative on land management and conflict minimisation for economic and social development to be implemented by SPC specifically by its Land Management and Resources Policy Support Team.	Work is in progress on the project proposal to source funding from donors to begin the implementation.
LAFM&D 9	SPC LRD to endorse the proposed SPC/GIZ programme Climate Protection through Forest Conservation in the Pacific Island Countries and its elements funded by the German government.	<ol> <li>Project proposal approved, funded through the German International Climate Initiative under BMU (Ministry of Environment).</li> <li>National planning meetings\ workshops were held in Papua New Guinea, Solomon Islands and Vanuatu</li> <li>National implementation starting</li> <li>Regional Policy Framework for REDD+ being finalised.</li> </ol>

LAFM&D 10	SPC LRD to endorse the Pacific Youth in Agriculture Strategy and request that SPC seek and mobilise resource for implementation at the regional level and support activities at the national level.	A few national consultations leading up to a regional stakeholders meeting carried out.
LAFM&D 11	SPC LRD to commit to taking the Pacific Youth in Agriculture Strategy and suggested action plan to the national level and adapting to your particular circumstances.	Seeking partners and donors
MTI 1	LRD works closely with the Pacific Islands Trade & Investment Commission (PITIC), the Pacific Islands Private Sector Organisation (PIPSO) and non-governmental organisations in providing capacity building in marketing techniques, including appropriate branding and the use of ICT in promoting products.	Ongoing assistance from LRD. PIPSO and PITIC are part of the FACT PSC and TAG committees and PIPSO, IACT and FACT collaborated closely on the Nadi Trade Pacific 2012 and London CARIFORUM Trade Forum.
MTI 2	LRD builds capacity in identifying suitable products for processing and value-adding, including the development of organic, fair trade and eco-certification systems.	Ongoing assistance from LRD. Virgin Coconut oil, Crystallised ginger,, Pandanus Juice, Natural essence, Coffee and sugar, Banana and Cassava chips, cassava flour
MTI 3	LRD strengthens information exchange, including promotion of success stories, between the public and private sector and other stakeholders.	Ongoing assistance from LRD FACT Newsletter
MTI 4	LRD and its partners is developing a regional market information system to support trade.	Ongoing assistance from LRD
MTI 5	LRD liaises with the Pacific Shipping Association through PIPSO and the SPC Transport Programme in identifying transport links to enhance intra-regional trade.	Ongoing assistance from SPC for Fiji/ Rotuma–Tuvalu, Kiribati–Solomon Is
MTI 6	LRD provides capacity building and awareness raising for producers and associations to meet quality and marketing requirements for export trade.	Ongoing assistance from LRD to POETCom, Fair Trade and HACCP

## **ANNEX 3**

#### PROGRESS OF IMPLEMENTATION OF 2008 HOAFS RECOMMENDATIONS

Tabulated below is a brief summary of the LRD responses to the 2008 HOAFs meeting recommendations that come under Objectives 1, 2 and 3 of our Strategic Plan 2009–2012. All recommendations are being implemented, a few have been achieved but due to the nature of the recommendations, the implementation is an ongoing process, which will, in the majority of cases, continue throughout the current strategic plan.

The key to the four areas of recommendations are as follows;

1. FN: Improved food and nutrition security

2. SLFPS: Strengthening local food production systems

3. LAFM&D: Integrated and sustainable land, agriculture and forestry management and

development

4. MTI: Maximising income from agriculture and forestry products and their trade.

NO.	RECOMMENDATION	PROGRESS OF IMPLEMENTATION
FN21.	The approach used by the EU-funded Development of Sustainable Agriculture in the Pacific project (DSAP) be institutionalized within LRD and funding secured to ensure continuity into 2009 and beyond.	Institutionalisation Completed
FN2.2	LRD and the Public Health Programme of SPC develop and present a strategy paper for CRGA which recognizes the importance of close collaboration between the agriculture and health sectors in combating the increasing incidence of lifestyle related diseases	Completed
FN2.3	SPC and the Secretariat to the Treaty progress with the establishment of an agreement to place the <i>ex situ</i> collections of the Centre for Pacific Crops and Trees (CePaCT) into the Multilateral System (MLS).	Completed
FN2.4	LRD explore the establishment of a trust fund for the long-term conservation of Pacific crop diversity	Completed
FN2.5	A duplicate collection of the breadfruit varieties currently held in the National Tropical Botanic Garden in Hawaii, is established in the Pacific.	Ongoing
FN2.6	LRD, in collaboration with NARI and FAO, source funding to implement the Pacific Crop Improvement Programme (PARCIP).	Funding not secured. Need to source new funding for PARCIP

FN2.7	LRD and USP and other regional training institutions explore ways of incorporating veterinary science into the curriculum of the relevant institutions	Ongoing
FN2.8	LRD strengthen engagement with civil society and provides support to build their management capacity	Governance and management support being provided through POETCom secretariat to national organic focal points; IACT Technical Advisory Group (TAG) formed, and TAG held its 1st meeting last June 29 to review and approve applications for support of Pacific enterprises
FN2.9	LRD ensures the sustainability of the research programme within the Centre of Excellence on Atolls	Ongoing
SLFPS4.1	LRD continues to empower extension services to respond to the changing needs of the agro-forestry sector at all levels, such as climate change	Coordination of the Pacific Islands Extension Network to align with regional and global extension and advisory networks (APIRAS and GFRAS) to access extension capacity training assistance.
SLFPS4.2	LRD helps PICTs to strengthen the partnerships within their communities in order to raise awareness of the benefits of food and nutritional security, and income generation achieved through increasing local food production and consumption	Collaborate with local partners to develop awareness materials on protecting agrobiodiversity for food security.
SLFPS4.3	LRD collaborates with relevant education institutes, such as USP and CETC, to support and strengthen agricultural education, especially the link between agriculture and health	Ongoing
SLFPS4.5	LRD seeks to strengthen planting material (vegetative and seeds) production capacity and exchange in the region and to expand the diversity within the crop and animal genepool using appropriate technologies	Ongoing
SLFPS4.6	LRD strengthens linkages with all relevant nutrition and health agencies, to encourage the consumption and production of local foods, especially targeting children and youth	Ongoing
SLFPS4.7	LRD builds and strengthens capacity in the processing and preservation of local foods, taking into account traditional knowledge, to provide a competitive alternative to imported foods	Ongoing
SLFPS4.8	LRD assists PICTs develop appropriate technology for peri-urban agriculture production and to promote and support the home-garden approach	Ongoing

SLFPS4.9	LRD works with SPREP, GTZ and UN to develop climate change adaptation plans relevant to each country.	Promote communication strategies on climate change knowledge. Link regional media to highlight climate change reporting and develop online knowledge and resources.
LAFM&D3.1	LRD promotes a whole-of-island approach to planning for land resource management	Land zoning or land use map done for Rarotonga. A process done to identify land that should be managed and used in a sustainable manner. This process and approach is done for other countries such as Fiji in community, district and catchment level, ridge to reef approach and a whole island integrated approach to be promoted that will involve multi sectoral and integrated process to land utilisation and management
LAFM&D3.2	LRD strengthens its technical capacity in agroforestry, post-harvest wood processing, and product diversification to effectively support national initiatives in these areas.	Ongoing
LAFM&D3.3.	LRD commissions a study to provide up-to-date information and advice on the trade in carbon credits to assist PICTs in exploring options and formulating policies	Ongoing
LAFM&D3.4	LRD reactivates the biannual Heads of Forestry Meeting	Completed
LAFM&D3.5	LRD participates in the CABI Compendium Development Consortium to strengthen availability of and access to information on PICTs agriculture and forestry sectors.	Completed
LAFM&D3.6	LRD and Land Care Research collaborate in the development of a Pacific Soil Portal	Discussion continues with Landcare NZ on how to establish the portal and the costings.
LAFM&D3.7	LRD implements a regional initiative formulated by LRD and PIFS on land management and conflict minimisation	Work is in progress on the project proposal to source funding from donors to begin the implementation.

LAFM&D3.8	LRD promotes the use of land-zoning mapping and economic analysis of land use practices as tools for the sustainable development and management of land resources in PICTs	Publication of the Fiji Land Use Capability Guideline  Supporting Vanuatu and Solomon Island in the development of Land use policies.  Inclusion of land use planning and sustainable land management activities in current and new LRD projects.  Initiating GIS mapping analysis to match land use, land systems and soil types.  Ongoing economic analysis (CBA) of agriculture and forestry projects
		(eg soil health, fair trade certification , and CBA training)
MTI5.1	LRD works closely with PITIC, PIPSO private sector and NGOs in providing capacity building in marketing techniques including appropriate branding and the use of ICT in promoting products	Ongoing through FACT and IACT, including through Trade Shows (inaugural Trade Pasifika 2012, Fine Food Fair and Fair Trade Shows), development of marketing and branding strategies for private sector export partners in PNG, Solomon Islands, Fiji, Vanuatu and Samoa.
MTI5.2	LRD builds capacity in identifying suitable products for processing and value adding including the development of organic, fair trade and ecocertification systems	Ongoing through FACT and IACT/POETCom, including for sugar (FLO certification of Labasa Cane Producers Association in Fiji), cocoa (progress towards fair trade certification of two producer associations in Solomon Islands), coffee (sustainability certification in PNG Highlands and Oro Province), coconut (carbon footprint assessment of VCO in progress in Fiji), timber (ongoing assistance with FSC certification of two timbers exporters in Solomon Islands) and spices (organic certification of producer groups in East New Britain)

MTI5.3	LRD strengthens information exchange between public and private sector and other stakeholders including promotion of success stories	Ongoing through FACT and IACT, including through PSC/TAG meetings, popular media (TV and radio interviews) and news stories (including Island Business, local newspapers).
MTI5.4	LRD and its partners develop a regional market information system to support trade	Ongoing assistance from LRD
MTI5.5	LRD liaises with the Pacific Shipping Association through PIPSO and the SPC Maritime programme in identifying transport links to enhance intra-regional trade	Ongoing assistance from SPC for Rotuma-Tuvalu, Kiribati – Solomon Is.
MTI5.6	LRD provides capacity building and awareness raising for producers and associations in meeting quality and marketing requirements for export trade	Ongoing through FACT and IACT, including advice on SPS standards for private sector partners such as ISO Quality Assurance training program in PNG, development of HACCP programs for private sector partners in Fiji and Vanuatu.