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#### **SPC Headquarters**

BP D598848 Noumea Cedex, New Caledonia Telephone: +687 26 20 00Fax: +687 26 38 18SPC

#### Suva Regional Office

Private Mail Bag, Suva, Fiji Islands Telephone: +679 337 0733 Fax: +679 377 0021SPC

#### Pohnpei Regional Office

Level 2, Pohnpei National Building Namiki, P.O. Box Q,Kolonia, Pohnpei, FM 96941, Federated States of Micronesia Telephone: +691 3207 523Fax: +691 3202 2725/6224

#### Produced by:

LRD Information, Communication and Extension Team, Land Resources Division, SPC, Nabua, Fiji Islands

Photography by: SPC Staff

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### **Executive Summary**

n 2009, the Land Resources Division (LRD) of the Secretariat of the Pacific Community (SPC) began implementing its second integrated strategic plan (covering the period 2009–2012), while continuing to align activities as much as possible with the national priorities elaborated on in the Joint Country Strategies.

LRD continued its facilitation role in policy, legislation and planning development. LRD ensures that the Pacific Islands' voice is heard beyond the region by actively participating in important international fora such as the Codex Alimentarius Commission, the United Nations Forum on Forests, the United Nations Convention to Combat Desertification, the Convention on Biological Diversity, the United Nation Framework Convention for Climate Change, and the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA).

The new facility to house the Centre for Pacific Crops and Trees (CePaCT) at the SPC Narere compound in Suva, Fiji Islands, was completed and formally opened on 25 September by the European Union (EU) representative for Pacific Operations. The centre will play an important role in efforts at climate change adaptation, improving food security, and increasing domestic and export trade in agriculture and forestry products. This facility will also house the two LRD thematic groups, Forests and Trees and Forestry and Agricultural Diversification, including the EU-Facilitating Agricultural Commodity Trade Project. The centre also will include a tree seed bank that will facilitate the supply and exchange of important tree germplasms among SPC member countries in the Pacific.

The collection of Annex 1 crops held in trust by CePaCT have been placed in the ITPGRFA Multilateral System. Samoa's Minister of Agriculture, as Chair of the Ministers of Agriculture and Forestry meeting (Samoa 2008), addressed the 3<sup>rd</sup> Session of ITPGRFA's governing body in Tunisia (June 2009) and signed the treaty on behalf of Pacific Island countries and territories (PICTs) with the United Nations Food and Agriculture Organization. This improves the region's ability to access non-Pacific germplasm of Annex 1 crops for development purposes, thus improving biodiversity.



Trade facilitation, plant health and biosecurity continue to be hallmarks of LRD's functions. Substantial assistance has been provided to PICTs, including:

- private sector export market development, pest and disease surveys;
- biological control, including of invasive species and integrated pest management, research and development on pest and disease control and on quarantine treatments of fresh produce;
- harmonisation of national legislation to comply with World Trade Organization Agreement on the Application of Sanitary and Phytosanitary Measures requirements;
- facilitation of inter-regional and international trade; and
- capacity building in a broad range of technical areas including through the Import-Export Biosecurity Technology Centre facility.

Unfortunately, the current lack of financial support is preventing adequate staffing and operations of the Plant Health team and the outlook remains unclear.

The EU-funded Facilitating Agricultural Commodity Trade (FACT) pilot project has made substantial progress during the course of 2009. FACT worked with more than 14 exporters in six Pacific ACP countries (Fiji, Papua New Guinea, Republic of the Marshall Islands Samoa, Solomon Island and Vanuatu). The project has conducted independent reviews and analyses of these partner Pacific Islands agricultural and forestry export businesses and associated value chains. Highlights for 2009 included:

- market studies for papaya, root crops and timber products;
- development of improved export producer, processing and supply networks;
- a joint Pacific Islands roundtable meeting with the Asia-Pacific Coconut community on value—added coconut products;
- development and promotion of important certification systems related to fair trade, organics, food safety and eco-certification;
- training in food preservation and food safety in seven Pacific Island countries (Federated States of Micronesia, Fiji, Kiribati, Republic of the Marshall Islands, Solomon Islands, Tuvalu and Vanuatu) and identification and development of new export markets for several agricultural products.



The Development of Sustainable Agriculture in the Pacific (DSAP) has made an indelible positive impact on the lives of rural farmers and communities, including women and youth in PICTs. Although DSAP I was completed in December 2008 and DSAP II will conclude at the end of 2009, graduate research assistants and research and extension assistants have continued to maintain an active network, completing unfinished work and planning and/or implementing new activities in their own countries.

LRD's present science and technology capacity will be significantly diminished with the completion of some relatively large projects. The thematic area teams that will be affected most include: Plant Health; Crop Production and Soils Management; Animal Health and Production; and Information, Communication and Extension. LRD's professional staff are actively seeking resources from new sources to bridge funding gaps.

New initiatives currently being designed are expected to begin in 2010 and may ease some of the staffing and operational difficulties faced by LRD. These include the European Development Fund 10 project, 'Enhanced Sustainable Livelihoods Through Facilitating Increased Trade and Product Diversification'; SPC–Australian Agency for International Development (AusAID) Pacific Regional Land Initiative; AusAID Pacific Horticultural and Agricultural Market Access initiative; AusAID Climate Change Adaptation; and the Australian Centre for International Agricultural Research Pacific Agribusiness Research and Development Initiative.

LRD will continue its partnership with the German Agency for Technical Cooperation (GTZ) through the SPC/GTZ Pacific German Regional Programme on Adaptation to Climate Change in the Pacific Island Region. The four-year programme began in January 2009 and has a funding of EUR 4.2 million from the German Federal Ministry for Economic Cooperation and Development. This programme reflects LRD's commitment to its member countries to address climate change issues in agriculture, forestry, and land use. It is also an indication of the successful partnership between SPC-LRD and GTZ, established over more than 10 years through the phased out SPC/GTZ Pacific-German regional forestry project.

# PROGRESS TOWARD ACHIEVING THE LAND RESOURCES DIVISION'S STRATEGIC OBJECTIVES

he new Integrated Strategic Plan 2009–2012 for the Land Resources Divvvision (LRD) of the Secretariat of the Pacific Community (SPC) has three objectives: 1) improved food and nutritional security; 2) integrated and sustainable agricultural and forestry resource management and development; and 3) improved and increased trade in agriculture and forestry products.

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. Its various projects, including the Development of Sustainable Agriculture in the Pacific (DSAP), European Union (EU)-Facilitating Agricultural Commodity Trade (FACT), Pacific Regional Influenza Pandemic Preparedness (PRIPP) project, German Technical Cooperation (GTZ) Pacific German Regional Programme on Adaptation to Climate Change in the Pacific, Australian Agency for International Development (AusAID) Forests and Trees Programme, EU-funded Facilitating Agricultural Commodity Trade in the Pacific (FACT) project, and other project interventions, are integrated into the LRD framework in terms of implementation and reporting to the Heads and Ministers of Agriculture and Forestry, to donors, and to the Committee of Representatives of Governments and Administrations (CRGA).

LRD places significant importance on an integrated and participatory approach. 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, unsustainable practices (with particular reference to the management of forest resources), increasing food prices, and land management and conflict minimisation. In addition, the global demand for alternative fuels could conflict with the principles and practices of food production, even to the point of competing for the land on which that production takes place.

## **OBJECTIVE 1: IMPROVED FOOD AND NUTRITIONAL SECURITY**

#### Objective 1 is organised into four output areas:

- Output 1.1 Development of policies to support the production, use and consumption of locally grown food sources
- Output 1.2 Agro-biodiversity conserved, developed, promoted and used
- Output 1.3 Diverse food supply systems promoted
- Output 1.4 Traditional knowledge preserved, enhanced, used and acknowledged

Crucial to attaining this objective is the support of all stakeholders — from farmers and resource owners to policy-makers.

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

The following are the main initiatives and activities contributing to this output.

- a Countries have been supported in the ratification of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), ensuring that crop diversity is available for PICT farmers to support local food production. In the period since the last CRGA, Pitcairn Islands has ratified ITPGRFA. LRD supported the participation of PICTs at the 3rd Session of the ITPGRFA's Governing Body and ensured that the Pacific voice was heard on issues such as 'farmers' rights'.
- b LRD is involved in regional and national efforts to promote local food production and consumption in an effort to counter the alarming increase in non-communicable diseases, and the increasing rates of vitamin and mineral deficiencies. In particular, LRD is supporting national food summits and the Pacific Food Summit 2010, which will result in the Pacific Food Security Declaration and Plan of Action. LRD is an active member of the Pacific Food Summit Working Group.
- c An organic agriculture policy brief for the Pacific has been developed under the Pacific Organic and Ethical Community Network, which promotes local food crops and traditional farming systems.



## SPC OPENS STATE-OF-THE-ART BIODIVERSITY CENTRE

The new Centre for Pacific Crops and Trees (CePaCT) was officially opened in September by Ambassador Wiepke van der Goot, EU head of delegation for the Pacific.

CePaCT is the first modern genebank built to international standards in the Pacific Islands region. A regional genebank was first conceived by the Pacific Ministers of Agriculture in 1996, when they recommended a regional approach to conservation of crop diversity, acknowledging the significance of crop diversity to food and nutritional security.

Conservation is the core business of the Centre with priority given to the region's staple crops however CePaCT is very active in making germplasm available to countries, having distributed over 24,819 plants in the period 2004-8. In vitro techniques are used to conserve a wide range of crops, namely Alocasia (Alocasia macrorrhiza), Banana (Musa spp), Bele (Abelmoschus manihot), Black pepper (Piper nigrum), Breadfruit (Artocarpus altilis), Cassava (Manihot esculenta), Cyrtosperma (Cyrtosperma merkusii), Irish potato (Solanum tuberosum), Kava (Piper methysticum), Pandanus (Pandanus tectorius), Sweet potato (Ipomoea batatas), Taro (Colocasia esculenta), Vanilla (Vanilla fragrans), Xanthosoma (Xanthosoma sagittifolium) and Yam (Dioscorea spp).

The taro collection is unique, acknowledged as the largest in vitro collection in the world consisting of over 850 varieties from the Pacific and Asian countries including improved lines obtained through collaboration with breeding programmes in Papua New Guinea and Samoa. The importance of both the taro and yam collections to food security have been recognized globally with the recent signing of a long-term agreement with the Global Crop Diversity Trust providing funding support ad infinitum for these collections. This is the first long-term grant provided by the Trust to a collection outside of the Consultative Group for International Agricultural Research (CGIAR).

CePaCT manager and SPC Genetic Resources Coordinator, Dr Mary Taylor said, "The Centre for Pacific Crops and Trees (CePaCT) is one of a kind in the Pacific and is a resource that has been built up over the years through the commitment of the people of the Pacific, donors and SPC. Importantly it is a resource the Pacific region now truly values for its role in conserving traditional crops and trees, and providing "new" material to fulfill all the functions required of diversity. With the challenges of the 21st century this role is becoming increasingly important. The demands are huge on the fragile resources of the Pacific, maintain food security with the unpredictability of climate change, address the problems of nutritional security, and respond to the needs of the markets."



#### Output 1.2 Agro-biodiversity conserved, promoted and utilised

Conserving and utilising PICTs' agro-biodiversity will contribute to food and nutritional security through improved ability and capacity to respond to emerging challenges such as climate change and global food price crises. The following are the main initiatives and activities contributing to this output.

- a The collection of Annex 1 crops that are held in trust by the Centre for Pacific Crops and Trees (CePaCT) have been placed in the ITPGRFA Multilateral System. Samoa's Minister of Agriculture, as Chair of the Ministers of Agriculture and Forestry meeting (Samoa 2008), attended the 3<sup>rd</sup> Session of the Treaty's Governing Body in Tunisia (June 2009) and signed the agreement on behalf of the PICTs with the United Nations Food and Agriculture Organization (FAO). This is a significant move that improves the region's ability to access non-Pacific germplasm of Annex 1 crops for development purposes, thus improving bio-diversity.
- In collaboration with the International Livestock Research Institute laboratory in Beijing, the DNA characterisation of pig and poultry for Fiji Islands, Samoa, Niue and Tonga under the FAO animal genetic resources (AnGR) project for the region has been completed. The final report was presented to the Pacific Heads of Veterinary and Animal Production Services (PHOVAPS) meeting in July 2009. The endorsed version is currently under discussions with FAO, Rome. The compilation and analysis of DNA characterisation is being finalised.

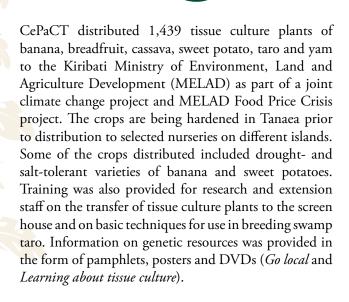
- LRD staff attended Asian AnGR national coordinators workshop, Beijing, China, 17–20 November, 2009, on Sustainable Management of Animal Genetic Resources: development of priorities, policies, and national action plans.
- d LRD has continued sharing relevant technical AnGR materials through the AnGR for Food and Agriculture Mailing List. Support continued to be provided to PICTs for import risk analysis through the screening and selection for use of appropriate livestock breeds.
- e The establishment of national genebanks of selected crops has been supported in Niue, Vanuatu, Fiji Islands, Samoa and Tokelau.
- f Seed production training in some PICTs was supported. In recognition of the problem of an irregular supply of seeds facing many PICTs, a consultancy has been conducted, in collaboration with FAO, on seed access and availability. Also, a memorandum of understanding has been signed with the World Vegetable Centre (AVRDC) to facilitate access to seeds, particularly openpollinated varieties.



- g. Federated States of Micronesia (FSM), Nauru, Niue, Palau, Republic of the Marshall Islands (RMI), Samoa and Tonga received support to establish nurseries within communities in order to address the problem of an irregular supply of healthy root crop planting materials.
- h. Important regional collections of Pacific staples continue to be conserved. These include: taro (850 accessions), yams (204 accessions), sweet potato (230 accessions), cassava (13 accessions), banana (134 accessions), other aroids (34 accessions), breadfruit (15 accessions), and other crops (54 accessions). Since the last CRGA report, CePaCT has received 53 accessions (227 plants) of banana, cassava and Irish potato. This is the first importation of Irish potato by CePaCT and is in response to requests from several countries.
- The new building that will house CePaCT was completed at the site of the Community Education Training Centre in Narere, Fiji Islands was officially opened on 25 September 2009.
- j. A regional tree seed bank has been established within the new CePaCT building; it will have seed testing and storage facilities, and will be managed initially by a tree seed technician or trade facilitation assistant. The establishment of the regional tree seed bank is identified as a priority action under the Pacific Forest and Tree Genetic Resource Conservation, Management and Sustainable Use Action Plan 2007–2015, whose aim is to assist PICTs in collecting and sharing germplasm of timber, fruit and nut tree and shrub species of high regional importance. The tree seed bank will also provide technical support, training and advice on all aspects of germplasm collection, storage, propagation techniques and export market opportunities.

- k. SPC has signed an agreement with the Global Crop Diversity Trust, which will ensure long-term funding support of USD 50,000 per year for the taro and yam collections held by CePaCT in recognition of their uniqueness.
- LRD participated in the National Food Summit in American Samoa in February 2009, and presented a paper on the importance of plant genetic resources for food and agriculture (PGRFA) to sustaining local food production.
- m. About 730 plants have been distributed by CePaCT since the last CRGA meeting. Norfolk Island received its first consignment of tissue cultures (cassava, bananas, breadfruit, sweet potatoes, taro and yams 221 plants in all) in March 2009. The information from the evaluation of all distributed plants informs the work of CePaCT. Special attention is being given to performance on atolls and resilience to drought and salinity. Adaptable accessions have been identified for some crops and these will become part of the 'climate ready' collection.
- n. Collaboration with the FAO Food Security project continues with the distribution of 1,232 bananas (different varieties) to Nauru.





o. To support the establishment of a Pacific banana collection, containing the unique bananas of the Pacific, funds were made available to Vanuatu for collecting banana diversity in the island group. Four unique fei bananas have been provided to the collection by FSM. Banana virus indexing training was conducted by the Queensland Department of Primary Industries (DPI) experts in Fiji for CePaCT staff and staff from the Fiji Islands Ministry of Agriculture and Primary Industries (MPI) and the French Polynesia Ministry of Agriculture.



- q. To support the establishment of a Pacific breadfruit collection, LRD/EU-FACT supported the collection of breadfruit in both Fiji Islands and Vanuatu. In Fiji, 20 varieties were collected. In Vanuatu, 121 accessions were collected and classified into groups of morphotypes presenting similar morphological characteristics.
- r. Collection activities have been supported in response to requests that either fall into the category of rescue collection or emergency conservation. Crops include coconut and yam.
- s. Eleven varieties of swamp taro were collected in Kiribati, after characterisation. There is a risk that some of these varieties could be lost with increasing salt intrusion into the taro pits. These varieties have been established in tissue culture at CePaCT to ensure they are not lost to the region.
- t. LRD continues in its collaboration with the University of the South Pacific (USP), Samoa to support the Taro Improvement Programme (TIP). The Cycle 6 lines crosses between Asian and Pacific genepools are currently being virus tested and will soon be available for distribution to PICTs. These lines have received excellent feedback in Samoa. This successful participatory breeding programme is being documented by LRD to ensure widespread dissemination of the approach and techniques used in the programme.
- LRD supported the compilation of the FAO Global Plan of Action reports from five countries: Cook Islands, Fiji Islands, Palau, Samoa and Papua New Guinea (PNG).
- v. LRD provided training in the implementation of ITPGRFA to those countries that have ratified the treaty. At the same training, national consultations were held with those countries yet to accede to the treaty.
- u. LRD provided training in the collecting of PGRFA, and management of PGRFA collections at the national level. Training included the collecting of morphological data, data management and analysis

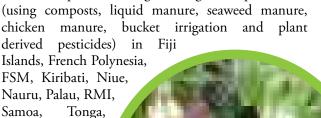
#### Output 1.3 Diverse food supply systems promoted

Outcomes centre on the identification and development in PICTs of diverse safe and nutritious foods and their production systems, as well as best practices involved. The following are the main initiatives and activities contributing to this output.

- Under the Pacific Organic and Ethical Trade a. Community — formerly the Regional Organic Task Force (ROTF) — national organic association members are promoting organic, traditional and other relevant and appropriate farming systems.
- Ь. LRD, in collaboration with other agencies, such as the National Agricultural Research Institute (NARI) in PNG, Crops for the Future (formerly the International Centre for Underutilized Crops), and the Asia Pacific Association of Agricultural Research (APAARI) has developed a regional strategy for promotion and development of underutilised species.
- To improve availability of vegetables to households, c. LRD has promoted organic vegetable production (using composts, liquid manure, seaweed manure, chicken manure, bucket irrigation and plant

and Wallis and

Futuna.



International Agricultural Research (ACIAR)-funded project called 'Tongan Tropical Fruit Production - Improving Genetic Diversity and Production Capacity Building'. To date, training has been carried out, a database of existing fruit diversity initiated, and planting material of new and improved varieties imported. A study tour to north Queensland, focusing on the tropical fruit industry, raised awareness on nursery management and uses of tropical fruits.

LRD is implementing an Australian Centre for

LRD continues to support the promotional activities of Island Food Community of Pohnpei in promoting local food crops for health and nutrition.

- f. To reduce consumption of imported food in schools and to promote farming among high school students, LRD is working with four schools in the PNG provinces of Kubiano, Malabang and Simbu, in promoting taro and livestock production.
- Agroforestry systems are being promoted for atoll PICTs by the Centre of Excellence for Atoll Agriculture Research and Development (CEAARD) in Tarawa, Kiribati. For example, four different breadfruit varieties are cultivated in conjunction with root crops to ensure food availability throughout the year. In other places, leguminous multi-purpose trees such as Gliricidia are being used as simultaneous fallow trees to improve soil fertility while also providing a source of firewood.

# Output 1.4 Traditional knowledge preserved, enhanced, utilised and acknowledged

Traditional farming systems in PICTs, and their related best practices have proven sustainable in maintaining food security and productivity of natural resources.

- a. CEAARD is documenting sustainable food production systems, and food preservation and utilisation methods for atolls.
- b. LRD is supporting the compilation of traditional cooking recipes in several countries to help promote the consumption of local foods.
- c. LRD is conducting training in FSM, Palau and RMI on food processing and cooking of traditional root crops. CEAARD is evaluating breadfruit and pandanus processing.
- d. Progress was made on the revival of tigaso tree oil tapped from rainforest trees of the genus *Campnosperma* spp. with the establishment of a nursery, and support was provided to villagers to tap the trees in the jungles near Lake Kutubu, PNG. NARI is testing the natural tree oil for potential use as an organic pesticide. A cultural event to promote the preservation of traditional knowledge and use of the oil in traditional dancing is under discussion.
- e. LRD is working with the Fiji Islands MPI in assembling traditional knowledge relating to climate change adaptation and promoting crop diversity on Viwa Island in the Yasawas. This activity is part of a climate change adaptation project in collaboration with the Pacific Community-focused Integrated Disaster Risk Reduction Project.
- f. LRD collaborated with NARI in PNG in conducting an on-farm conservation survey in the Kairuku-Hiri district of Central Province. The survey focused on collecting baseline information about food crop diversity and animal genetic resources maintained by farmers. The survey was the second part of a study; the first part was conducted in 2005.
- g. LRD has documented the work of the Kastom Gaden Association in Solomon Islands. A DVD vividly portrays the indigenous communities using environmentally friendly farming practices in addition to the plant material network.

### THE PACIFIC AND THE BRUSSELS DECLARATION

The ACP/EU Technical Centre for Agricultural and Rural Cooperation (CTA) held an international seminar on the "Role of the media in agricultural development in ACP countries (West, Central, East and Southern Africa, the Caribbean and the Pacific)".

The seminar was held in Brussels, Belgium between 12 and 16 October 2009 and it aimed to contribute to the preparation of strategies for media capacity building with regard to access and dissemination of information on key issues for the ACP agricultural sector; strengthen communication links between the media and the agricultural sector; and to contribute to the identification of media support programmes

The seminar provided a platform to discuss challenges, problems and hindrances in highlighting ARD in Africa, the Caribbean and the Pacific. Experiences were shared, models were presented and issues regarding the need to promote information and communication technology (ICT) were highlighted. Discussions made reference to the problems that farmers and rural dwellers face.

An important lesson learned is the need to involve the people who will be affected by this information on agriculture and rural development.

The final document – the Brussels Declaration – is a guide and a statement of commitment from the ACP countries. It is a living document and a testimony of the efforts stakeholders in ARD and the media intend to make.

What will still be required is a reminder of these commitments and of the progress made, as well as a record of efforts to give ARD issues the recognition they deserve.

The Brussels Declaration looked at 'the critical importance of agriculture in the development of ACP countries given that two-thirds of their population live in rural areas and depend largely on agriculture for their livelihoods. However, the agricultural sector and rural population do not not have sufficient recognition in the ACP media. And the information which they do receive may not be sufficiently relevant to their diverse needs.'

It went on to say that the media's role is important in overcoming obstacles to innovation, productivity and the sustainability of the agricultural sector and rural livelihoods.

'The media includes journalists and communicators working at local, national, regional and international levels using a range of An overarching observation and recommendation from the seminar was the need to build the capacities of the media, agricultural producers and their organisations, researchers, scientists and universities, national governments and regional institutions.

The declaration calls on donors and ACP development partners and the private sector to invest in ARD and emphasise information sharing and partnerships.



## **OBJECTIVE 2: INTEGRATED AND SUSTAINABLE AGRICULTURAL AND FORESTRY RESOURCE MANAGEMENT AND DEVELOPMENT**

#### Objective 2 is organised into five output areas:

- Output 2.1 Development of sustainable forestry, agriculture and land use plans, policies and legislation supported
- Output 2.2 Sustainable and appropriate forest, agriculture and land use management practices developed and promoted
- Output 2.3 National and regional capacity to prepare, respond and adapt to climate change and natural disasters developed and strengthened
- Output 2.4 Invasive species, pests and disease problems identified and addressed and capacity to respond at national and regional levels supported
- Output 2.5 National and regional capacity of extension, outreach and information services strengthened

# Output 2.1 Development of sustainable forestry, agriculture and land-use plans, policies and legislation supported

Outcomes centre on PICTs putting into place appropriate national land use plans, policies and legislation, using a harmonised regional approach and engaging with international initiatives that they have signed. The following are some of the main initiatives and activities contributing to this output.

- a. In collaboration with GTZ, LRD continued to support the Fiji Forestry Department in the revision of its 1992 Forest Decree to bring it into line with the new forest policy that was endorsed in 2007.
- b. LRD assisted Pacific participants in their preparations to attend the United Nations Forum on Forests 8th Conference (UNFF8) in New York, through a preparatory workshop. Areas covered included the non-legally binding instrument on all forests and the UNFF multi-year programme of work. Agenda items and the main issues involved were also covered. A regional statement was formulated. SPC, through LRD, participated at UNFF8 and provided support to the countries represented. Close liaison with the Pacific UN missions in New York was maintained throughout.
- c. Through the animal health and production (AHP) thematic team, LRD continued to monitor and finetune the emergency response and preparedness plans of PICTs with respect to the Pacific preparedness checklist. A five-day training workshop in Wallis and Futuna produced a revised avian influenza preparedness plan and trained participants in the use of personal protective equipment (PPE), rapid test kits and poultry post mortem techniques.
- d. Assisted the Fiji Biosecurity and Animal Health Production Division in completing the first draft of their animal health emergency plan with stakeholder consultation under way with the aim to obtain Cabinet endorsement in December 2009.
- e. The biannual PHOVAPS meeting was organised under the theme of 'Animal Health and Production Challenges and Opportunities' to assess progress of ongoing AHP programmes and provide guidance on future activities to be considered by LRD.



- f. The first sub-regional World Organisation for Animal Health (OIE)/FAO GF-TADs (Global Framework for the Progressive Control of Transboundary Animal Diseases) meeting was organised back to back with the PHOVAPS meeting. The meeting, which was cofunded by OIE and FAO, discussed and developed proposals aimed at developing capacities for the progressive control of transboundary animal diseases in the region.
- f. LRD was represented at the 3<sup>rd</sup> Regional Steering Committee meeting for GF-TADs in Asia and the Pacific in Tokyo, Japan from 23–24 July. The findings and conclusions of the first sub-regional GF-TADs meeting for the SPC sub-region were presented and endorsed at this meeting.
- g. Work was initiated to develop a framework to guide PICTs in developing animal welfare legislation. In addition, the development of livestock-related policy briefs began. The first livestock policy brief was completed in November 2009.
- h. Undertook the first PRIPP project advocacy work in French Polynesia. Made presentations and coordinated discussions with animal health workers, veterinarians and human health workers. Also helped design their avian influenza response plan.
- A similar trip was undertaken to New Caledonia to discuss their avian influenza preparedness status with relevant stakeholders. Advocacy work on the SPC animal health programmes was made.

j.

In consultation with AusAID and the Pacific Islands Forum Secretariat, LRD finalised the terms of reference for the land management and conflict minimisation study. Agreement was reached with the AusAID Pacific Land Programme to undertake a joint SPC–AusAID design mission for the LRD land management and conflict minimisation study and AusAID's regional land management centre.

#### **NEW CALEDONIA'S FIRST ORGANIC MARKET**

In the last week of March, SPC/LRD participated in the "Week without Pesticides" organised in Noumea, New Caledonia's capital, by the environmental umbrella organisation "Ensemble pour la planète" (together for the planet). The NGO wanted to draw attention to the effects agrochemicals can have on human health and the environment and the need to act responsibly in using them. Among a number of activities organised during the week was New Caledonia's first ever organic market. The two-day market, held on the last weekend of March, was an ideal occasion for SPC to present the Pacific Organic Standard and its activities in the organic sector, to the New Caledonian public, producers and consumers alike.

The market attracted crowds of people and had a wide variety of stands. Producers and producer associations displayed fresh fruits, vegetables and staples, products from the sea, jams and pickles, essential oils, cosmetics, honey and beeswax products, traditional foods, vanilla, local crafts, endemic plants and organic farming inputs. As there is no organic certification in the country, the participation of producers was based on trust – trust that agrochemicals were not used in the production process and that organic products were used in manufactured items. For example, a producer from Lifou used organically certified sugar to produce a range of delicious jams that were available for tasting and buying.

SPC/LRD combined with the Chamber of Agriculture and the producers' association, Arbofruits, to set up an information stand. The stand featured the Pacific Organic Standard, highlighting that it is a truly Pacific document that reflects the cultures, traditions, physical and geographical circumstances of the diverse peoples, ecosystems and natural resources of the region. It was explained that the Standard, which encompasses organic principles accepted worldwide, supports sustainable production systems and consumer protection

Work on creation of a Participatory Guarantee System (PGS) for the certification of organic products for the local market was also presented at the stand. The occasion was used not only to inform producers and consumers, but also to recruit people interested in getting involved. The systems are locally focused quality assurance systems to certify organic producers. Their mode of operation is defined through active dialogue and participation of producers and consumers in search of the same outcome – quality products at a fair price. PGS are built on a foundation of trust, social networks and knowledge exchange.

There was also great interest in the practical guidelines on sustainable agricultural techniques developed under the DSAP project, including those on preparing plant-based pesticides (derris and neem), drip irrigation systems, compost and fish fertilizer.

Work by SPC in Lifou on the production of organic fertilizer and animal feed from fish waste was presented through samples and a comic series. People were surprised that the product did not smell!

The media attention, the overwhelming response from the public, and official distribution of the Pacific Organic Standard to political and administrative authorities meant that not only is the Standard now well and truly launched in New Caledonia, but hopefully that this was only the first of many organic markets where people will be able to choose from a wide range of verified and certified locally produced products.



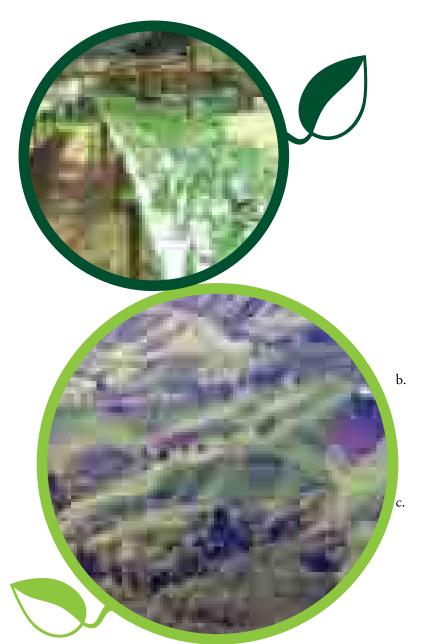
and seeks to enhance the image of the unique traditional agricultural systems practiced in the Pacific.

- k. The second meeting of the Pacific Agriculture and Forestry Policy Network (PAFPNet) was held in December 2009. LRD acts as the secretariat for the network. The purpose of the meeting was to strengthen the network and develop priorities for the network activities until 2012 based on members' needs. PAFPNet has produced and disseminated policy briefs on organic agriculture and climate change during 2009 that highlight key policy recommendations for decision-makers. Policy briefs on livestock, youth and agriculture are progressing.
- l. In response to a recommendation from the Ministers of Agriculture and Forestry in 2008, PAFPNet, in collaboration with LRD and SPC's Human Development Programme, engaged consultants to develop a Youth and Agriculture Strategy and Action Plan. They conducted consultations in Fiji, Kiribati and Tonga, and presented early results to the PAFPNet stakeholder meeting. Further consultations will be conducted during 2010.
- m. Policy briefs on organic agriculture and climate change were completed and disseminated.
- n. LRD assisted American Samoa, French Polynesia, FSM, Samoa, Tokelau and Tonga to develop their strategic plans for agriculture and forestry development. Through the Joint Country Strategies (JCSs), requests have also been received from Palau and the Commonwealth of the Northern Mariana Islands (CNMI) for assistance in developing their agricultural development strategies.
- o. The Cook Islands Parliament enacted a biosecurity bill in September 2008, and the Crown Law Office and Biosecurity Division of the Department of Agriculture conducted public awareness training on the Biosecurity Act in Rarotonga and Aitutaki. In Fiji Islands, the president promulgated the biosecurity bill in Promulgation no. 28 on 19 December 2008. The Fiji Biosecurity Promulgation and Fiji biosecurity information facility were officially launched on 17 April, followed by awareness and training sessions for the public around the country.

- p. Discussions on the status and next steps of the biosecurity bill are ongoing with FSM, Kiribati, Palau, PNG, RMI, Tuvalu and Vanuatu. Kiribati anticipates introducing its bill during the second half of 2009, and has received financial assistance to undertake national consultations. PNG has engaged a local legal consultant to assist with its biosecurity policy and preparations of other nationally required policy documents to enable to the biosecurity bill to progress.
- q. SPC, together with the United States Department of Agriculture's Animal and Plant Health Inspection Service and the University of Guam, co-sponsored and conducted sub-regional quarantine training of quarantine, homeland security and environment officers from the Micronesian countries and territories at the University of Guam.
  - The progress report on the harmonisation of biosecurity laws, including the status of the bills in the various PICTs, was presented to the Pacific members of the African, Caribbean and Pacific Group of States trade officials and ministers meeting in June in Apia, Samoa, as part of the consolidated Pacific Regional Economic Integration Programme report. A progress report was also presented at the 6th triennial meeting of the Pacific Plant Protection Organisation (PPPO) and the 14th Regional Technical Meeting for Plant Protection (RTMPP) in Port Moresby, PNG, in July 2009. The Heads of biosecurity services of the PICTs agreed to persevere with their national processes.
- s. Supported a consultation process to integrate climate change in the draft forest policy and the draft forest legislation from July 2009 onwards through the SPC/GTZ regional programme on climate change.
- t. LRD was represented at the Asia Pacific Forestry Committee (APFC) meeting in Chiang Mai, Thailand. The meeting reviewed the activities of the committee and also discussed the 2010 and 2011 sessions.
- u. LRD was represented at the International Symposium on Forest Genetic Resources held from 5–8 October 2009 in Kuala Lumpur, Malaysia in collaboration with the International Tropical Timber Organization, Asia Pacific Association of Forestry Research Institutes, Bioversity International and the Forest Research Institute of Malaysia. A one-day workshop for the Asia-Pacific Region on the preparation of a Report on the State of the World's Forest Genetic Resources was also held after the FGR Symposium.

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

Outcomes centre on PICTs adopting a balance between traditional and modern land management ideas, and solving problems affecting forestry and agriculture production using the best science. Communities own the achievements because delivery of services and technology is carried out using participatory approaches. The following are the main initiatives and activities contributing to this output.



- The DSAP project for the eight Lome Convention countries (DSAP I) was completed in December 2008; DSAP II, for the six new Pacific members of the African, Caribbean and Pacific Group of States, will be completed in December 2009. Despite closure and winding down of activities, the projects' graduate research assistants and research and extension assistants have continued to actively liaise with each other and with LRD, completing unfinished work and initiating follow-on activities. DSAP has helped PICTs develop technologies to address some of the major problems in agriculture in the region:
  - Cover crop Mucuna pruriens has been promoted as short-term fallow and green manure with great successes in Cook Islands, Niue, PNG, Samoa, Tonga, Vanuatu and Solomon Islands, while Dolichos lablab is being used successfully in Wallis and Futuna.
  - Compost in conjunction with biochar is being promoted to improve properties of atoll soils.
     CEAARD in Tarawa, Kiribati, is developing a simple home kiln for the production of charcoal.
     The centre is also promoting the use of plantderived pesticides such as neem and *Derris* for control of some insect pests in crops.
  - The bucket drip irrigation system has been very effective in cultivating vegetables and fruits.
     The technology is now widely used in Cook Islands, French Polynesia and Tonga, and is being promoted in Kiribati, Nauru, Niue and RMI.
  - LRD is promoting hydroponics as an alternative method of producing vegetables on a regular basis, including during off-season periods.
  - In collaboration with the Tasmania Forest Practices Authority, LRD assisted Tonga in formulating its Code of Forestry Practices for the island of 'Eua. This covers the whole cycle of planting, management and harvesting, and aims to contribute to the better management of the 'Eua water catchment.
  - In collaboration with the Pacific Islands Applied Geoscience Commission (SOPAC), LRD assisted Kiribati in setting up a vegetation monitoring system. This required setting up a system for mapping Kiribati on a 1:10,000 scale, and training relevant people to operate the system, including the collection of field data. It is hoped that this will be a model that other atoll countries will consider. The system, apart from facilitating the more effective monitoring of Kiribati's vegetation cover, will also fulfil some of the country's reporting obligations under FRA 2020 and others.

## THIRD PACIFIC HEADS OF FORESTRY MEETING

The Third Pacific Regional Heads of Forestry Meeting was held in September in Nadi, Fiji. The theme of the meeting was, "Forests, Climate Change and Markets" and examined the role of . Delegates from 17 SPC member countries and territories in the Pacific (PICTs) attended.

SPC Deputy Director-General, Ms Fekitamoeloa Utoikamanu gave the official keynote address, highlighting the vulnerability of small island states to the projected effects of climate change, such as sea-level rise and saltwater intrusion. Pests and diseases are also likely to become more prevalent. She emphasised the strong commitment of SPC through its Land Resources Division to assist its member countries and territories in sustainable management and development of their agricultural and forest resources and improved biosecurity and trade in agriculture and forestry products. SPC's Forests and Trees Programme provides valuable technical assistance to PICTs in this regard.

For the first time, the United Nations Forum on Forests (UNFF) Secretariat was represented at the meeting. UNFF, the international body on forestry, recognises climate change as a global issue affecting the world's forestry resource and this was one of the main themes of its 8<sup>th</sup> Session held in New York earlier this year.

Mr Sairusi Bulai, coordinator of SPC's forests and trees thematic group presented a report on the activities of the group and activities carried out by the agriculture and forestry diversification group of LRD.

Country reports highlighted developments and challenges in the management of national forestry resources. Regional and international partners provided valuable information and expertise on a range of topics including climate change and markets for forestry products. Presentations were made on international policies and financing instruments, forest sector markets, regional initiatives as well as climate change. The strategy is 'to build institutional capacities and strengthen the forestry sector's involvement in climate change negotiations at national, regional and international levels'.

Meeting delegates were informed of the new collaboration between SPC's Land Resources Division (LRD) and German Technical Cooperation (GTZ) to implement a regional initiative on adaptation to climate change. LRD is also taking a lead role in the conservation, improvement, distribution and use of plant genetic resources in the region with the opening of a new building for the Centre for Pacific Crops and Trees (CePaCT). The Centre includes a tree seed unit to support SPC's work in distributing and exchanging crop and tree germplasm, with the aim of improving the productivity of farmers and tree growers.

Meeting delegates agreed on a list of recommendations that will be submitted to the Heads of Agriculture and Forestry Services (HOAFS) meeting for endorsement. The next HOAFS meeting will be held in Tonga in 2010.

Specific recommendations related to climate change, policy and legislation, sustainable forest management, markets, agroforestry, forest genetic resources, invasive species, land use planning, participation in international policy-making, and ecosystems and biodiversity.

The meeting was organised by SPC's Land Resource Division in close collaboration with GTZ, ACIAR and the EU.

- d. Continued support was provided to the Drawa sustainable forest management model area in Fiji Islands. This was to ensure that relevant activities that were agreed to between the land owners and the sustainable forest management steering committee were implemented after the SPC/GTZ regional forestry project ended in 2008. This was facilitated to a great extent by the recruitment of a community forestry technical officer jointly funded by SPC and GTZ.
  - In collaboration with the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and with funding from the AusAID Pacific Governance Support Programme, LRD started implementing a project that would assist PICTs to overcome some of the hurdles impeding the efficient and safe movement of wild and improved tree germplasm between countries. During the year, the project team met with forestry, agriculture, customs and quarantine officials from six focus countries (Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu) to discuss relevant issues pertaining to access and safe movement/exchange of tree germplasm between countries. As the final output of the project, a workshop on improving governance and building the capacities for safe movement of tree germplasm between Pacific Island States will be held in March 2010 to provide formal training to participants on the main principles and practices of pest risk analysis. The workshop will also look at the preparation of general country specific recommendations related



to principles and practices, changes in legislations and regulations on safe movement of tree germplasm, consider draft Material Transfer Agreements, and discuss solutions to problems which have been evident/identified during the past surveys or discussions. The success of this project will contribute positively to the operation of the tree seed centre being established within the new CePaCT facility in Narere, Fiji.

- f. LRD participated in the preparation of a global report by the FAO Commission on Genetic Resources for Food and Agriculture on the use and movement of forest genetic resources for food and agriculture in collaboration with FAO and Biodiversity International. A paper on 'The use and transfer of forest reproductive materials of some priority tree species in the South Pacific' was prepared and presented in a workshop held in Rome in February 2009.
- g. LRD contributed to the organisation and facilitation of the Taveuni Mini Summit to develop an integrated and sustainable agriculture concept for the island. This was in response to concerns being raised regarding the widespread use of unsustainable taro farming practices and the danger that this would lead to the permanent loss of soil fertility, forests and biodiversity on an island called the 'Garden Island of Fiji' because of its rich agricultural soil and its natural beauty.
- h. In collaboration with the Fiji Islands MPI, LRD conducted the following awareness meetings: one promoting the importance of implementing an integrated and sustainable land resource management regime in Nadi during Fiji Arbor Week with the theme

'Prevent Flooding, Combat Climate Change, Plant Trees Now!'; one in support of the Rotuma/Tuvalu Agriculture Trade Initiative on the island of Rotuma; and one as part of the Nakurusiga Youth Agriculture Project.

i. LRD continued to support Samoa in the areas of bamboo propagation, management and utilisation, including the use of bamboo for rehabilitating degraded water catchments. Because of its short rotation and excellent properties, bamboo can productively contribute to the islands' agroforestry systems in terms of the production of food and construction materials, soil rehabilitation and income generation.

The EU-funded Facilitating Agricultural Commodity Trade (FACT) Pilot Project supported the training of farmers in Fiji and Solomon Islands in implementing sustainable practices in their cocoa plantations.

k. Continued support was provided for developing standard operating procedures relevant to PICTs' emergency response plans. These are now available online for adaptation by PICTs.

1.

- The paravet training programme was extended to Kiribati, Nauru and Niue. Final assessments for these three sessions are being conducted. The programme was launched in PNG in collaboration with the National Agriculture Quarantine and Inspection Authority and Vudal University, and served as the initial stage in institutionalising the paravet training programme into the national training institutions. Similar institutionalisation of the programme is presently being discussed with the Fiji College of Agriculture, the Solomon Islands College of Higher Education, the College of Micronesia in FSM and the Land Grant College in American Samoa.
- m. The introductory paravet training module has been translated (from English into French), and an electronic version (with Internet access) has been developed.
- n. The first draft of the Animal Disease Surveillance and Diagnostic Manual has been completed, and is being circulated to relevant stakeholders for feedback.

- o. Revision of the content of the meat hygiene and food safety module is ongoing, with a French version to be made available online. Work on improvements to the design and implementation of distance learning tools (marking systems, evaluation forms, etc.) continued. Work began on translating the introductory paravet module into French (electronic version) and making it available online (via Moodle).
- p. LRD continued to collaborate with the World Society for the Protection of Animals, the Commonwealth Veterinary Association, and the International Fund for Animal Welfare to explore opportunities for increasing veterinary capacity in the region.
- q. Assisted Fiji Ministry of Primary Industry, through the provision of technical advice, on their Brucellosis eradication campaign, including the supervision of meat inspectors during the slaughter of reactor animals.
- Assistance was provided to Tonga on implementation of the Venezuela-funded livestock integrated project on piggery design and construction, and crop integration.
- s. Conducted training in livestock production systems and practices in collaboration with the Community Education Training Centre in Tonga and Fiji.
- t. Technical assistance was provided to PICT-United Nations Convention to Combat Desertification (UNCCD) focal points who attended the Asia–Pacific Regional Preparatory meeting for the 9<sup>th</sup> Conference of the Parties in Argentina in September 2009.
- Monitoring and evaluation reports on the Venezuelafunded project on sustainable land management for Palau and Samoa were submitted to the UNCCD Secretariat in Bonn, Germany.
- v. Technical support was provided to the Global Mechanism for UNCCD and UNDP Regional Offices in Bangkok, Thailand; Suva, Fiji; and Apia, Samoa for the design of integrated financing strategies for combating desertification and land degradation in preparation for the Pacific workshop.
- SPC-AusAID Pacific Land Program undertook a joint design mission to develop their respective regional programmes through a regional land initiative. A

- joint design approach was considered appropriate given the similar aims, approach and stakeholders associated with the Land Management and Conflict Minimisation, Pacific Urban Agenda and AusAID's Pacific Land Program. The design team consisted of AusAID and SPC representatives as well as consultants with appropriate thematic and cultural expertise. The team consulted with regional and national stakeholders in Fiji, Samoa, Solomon Islands and Tonga, and are currently working on the Pacific Regional Land Project Proposal. LRD anticipates implementing the proposal from 2010 to 2014.
- The ACIAR-funded project on integrated management of pests of brassicas in Fiji and Samoa was implemented, with successful trials on pesticide resistance, and farmer field schools to train brassica farmers, at several locations in the two countries. Part of the project also supports an MSc degree student enrolled at the University of Queensland. Field and laboratory experiments were conducted in Fiji and Samoa. Follow-up workshops were conducted to train the trainers for farmer field schools. The project's benefits are being extended to French Polynesia, Tonga, Vanuatu, and other PICTs. The project ends in the third quarter of 2009 and is due for review by ACIAR.
- y. The biological control of mikania project in Fiji and PNG began in PNG with the release of fungi in more than a dozen provinces to control the weed, and confirmed field establishment in four provinces by mid-year. In Fiji, the necessary authorisation was delayed, and the release at predetermined locations where the weed is a problem is still pending.
- z. The LRD Plant Health team continued the support provided to Vanuatu in 2007–2008 to promote kava die-back disease management strategies in the major kava producing islands of that country.



### PACIFIC EXTENSION SUMMIT EXAMINE ROLE OF ICT AND MEDIA TO SUPPORT AGRICULTURE

Information about agriculture needs to be presented in a way that makes it relevant to people's lives and interests to be attractive to local news outlets and to the general public.

This was one of the recommendations following a panel discussion on the role of media in extension during the 2<sup>nd</sup> Extension Summit in Nadi, Fiji Islands.

The perception that agriculture is a poor person's profession points to the critical need for the media and extension officers to work together. The lack of interest in agriculture among youth in the Pacific may be due to a lack of awareness of opportunities and professions that are available in agriculture. Agricultural graduates go on to pursue specialist careers, becoming soil scientists, plant health specialists, agricultural economists, veterinarians, foresters, conservationists, or progressive farmers. According to one panellist, Samisoni Pareti of Islands Business International (IBI), media and extension officers need to develop good working relationships and encourage a healthy exchange of information to assist in rural development.

'We should not see each other as competitors but instead as partners complementing each other's work. The media can further the work of extension.' I strongly believe in exposing journalists to extension work carried out by agriculture and forestry extension officers and providing basic training for extension officers in developing and packaging news.'

Pareti also suggested that through partnerships, youths can also be encouraged to consider professions related to agriculture and forestry.'I also urge regional organisations to include round table meetings and media briefings during major events to create awareness regarding their work activities.'

The use of telecenters as a focal point to allow farmers access to information was also highlighted as one innovative way to improve extension services. Developing relevant content remains a challenge to extension workers in the operation of telecentres. CTA is quite keen on promoting this initiative.

The One Laptop Per Child (OLPC) initiative and the creation of the XO laptop was also demonstrated as an innovative tool to connect to the Internet using a rugged low-cost laptop. The objective of the initiative which started in 2002 is to reach the nearly 2 billion children of the developing world with little or no access to education.

Extension work continues face challenges given scarcity in human, financial and physical resources. **SPC** is working to use ICT to improve the accessibility, quality and relevance of advisory services provided to farmers/growers to allow them to effectively participate and adapt to a dynamic global environment.

The key objectives of the SPC's work in this area are to address the need to deliver information using low cost and assistive mobile technologies, to evaluate the use of mobile technologies to improve technical assistance, to market information to farmers in three pilot countries, and to assess the use of mobile technologies in enhancing policy. ICT has successfully been used to contribute to the dissemination of information to farmers in several countries.

At the summit, participants were asked to discuss innovative ways to transform extension services to better reach farmers with new knowledge and technology, given the limitations in physical and human resources.

Sixty participants from 17 Pacific Island countries and territories, including some in the northern Pacific, are participating in the week-long gathering of extension and outreach experts with the theme 'transforming extension and outreach in the Pacific for sustainable development'.

The Technical Centre for Agricultural and Rural Cooperation (CTA) is the major sponsor of the summit. SPC's Land Resources Division (LRD) is a co-sponsor and is supporting events and providing funding to bring participants to the summit. Other co-sponsors include the Food and Agriculture Organization of the United Nations (FAO), the University of the South Pacific (USP), German Technical (GTZ), Cooperation the Australian Agency for International Development (AusAID).

- aa. With support from ACIAR, LRD contributed to scoping studies and renewed interest in reviving the cocoa industry in Fiji. The special expertise of the Plant Pathologist in developing integrated disease management in cocoa systems provided this impetus. Specialist training was provided to cocoa farmers in Tailevu and pilot or trial plots were set up to demonstrate integrated disease management strategies.
- ab. The ACIAR-funded Improved Plant Protection in Solomon Islands (IPPSI) project, coordinated by LRD, has had good results in rehabilitating plant protection capacity after the tensions of the 1990s.
- ac. In collaboration with the International Fund for Agricultural Development (IFAD), work on promoting organic and ethical trade has developed significantly, including:
  - development, approval and launch of the Pacific Organic Standard through a locally owned process with multi-sector participation;
  - development, approval and launching of the regional strategy (national plans are being developed);
  - completion of a capacity assessment of national organic agencies with the development of a project proposal to build capacity of national organic agencies now ongoing;
  - establishment of two key groupings tasked with driving the organics movement in the Pacific

     The Pacific High Level Organics Group, consisting of Pacific leaders who have shown a commitment to organics development in the region and provide high-level political support and advocacy; and
    - attendance at a meeting of POETComm, a technical group of organic practitioners charged with developing the Pacific standard and responsible for implementing the Regional Strategic Plan. POETComm has evolved into a cohesive 'organic voice' in the Pacific and an effective network that has stimulated and supported activities at national and local levels.
      - ad. In collaboration with FAO, LRD

- organised the Global Environment Facility (GEF)—Pacific Alliance on Sustainability (PAS) regional consultation on forest conservation and protected area management for Fiji, Niue, Samoa and Vanuatu, which was held in Nadi, Fiji. The consultation was funded under the SPC-National Forest Programme Facility partnership
- ae. The ACIAR-funded dasheen mosaic virus (DsMV) project has distributed taro plants to both Samoa and Fiji for the field stage of the project. The rate of reinfection of DsMV in the 'clean' planting material will be assessed and the impact on yields measured. This will assist in determining the value and benefits of clean planting material to taro growers

af.

- In response to the recommendation of the Third Regional Meeting of the Heads of Agriculture and Forestry Services (HOAFS) — endorsed by the Second Regional Conference of the Ministers of Agriculture and Forestry (MOAF) — the Third Pacific Regional Heads of forestry Meeting was convened in September 2009. The theme of the meeting was, 'Forests, Climate Change and Markets', and was attended by heads of forestry and their representatives from 17 PICTs. Also represented at the meeting were a number of donors and partner agencies, including the EU, FAO, GTZ, Japan International Cooperation Agency, ACIAR, United States Department of Agriculture - Forest Service, United Nations Forum on Forests (UNFF), CSIRO and SOPAC. The UNFF Secretariat participated for the first time in this meeting.
- ag. In collaboration with GTZ-IWP of Germany, the EU-FAO ACP Forest Law Enforcement, Governance and Trade Programme and the SPC/GTZ Pacific German Regional Programme on Adaptation to Climate Change Project, organised and held the Regional Training Courseon Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific.
- ah. Continued support was provided to the Nauru Rehabilitation Corporation to build their capacity to rehabilitate their phosphate-mined land, a priority activity highlighted in the Nauru JCS. In collaboration with Goko Nickel BP of New Caledonia, a study tour was organised for the Chief Executive Officer of Nauru Rehabilitation Corporation and his staff to observe rehabilitation activities of Goko Nickel, in Noumea, New Caledonia.

- ai. LRD supported a two-week training course on FSM atoll vegetation survey and forest inventory methodology. The design and field survey was intended for the 10 atolls of FSM from Pohnpei, Chuuk and Yap States. The purpose of the training was to;
  - train the state peer trainers on FSM Atoll vegetation survey and forest inventory methodology;
  - carry out field testing of proposed designs;
  - select the most appropriate methodology;
  - Finalize plans for the survey trip; and
  - Discuss data input and analysis training.
- aj. LRD was successful in submitting funding requests, and obtaining extra funds for the regional animal waste management project from the Republic of China. (Actual implementation of activities to begin in 2010.)





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

PICTs are among the most vulnerable countries in the world with regard to climate change, and natural disasters are a fact of daily life. Outcomes for this output centre on PICTs putting in place structures, capability and capacity to work toward minimising the impact of climate change and natural disasters (and to support and accelerate recovery). Output 2.4 activities also make a significant contribution to this output. The following are the main initiatives and activities contributing to this output.

- a. The SPC/GTZ Regional Programme on Adaptation to Climate Change developed plans that define activities to strengthen adaptation capacities of project countries Tonga, Fiji and Vanuatu from the policy level to the community level. A plan of operation was also developed to strengthen climate change-related capacity development for LRD and its services. These plans, which cover the period until December 2012, were elaborated on with a wide group of stakeholders.
- b. In May 2009, an introductory seminar on reducing emission from deforestation and forest degradation (REDD) was conducted for Fiji national stakeholders. Following this, a REDD policy scoping workshop and an introductory training on carbon monitoring was carried out in August 2009, involving more than 50 participants from all forest-related sectors, including resource owners. The workshop developed and agreed on draft National REDD Policy for Fiji.
- c. Following on from the Pacific Regional Biofuels workshop held in Nadi, Fiji in November, LRD presented an update on progress implementing coconut biofuels projects in the region, and the lessons policy-makers and project designers should take to the regional Energy Ministers meeting in Tonga. In collaboration with IFAD, LRD is completing a consultancy paper investigating the policies, priorities and project implementation barriers to 'making coconut biofuels' work in the Pacific.
- d. The Plant Health team is now able to screen for the presence of viruses released to control the coconut damaging rhinoceros beetles in PICTs. Testing and detecting the presence or absence of viruses will contribute to determining if beetle populations need to be controlled by releasing new virus-infected beetles into pestiferous populations.

- e. Fiji flood relief work was supported by the Plant Health and AHP teams, which coordinated the purchase and delivery of planting materials (sweet potato cuttings and seeds of a range of vegetable crops) and veterinary drugs (accompanied by training on proper use of the drugs) to farmers in the areas affected by the floods in January 2009. The Genetic Resources team provided drought and salt tolerant sweet potato varieties to Koronivia Research Station for multiplication and wider distribution, and are working with the station to expand and improve on their tissue culture laboratory to strengthen the supply of planting material in Fiji generally.
- f. The 'climate-ready' collection in CePaCT now consists of 104 accessions made up of crops and varieties with recognised and potential 'climate-ready' traits.
- g. Salt and drought tolerant sweet potato varieties from the International Potato Centre have been distributed to 10 countries.
- h. Some preliminary experiments have been conducted to evaluate methodologies for screening and inducing salt tolerance in vitro. The results will form the basis for more advanced research in 2010.
- i. 167 accessions of taro were sent to PNG for drought and salt tolerance screening, where two sites have been identified. The taro will be evaluated, and any accessions performing well will be further investigated for salt and drought tolerance.
- j. The SPC/GTZ Regional Programme on Adaptation to Climate Change supported the consultation process to integrate climate change into the draft Tonga national forest policy and the draft Tonga forest legislation.
- k. In recognising the need to strengthen community awareness on climate change issues, the SPC/GTZ Regional Programme on Adaptation to Climate Change supported a two-day workshop on climate change, land use, forestry, and agriculture for the Fijian province of Ra.
- 1. The Regional Heads of Forestry Meeting held on September in Nadi, Fiji was themed 'Forests, Climate Change and Markets'. Intensive sessions on climate change issues for the forestry sector in the Pacific was conducted with 17 member country representatives and 15 international and regional experts.



- m. The SPC/GTZ Regional Programme on Adaptation to Climate Change supported preparations for negotiations and participation of the Fiji Forestry Department to the United Nations Framework Convention on Climate Change (UNFCCC) 15<sup>th</sup> Conference of the Parties (COP15) in Copenhagen.
- n. In collaboration with the International Union for Conservation of Nature (IUCN) and the Secretariat of the Pacific Regional Environment Programme (SPREP), developed an information brief on ecosystem-based adaptation to help address climate change.
  - LRD coordinated the development of a paper on climate change that was presented at the Pacific Legislators for Population and Governance at their meeting in Rarotonga, Cook Islands in November 2009. The meeting aimed to get more parliamentarians involved in addressing the impacts of climate change. The Rarotonga Declaration on Climate Change and Framework for Action on Climate Change were key outcomes from the meeting and committed Members of Parliament to working at the international, national and local level to mainstream climate change across all sectors of government including agriculture and forestry. A number of Members of Parliament were also appointed as climate change champions.



# Output 2.4 Invasive species, pests and disease problems identified and addressed, and capacity to respond at national and regional levels supported

With the increasing expansion of trade and tourism, intensification of agriculture, and continuous logging of even some of the most inaccessible forests, the Pacific has become more vulnerable to invasive species, pests and diseases, including zoonoses. Outcomes centre on the existence of national and regional capacities to ensure that PICTs effectively manage such events. Major activities under this output are as follows.

- a. LRD undertook a region-wide programme to audit the regional and national fruit fly surveillance programmes in PICTs. Based on the audit, corrective actions have been undertaken. These included addressing issues of non-compliance with ISPM 6 (International Standard for Phytosanitary Measures), audit training, and training on general maintenance and upkeep of surveillance programmes. LRD has also embarked on a programme to use GPS receivers to plot locations of all fruit fly traps across the region. Thus far, audits and GPS plotting have been completed for American Samoa, Fiji Islands, French Polynesia, Niue, Pitcairn Islands, Tuvalu, Vanuatu, and Wallis and Futuna.
- b. Eradication of Fiji fruit fly on Niulakita Island in Tuvalu is ongoing. LRD supplied fruit fly traps, lures and other materials to Tuvaluan government staff undertaking the programme. Eradication of the little fire ant is ongoing in Santo and Efate in Vanuatu and in Wewak in PNG.
- Through DSAP and CEAARD, LRD is trialling and promoting the use of plant derived pesticides on some crops.
- d. The development of a strategy for building capacity of Pacific laboratories, and for shipping routes and protocol, was completed and endorsed by the PHOVAPS Advisory Group. The list of contact persons within PICTs to establish shipping accounts with couriers is being finalised.
- e. In collaboration with Queensland DPI, AHP organised laboratory training for animal health officers in seven PICTs (Kiribati, PNG, Solomon Islands, Tonga, Tuvalu and Vanuatu) that was held in Townsville, Australia.

Training for officers from an additional four PICTs (Cook Islands, Fiji Islands, French Polynesia, and Wallis and Futuna) will be conducted in September in collaboration with the New Zealand Ministry of Agriculture and Forestry Biosecurity lab in Wallaceville, New Zealand.

- f. Strengthening of sub-regional animal health laboratories in Fiji Islands, Guam and PNG continued. Laboratory equipment for PNG has been procured and delivered, and orders for consumables and reagents are being finalised. The development of the Guam lab at the University of Guam is subject to the availability of Pacific Regional Influenza Pandemic Preparedness Project (PRIPPP) funds. The university's contribution is already in place.
- g. Regional route maps and transportation plans for submission of animal health specimens to target laboratories completed. Shippers' accounts were established and shipping protocol templates developed. Specific country route maps, shipping accounts and protocols were developed for Fiji, French Polynesia, Kiribati, Samoa, Solomon Islands, Tonga, Vanuatu, and Wallis and Futuna.
- h. Work instruction templates for animal health labs were also developed and circulated.
- i. Procurement of animal disease investigation kits completed, and kits repackaged and prepared for shipment to individual PICTs.

j.

The LRD Plant Health team continued to collaborate with researchers at Rhodes University and the Plant Protection Research Institute (both in South Africa) on research into the genetic relationships between troublesome African tulip tree populations in the Pacific and those in the supposed native range in tropical Africa. DNA tests on 150 samples from Fiji pointed to a West African origin in late 2008. In June and July 2009 the first exploratory trip to the forests of Ghana was undertaken by collaborators in South Africa on behalf of SPC LRD. Very interesting preliminary findings included a number of very damaging insects and a mite. Additional funding and time will be needed to completely ensure that these natural enemies are safe for introduction into the Pacific. Funding is required to conduct preliminary host-specificity tests in either South Africa or Ghana to eliminate non-host specific organisms. Further host testing in one PICT will require additional resources.



# PITCAIRN ISLAND RECEIVES BIOSECURITY TECHNICAL ASSISTANCE

SPC Director General, Dr Jimmie Rodgers officially handed over biosecurity technical assistance for Pitcairn Island in a short ceremony held in July just prior to the mini CRGA. Accepting the assistance on behalf of Pitcairn island government was Assistant Commissioner Mr Evan Dunn, who was attending the mini CRGA held at Lami Tradewinds, Suva, Fiji. The technical assistance is aimed to strengthen Pitcairn's biosecurity service to prevent new pest incursions and to facilitate trade.

The technical assistance provided included a computer, digital camera, visitor arrival card, and biosecurity uniforms. In a previous SPC mission in 2007 these were the main assistance requested for biosecurity.

Dr Jimmie Rodgers reiterated the need to maintain a good biosecurity service to prevent new pest incursions especially with the need to protect the island nations lucrative honey exports. Despite the 50 or so island population there are quite a number of cruise ships that call in to Pitcairn enroute to French Polynesia from ports in South America. Thus, the biosecurity uniforms and arrival cards, which combine information on immigration, customs and biosecurity, will become very helpful in passenger clearance.

Since first establishing contacts in 2007, other on-going assistance from SPC to Pitcairn island include market access research for fresh produce into the Gambier Islands in French Polynesia, initiation of a fruit fly area wide IPM programme including release of fruit fly parasitoid, *Fopius arisanus* currently reared in French Polynesia, continue with Biosecurity awareness and developing a simple import permit system.

There is also in the pipeline a EU funded organics initiative targeting Pitcairn Island.

- k. The LRD Plant Health team continued to play an important advisory role on the recently discovered Bogia coconut disease syndrome in PNG to ensure appropriate procedures were followed and the disease was identified taxonomically. The identification of the disease was made by two separate internationally reputable laboratories, and the PNG government is expected to formally announce the findings soon.
  - l.An outbreak of the prickly sensitive plant mimosa was reported in Tonga for the first time. The Plant Health team is assisting in addressing this pest threat. Wedelia was found to be more widespread and identified as a weed for eradication in Tarawa, Kiribati.
  - m. The 6<sup>th</sup> meeting of the PPPO endorsed the draft generic contingency plan for invasive ants as the regional plan that PICTs adopt and use in case of dangerous ant incursions. Little fire ant management work in Vanuatu continued at known outbreak sites. A fresh outbreak of little fire ants at Angoram was found, while expansion of range from two existing infestations in the East Sepik Province of PNG was surveyed and treatments were applied at one location. Funding from the French Pacific Fund was approved in 2008 to support work on little fire ants in PNG, Vanuatu and French overseas countries and territories, but funding has not yet been received.
  - n. Weed surveys were conducted in Kiribati on two major islands. Insect pest and plant disease surveys were carried out in Tuvalu, in preparation of the expected trade in agricultural products between Rotuma (Fiji Islands) and Tuvalu. All information from these surveys will be available in the online Pacific Pest List Database.
- o. The LRD Plant Health team is assisting the Solomon Islands Ministry of Agriculture in finding ways to control taro mitimiti diseases on Rennell Island.
- p. In collaboration with SPREP, LRD prepared the Pacific regional invasive species management guidelines. The guidelines were approved by the Ministers of Agriculture and Forestry at their 2008 meeting in Samoa, and the SPREP Ministers of Environment 2008 meeting in Pohnpei. The 6<sup>th</sup> Board Meeting of the Plant Protection in the Pacific (PPP) project endorsed the guidelines.
- q. Technicians from Kiribati and Solomon Islands were provided attachment training with the Plant Health team at SPC Nabua (Fiji), focusing on entomological skills.

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

Outcomes centre on PICTs having up-to-date information on their animal and plant health status from LRD-generated and regionally maintained information gathered from pest and disease survey

- a. LRD continued to provide advice and share information through the AnGR for Food and Agriculture mailing list, the Pacific Veterinary Mailing List, the Pacific Animal Health Network, and the PHOVAPS mailing list.
- b. The Plant Health team contributed to the publication of: the proceedings of the conference on ecology and management of pasture weeds; the final report of the Taro Beetle Management Project; the final report of the EU-Plant Protection in the Pacific Project; and staff contributed to a number of scientific publications, including a chapter detailing SPC's roles in the biological control of weeds in a book published by Cambridge University.
- c. The community garden concept continued to be promoted, especially in some urban and school settings in Fiji Islands. At farmer field schools, trainers have been trained and are expected to train other farmers on integrated pest management.
- d. The Technical Centre for Agricultural and Rural Cooperation ACP–EU (CTA), GTZ, ACIAR, FAO,USP and the EU-funded FACT and DSAP projects collaborated to convene the 2<sup>nd</sup> Pacific Extension and Outreach Conference with the theme 'transforming extension and outreach in the Pacific for sustainable development' in May. The conference recognised the expanding role of agriculture extension and formulated strategies for developing extension policies, increasing role of extension in sustainable development, engaging youth in agriculture, public private sector partnerships and communications utilising networks and information and communications technology.
- e. In collaboration with the Fiji Islands MPI and support from GTZ and other LRD thematic teams, the Information, Communication and Extension team organised a stakeholder summit titled 'Taveuni Island Sustainable Agriculture Development: The Way Forward From 2009'. The summit brought together citizens who were concerned with the rapid rate of deforestation due to the unsustainable production



of export dalo. The citizens concerned have now organised themselves to advocate sustainable farming practices and appropriate research to be conducted on Taveuni.

- f. The LRD Information, Communication and Extension support team continued to support development of farmer associations in Samoa by conducting membership drives, awareness campaigns and development of management and governance structures. LRD has been in the forefront of establishing information centres utilising modern information and communications technology such as mobile phones to improve the delivery of services to farmers.
- g. In collaboration with CTA in the Netherlands, LRD organised the Pacific's input to an international seminar held in Brussels on the role of the media in agriculture and rural development.
- h. LRD's Publications and Communications team has continued to develop and distribute relevant information in many formats to support LRD activities.
- i. In its efforts to improve information and service delivery, LRD, with the support of GTZ, is refurbishing its website to ensure full and interactive functionality capable of meeting clients' requirements. The upgrading of the website will include the integration of related climate change issues into all LRD focal areas.

## SUBREGIONAL TRAINING ON DISEASE SURVEILLANCE FOR TROPICAL ANIMAL PRODUCTION

Improving diagnostic skills of Pacific Island animal health specialists in detecting animal diseases was the main aim of a workshop on laboratory procedures held at the Tropical and Aquatic Animal Health Laboratory, Oonoomba, Townsville, Australia, from 6 to 15 July 2009.

The serology training for the diagnosis of different animal diseases is an ongoing activity to strengthen animal disease diagnostic capacity within the Pacific region under the Pacific Regional Influenza Pandemic Preparedness Project (PRIPPP), funded by the Australian Agency for International Development (AusAID) and the New Zealand Agency for International Development (NZAid).

The capacity building exercise was a collaboration between LRD Animal Health and Production, Queensland Department of Primary Industries (QDPI) and James Cook University (JCU). The laboratory course is one of the series of sub-regional diagnostic training sessions for Agriculture and Animal Health Officers of the Pacific Island countries and territories. It was an output-oriented training with the aim of exposing Agriculture and Animal Health Officers to basic laboratory set-up procedures..

The exercise allowed a communications network to be developed between the different Pacific Island countries and established laboratories such as the QDPI animal health laboratories. Training participants consisted of animal health staff who are currently or will be involved in laboratory activities in Kiribati, Samoa, Solomon Islands, Tonga and Tuvalu.

The capacity training included presentations and hands-on practical laboratory exercises. Lectures included theories on diagnostic serology procedures and laboratory quality assurance delivered by James Cook University Senior Lecturers Dr Graham Burgess and Dr Jeff Warner. The practical exercises focused on basic laboratory skills ranging from efficient use of pipettes to more advanced procedures such as polymerase chain reaction (PCR).

Other diagnostic procedures covered included enzyme linked immunosorbent assay (ELISA), agar gel immunodiffusion test (AGID), hemagglutination (HA) and rose bengal test (RBT).

Selected participants also performed complement fixation test (CFT) for detection of Brucella in animals. Trainers for the laboratory exercises were experienced staff from Oonoonba and Toowoomba animal health laboratories headed by veterinary virologist Dr Glen Edmunds. The challenge for the trainers was to ensure that participants developed a good level of understanding of the different diagnostic procedures given the short duration of the training. Workshop training assistants included Mr Peter Wai'in, Laboratory Manager at the National Vet Laboratory of Papua New Guinea, and Ms Merewai Toganivalu, SPC Animal Genetics Technical Assistant. Good interaction was the key to the success of the training, which achieved most, if not all, of the training goals.

The training programme has sparked interest among the participants in enhancing their skills in animal disease diagnostics. Participants have returned to their respective island countries to continue to support and assist in improving national animal health diagnostic capacity.





## **OBEJECTIVE 3: IMPROVED AND INCREASED TRADE IN AGRICULTURAL AND FORESTRY PRODUCTS**

Trade is an integral part of the national economic development agenda in the PICTs and its regional prominence is reflected in the negotiation of regional economic integration as one of the pillars of the Pacific Plan. Trade in agricultural and forestry products must be supported through development of value-adding strategies, and by effective biosecurity services that facilitate trade within the region, with traditional trading partners or with new and emerging markets. Growth of domestic trade in agriculture and forestry products also needs to be fostered.

Outcomes for this objective centre on improved compliance by PICTs with international standards and increased domestic and export trade. There are four outputs for this objective.

- Output 3.1 National capacity to comply with international and other relevant standards strengthened
- Output 3.2 National capacity to increase domestic and export trade developed and strengthened
- Output 3.3 Sustainable and viable post-harvest technologies developed and promoted
- Output 3.4 Improved information available on plant and animal health status

# Output 3.1 National and regional capacity of extension, outreach and information services strengthened

Outcomes centre on PICTs being able to participate in the international standard-setting processes, being better able to comply with international standards, and being more active in export trade in the international market. The main achievements under Output 3.1 are outlined below.

- a. The PPPO Secretariat and Pacific representatives of contracting parties to the International Plant Protection Convention (IPPC) attended the 4th Session of the Commission on Phytosanitary Measures in April 2009. This session approved five new international standards on phytosanitary measures. The PPPO Secretariat successfully co-funded with the IPPC Secretariat a regional workshop on draft ISPMs in Nadi, Fiji Islands in August 2009. The workshop was facilitated by southwest Pacific representatives of the Standard Committee, LRD and the FAO Subregional Office for the Pacific Islands. Outcomes of the workshop were forwarded to the IPPC Secretariat as PPPO comments on the draft ISPMs.
- b. OIE, under an memorandum of understanding with SPC, agreed to provide SPC member PICTs access to the World Animal Health Information System (WAHIS) disease reporting system. Names of country representatives and Heads of Veterinary services were provided as national OIE contact delegates. The WAHIS system allows reports to be prepared in draft and then reviewed and edited or amended as required before final submission to OIE. Individual PICT OIE contacts or delegates are responsible for determining who the authorised WAHIS users are for their country/ territory and submitting disease reports to OIE, electronically via the online WAHIS system or using a paper-based reporting system (and mailing reports to OIE in Paris). SPC's AHP team has been authorised to assist in the process of disease reporting.
- c. The comprehensive Biosecurity Information Facilities (BIF) have been installed and commissioned in Cook Islands, Fiji Islands, French Polynesia, PNG and Tuvalu. The Cook Islands and the Fiji Islands BIF are now operational and operators are able to use their online operations manuals to undertake import permit and export certification using the system.

- d. French Polynesia, on its own initiative, has translated the operations manual component of BIF from English to French and is now being assisted by LRD to introduce the database component of BIF. PNG, Tuvalu and Vanuatu have not started using the import permitting and export certification module of BIF yet and assistance is continuing to enable them to use the system.
- e. The SPC Director-General donated materials for biosecurity technical assistance for Pitcairn Islands in a brief official ceremony held in July. In accepting the assistance, Assistant Commissioner Mr Evan Dunn, thanked SPC for the materials, which included a computer, a digital camera, newly developed visitor arrival cards, and biosecurity uniforms, which will help strengthen Pitcairn's biosecurity service.
- f. The Nauru Department of Justice and Border Control Authority has issued a new arrival declaration card that has been developed with LRD's assistance. The cards are now used by all passengers arriving in Nauru.
- g. LRD, under a World Trade Organization (WTO) Standards and Trade Development Facility-funded project, undertook phytosanitary capacity evaluation in Vanuatu in June. Thus far evaluations have been undertaken in Cook Islands, Fiji Islands, Kiribati, Palau, PNG, Samoa, Solomon Islands, Tuvalu, Niue and Vanuatu. The evaluations are undertaken using an internationally accepted phytosanitary evaluation tool developed by the FAO-IPPC Secretariat and the outcomes of the evaluations will be used by SPC and other development partners in developing future interventions.
- h. The development of the Pacific's own organic standard has made it possible to showcase the Pacific's unique clean image and its wholesome organic produce on the world markets. Two international organic certifying organisations the Association for Sustainable Agriculture, Australia and BioGro of New Zealand have agreed to seek EU equivalency for the Pacific Organic Standard. The International Organic Accreditation Service, which manages the assessment and quality assurance systems of organic certifiers, is working on the equivalency recognition of the Pacific Organic Standard for exports to the EU.



Virgin Coconut Oil (VCO) is extracted directly from fresh coconut meat without the use of high temperatures (above 70°C) or chemicals. Minimal or low heat is used to dry the meat before the oil is extracted by pressing. Alternatively, the undried meat can also be pressed first. The mixture of oil and water that is obtained is allowed to separate to produce the virgin oil.

This oil retains the characteristic scent and taste of coconut and is suitable for human consumption without any further processing. It is a vastly superior product for eating and cooking compared to coconut oil made conventionally from mechanical pressing of copra.

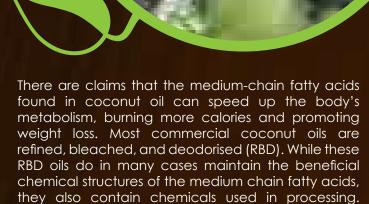
The increasing health consciousness of the general public and the quest for an ever-better lifestyle have provided a window of opportunity for Pacific VCO producers, who have been selected to receive support from SPC through the EU-funded FACT (Facilitating Agricultural Commodity Trade in the Pacific) project.

Coconut oil is used prolifically in tropical regions around the world: throughout the Pacific Islands, Asia, Africa, Central and South America. Its uses by Ayurvedic medicine in relation to the mind, body and spirit were documented in Sanskrit from 1500 BC. Early European explorers including Captain Cook wrote admiringly of the beauty of communities across the Pacific that used coconut oil as an integral part of their daily lives. During World War II, the water from young green coconuts was successfully used as a substitute for saline drips, saving the lives of many allied soldiers. After the war, coconut oil was sold in England as "margarine" and in the USA as "coconut butter".

#### Properties and therapeutic uses of coconut oil

Coconut oil is now known to contain a unique form of saturated fat that may help in preventing heart disease, stroke, and hardening of the arteries. The saturated fat in coconut oil is unlike the fat found in meat or other vegetable fats. It is identical to a special group of fats found in human breast milk that have been shown to improve digestion, strengthen the immune system, and protect against bacterial, viral, and fungal infections. Some clinical studies have in fact shown that coconut oil has anti-microbial and anti-viral properties.

Fats derived from coconut oil, are now used in some hospital IV formulations and commercial baby formulas. They are also used in sports drinks to boost energy and ephance athletic performance.



#### **Boosting Pacific VCO production**

SPC is supporting VCO production in Pacific Island countries through its FACT project. Given huge global demand and the abundance of coconut trees in the region, VCO could make a valuable contribution to Pacific Island economies. However, considerable work on production, packaging, labelling and marketing is needed first and FACT will assist producers with the expertise required.

A few countries in the Pacific, including Fiji, Samoa, Solomon Islands and Tonga, are already producing VCO commercially, but only in small volumes.

In Fiji, two extraction methods are used. One is based on direct micro expeller (DME) technology, which was introduced to Vanua Levu in 1994 by Dan Etherington of Kokonut Pacific. However, since the initial introduction of the technology, little has been done to create awareness amongst communities on its operation and management and production has been static.

Tinytech extraction technology was introduced to Fiji from India at almost the same time. It is mostly used for producing VCO in bulk for soap and aromatic oil manufacturers, while DME technology is used to produce bottled VCO (especially edible oil) targeting the tourism and domestic markets.

In Samoa, the NGO, Women in Business Development Incorporated, took the initiative in developing the virgin coconut oil industry. Established in 1991, its aim is to help Samoan women and youth develop sustainable livelihoods. From humble beginnings, Women in Business has thrived and is now active in around 90 villages across Samoa, supporting a range of income-generating activities in addition to coconut oil production.

# Output 3.2 National capacity to increase domestic and export trade developed and strengthened

Outcomes centre on PICTs having the capability and capacity to explore and develop opportunities to increase domestic and export trade. In contributing to achieving these outcomes, LRD takes a holistic approach working with the public and private sectors and with non-state actors active in the supply chain. Major activities under this output are as follows.

- a. LRD continues to support the bilateral efforts of Fiji Islands and Tuvalu to initiate trade between Rotuma and Tuvalu. SPC supported the visits by a Fiji delegation to Tuvalu and a Tuvalu delegation to Rotuma. Fiji Islands submitted formal market access requests for export of taro, sweet potato and cassava from Rotuma to Tuvalu. Tuvalu has undertaken the import risk analysis with LRD assistance. It is currently in the process of finalising the import conditions for taro, sweet potato and cassava. LRD undertook a cropspecific pest survey in the various islands of Tuvalu as a prerequisite to the import risk analysis.
- b. Negotiations continue on market access for Tuvalu coconut products to New Zealand. This market access request has been pending for the past three years. LRD has been assisting the Tuvaluan government and private sector in their preparation to begin exports once formal approval is granted.
- c. Through the FACT Pilot Project, independent economic and systems analyses of production, export and marketing requirements and design were undertaken for the 14 enterprises selected for FACT support. Based on these studies, the project has begun to facilitate ongoing progress toward commercially viable, sustainable and market-oriented production programmes for the enterprises. These included the use of improved germplasm, provision of equipment and technical assistance, implementation of training programmes, establishment of demonstration plots and creation of grower/production networks.

- d. In collaboration with the FACT Pilot Project, work was initiated to evaluate new species, varieties and breeds and products with a view to increasing the range of agricultural and forestry exports from the Pacific. Work carried out so far included the collection of breadfruit and pandanus germplasm in Vanuatu and Fiji, respectively. Also, new banana and taro germplasm were collected in Fiji and are now with CePaCT. High quality seeds of export varieties of papaya (Solo Sunrise and Waimanalo) were imported from Hawaii and distributed to nurseries and growers in Fiji. High quality balsa seeds were obtained from Honduras for PNG Balsa Ltd.
- e. In collaboration with government agencies, the Pacific Islands Trade and Investment Commission and trade agents, the FACT Pilot Project funded the participation of a Pasifika Fair Trade delegation at the Fair Trade Fortnight in Sydney. The delegation consisted of exporters from Fiji (Friend, The Fair Trade Company, Origins Pacific Ltd, Spices of Fiji), Samoa (Women in Business Development), and Vanuatu (Alternative Communities Trade). In addition, Origins Pacific Ltd of Fiji was sponsored to participate in the Taiwanese Trade Fair. Participating in these fairs provided the enterprises opportunities to promote and sell some of their products.
- f. Research is continuing to develop a micro-propagation system for sandalwood with a view to providing planting material for a commercial nursery. As for most forest tree species, seed propagation is common for sandalwood, although vegetative propagation via grafting, air layering and root suckers is also practiced. However, achieving production of clones using these methods is inefficient and time consuming. Tissue culture plants of sandalwood have been established and efforts are now focused on root production in tissue culture.
- g. Under the guidance of the Pacific Organic and Ethical Trade Community (formerly ROTF), the national organics associations of Cook Islands, Fiji Islands, French Polynesia, Kiribati, New Caledonia, PNG, Samoa, Solomon Islands, Tonga and Vanuatu have continued to develop and promote local organic production and marketing. Some national associations have commenced exports (e.g. coffee from PNG and Vanuatu, and organic coconut oil from Samoa and Solomon Islands).

#### Output 3.3 Sustainable and viable postharvest technologies developed and promoted

Outcomes centre on development of post-harvest technologies, including biosecurity treatments to meet import requirements and develop new niche products. Major activities under this output are as follows.

- a. The FACT Pilot Project facilitated the development of post-harvest quality assurance and processing and packaging operator skills to increase SPS compliance, market access, and shelf life, as well as value adding to enhance the competitiveness of products exported by the FACT-supported enterprises. Products included essential oils (PNG), cassava chips (Vanuatu), banana chips (Samoa) and pandanus juice (RMI). The FACT project provided information and communications technology and training support for quality standards, post-harvest processing, packaging, marketing, market access and compliance with SPS and Codex standards and Hazard Analysis and Critical Control Points (HACCP).
- b. In collaboration with Queensland DPI, Fiji Islands Forestry Department, Division of Forestry in Samoa and the private sector, LRD continued to implement the ACIAR-funded project on coconut wood flooring. Significantly, confirmation was received of an order for one container of high quality coconut wood flooring for the French market.
- c. Dr Francis Delima from the University of Adelaide undertook a scoping study on hot water treatment of taro and cut flowers, and examined other quarantine treatments. The draft report is being submitted to ACIAR and the report will be considered in designing the research and development component of the Pacific Horticultural and Agricultural Market Access (PHAMA) programme.
- d. A design team has been put together, and has started designing the AusAID-funded Pacific Horticultural and Agricultural Market Access programme. One component of this programme addresses research and development issues associated with getting market access or utilising existing market access for PICT products in overseas markets.

# HEADS OF QUARANTINE AND PLANT PROTECTION MEET TO DISCUSS TRADE

There is a need for more trained professionals in plant health sciences to support farmers and quarantine services to improve production to facilitate trade. Lack of capacity in physical and human resources for effective delivery of plant health services remains a challenge for the Pacific region. Global trade is impacting on Pacific economies particularly with exports and WTO compliant international standards.

Important research and development needs included an update of the status of pests and diseases of most crops, and improved diagnostic capacity for gaining improved access to overseas export markets. Presently samples of new pest incursions are sent overseas for identification and are a very expensive exercise. Having the capacity to carry out this activity in-country speeds up pest information update, and subsequently market access.

These were a few of more prominent issues raised at a regional meeting of heads of quarantine and plant protection held in Papua New Guinea, 29 June – 3 July, 2009. Over 50 regional and international delegates met for the 6<sup>th</sup> Pacific Plant Protection Organisation (PPPO) and 14<sup>th</sup> Regional Technical Meeting of Plant Protection (RTMPP) held at the Holiday Inn, Port Moresby. The meetings were hosted by PNG National Quarantine Inspection Authority (NAQIA), and with funding assistance from SPC Land Resources Division and the Australian Centre for International Agricultural Research (ACIAR).

The meeting also heard of the lack of updated data on pests as well as diseases attacking crops in the Pacific countries. Availability of such information is important for Pacific produce to gain access to export markets. The high cost of travel associated with poor infrastructure and road networks had prevented countrywide surveys to be carried out to update information.

In his official address to open the meeting, PNG agriculture and livestock minister John Hickey said, "PNG government's position to co-host the meet was because the region was now vulnerable to the extremes of the current global challenges of climate change, rising food prices, biosecurity risks and depletion of plant genetic resources," said minister Hickey.

Mr Hickey said agricultural development is fundamental and a pre-requisite for economic growth and overall development in the Pacific region.



huge potential to create wealth and boost economic growth. The region has good tropical environment, with rich fertile soils, abundance of rainfall and rich genetic diversity coupled with its industrious and committed farming communities.

The region which depends on agriculture, forestry and fisheries for livelihoods is now becoming vulnerable to the extremeness of global challenges such as climate change, rising food prices, increased bio-security risks and depletion of plant genetic resources.

PPPO is the peak regional body which exists to provide advice on phytosanitary measures in order to facilitate trade without compromising the plant health status of the importing members and countries and territories. Most PICTs 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. The challenge is now on the individual countries to conform to international standards."

SPC has been the Secretariat to both the Pacific Plant Protection Organisation (PPPO) and the Regional Technical Meeting on Plant Protection (RTMPP) since they came into being. Meeting outcomes of the two peak bodies have for a long time guided the work of plant protection, biosecurity and trade facilitation agencies in PICTs both at the policy and operational levels. These meetings have also been instrumental in shaping the broad direction and nature of assistance provided to member countries and territories by the SPC with support of donor and other strategic partners.

In past years, RTMPP and PPPO had provided direction for the region in many areas of plant protection and Biosecurity and trade facilitation, in such areas as fruit fly management, the shift in SPC emphasis from strengthening quarantine services to Biosecurity and trade facilitation, developing integrated pest management strategies for major pests including taro beetle and rhinoceros beetle in collaboration with national and international partners. SPC promotes biological control for pest management of weeds and pests, as well as more awareness on invasive species.

SPC continues to provide technical assistance to member countries to assist them in complying with their obligations under international conventions such as the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), UN Convention on Biological Diversity (CBD), the International Plant Protection Convention (IPPC), and the UN Framework Convention on Climate Change (UNFCCC).

Another service developed by SPC is the Biosecurity Information Facility, a web-based information system that shows how to operate a national quarantine/biosecurity service as required by trading partners. The system provides instructions on what to do at the workplace, and also provides information on technical and legal guidance to support decisions made at critical points in import and export clearance of all types of commodities. As the system developed the facility became very useful with daily quarantine operations, and the addition of various reference text plus linkages to databases and other information systems increased the usefulness of the facility allowing it to become a broadly based information system for use by all areas of biosecurity.

SPC Land Resources Division has been assisting Pacific countries review, update and harmonise their national biosecurity laws over the past eight years. This activity is part of the broader programme on regional economic integration focused on facilitating regional and international trade, prevention of the introduction of invasive species, pests and diseases, and other regulated articles, and facilitation of closer working relationship amongst all border management agencies.

The biosecurity laws and development of the operational manuals is an activity of Component 4 (Capacity building for regional economic integration) of the Pacific Regional Economic Integration Programme (PACRIEP) funded by EU under the 9<sup>th</sup> EDF. The PACREIP Project aims to enhance stronger regional economic integration, which is a key element for engendering economic growth and building a relationship with the rest of the world.

The meetings ended with delegates making recommendations to improve trade as well as plant protection services in the Pacific through capacity strengthening assisted by donor partners.

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

f.

Outcomes centre on PICTs having up-to-date information on their animal and plant health status from LRD-generated and regionally maintained information gathered from pest surveys. Major activities under this output are as follows.

- a. In collaboration with the Queensland DPI and with funding from ACIAR, LRD conducted a three-day national training workshop for Fiji Quarantine Officers on timber pest identification.
- b. A regional animal disease information management and reporting workshop was held in Nadi, Fiji Islands from 6-9 April, and was attended by representatives of 18 member PICTs. Participants received training in OIE international disease reporting for diseases of both aquatic and terrestrial animals using an online WAHIS 'test system'. Contact details for country or territory delegates were confirmed in order to enable OIE to provide WAHIS access to delegates of SPC member PICTs. Participants also received introductory training in FAO's trans-boundary animal disease information management system (TADinfo). This disease reporting training enabled SPC to negotiate a special dispensation to allow countries that are not OIE members to be able to export live aquatic ornamentals to the EU.
- c. Several countries have identified the use of the FAO TadInfo software as being appropriate for national animal disease surveillance. AHP under its PRIPPP Small Grants scheme is facilitating the acquisition of this software for these PICTs.
- d. LRD maintains the PPPO website on the international phytosanitary portal. The Pacific fruit fly website (www. pacifly.org) is also serviced and updated regularly. LRD plans to move this website to SPC's website.
- e. The entomology and plant pathology experts of the LRD Plant Health Team continued to provide insect and plant disease diagnostic services to PICTs. Most of the diagnostic work was associated with surveys in Kiribati, Nauru, Fiji Islands, PNG, and Tuvalu. Weed surveys were completed for the Kiribati islands of Abemama and Tarawa. Survey records will be available in the Pacific Pest List Database for Kiribati.

- SPC received endorsement from the Heads of Agriculture and Forestry (HOAFS) in 2008 to become a member of the Compendium Development Consortium of the Commonwealth Agricultural Bureau International. The New Zealand Agency for International Development (NZAID) had recommended that SPC join this consortium. NZAID has been asked to support SPC in paying the USD 253,000 discounted membership cost for access to the five different compendia, including the soon-to-bereleased Invasive Species Compendium that, starting in 2010, will include significant sections of the current Crop Protection Compendium. Future access to the various compendia will be available to members over the internet only, with the Commonwealth Agricultural Bureau International phasing out the distribution of CD copies.
- g. The LRD Information, Communication and Extension group continues to maintain the Pacific Pest List Database, which is used in import risk analysis and negotiations for market access. The LRD Information, Communication and Extension group also continues to provide information in formats such as posters, leaflets, pest alerts, pest advisory fact sheets and news releases. LRD is supporting Cook Islands and the biosecurity services in the PICTs in preparing and running public awareness activities on the potential biosecurity risks associated with the Pacific Mini Games taking place in September in Cook Islands.



## ANIMAL DISEASE REPORTING SYSTEMS NEEDED TO SUPPORT TRADE

EU trade restrictions on the export of ornamental fish and molluscs (clams) from the Pacific region are an issue for a number of Pacific island countries. The restrictions, which were introduced in January 2009, were imposed due to lack of animal disease reporting systems. To facilitate the resumption of trade, SPC is providing technical assistance to affected countries to help them establish systems for disease information management and international disease reporting that satisfy EU requirements.

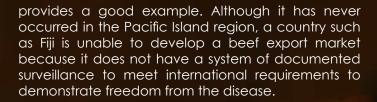
A regional workshop on international reporting of animal diseases highlighted improved trade as one of the benefits of having an internationally recognised animal health status. The Nadi workshop (6–9 April, 2009) was attended by representatives from Pacific member countries. It also highlighted the 'in-country' benefits for animal health agencies of establishing and maintaining national disease surveillance and information management systems. Such systems enable early detection of disease outbreaks and through monitoring, reduce the impacts of endemic diseases.

The SPC-organised workshop was held in collaboration with the Food and Agriculture Organization (FAO) and World Organisation for Animal Health (OIE). OIE is recognised by the World Trade Organization as the standards setting body for animal health issues including disease reporting. SPC has signed a memorandum of understanding with OIE to promote the adoption of its standards in Pacific countries. Of SPC's 22 Pacific Island member countries and territories, only Fiji Islands, New Caledonia, Vanuatu and the Federated States of Micronesia are currently OIE members.

The Pacific island region enjoys favourable animal health status, both for terrestrial and aquatic animals. However, many island countries do not have well-documented disease surveillance and information management systems to underpin international

disease reporting and the development of potential trade opportunities.

'Mad cow' disease



Dr Akiko Kamata of FAO, Rome, introduced participants to the trans-boundary animal disease information management system (TADinfo), an FAO developed user-friendly database application that can be used as a national animal health information management system. TADinfo includes modules, such as field observations, abattoir observations, active surveillance, livestock populations and vaccination programmes, that can be used as required to record information. It also has a GIS (geographic information system) interface to enable disease information to be displayed via country maps. This enables trends in disease occurrence and spread to be analysed and control measures to be modified or adapted if required.

Sessions on international disease reporting and the World Animal Health Information System (WAHIS) were led by OIE information management specialists, Dr Karim Ben Jebara and Dr Daniel Chaisemartin. WAHIS is an online disease reporting system that countries can use to provide emergency notification to trading partners of significant disease outbreaks. The WAHIS system also enables half-yearly and annual animal health status reports to be submitted, providing valuable information for import risk assessments to facilitate safe international trade in animals and animal products.

Workshop participants completed numerous 'online' disease reporting exercises to familiarise themselves with the data entry and reporting features of the WAHIS application.

Dr Kenji Sakurai (OIE, Tokyo) described how countries go about joining OIE, and outlined the benefits and assistance that OIE gives its members.

As a key outcome of the workshop, OIE has granted all SPC members access to the WAHIS disease reporting system. This will enable all countries and territories in the region, not just OIE members, to provide reports to OIE on their animal health status – a very significant achievement that will assist countries that wish to export ornamental fish to Europe to satisfy EU requirements. It may also lead to the development of other opportunities for exporting animals and animal products.

PACIFIC REGION JOINS GLOBAL SYSTEM FOR CONSERVING AND USING PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE

Recognising that international cooperation and open exchange of genetic resources are both essential for food security, the Pacific region has placed the collections held by the Centre for Pacific Crops and Trees (CePaCT) in the Multilateral System of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA).

The Hon. Taua Kitiona, Samoa's Minister of Agriculture, representing other ministers and the region, attended the 3<sup>rd</sup> Session of the Governing Body of the ITPGRFA in Tunis, and in the opening ceremony on 1 June formally placed these collections into the treaty system.

With the ITPGRFA, crops that produce our food – breads, curries, tortillas – are put into a common pool. The treaty facilitates access to those crops for all users and ensures fair and equitable sharingt of benefits derived from their use.

The ITPGRFA is a global treaty for food security and sustainable agriculture, and is vital for ensuring the continued availability of the plant genetic resources that countries need to feed their people. Crop diversity is an essential tool for generating crop varieties that can help farmers manage climate change. Like all other nations of the world, Pacific Island countries and territories do not have enough crop diversity within their borders to sustain productive systems.

Outbreaks of new pests and diseases can wreak havoc with crops that do not include resistant varieties. This was dramatically illustrated in Samoa in the early 1990s when taro leaf blight totally destroyed taro production because of the susceptibility of the cultivar being used. Climate change is likely to bring other similar challenges.

In 1996, to address these challenges, Pacific Ministers of Agriculture attending a meeting hosted by SPC resolved to put in place policies and programmes to conserve, protect and use their plant genetic resources effectively for development. In response, SPC established a regional genebank in 1998, now known as the Centre for Pacific Crops and Trees (CePaCT).

SPC's work on genetic resources has not stopped with the establishment of the genebank. An active network – PAPGREN – was established in 2004 to strengthen capacity in the region for conservation and utilisation of plant genetic resources for food and agriculture. Much has been achieved by both the Centre and PAPGREN in raising awareness of the importance of crop diversity in the region, especially in light of current challenges.



In their second regional conference in Samoa in 2008, Pacific Ministers and Heads of Agriculture and Forestry acknowledged that although the Pacific has significant diversity, there is no assurance that national biodiversity will be sufficient to sustain food production in the future, especially given the projected effects of climate change. The region must be able to access the global pool of genetic diversity, which can be achieved through ratification of the treaty. At the same time, the ministers also saw the importance of putting in place mechanisms to establish the key collections of the Pacific within the global system, enabling the region to contribute to global food security and be part of a global network that will support the sustainable conservation and use of these collections in the future.

"The signing of these agreements by SPC has been fully endorsed by the Pacific region, recognising we live in one world despite the miles between us. To survive the many challenges of this century, we need to work together, sharing our resources and importantly further recognising that the genetic diversity found in genebanks today may become the most important resource we have in shaping an effective response to climate change," said the Hon. Taua Kitiona Seulala in his address to the governing body of the Treaty.

### **RESOURCES**

At the end of June 2009, the total number of staff positions in LRD was 88; five of which were vacant (these are for semi-specialised technical staff). Thirty staff members were recruited internationally with specialised technical skills: two of which are field based, thirty-two are semi-specialised technical staff, nine are laboratory assistants, and 12 provide administrative support across the LRD thematic areas. Thirteen semi-specialised staff members are field based.

With the completion of two major projects (DSAP and PPP) and the delayed processing of proposals submitted under EDF 10, LRD's science and technology capacity has been eroded. The situation will be made worse when PRIPPP ends in June 2010. The thematic area teams that will be most affected include Plant Health, Crop Production and Soils Management, Animal Health and Production, and ICE. On the positive side, support from AusAID and ACIAR (through some new initiatives that are outlined in in the following section, 'Future Outlook') will likely fill in some gaps while focusing on core project issues.

Total funding for LRD was 7.5 million CFP units in 2005, 8.5 million CFP units in 2006, 8.7 million CFP units in 2007, 9.6 million CFP units in 2008, and 9.2 million CFP units in 2009. Over this period, project funds were steady at about 73%, programme funds steady at 20–21%, and core funds steady at 6–7%.

#### LRD funding (in CFP units) for 2005-2009 by funding source

	Budget 2005	Budget 2006	Budget 2007 R	Budget 2008 R	Budget 2009 R	%
INCOME						
Core budget	570,000	516,000	501,900	636,400	534,600	6%
Programme funding						
AusAID	845,000	1,789,000	1,343,900	1,250,000	1,214,700	
France	219,000	219,000	215,000	215,000	209,700	
NZAID	437,000	398,000	395,000	395,000	386,200	
IFAD	-	-	-	31,800	-	
Total programme funds	1,501,000	2,406,000	1,953,900	1,891,800	1,810,600	20%
Project funding						
ACIAR	294,000	445,000	259,600	135,800	518,400	
AusAID			1,283,000	839,300	1,011,000	
NZAID	443,000		-	180,500	318,900	
EU	3,503,000	3,923,000	3,185,100	4,540,900	3,000,800	
GTZ	984,000	987,000	918,600	901,900	1,000,000	
FAO			230,500	99,800	172,000	
Taiwan/ROC		30,000	44,300			
French Pacific			76,000	75,100	23,600	
IFAD			32,300	158,800	248,400	
Korea	75,000	50,000				
CTA	-	-	-	-	427,800	
IPGRI			61,300	125,400		
WTO		-	-	-	49,400	
Others	113,000	163,000	211,400	43,700	95,000	
Total Project Funds	5,412,000	5,598,000	6,302,100	7,101,200	6,865,300	75%
Total Income	7,483,000	8,520,000	8,757,900	9,629,400	9,210,500	100%

### **FUTURE OUTLOOK**

#### Background

Agriculture has been one of SPC's core programmes since the organisation's inception. With direction provided by meetings of the Pacific Heads of Agriculture and Livestock Production Services (PHALPS), and later HOAFS and Ministers of Agriculture and Forestry (MOAF), and guidance by CRGA, the focus of the agriculture programme's role has significantly broadened from crop protection, animal health and quarantine to also include crop production and soils management, animal production, genetic resources, forestry and agroforestry (since 1997), land use policy and planning, and more recently, trade. PICT agriculture ministries have always seen the services provided by LRD as essential to complement 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 five years LRD has built a strong information, communication and extension outreach capability and capacity that has enhanced impact of its interventions at national community levels.



#### **Current situation**

With the corporate initiative of moving services closer to, and engaging more directly with, beneficiaries through JCSs, having a strong integrated regional service comprising professionals in diverse thematic areas 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 or international agency.

Work to integrate the Agriculture and Forestry programmes started in 2004 following the review of LRD 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. LRD's thematic and support areas structure represent the core services provided by LRD to the membership. The foci may vary over time, thereby influencing resource allocation. Crucial in LRD's ability to have a positive impact, is its 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 PICTs, such as plant pathologists, entomologists, veterinarians) need to be maintained for the long term.

#### **CYCLE-5 TARO BREEDING LINES NOW AVAILABLE**

Exciting new Cycle-5 taro lines now available from the Centre for Pacific Crops and Trees (CePaCT) are the result of the efforts of the Samoa-based Taro Improvement Programme (TIP). TIP is a participatory varietal selection and breeding programme that was initiated by the AusAID-funded Taro Genetic Resources: Conservation and Utilisation (TaroGen) project. Since the completion of that project, the programme has been successfully managed by Tolo losefa, the TIP Coordinator. TIP is a collaborative venture with SPC, USP and Samoa's Ministry of Agriculture.

The Cycle-5 lines are particularly interesting as they are the first crosses between taro from the Pacific and taro from southeast Asia, which was made available through the EU-funded TANSAO (Taro Network for Southeast Asia and Oceania) project. There has been excellent feedback on these taros from Samoa, and now thanks to the collaboration between USP and SPC, and the facilities and expertise made available by CePaCT, the lines are in tissue culture, have been tested for viruses and are available for trial by the region.

Cycle-5 lines have been planted and evaluated by TIP farmers and have now spread all over the islands. These taro lines are a smorgasbord of genetic diversity with different shapes, vigour and colour. Farmers have named the C5-clones talo lautaamu (leaves like tarmy Alocasias p.) or laui'ila (shinyleas)

taamu, Alocasia sp.) or laui'ila (shiny leaves). Some lines produce yellow corms (characteristic of varieties from Malaysia). However, the feedback on

taste from TIP farmers is that many still long for the real taste of Taro Niue.

idsie of faro nice.

Cycle-5 has provided the opportunity to backcross to Niue, with Cycle-6 using first generation Niue BC and Niue BCF1, and Cycle-7 using Niue BC-1.

The search for the Holy Grail of taro, taro with Niue traits, continues for Mr Tolo losefa and his highly successful participatory taro improvement programme (TIP).

#### New initiatives

Some new AusAID and ACIAR initiatives are currently being designed or negotiated; these would likely fill in some of the gaps left with delays in processing proposals made under EDF 10 and to other donors. These new initiatives include:

Pacific Regional Land Initiative: This initiative, which is jointly designed by AusAID and SPC, integrates LRD's terms of reference for an initiative on land management and conflict minimisation, as mandated by the Forum Islands Leaders at their 2008 annual meeting communique, and AusAID's Pacific Land Management's regional initiative, which focuses on capacity building and the Pacific Urban Agenda. The initiative will like have three components: information sharing and coordination; education, training and professional development; and a flexible funding facility. AusAID has allocated AUD 12 million over three years for this initiative.

Support for climate change adaptation: AusAID, through the International Climate Change Initiative, will fund the 'collection, conservation and promotion of crop diversity to enhance food security in a changing climate'. Resources will be provided to support the development, distribution and evaluation of the CePaCT 'climate ready collection' — a collection of crops and varieties with agronomic traits, such as drought tolerance, to help farmers manage climate change. Resources are also available to:

conduct research into the development of drought and salt tolerant varieties; assess the impact of increased carbon concentration on the major crops of the Pacific;

and conduct a more systems-wide approach to determining the impact of climate change on agrobiodiversity.

Pacific Horticultural and Agricultural Market Access (PHAMA): This AusAID-funded project is currently being designed. It is a 10-year programme with two distinct phases. Phase 1, covering Fiji Islands, Samoa, Solomon Islands, Tonga and Vanuatu, will last four years. AUD 12 million in funding has been approved. The programme has four components: development and processing of market access submissions; implementation of market access requirements; research and development; and regional support. Component 4 (regional support) will be implemented by LRD. PHAMA will focus on obtaining, maintaining and improving market access of selected horticultural and agricultural products, including animal products, to export markets by addressing regulatory constraints.

Pacific Agribusiness Research and Development Initiative (PARDI): PARDI is being developed by ACIAR to improve competitiveness and market access for agricultural products. The initiative will contribute to PICTs' economic growth and will benefit smallholder farmers and traders. It will also use the knowledge generated by previous ACIAR and other regional projects, and will link with programmes such as the Pacific Agreement on Closer Economic Relations Regional Trade Facilitation Programme and FACT. PARDI is designed to complement to PHAMA. The project has an initial funding of AUD 12 million, and will focus on six countries: Fiji Islands, Kiribati, Samoa, Solomon Islands, Vanuatu and Tonga. The initiative will address production and supply-chain constraints associated with fresh and processed horticultural, fisheries and forestry products.

### **ANNEX 1: LRD COUNTRY ACTIVITIES IN 2009**

Country	Activity	Joint Country Strategy (JCS)	Approx.
		(yes/no)	JCS costs (FJD)
American Samoa	Resource speaker provided for the American Samoa Food Summit	У	1,000
	Support for participation in the ITPGRFA implementation	У	5,500
-2	workshop; the Crops for the Future in the Pacific meeting; and the annual PAPGREN meeting and genebank management training	У	18,900
	Refresher training on Biosecurity operations and mentoring	у	10,800
	Pest incursion response and quarantine pest surveillance	У	3,500
	Consultation on institutionalising paravet training in the Land Grant College		
	Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji	У	3,400
	Training of one rep in animal disease reporting and information management	у	2,000
	Support for participation in 2 <sup>nd</sup> Pacific Extension Summit		
	Support for participation in the 6 <sup>th</sup> Technical Board meeting of the Plant Protection Organisation (PPPO) and 14 <sup>th</sup> Regional Technical Meeting on Plant Protection (RTMPP) in PNG	У	9,000
	Support for participation in the Pacific Regional Heads of Forestry meeting	У	5,000
Common- wealth of the Northern Mariana Islands	Support for participation in the ITPGRFA implementation workshop; the Crops for the Future in the Pacific meeting; and the annual PAPGREN meeting and genebank management training	У	11,900
-60	Support for consultation to develop an animal health emergency response plan	у	5,500
	Online technical advice on introduction of improved pig breeding stock and the use of locally available raw materials for animal feed formulation		1.500
	Support for LRD information distribution	У	1,500
	Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji		
	Support for training in animal disease reporting and information management	У	3,000
	Support for participation in the SPC, USDA-PHIS and University of Guam sub-regional training workshop on biosecurity at the University of Guam for homeland security officers (CNMI,	У	7,400
	Guam, FSM, Palau and RMI)	У	5,500

Cook Islands	•	Support for the National PGRFA programme	У	2,700
<b>*</b> 0	•	Conducted a national workshop on design, conduct and analysis of on-farm trials. This was followed up with establishment of on-farm trials, and an edible garden project with pre-schools and primary schools has been launched to promote gardening and improve the image of agriculture amongst students. Technical support for Graduate Research Extension Assistant (DSAP).	У	110,000
	•	Support for participation in the Crops for the Future in the Pacific meeting; participation in the ITPGRFA implementation workshop; participation in the annual PAPGREN meeting and genebank management training	У	7,300
	•	Resources are also available: to conduct research into the development of drought and salt tolerant varieties; to assess the impact of increased carbon concentration on the major crops of the Pacific; to conduct a more systems-wide approach to determining the impact of climate change on agrobiodiversity	У	2,500
	•	Support for the documentation on the State of Cook Islands PGRFA	У	3,650
	•	Support for participation in PHOVAPS and GF-TADs regional meeting in Nadi, Fiji	У	15,200
	•	Support for participation in training in animal disease reporting and information management, and emergency response		
		planning; training in pest management techniques, sampling, animal disease investigation, use of rapid test kits, infection control, proper use of personal protective equipment, development of standard operating procedures and scenario testing	У	11,300
	•	Assistance to farmers in preparing food crops for major events including the world under-21 netball World Cup and the Pacific Mini Games. The support aimed to disseminate up-to-date information to participating farmers on sustainable practices		
	•	Support for quarantine service in conducting quarantine public awareness in preparations for the major sporting events. Pacific Mini Games in 2009		
	•	Support for participation in Pacific Organic and Ethical Trade Community, the production of extension materials training course, and the 2 <sup>nd</sup> Pacific Extension Summit		

Cook Islands	Support and involvement in community-based national land use policy consultations	У	5,300
	Cook Islands Crown Law Office and the Department of Agriculture officers undertook public awareness sessions on the Cook Islands Biosecurity Law in various places in Rarotonga and Aitutaki islands	У	11,400
	BIF operations manual completed and transferred into the CMS systems; BIF technician commissioned the Cook Islands BIF and trained relevant officers	У	11,700
	Support for participation in the 6 <sup>th</sup> PPPO and 14 <sup>th</sup> RTMPP in PNG	У	12,000
	Support for participation in the WTO-SPS workshop and Draft ISPMs Regional Workshop in Nadi, Fiji	У	7,700
	Support for participation in the Pacific Regional Heads of Forestry meeting	У	7,700
	Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific	У	7,600
			110 000
Federated States of Micronesia	Support for regional media training of agricultural staff (RMI, Palau and FSM) on how to develop media releases	У	110,000
Micronesia	Support for charcoal and compost field by DSAP		110,000
		У	110,000
	Support for health sector in addressing obesity and nutrition related diseases, through the island food project initiative	У	110,000
	Technical support for the development of an agricultural strategic plan		110,000
	Support Department of Environment in designing food security adaptations to climate change	У	7,400 9,300
	Support for participation in the Pacific Regional UNFF8     Preparatory Workshop held in Nadi, Fiji	У	23,600
	Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji	у	2,500
	Support for participation in the Crops for the Future in the Pacific meeting; the ITPGRFA implementation workshop; and the annual PAPGREN meeting and genebank management training	У	4,500
	Support for publications promoting the nutritional benefits of traditional food crops		
		У	10,000

#### Federated States of Micronesia



Provision of 272 taro, sweet potato and breadfruit plants to Chuuk and 169 cassava and sweet potato plants to Pohnpei; sweet potato includes drought and salt tolerant varieties, and varieties with good levels of beta-carotene (orange flesh) 1,000 У Engage local consultants for consultation and training on the biosecurity law Support for training on pest incursion response and quarantine 5,000 У pest surveillance and phytosanitary capacity evaluation Audit of fruit fly surveillance systems, GPS mapping of trap sites and recording data in Pest List Database 5,000 У Phytosanitary capacity evaluation 7,000 Completion of online CMS and national version of the BIF and У test; training and technical assistance 10,000 Provision of software, computers, servers and accessories to implement BIF National training conducted on the national operational 10,000 manual 2,500 У Facilitation of export of fresh produce – market access 3,000 У Production of in-flight video on biosecurity for Continental Airlines Support for participation in the 2nd Pacific Extension Summit and the extension materials production workshop У 18,400 Support for participation in preparatory workshop held in Nadi, 5.500 У Support for participation in the SPC, USDA-PHIS and University of Guam sub-regional training workshop on Biosecurity at У the University of Guam for homeland security officers (CNMI, Guam, FSM, Palau and RMI) 15,000 У Support for participation in the WTO-SPS workshop in Nadi, Fiji Support for participation in the 6th PPPO and 14th RTMPP in У Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji 5,000 DSAP/FACT supported national food technology workshop for 8,500 DSAP farmers (men, women, youth), local food vendors and agriculturalists on food safety, preparation, processing and 9,300 У preservation У Support for participation in the Pacific Regional Heads of Forestry meeting Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific Conducted training on national vegetation survey and forest inventory of the atolls

#### Fiji Islands



- DSAP support on the use of the bucket irrigation system extended to Xavier College in Ba and to youth groups in Naitasiri
- DSAP established resource centres further strengthened to ensure the rural communities have good access to farming information
- Introduced Mucuna pruriens to be used as cover crop/green manure on taro with the aim of replacing inorganic fertilisers. It is also being tried in other cropping systems.

•

- Through the EU-funded FACT Pilot Project, supported the training of cocoa farmers in implementing sustainable practices in the management of their cocoa plantations
- FACT conducted a one-day training session on the propagation and utilisation of bamboos in Fiji
- FACT assisted five exporters of agricultural produce (Kaiming Agro, Balthan (Western) Ltd, Agrana Fruit (Fiji) Ltd, FRIEND and Origins Pacific Ltd
- Continued support provided to the Drawa sustainable forest management model area. This was to ensure that activities agreed to between the land owners and the sustainable forest management steering committee were implemented after the GTZ project ended at the end of last year
- Contributed to the organisation and facilitation of the Taveuni Mini Summit to develop an Integrated and Sustainable Agriculture concept for the island.
- In collaboration with the Fiji Islands MPI, conducted awareness meetings promoting the importance of implementing an integrated and sustainable land resource management regime
- Support for participation in the Pacific Regional UNFF8 Preparatory Workshop held in Nadi, Fiji
- Support for participation in the GEF-PAS Regional Consultation on Forest Conservation and Protected Area Management held in Nadi, Fiji
- Through AusAID funding, support was provided to strengthen Fiji's planting material network. Technical support and back-up were provided to strengthen the tissue culture laboratory at Koronivia Research Station (KRS), and its work programme in the supply of planting material of root and tuber crops
- Support to Fiji Birdlife on repatriation of 293 of traditional Fijian yam and taro plants as part of its Sustainable Land Use Management programme
- Support for evaluation of diversity on Viwa atoll
- Collecting of diversity banana, breadfruit, yam, alocasia and swamp taro
- Approval by Quarantine for the release of 24 varieties of banana (54 plants) from CePaCT to Nacokaika Youth Farming Project in Naitasiri in collaboration with EU/FACT project

#### Fiji Islands



- Support for participation in the Crops for the Future in the Pacific meeting; the ITPGRFA implementation workshop; the annual PAPGREN meeting and genebank management training
- Support for one masters student in genetic resources
- Partner in the ACIAR-funded dasheen mosaic virus (DsMV) project to assess the impact on yield of DsMV on selected taro varieties
- Support for documenting the state of Fiji's PGRFA
- Support for the island of Rotuma with regard to the Rotuma/ Tuvalu Agriculture Trade Initiative
- Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji
- Support for training in animal disease reporting and information management
- Assistance in brucellosis eradication campaign through provision of technical advice, sampling equipment etc.
- Assisted in the development of import risk analysis and import conditions for small animals
- Support for youth projects in Ba, Xavier Collage, Natitasiri, and Drawa training youth in farming and income generating activities
- Support for the development of the Fiji Organic Strategic Development Plan
- Support for Fiji's participation in the Pacific Organic and Ethical Trade Community, the 2nd Pacific Extension Summit and the extension materials production workshop
- Support for biological control of Mikania micrantha implemented on all main island groups; permission to release rust successfully obtained
- Surveys for potential invasive plants among ornamental gardens on Viti Levu completed; survey of Erythrina gall wasp distribution on Viti Levu supported
- Initiated and supported revival of cocoa industry in Fiji with particular support to farmers in Tailevu. PNG cocoa scientists provided training
- 12 participants supported for the Regional SPC/GTZ Adaptation to Climate Change planning workshop
- Conducted the SPC/GTZ Adaptation to Climate Change Fiji National Workshop to develop Fiji's national plan of operation (May 2009)
- Conducted the SPC/GTZ Adaptation to Climate Change Fiji REDD Policy Scoping Workshop, August-September 2009
- Awareness/training on the Fiji Biosecurity Promulgation 2008 in Suva and Nadi for MPI officers

#### Fiji Islands



- Training provided to Fiji Quarantine and Inspection Division officers on the use of BIF, particularly on how to input the necessary information to generate PCs and import permits electronically
- Consultancy to do the Fiji BIF and provide technical support; Fiji BIF installed and commissioned
- Computers procured for BIF activities
- Revision and publication of training manual on systems approach to production and export of fruit fly host commodities
- Facilitated fresh produce trade between Fiji and Tuvalu
- Participated in the WTO-SPS workshop in Nadi, Fiji
- Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji
- Support for participation in the Pacific Regional Heads of Forestry meeting
- Support for participation in the APAFRI Executive Committee meeting in Kuala Lumpur, Malaysia
- Support for participation in the International Symposium on Forest Genetic Resources in Kuala Lumpur, Malaysia
- Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific (4 participants)
- Support of participation to the UNFF regional meeting in China
- Support for participation of Future Forests of Fiji Ltd in the International Workshop on the Production and Marketing of Teakwood held in India
- Through the SPC/GTZ regional programme on climate change, supported the participation of media personnel to the climate change media training workshop in Vanuatu and to the PINA summit
- Through the SPC/GTZ regional programme on climate change supported, a community awareness workshop on climate change in the Ra Province (December 2009)
- Through the SPC/GTZ regional programme on climate change, supported the participation of the deputy conservator of forests to the UNFCCC 15th Conference of the Parties (COP15) held in Copenhagen
- Fiji JCS has not yet been undertaken

French Polynesia	DSAP support on vegetable growing and proper use of agrochemicals	У	5,000
٠	Support for participation in training on banana virus indexing as a component of the Pacific banana strategy	У	8,100
	Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji		
	Training in animal disease reporting and information management	У	4,900
	Support for participation on the various meetings of the Pacific Organic and Ethical Trade Community (formerly ROTF)	У	5,400
	•	У	6,000
	Support for the sharing of traditional experiences of successful French Polynesia vanilla farmers with farmers from Niue and Samoa	У	10,000
	Consultancy contract to do the French Polynesia BIF and provide technical support		
	Support for participation in the 6th PPPO and 14th RTMPP in PNG	У	5,500
	Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji		7 200
		У	7,300
		У	4,500
_			
Guam	Provision of virus cultures for management of rhinoceros beetles	n	
Guam Ü	<ul> <li>Support for participation in PPPO/RTMPP meetings in PNG</li> </ul>	n	
Guam	beetles	n	
Guam	<ul> <li>Support for participation in PPPO/RTMPP meetings in PNG</li> <li>Support for participation in the SPC, USDA-PHIS and University of Guam sub-regional training workshop on Biosecurity at the University of Guam for homeland security officers (CNMI,</li> </ul>	n	
Guam	<ul> <li>Support for participation in PPPO/RTMPP meetings in PNG</li> <li>Support for participation in the SPC, USDA-PHIS and University of Guam sub-regional training workshop on Biosecurity at the University of Guam for homeland security officers (CNMI, Guam, FSM, RMI &amp; Palau)</li> <li>Continuous provision of online technical information on animal</li> </ul>	n	
Guam	<ul> <li>Support for participation in PPPO/RTMPP meetings in PNG</li> <li>Support for participation in the SPC, USDA-PHIS and University of Guam sub-regional training workshop on Biosecurity at the University of Guam for homeland security officers (CNMI, Guam, FSM, RMI &amp; Palau)</li> <li>Continuous provision of online technical information on animal health issues</li> <li>Support for participation in the Pacific Regional Heads of</li> </ul>	n	
Guam	<ul> <li>Support for participation in PPPO/RTMPP meetings in PNG</li> <li>Support for participation in the SPC, USDA-PHIS and University of Guam sub-regional training workshop on Biosecurity at the University of Guam for homeland security officers (CNMI, Guam, FSM, RMI &amp; Palau)</li> <li>Continuous provision of online technical information on animal health issues</li> <li>Support for participation in the Pacific Regional Heads of Forestry meeting</li> </ul>	n	
Guam	<ul> <li>Support for participation in PPPO/RTMPP meetings in PNG</li> <li>Support for participation in the SPC, USDA-PHIS and University of Guam sub-regional training workshop on Biosecurity at the University of Guam for homeland security officers (CNMI, Guam, FSM, RMI &amp; Palau)</li> <li>Continuous provision of online technical information on animal health issues</li> <li>Support for participation in the Pacific Regional Heads of Forestry meeting</li> </ul>	n	
Guam	<ul> <li>Support for participation in PPPO/RTMPP meetings in PNG</li> <li>Support for participation in the SPC, USDA-PHIS and University of Guam sub-regional training workshop on Biosecurity at the University of Guam for homeland security officers (CNMI, Guam, FSM, RMI &amp; Palau)</li> <li>Continuous provision of online technical information on animal health issues</li> <li>Support for participation in the Pacific Regional Heads of Forestry meeting</li> </ul>	n	
Guam	<ul> <li>Support for participation in PPPO/RTMPP meetings in PNG</li> <li>Support for participation in the SPC, USDA-PHIS and University of Guam sub-regional training workshop on Biosecurity at the University of Guam for homeland security officers (CNMI, Guam, FSM, RMI &amp; Palau)</li> <li>Continuous provision of online technical information on animal health issues</li> <li>Support for participation in the Pacific Regional Heads of Forestry meeting</li> </ul>	n	

#### Kiribati



•	n collaboration with SOPAC assisted Kiribati in the setting up vegetation monitoring system	У	3,300
•	The DSAP activities have been transferred to CEAARD. These activities include use of charcoal and compost; bucket irrigation; evaluation of root crop varieties for adaptation to increasing salinity, high temperature and drought; and demonstration of some agroforestry models	У	160,000
•	Support for the Immersion Program now operated by the Department of Agriculture	У	3,500
•	Through the FACT project, food safety workshop was conducted and production of value added products	у	2,400
	encouraged	У	12,500
•	Support for participation in the Crops for the Future in the Pacific meeting; participation in the ITPGRFA implementation workshop; participation in the annual PAPGREN meeting and gene bank management training	У	2,900
•	Participation in the coconut roundtable meeting	У	7,700
•	Provision by CePaCT of over 1,463 breadfruit, banana, taro, cassava, sweet potato, yam and vanilla plants and 367 sweet	У	
	potato, banana, cassava and taro plants directly to Christmas Island. Sweet potato includes drought and salt tolerant	У	18,800
	varieties, and varieties with good levels of beta-carotene (orange flesh)		6,100
•	Provision of training for MELAD staff on management and	У	4,600
	transfer of tissue culture plantlets in the screen house prior to field planting and distribution to outer islands	У	
•	Conservation of 11 Kiribati swamp taro varieties at CePaCT		3,100
•	Attendance at PHOVAPS and GF-TADs regional meetings in Nadi, Fiji	У	31,700
	Training in animal disease reporting and Information	У	
	Management		8,600
•	Orientation and lunching of paravet training programme, training in development of animal health emergency response plans, disease investigations, sampling, development of standard operating procedures, scenario testing, rapid test	У	1,000
	kit use, proper use of personal protective equipment, and infection control	У	15,000
•	Surveys for weeds in Tarawa and Abemama Island; data will be entered into the country's Pest List Database	у	2,500
•	Support for undertaking surveys for wedelia; the Kiribati National Invasive Species Learning Network/Team will be undertaking eradication and containment programmes		
		У	24,600
•	Surveys for plant diseases conducted on Tarawa and Butaritari islands; on Butaritari further technical and advisory support was provided for the management of breadfruit bleeding disease	У	
		У	5,000
•	Support for participation in emergency response planning for ants in Suva, Fiji	У	7,700
•	Support for participation in the Pacific Organic and Ethical	У	5,000
	Trade Community, the 2nd Pacific Extension Summit and the extension materials production workshop		3,100

Kiribati	Support for provision of relevant information		
-	Assisted with preparation of the biosecurity bill for Cabinet consideration and tabling in Parliament later this year		
	Support for participation in the 6th PPPO and 14th RTMPP in PNG		
	Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji		
	Support for participation in the Pacific Regional Heads of Forestry meeting		
	Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific		
	Support for vegetation mapping of the atolls in collaboration with SOPAC		
Marshall Islands	FACT assisted Robert Reimer Enterprises to develop commercial exports of pandanus products (juice, jam and)	У	41,300
	baby food)	У	110,000
	DSAP support for charcoal and compost field work	У	110,000
	Evaluation through DSAP of sweet potatoes as potential food root crop, demonstrating good yields	У	110,000
	Training on design, conduct, data collection and analysis of		
	on-farm trials	У	10,600
	Capacity support through graduate research assistant	У	7,200
	Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji	У	22,300
	Support for participation in training in animal disease reporting and information management	У	5,000
	Support for the participation in the 2nd Pacific Extension Summit and the extension materials production workshop	У	6,000
	LRD information support	У	10,000
	Support for management of Chromolaena odorata provided	У	6,200
	by the Plant Protection Micronesia office	У	4,000
	Support for participation in PPPO/RTMPP meeting in PNG	у	7,400
	<ul> <li>Support for participation in the SPC, USDA-PHIS and University of Guam sub-regional training workshop on biosecurity at the University of Guam for homeland security officers (CNMI, Guam, FSM, RMI and Palau)</li> </ul>		
	Support for participation in the WTO-SPS workshop in Nadi, Fiji		
	Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji		

Marshall Islands	Support for regional media training for agricultural staff (RMI, Palau and FSM) on how to develop media releases		
	DSAP/FACT supported national food technology workshop for DSAP farmers (men, women, youth), local food vendors and agriculturalists on food safety, preparation, processing and preservation		
	Support for participation in the Pacific Regional Heads of Forestry meeting		
Nauru	Provision of 176 banana, breadfruit, taro and sweet potato plants (banana and sweet potato includes drought and salt tolerant varieties, and varieties with good levels of betacarotene)	У	15,000
	Bucket irrigation was successfully demonstrated by DSAP in Nauru in the production of root crops such as sweet potatoes and vegetables	у	110,000
	Training on design, conduct, data collect and analysis of on- farm trials	У	110,000
	Charcoal and compost field work is ongoing and promoted	У	110,000
	A DSAP on-farm trial evaluating organic pesticides is continuing; results of the follow-up trials are promising	У	110,000
	Mucuna seed production is now under way and more farmers are using mucuna as soil amendment	У	110,000
	Papaya seeds are now available through bagging and collection from existing hermaphrodite trees	У	12,000
	Support for two participants to attend GEF-PAS regional consultation on forest conservation and protected area management in Nadi, Fiji	у	5,600
	Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji	У	4,200
	Support for participation in training in animal disease reporting and information management	У	16,100 5,200
	Launching and orientation of paravet training	У	3,200
	Training in development of animal health emergency response plans, disease investigations, sampling, development of standard operating procedures, scenario testing, rapid test kit use, proper use of personal protective equipment, and infection control	У	5,200
	Support for participation in 2nd Pacific Extension Summit	у	2,500
	LRD information support	У	16,100
	Support for participation in PPPO and RTMPP meetings in PNG	У	5,800
	Support for participation in PRA/IRA training at SPC		
	Support for participation in the WTO-SPS workshop in Nadi, Fiji	У	5,800

in Nadi. Fiji  Support for participation in the Pacific Regional Heads of Forestry meeting  Support for the study/observation tour of the CEO of Nauru Rehabilitation Corporation to the mined-land restoration and rehabilitation activities in Naurea, New Caledonia hosted by the Gord Nickel BP of New Caledonia noted by the Gord Nickel BP of New Caledonia noted by the Gord Nickel BP of New Caledonia workshop; and annual PAPGREN meeting, and genebank management training  Cefect supplied 46 alata yam plants for evaluation which included some anthroconser esistant varieties imported from IITA, Nigeria  Support for participation in the Regional Organics Task Force meetings  Support for participation in training in animal disease reporting and information management  Support for participation in the WTO-SFS workshop in Nadi. Fiji  Support for participation in the WTO-SFS workshop in Nadi. Fiji  Support for participation in the Broff ISPMs Regional Workshop in Nadi. Fiji  New Caledonia JCS has not yet been undertaken  Niue  Support for participation in the Environment Department and the forestry Division at the GEF-PAS Regional Consultation on Forest Conservation and Protected Area Management in Nadi. Fiji  Launching and orientation of paravet training and in development of animal breather mergenery response plans, disease investigations, screening and orientation of paravet training, and in development of animal Infection control  Support for participation in the Theorem Protected Area Management in Nadi. Fiji  Launching and orientation of paravet training and in development of animal Infection control  Support for participation in Infaning in animal disease reporting and information management  Support for participation in Infaning in animal disease reporting and information management  Support for participation in Infaning in animal disease reporting and information management  Support for participation in Infaning in animal disease reporting and information management  Support for participation in Infaning in animal		Support for participation in the Draft ISPMs Regional Workshop		
Forestry meeting  Support for the study/observation tour of the CEO of Nauru Rehabilitation Corporation to the mined-land restoration and rehabilitation activities in Noumea, New Caledonia hosted by the Goro Nickel BP of New Caledonia hosted by the Goro Nickel BP of New Caledonia  Support for participation in the Crops for the Future in the Pacific meeting: IPCRFA implementation workshop: and annual PAPCRFN meeting and genebank management training  CePaCT supplied 68 alata yam plants for evaluation which included some anthrochose resistant varieties imported from IIITA, Nigeria  Support for participation in two Regional Organics Task Force meetings in Nadi, Fiji  Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji  Support for participation in PPPO/RIMPP meetings in PNG  Support for participation in the WTO-SPS workshop in Nadi, Fiji  Support for participation in the BTO-SPS workshop in Nadi, Fiji  Support for participation in the BTO-SPS workshop in Nadi, Fiji  Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji  Support for participation of the Environment Department and the Forestry Division at the GEF-PAS Regional Consultation on Forest Conservation and Protected Area Management in Nadi, Fiji  Launching and orientation of paravet training and in development of animal health emergency response plans, disease investigations, sampling, development of standard aperating procedures, scenario testing, rapid test kit use, proper PFE use, and infection control in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji  Support for participation in training in animal disease reporting and information management  Support for Nieu Youth in Agriculture Project and support		in Nadi, Fiji		
Rehabilitation Corporation to the mined-land restoration and rehabilitation activities in Nouroea, New Caledonia hosted by the Goro Nickel BP of New Caledonia  Support for participation in the Crops for the Future in the Pacific meeting: ITPGRFA implementation workshop; and annual PAPGRFN meeting and genebank management training  CePaCT supplied 68 alata yam plants for evaluation which included some anthracnose resistant varieties imported from ITA, Nigeria  Support for participation in two Regional Organics Task Force meetings  Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji  Support for participation in training in animal disease reporting and information management  Support for participation in the WTO-SPS workshop in Nadi, Fiji  Support for participation in the 6th PPPO and 14th RTMPP in PNG  Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji  New Caledonia JCS has not yet been undertaken  Niue  Support for participation of the Environment Department and the Forestry Division at the GEF-PAS Regional Consultation on Forest Conservation and Protected Area Management in Nadi, Fiji  Launching and orientation of paravet training and in development of animal health emergency response plans, disease investigations, sampling, development of standard operating procedures, scenario testing, rapid test kit use, proper PPE use, and infection control  Support for participation in training in animal disease reporting and information management  Support for Nadi, Fiji  Support for participation in training in animal disease reporting and information management  Support for Nadi, Fiji  Support for participation in training in animal disease reporting and information management  Support for Naticipation in training in animal disease reporting and information management				
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PNG  Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji  New Caledonia JCS has not yet been undertaken  Support for participation of the Environment Department and the Forestry Division at the GEF-PAS Regional Consultation on Forest Conservation and Protected Area Management in Nadi, Fiji  Launching and orientation of paravet training and in development of animal health emergency response plans, disease investigations, sampling, development of standard operating procedures, scenario testing, rapid test kit use, proper PPE use, and infection control  Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji  Support for participation in training in animal disease reporting and information management  Support for Niue Youth in Agriculture Project and support		Support for participation in the WTO-SPS workshop in Nadi, Fiji		
in Nadi, Fiji  New Caledonia JCS has not yet been undertaken  • Support for participation of the Environment Department and the Forestry Division at the GEF-PAS Regional Consultation on Forest Conservation and Protected Area Management in Nadi, Fiji  • Launching and orientation of paravet training and in development of animal health emergency response plans, disease investigations, sampling, development of standard operating procedures, scenario testing, rapid test kit use, proper PPE use, and infection control  • Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji  • Support for participation in training in animal disease reporting and information management  • Support for Niue Youth in Agriculture Project and support				
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<ul> <li>Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji</li> <li>Support for participation in training in animal disease reporting and information management</li> <li>Support for Niue Youth in Agriculture Project and support</li> </ul>		development of animal health emergency response plans, disease investigations, sampling, development of standard operating procedures, scenario testing, rapid test kit use,	У	15,300
<ul> <li>and information management</li> <li>Support for Niue Youth in Agriculture Project and support</li> </ul>		Support for participation in PHOVAPS and GF-TADs regional	У	3,700
			У	3,900
			У	110,000

	У	110,000
	У	4,370
Support for participation in the PPPO/RIMPP meetings in PNG		8,000
Advisory support for biological control of sida weeds		
Surveys undertaken for nematodes and potential biocontrol agents identified	У	5,000
<ul> <li>Monitoring and evaluation of the Venezuela-funded project and preparation of the report to be submitted to the Secretariat of the UNCCD</li> </ul>	У	4,400
Computers procured for BIF activities		
Support for participation in the WTO-SPS workshop in Nadi, Fiji	У	4,700
Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji	V	3,500
Support for participation in the Crops for the Future in the		7,2,2,2
the annual PAPGREN meeting and genebank management		7,700
Support for participation in the Pacific Regional Heads of Forestry meeting	V	12,350
Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific	,	12,000
Provision of 221 banana, breadfruit, cassava, sweet potato, taro and yam plants	n	
DSAP supported charcoal and compost field work	У	110,000
Promotion of the use of biogas digesters by DSAP Palau is as a means of managing waste from piggeries		110,000
Technical assistance in form of graduate research assistants	V	110,000
Use of plant derived pesticides promoted as environmentally friendly option	у	110,000
<ul> <li>Support for participation in the Pacific Regional UNFF8</li> </ul>		
Support for participation in the Pacific Regional UNFF8     Preparatory Workshop in Nadi, Fiji	у	5,400
	у	5,400
	ofthe Pacific Organic and Ethical Trade Community and the extension materials production workshoppport for the launching of the Nive Islands Organic Association (NIOFA) standards and activities at the May FAO Ministers of Agriculture meeting  Support for participation in the PPPO/RTMPP meetings in PNG  Advisory support for biological control of sida weeds  Surveys undertaken for nematodes and potential biocontrol agents identified  Monitoring and evaluation of the Venezuela-funded project and preparation of the report to be submitted to the Secretariat of the UNCCD  Computers procured for BIF activities  Support for participation in the WTO-SPS workshop in Nadi, Fiji  Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji  Support for participation in the Crops for the Future in the Pacific meeting; the ITPGRFA implementation workshop; and the annual PAPGREN meeting and genebank management training  Support for participation in the Pacific Regional Heads of Forestry meeting  Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific  Provision of 221 banana, breadfruit, cassava, sweet potato, taro and yam plants  DSAP supported charcoal and compost field work  Promotion of the use of biogas digesters by DSAP Palau is as a means of managing waste from piggeries  Technical assistance in form of graduate research assistants  Use of plant derived pesticides promoted as environmentally	offhe Pacific Organic and Ethical Trade Community and the extension materials production workshopport for the launching of the Niue Islands Organic Association (NIOFA) standards and activities at the May FAO Ministers of Agriculture meeting  Support for participation in the PPPO/RTMPP meetings in PNG  Advisory support for biological control of sida weeds  Surveys undertaken for nematodes and potential biocontrol agents identified  Monitoring and evaluation of the Venezuela-funded project and preparation of the report to be submitted to the Secretariat of the UNCCD  Computers procured for BIF activities  Support for participation in the WTO-SPS workshop in Nadi, Fiji  Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji  Support for participation in the Crops for the Future in the Pacific meeting; the ITPGRFA implementation workshop; and the annual PAPGREN meeting and genebank management training  Support for participation in the Pacific Regional Heads of Forestry meeting  Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific  Provision of 221 banana, breadfruit, cassava, sweet potato, taro and yam plants  DSAP supported charcoal and compost field work  Promotion of the use of biogas digesters by DSAP Palau is as a means of managing waste from piggeries  Technical assistance in form of graduate research assistants  Use of plant derived pesticides promoted as environmentally

•	CePaCT supplied 131 plants of bananas, new taro lines (C5),	у	9,000
	yams and sweet potato. Banana and sweet potato varieties include drought and salt tolerant varieties, and varieties with good levels of beta-carotene (orange flesh); Yams and taro lines are resistant to anthracnose and taro leaf blight disease.		
•	Procurement and supply of animal health diagnostic equipment and reagents for Palau animal health lab		
•	Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji		
•	LRD information support	У	6,200
•	Support for participation in the 2nd Pacific Extension Summit		
•	Support for increasing awareness on invasive species, particularly macaque monkeys and ants	У	2,500 17,200
•	Support for training on invasive species management and		
	weed control along newly built roads	У	8,000
•	Submission of the monitoring and evaluation report of the Palau Venezuela-funded Sustainable Land Management Project to the UNCCD Secretariat	У	5,000
•	Support for participation at the SPC, USDA-PHIS and University	у	
	of Guam sub-regional training workshop on biosecurity at the University of Guam for Homeland Security officers (CNMI, Guam, FSM, RMI and Palau)		10,000
		У	
•	Support for participation in the WTO-SPS workshop in Nadi, Fiji		
•	Support for participation in the 6th PPPO and 14th RTMPP in PNG.		8,600
•	Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji	У	
•	Support for regional media training of agricultural staff (RMI, Palau and FSM) on how to develop media releases		
	DSAP/FACT supported national food technology workshop for		5,000
	DSAP local food processors, vendors and agriculturalists on food safety, preparation, processing and preservation	У	8,600
•	Support for participation in the Pacific Regional Heads of Forestry Meeting	У	7,200
	Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the		
	Forest Resources in the Pacific		

#### Papua New Guinea



- Support for participation of three participants from the PNG Forestry Authority in the Pacific Regional UNFF8 Preparatory Workshop in Nadi, Fiji
- FACT assistance for two exporters of agricultural and forestry produce (Pacific Spices and PNG Balsa Ltd)
- Assistance sought by Pacific Spices Ltd from FACT included research and development (new essential oils), technical assistance (nutmeg propagation), training of producers to improve quality, HACCP and organic certification, and appropriate stills and drying equipment to increase production and quality
- Technical assistance was sought by PNG Balsa Company Ltd from FACT for improved genetic materials – seed improvement programme and kit manufacture, certification – either Det Norsk Veritas (DNV) or Forest Stewardship Council (FSC), project management training and out grower extension services
- Evaluation of 167 taro accessions in drought and atoll conditions
- Provided grant for the in-situ conservation research and development activity in the Gabadi area (Central Province)
- Support for participation in the Coconut Roundtable meeting
- Support for documentation on the State of PNG's PGRFA
- Launching and orientation of paravet training
- Initiation of discussions on institutionalisation of paravet training programme in Vudal University
- Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji
- Support for participation in training in animal disease reporting and information management
- Support for the participation of PNG representatives, government and non-government organisations in the Pacific Organic and Ethical Community meetings
- Supported the participation of PNG representatives at the 2nd Pacific Extension Summit and the extension materials production workshop
- Surveys and management of little fire ants in East Sepik Province under French Pacific funding undertaken and ongoing
- Research on tigaso tree oil uses in Lake Kutubu, Southern Highlands Province is ongoing, targeting revival of cultural uses and research into modern uses such as plant derived pesticides, cosmetics and other uses
- Implementation of the ACIAR Mikania Project in collaboration with NARI
- Provision of digital cameras to PNG Oilpalm Research Association and NARI Lowland Islands Research Programmes

Papua New Guinea	Support for research to identify causal agent for unknown betelnut disease in Markham Valley, Morobe	n	
	Organised PPPO and RTMPP meetings in collaboration with the PNG Government in Port Moresby in early July		
	Support on surveys and diagnosis of new coconut disease discovered in Bogia, Madang province		
	Support for contract of local legal consultant to assist with finalisation of harmonised bill for Cabinet consideration		
	PNG BIF technician contract was extended for another year		
	Support for participation in the WTO-SPS workshop in Nadi, Fiji		
	Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji		
	Support for participation in the Pacific Regional Heads of Forestry meeting		
	Support for participation to the APAFRI Executive Committee meeting in Kuala Lumpur, Malaysia		
	Support for participation in the International Symposium on Forest Genetic Resources in Kuala Lumpur, Malaysia		
	Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific (4 participants)		
	Support for participation in the Asia and the Pacific Forest Products Workshop on Green Technologies and Products for Climate Change Mitigation and Adaptation held in Colombo, Sri Lanka in December 2009		
	Support national training on code of logging practice implementation strategies.		
	PNG JCS has not yet been undertaken		
Pitcairn Islands	Support for ratification of ITPGRFA	У	1,000
***	Provision of computer, digital camera, newly developed visitor arrival cards, and biosecurity uniforms, to strengthen biosecurity service	У	10,000
	Information distribution via the Information, Communication and Extension group		
		У	2,500

#### Samoa



•	Support provided to Samoa in the areas of bamboo propagation, management and utilisation, including the use of bamboo for the rehabilitation of degraded water catchments	У	12,000
•	Supported participation in the Regional Pacific UNFF8 Preparatory Workshop in Nadi, Fiji	У	5,880
•	FACT assisted TH Plantations to develop commercial export of banana, taro and breadfruit chips through assistance with improved production, packaging and labelling and with development of export markets	У	26,500
•	Support for participation in the GEF-PAS Regional Consultation on Forest Conservation and Protected Area Management in Nadi, Fiji	У	11,760
•	Support and promotion by DSAP of plant derived pesticides such as Derris among growers		
•	Mucuna seed production was launched in conjunction with farmer groups and Women in Business International.	У	5,000
•	Support for the Taro Improvement Programme with the elite lines from the breeding programme feeding into the CePaCT collections for wider distribution	У	74,000
•	Support for participation in the Crops for the Future in the Pacific meeting; ITPGRFA implementation workshop; and the annual PAPGREN meeting and genebank management training	у	2,300
•	Support for USP laboratory (maintains duplicate of key CePaCT collections)	У	6,780
•	Partner in the ACIAR-funded dasheen mosaic virus (DsMV) project to assess the impact on yield of DsMV on selected taro varieties	У	10,000
•	Distribution of 8 varieties of Irish potatoes for evaluation as part of import substitute strategy for imported potatoes	у	1,335
•	Received from CePaCT 118 plants of yellow cassava, drought and salt tolerant sweet potato, and varieties with good levels of beta-carotene (orange flesh).		
•	Support for preliminary inventory study on the current status of the coconut field genebanks as part of the proposed strategy for the regeneration work in collaboration MAF and Global	У	1,300
	Crop Diversity Trust  Support for the documentation on the state of Samoa PGRFA	У	5,000
•	Participation in the Coconut Round Table meeting	У	3,100
•	Sponsorship for one postgraduate/masters student at USP, Fiji	У	12,000
•	Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji	У	15,500 12,000
•	Support for participation in training in animal disease reporting and information management	У	10,000
	and monitoring of the first of		

#### Samoa Support for plant protection training for Extension Officers 9,600 Continued support for strengthening of the Samoa Farmers У Association Support for activities of NGOs such as Women in Business 1,500 Development У Support for the participation of government and NGO representatives in the Pacific Organic and Ethical Trade 8,000 У Community meetings Support for participation of government and NGO representatives in the 2nd Pacific Extension Summit 5,000 У Support for participation in PPPO/RTMPP meeting in PNG Undertook cocoa feasibility/scoping study Implemented brassica integrated pest management with 8,000 ACIAR support; farmer field schools have been established and training provided by the SPC Plant Health team Submission of the monitoring and evaluation report of the Samoa Venezuela-funded Sustainable Land Management project, to the UNCCD Secretariat 3,200 У Support for participation in the WTO-SPS workshop in Nadi, Fiji Support for participation in the Draft ISPMs Regional Workshop 3,200 У in Nadi, Fiji Participation in the Samoa-SPC Joint Country Strategy (JCS) Support the study visit of ACEO Forestry Division (MNRE) to Vanuatu Support for participation in the Pacific Regional Heads of Forestry meeting Support two participants to the Regional Workshop on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific

#### Solomon Islands



5	•	FACT supported the training of cocoa farmers in implementing sustainable practices in the management of their cocoa plantations	У	14,500
	•	FACT assists three exporters of forestry and non-wood forest products (VATA, VETE and Maraghoto Holdings Ltd). Independent consultants were engaged to look at the sustainable management of Forest Resources. Currently FACT is funding the review and update of Solomon Island Handicraft booklet.	У	44,500
	•	Support for participation at the Pacific Regional UNFF8 Preparatory Workshop in Nadi, Fiji	У	6,200
	•	Facilitating access to swamp taro diversity from Fiji and FSM	у	5,000
	•	Documentation on DVD of the activities carried out by the Kastom Gaden Association	У	2,800
	•	Support for participation in the Coconut Round Table meeting in Nadi, Fiji	у	3,000
	•	DSAP Solomon Island promoted participatory approaches and the use of mucuna as soil improver and mucuna seed production project in Malaita	У	20,000
	•	Discovery of Bixa mosa, a traditional plant in Malaita, as a trap crop for insect pests on beans has proven to provide a huge potential as an organic pest control measure. Further research may be undertaken in collaboration with ACIAR.		
	•	Neem and derris extracts as organic pest controls are producing good results on pele in the DSAP project sites in Malaita	У	20,000 18,800
	•	Support for participation in the Crops for the Future in the Pacific meeting; the ITPGRFA implementation workshop; the annual PAPGREN meeting and genebank management training.	у	13,333
	•	Support for participation in the coconut roundtable meeting		6,000
	•	Support for participation in training in animal disease reporting and information management	У	2,600
	•	Supported government and NGO representatives at the 2nd Pacific Extension Summit & extension materials production workshop	У	18,800
	•	Led the implementation of the ACIAR-funded IPPSI project involving Kastom Gaden Association, Vois Blong Mere and the Department of Agriculture	у	106,000
	•	Support for participation in the WTO-SPS workshop in Nadi, Fiji	у	12,400 5,800
	•	Support for participation in the 6th PPPO and 14th RTMPP in	у	2,700
	•	PNG Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji	у	
	•	Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific (4 participants)		

Tokelau * *	Follow-up for evaluation of tissue culture plants of sweet potatoes, taros, bananas, cassava and yams provided by CePaCT in 2008	У	5,000
*	Attendance of PHOVAPS and GF-TADs regional meetings in Nadi, Fiji	У	3,000
	Supported participation in training in animal disease reporting and information management	у	5,000
	Continued to support the establishment of school and community gardening projects on Fakaofo and Nukunonu	У	10,000
	Facilitated the development of a national agriculture development plan for Tokelau		
	Support for participation in the Pacific Regional Heads of Forestry meeting	У	5,000
Tonga	In collaboration with the Tasmania Forest Practices Authority, assisted Tonga in the formulation of its Code of Forestry Practices for the island of 'Eua	У	15,200
	Support for participation in the Regional Pacific UNFF8     Preparatory Workshop in Nadi, Fiji	У	4,500
	Support for participation of four officers from MAFFF in the North Queensland study tour as part of the training in the ACIAR-funded tropical fruit development project. Further	У	14,000
	training was also provided in Tonga and fruit factsheets developed. Planting material of a range of fruits was imported in both seed and bare-rooted material	У	2,000
			6,600
	Support for participation in the Coconut Round Table meeting	У	8,800
	Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji	у	3,100
	Support for participation in the training in animal disease reporting and information management		
	Assistance in organising importation of breeding pigs from Fiji	У	1,000
	Assistance in implementation of the Venezuela-funded pig development project (import of pigs, workshop training, biogas digester construction)	У	Tonga funded
	generation activity in the three extension zones on Tongatapu	У	10,000
	Support for the improvement in an extension project focusing on communications and information packaging	У	3,000
	Support for the youth in agriculture organic activities with the Tonga National Youth Council – local organic market has been established	У	34,300
	Support for participation of government and NGO representatives at the 2nd Pacific Extension Summit and the extension materials production workshop	у	7,800

Tonga	•	Support for farmers with 30,000 kava seedlings as an income		
+	•	Support for the participation of Tonga (government and NGO) on the Pacific Organic and Ethical Trade Community		
	•	Support for two Ministry of Lands and Environment staff and three Ministry of Agriculture and Forestry staff to participate in the SPC/GTZ Regional Adaptation to Climate Change Planning Workshop in Suva, Fiji	У	2,200
	•	Conducted the SPC/GTZ Adaptation to Climate Change National Workshop in Tonga to develop its operational plan	У	13,500
	•	Support for a consultation process to integrate climate change in the draft forest policy and the draft forest legislation from July 2009 onward through the SPC/GTZ regional programme on climate change	У	2,000
	•	Support for participation in the WTO-SPS workshop in Nadi, Fiji	,	·
	•	Support for participation in the 6th PPPO and 14th RTMPP in PNG	У	3,000
	•	Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji		
	•	CePaCT supports food security by providing 167 plants of breadfruit, Irish potato and anthracnose resistant yams.  Evaluation of Irish potatoes was part of a strategy to reduce dependency on imported potato	У	3,000
		adpoindency on imported potato	У	12,000
	•	Provided one week tissue culture training at CePaCT for the Lab Technician from the Ministry of Agriculture and Food, Foresh and Fisheries (MAFFF) as part of capacity building	У	3,000
	•	Support for participation in the Pacific Regional Heads of Forestry meeting		
	•	Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific (2 participants)		
	•	Support for the participation of media personnel to the climate change media training workshop in Vanuatu, as a lead up to the PINA summit SPC/GTZ regional programme on climate change		
	•	Support the Forestry Division in their forest inventory efforts through the provision of a computer		

ıvalu	Support for participation in the Coconut Round Table meeting	g у	2,000
200	Support for arrangements for obtaining breeding pigs from Fij	і у	1,000
	Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji	У	4,200
	Support for participation in training in animal disease reporting and information management	у	4,400
	Supported and conducted PRIPP dog control and avian influenza workshop	у	7,900
	Support for participation in 2nd Pacific Extension Summit	<b>y</b>	7,700
	Information distribution support	у	2,100
	<ul> <li>Two computers and relevant accessories were purchased an supplied to Tuvalu for BIF</li> </ul>	y y	2,500
	BIF consultant installed BIF for Tuvalu and trained Tuvalu biosecurity officials on the use of BIF	У	10,000
	<ul> <li>Facilitation of visit by senior quarantine officer and coconut industry representative to Fiji Islands to see export systems and hold discussion with Fiji coconut exporters</li> </ul>	у	10,000
	Facilitation of fresh produce trade between Fiji and Tuvalu	У	15,000
	Assistance to Tuvalu in finalising import protocols		
	Support for participation in the WTO-SPS workshop in Nadi, Fiji		
	Support for participation in the 6th PPPO and 14th RTMPP in PNG	У	20,500
	Support for participation in the Draft ISPMs Regional Workshop	у	8,000
	in Nadi, Fiji	У	5,000
	Support for participation in the Crops for the Future in the Pacific meeting; the ITPGRFA implementation workshop; the annual PAPGREN meeting and genebank management training	У	6,200
	Support for participation in the Pacific Regional Heads of Forestry meeting	У	5,200
	Support for participation in the Regional Workshop/Training of Forest Policy Processes for the Sustainable Management of	e	4,000
	Forest Resources in the Pacific	У	6,000

#### Vanuatu



- Support for three participants from Vanuatu to attend the Pacific Regional UNFF8 Preparatory Workshop in Nadi, Fiji
- Assistance from FACT for Lapita Cafe to develop commercial export of cassava chips and flour
- Support for three participants from the Forestry Department of Vanuatu to attend the GEF-PAS Regional Consultation on Forest Conservation and Protected Area Management
- Support for collecting banana germplasm
- Support for collecting breadfruit germplasmProvision of 160 plants of 32 different accessions of sweet potato (drought and salt tolerant varieties, and varieties with good levels of betacarotene)
- Support for participation in the Coconut Round Table meeting
- Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji
- Support for participation in training in animal disease reporting and information management
- Support for participation of government and nongovernmental organisations at meetings of the Pacific Organic and Ethical Trade Community
- Support for participation in the Pacific Extension Summit and extension materials production workshop
- Support provided for containment of little fire ants on Santo and Efate
- Support for biological control of the two water weeds known as water hyacinth and water lettuce on Efate, Epi, Malekula and Santo
- Technical support for the control of three species of broomweeds on all the major island groups
- Significant support for launching and implementation of kava dieback disease management in Santo, Tanna and Pentecost
- Support for participation of the Ministry of Agriculture and Forestry and the Ministry of Lands and Natural Resources in the SPC/GTZ Regional Climate Change Adaptation Workshop
- Conducted the SPC/GTZ Climate Change Adaptation National Workshop to develop Vanuatu's national plan of operation
- Supported the participation of one forestry officer to the Fiji REDD Policy scoping workshop held in Suva, Fiji
- Funding provided for computers
- Support for participation in the WTO-SPS workshop in Nadi, Fiji
- Support for participation in the 6th PPPO and 14th RTMPP in PNG
- Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji

Vanuatu  Wallis & Futuna	<ul> <li>Funded and conducted the Phytosanitary Capacity Evaluation national training workshop</li> <li>Funded and conducted BIF Training workshop for Vanuatu quarantine staff</li> <li>Support for participation in the Pacific Regional Heads of Forestry Meeting</li> <li>Support for participation in the Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific (4 participants)</li> <li>SPC/GTZ regional programme on climate change supported the participation of local media personnel in the climate change media training workshop held in Vanuatu as a lead up to the PINA summit</li> <li>Vanuatu JCS not yet undertaken</li> </ul>		5 000
Wallis & Futuna	<ul> <li>Assistance with coordination of the exchange programme between Fiji College of Agriculture and Wallis and Futuna Agriculture College (seven students and one lecturer)</li> <li>Support for participation in the Coconut Round Table meeting</li> </ul>	У	5,000
	Support for production of brucellosis and pig production posters/ leaflets in French and in the Wallisian language	У	3,000
	Support for participation in PHOVAPS and GF-TADs regional meetings in Nadi, Fiji	У	2,500
	Support for participation in training in animal disease reporting and information managementSupport for participation in the Pacific Regional Heads of Forestry meeting	У	3,300
	Development of animal health emergency response plans, disease investigation, sampling, development of standard operating procedures, infection control, proper use of personal protective equipment, rapid test kit use scenario testing	У	3,600
	LRD information support		
	Support for participation in the Draft ISPMs Regional Workshop in Nadi, Fiji		



### **ANNEX 2:** LRD 2009 PUBLICATIONS BY THEMATIC TEAMS

ANNEX Z:	LKD 2009 PUBLICATIONS BY THEMATIC TEAMS
Forests and Trees	Land cover type mapping in Kiribati
104	Regional and sub-regional inputs to UNFF8 – A submission by the Secretariat of the Pacific Community
	Report on the Regional Preparatory Workshop for UNFF8
	Plants of Nauru: Guide to Indigenous and Introduced Plants of Particular Cultural Importance and Weeds of Potential Threat to Nauru, by R. R. Thaman, C. C. Hassal and S. Takeda
Forest and Agricul- ture Diversification	Development of market information system for Solomon Island timbers – FACT Project Report
team	Root crops in Vancouver; a rapid market appraisal of products from Fiji – FACT Project Report
	Progressing forest certification in the Solomon Islands – FACT Project Report
	Trends in the world ginger market – FACT Project Report
	Facilitating Agricultural Commodity Trade (FACT) – Six monthly progress report
Plant Health team	• Ecology, impacts and management of invasive plant species in pastoral areas. Proceedings of the Regional Workshop on Invasive Plant Species in Pastoral Areas. Vincent Blanfort and Warea Orapa (eds). pp. 24–28. November 2003, Kone, New Caledonia. 212 p. (contributions from various authors in English and French).
	Ecology and Control Options: Mikania micrantha – a brochure in English, Tok Pisin and Fijian
	Poster: Revival of Tigaso (Wambola, Karao) oil in Kutubu, Papua New Guinea
	<ul> <li>Warea Orapa. (2009). The Role of the Secretariat of the Pacific Community in the biological control of weeds in the Pacific Islands region – past, present and future activities. pp. 465–480.</li> <li>In: Muniappan, R., Reddy, G.V.P and Raman, A. (eds). Biological control of tropical weeds using arthropods. Cambridge University Press.</li> </ul>
	Pacific Invasive Species Management Guidelines. SPREP–SPC publication.
	Taro beetle management in Papua New Guinea and Fiji – Final project report.
Crop Production team	<ul> <li>Tataua, B.E. 2007. The effects of composted organic matter and bucket-drip irrigation and Fe and Zn applications on the growth and yields of two vegetable crops and selected soil prop- erties in Tuvalu (Thesis)</li> </ul>
	Making an A-frame for hillside farming – DSAP Solomon Islands (poster)
	Fiche technique – Fabrication de compost, DSAP French Polynesia (brochure)
	Fiche technique – Compostage facilite, DSAP French Polynesia (brochure)
	Fiche technique – Culture sur bourre de coco (brochure)
	Fiche technique – Fabrication d'engrais de poisson (brochure)
	Fiche technique – Recettes maison de «biopesticides» (brochure)
	Des techniques pour une agriculture durable – Culture de pasteques et de melons sur motu en Polynesie Francaise (book)
	Pacific agroforestry – An information kit – translation (book)

#### **DSAP** Coconut fibre farming as used in the Tuamotu Archipelago, DSAP French Polynesia (brochure) A participatory toolkit for sustainable agriculture programmes in the Pacific – The DSAP experience (book) Case studies – Lessons from the field – The DSAP experience (book) **Genetic Resources** Regular articles for LRD Newsletter team Contribution to 'Climate change and health: a Pacific perspective' in the Commonwealth Secretariat publication Taylor, M.B. and Tuia, V.S. 2009. The importance of germplasm development and exchange in meeting the challenges of the 21st Century in the Pacific Region. Acta Horticulturae 829:231-241. Taylor, M., Kete, T. and Tuia, V. 2009. Underutilised species in the Pacific: An untapped source of nutritional and economic wealth. Acta Horticulturae 806:235–243. Cook Islands country report: State of the world II for plant genetic resources for food and agriculture Fiji country report: State of the world II for plant genetic resources for food and agriculture Palau country report: State of the world II for plant genetic resources for food and agriculture Samoa country report: State of the world II for plant genetic resources for food and agricul-Back to the roots (DVD): Kastom Gaden Association (Solomon Islands) Animal Health and FAO AnGR Pilot Project final report **Production team** First Subregional GF-TADs meeting report for the SPC region 4th PHOVAPS meeting report Agriculture, forestry and climate change – SPC Policy Brief (July 2009) **Land Management** and Resources Policy team The benefits of organic agriculture – SPC Policy Brief (August 2009) What is REDD – Presentation at Fiji National Planning and Training Workshop (May 2009) Rewducing Emissions from Deforestation and Forest Degradation – Fiji forest sector briefing document (May 2009) REDD Fiji forest sector briefing supporting documents (May 2009) Fiji REDD Policy and Scoping Workshop background materials (August 2009) Fiji REDD Policy and Scoping Workshop – final report (September 2009) Creation of new climate change website within LRD's site: http://www.spc.int/lrd/Climate\_ Change.htm Sustainable land management for biofuel Monitoring and evaluation report for the Venezuela-funded project for Palau Monitoring and evaluation report for the Venezuela-funded project for Samoa

Monitoring and evaluation report for the Venezuela-funded project for Niue

- Designing integrated financing strategies for sustainable land management training (May 2009)
- Joint SPC/AusAID Aide memoir for the Pacific Regional Land Program
- Pacific Island food security: situation, challenges and opportunities (contributing authors) –
   Pacific Economic Bulletin Volume 24:2.
- Pacific Information Brief: Ecosystem Based Adaptation (IUCN, SPC, GTZ, SPREP)

#### Information, Communication and Extension team

#### **Books/reports**

- LRD Annual Report (LRD Admin.)
- PPP end of project report, electronic copies available (PPPO)
- Pacific Region Organic Strategic Plan (ICE)
- Fiji Export Manual (editing) (Biosecurity and Trade Support)
- Cook Island Disease Report (editing) (Plant Health)
- Taro Beetle Report (ICE/Plant Health)

#### **Posters**

- Arbor Week (Forests and Trees)
- Fair trade (poster/ leaflet) (FACT)
- Cook Islands biosecurity awareness poster (Biosecurity and Trade Support)
- Tigaso poster (editing) (Plant Health)
- Pests in Fiji\_BAD/GOOD (Plant Health)
- Wallis and Futuna posters (ICE/CePaCT)

#### Leaflets and cards

- Mikania (PH)
- Assist Tonga MAFF (consultation) (ICE)
- Nauru arrival cards (Biosecurity and Trade Support)
- Pitcairn arrival cards (Biosecurity and Trade Support)
- Origin Pacific leaflet (FACT)
- Yela leaflet (Forestry and Agriculture Diversification)
- IPPSI 80 leaflets printed 30 each (IPPSI ICE)

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

#### Leaflets and cards

- Mikania (PH)
- Assist Tonga MAFF (consultation) (ICE)
- Nauru arrival cards (Biosecurity and Trade Support)
- Pitcairn arrival cards (Biosecurity and Trade Support)
- Origin Pacific leaflet (FACT)
- Yela leaflet (Forestry and Agriculture Diversification)
- IPPSI 80 leaflets printed 30 each (IPPSI ICE)
- Origin Pacific product labels (FACT)
- Friends leaflets (FACT)
- IPPSI pest and disease recognition certificate (ICE)
- Fiji biosecurity fact sheets (Biosecurity and Trade Support)
- IPPSI fact sheets
- Wallis and Futuna brochure (ICE/CePaCT)
- Pests of oranges reprinting (ICE/IPPSI)

#### **Press releases**

- Regional experts in extension gather for second summit
- Fiji Islands national planning workshop to develop international carbon market instruments
- Participatory extension methods are encouraged
- International consultation to chart way forward for Pacific coconut industry
- ICT and media to support agriculture extension services in the Pacific
- SPC coordinating fight against transboundary animal diseases
- Pacific region joins global system for conserving and using plant genetic resources for food and agriculture
- SPC partnership with Global Crop Diversity Trust to safeguard collections of edible aroids and yams
- Fourth PHOVAPS meeting
- SPC hosting regional consultation on global framework for animal disease control
- Heads of quarantine and plant protection meet
- Pacific Biocontrol Workshop
- Organic agriculture

#### LRD promotional products

- Folder
- A3 leaflet
- DVD
- LRD mini-posters

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

#### Workshop and meeting assistance

- CTA publication and extension workshop (Information, Communication and Extension)
- 2<sup>nd</sup> Extension Summit (ICE)
- PPPO meeting, PNG (Biosecurity and Trade Support and Plant Health)
- APPC Coconut meeting (FACT)
- PCE & BIF Workshop, Vanuatu (Biosecurity and Trade Support)
- Land Degregation Workshop (LMRS)
- ISPM Workshop (Biosecurity and Trade Support)
- Pacific UNFF8 Preparatory Workshop (Forests and Trees)
- Climate Change Workshop (GTZ)
- GEF-PAS Forest Conservation Workshop (LMRS)
- Mini CRGA meeting (SPC administration)
- Regional Organic Task Force meeting (ICE)
- Taveuni Island Sustainable Agriculture Development Workshop (ICE)

#### **Newsletters**

- LRD News Vol 1 2009
- LRD News Vol 1 2009
- Regional organic newsletter (ICE Organics)

#### Fruit tree publications

Leaflets

#### Campaign and awareness assistance

- Pacific Youth Festival (ICE LRD)
  - i. Set up SPC Booth
  - ii. Mend LRD Display
- Cook Islands Mini-Games Biosecurity Awareness (ICE BATS)
  - i. Poster
  - ii. TV spot
  - iii. amnesty bin label
  - iv. free-standing airport arrival banner
- Organic launching ministers meeting, Niue (ICE)
  - i. Drop down banner
  - ii. Invitation
  - iii. Organic Standards books for the launch (mailed)

# ANNEX 3: LRD MAIN SECTORAL MEETINGS AND WORKSHOPS IN 2009

### • National workshops on on-farm trials in Kiribati, Cook Islands, Nauru, Marshall Islands and Niue

National workshops on design, conduct, data collections and analysis of on-farm trials were conducted throughout the year in Kiribati, Cook Islands, Nauru, Marshall Islands and Niue. These were aimed at building the capacity of DSAP staff and local agricultural staff to effectively and efficiently carry out on-farm trials in order to supply appropriate information to help with advising of farmers.

### • National familiarisation or training workshops on the biosecurity information facility, various countries

The biosecurity technicians working on the biosecurity information facility conducted familiarisation workshops in Cook Islands 2–5 March, 8–12 June and 29 June to 1 July; in Fiji Islands 23–27 March, 18–27 May and 22–24 June; in Tuvalu 7–14 July; in French Polynesia 27–30 July; and in Vanuatu 8–13 June. These training sessions were attended by various officers from the ministries of agriculture.

### • National awareness and training workshops on the biosecurity laws in Cook Islands and Fiji Islands

The biosecurity services of Cook Islands and Fiji Islands conducted awareness and training workshops in several locations on their respective biosecurity laws that were enacted recently (late 2008).

#### • SPC/GTZ Regional Programme on Adaptation to Climate Change in the Pacific Island Region: strategic regional planning workshop, 5–11 February, Suva, Fiji Islands

Key stakeholders from the three project countries (Fiji Islands, Tonga, and Vanuatu) and stakeholders from government and non-governmental organisations and CROP (Council of Regional Organisations in the Pacific) agencies met in Suva in February to elaborate a plan of operation and indicator matrix for the four-year project phase.

#### • Implementation workshop for the Centre of Excellence for Atoll Agricultural Research and Development 9–10 February, Tarawa, Kiribati

An implementation workshop was held on 9–10 February emphasising the tools the centre will adopt to work with farmers.

#### • Pacific regional workshop on the WTO Agreement on the Application of Sanitary and Phytosanitary Measures and international standard setting bodies, 9–12 February, Nadi, Fiji Islands

Biosecurity and Trade Facilitation Adviser represented the FAO-IPPC Secretariat at the WTO Pacific regional workshop on SPS and the three international standard setting organisations. LRD AHP and Biosecurity and Trade Support participated in the workshop, which was attended by animal health, plant health, biosecurity, health, and trade officials from the region.

### • Pacific regional trade statistics capacity building, 25–27 February, Suva, Fiji Islands

In collaboration with FAO, LRD hosted the second in a series of training sessions to assist PICTs to improve their reporting of import and export information. The workshop brought together representatives of seven national statistics offices to identify problems with trade statistics in the region, and demonstrate techniques for improving the quality of that information. In addition, it saw the launch of the Pacific Regional Trade Statistics database, which can be accessed via the SPC website.

### • Paravet launch and PRIPPP workshop, 5–12 March, Tarawa, Kiribati

At this workshop paravet training was launched, a planning workshop was conducted to identify capacity needs, and avian influenza and pandemic preparedness and emergency response capabilities were established.

### • Paravet launch and PRIPPP workshop, 7–14 March, Alofi, Niue

At this workshop paravet training was launched, a planning workshop was undertaken to identify capacity needs, and avian influenza and pandemic preparedness and emergency response capabilities were established.

### • Pacific UNFF8 Preparatory Workshop, 9–12 March, Nadi, Fiji Islands

The purpose of the workshop was to raise awareness on the international forest policy process, and especially to enhance understanding of the non-legally binding instrument on all forests and the UNFF multi-year programme of work, to discuss the agenda items for UNFF8 and to work out possible regional positions to be endorsed at the national level and to discuss and agree on possible strategies for operating as a Pacific group during UNFF8.

#### • SPC/GTZ Regional Programme on Adaptation to Climate Change in the Pacific Island Region: Tonga national planning workshop, 17–19 March, Tongatapu, Tonga

The Tonga national planning workshop had the main objective of confirming the outputs identified for the country in the project plan of operation developed in Suva, and in further defining the related activities.

### • Paravet launch and PRIPPP workshop, 23 March–1 April, Nauru

Paravet training was launched in Nauru and hands-on training was provided on passive 'dead bird' disease surveillance system.

#### • SPC/GTZ Regional Programme on Adaptation to Climate Change in the Pacific Island Region: Vanuatu national planning workshop, 25–27 March, Port Vila, Vanuatu

The Vanuatu national planning workshop saw stakeholders from various government agencies, provincial offices from the other islands, non-governmental organisations and community representatives refining the project outputs for the country and further defining required activities.

### • Banana virus indexing training, 30 March–2 April, Suva, Fiji Islands

A banana virus indexing workshop was conducted in Suva, Fiji at the USP-SPC virus indexing laboratory. The training was carried out by Dr John Thomas and Ms Lee McMichael from QDPI in the techniques used in Australia and approved by the Australian Quarantine and Inspection Service. It was funded by the Global Crop Diversity Trust as an essential component of the Pacific banana strategy.

### • 4th session of the Commission on Phytosanitary Measures (CPM), 30 March–3 April, Rome, Italy

This meeting was attended by the Biosecurity Adviser and by national plant protection office representatives from Cook Islands, Fiji Islands, Samoa, PNG, Vanuatu, Australia and New Zealand. The session approval for five new international standards on phytosanitary measures.

### • Micronesia sub-regional biosecurity training, 5–10 April, University of Guam, Guam

SPC jointly with the United States Department of Agriculture's Animal and Plant Health Inspection Service and University of Guam co-sponsored and conducted sub-regional quarantine training of quarantine, homeland security and environment officers from the Micronesian countries and territories. A biosecurity and plant health specialist was engaged as a consultant to be resource person at this training workshop.

### • Workshop on OIE Regional Disease Information 6 April, Nadi, Fiji Islands

AHP in collaboration with the OIE and FAO organised a regional animal health disease reporting and information management workshop for PICTs.

#### • LRD represented on International Steering Committee, 8–9 April and 21–22 July, Wageningen, Netherlands

LRD represented the Pacific on the organising committee for an international seminar to held in Brussels, Belgium in October looking at the role of the media in agriculture and rural development. LRD will be leading a group of ten pacific representatives who will be presenting the regions views on a multitude of issues ranging from, media and climate change to media and agriculture development.

### • Production of agricultural extension materials training course, 14–25 April, Nadi, Fiji Islands

A workshop designed to improve the ability of agricultural information workers to develop simple, well-structured and culturally relevant agricultural extension materials for specific target audiences was facilitated by LRD in collaboration with CTA in April. Twenty-two participants attended from ministries of agriculture, the private sector and regional agricultural institutions.

#### • PRIPPP Workshop, May 4-9, Wallis and Futuna

The workshop took place in the context of the emergence and international spread of the H1N1 virus. The three-day workshop was intended to promote awareness of the international spread of highly pathogenic avian influenza (H5N1) and help Wallis and Futuna to be prepared for an outbreak of an emergency animal disease.

### • 2nd Pacific Extension Summit, 18–22 May, Nadi, Fiji Islands

With support from CTA, GTZ, ACIAR, FAO and USP, LRD hosted the 2<sup>nd</sup> Pacific Extension Summit in May. The summit, themed 'transforming extension and outreach in the Pacific for sustainable development', brought together 60 participants from 17 member PICTs including the northern Pacific.

#### • Celebration of Nadi District Arbor Week, 18–22 May, Nadi, Fiji Islands

In collaboration with the Fiji Islands MPI, LRD conducted awareness meetings promoting the importance of implementing an integrated and sustainable land resource management regime. The Arbor Week awareness campaign had the theme 'Prevent flooding, tackle climate change, plant trees now'.

### • DSAP 2009 annual meeting 19–20 May, Nadi, Fiji Islands

The annual meeting was held in conjunction with the 2<sup>nd</sup> Extension Summit in Nadi. The 2009 regional work plan and the country exit plans were discussed and countries were advised to ensure that exit plans are also followed through. Barriers to implementation and how to address them were also discussed.

# • SPC/GTZ Regional Programme on Adaptation to Climate Change in the Pacific Island Region: Fiji national planning workshop, 19–21 May, Suva, Fiji Islands

The Fiji national planning workshop saw the involvement of a REDD expert to guide the participants in defining an appropriate set of actions and outputs to strengthen Fiji's position in implementing REDD. Strong participation came from the various government sectors, private sectors, CROP agencies, resource owner representatives, and non-governmental organisations.

# • Inception meeting on PGSP 2008–2009, Improving governance and building capacities for safe movement of tree germplasm between Pacific Island countries, 26–28 May, Suva, Fiji Islands

In collaboration with CSIRO and with funding from the AusAID Pacific Governance Support Programme, this project began in May 2009. The project will assist PICTs to overcome some of the existing hurdles that impede the efficient and safe movement of wild and improved tree germplasm between countries. The first project activity was a three-day inception workshop for the project team held at the SPC offices in Suva, Fiji, to plan the project activities and prepare guidelines for discussions with officials in relevant forestry/agriculture and quarantine agencies in the project countries.

### • PRIPPP dog control and avian influenza workshop, 28 May–5 June, Funafuti, Tuvalu

Hands-on competence training of paravets was conducted on surgical operation techniques in castration and spaying of dogs. This was at the request of Tuvalu authorities due to the wandering dog problems at Funafuti runway which has been a problem for air safety for some time. The techniques were demonstrated and paravets were allowed to perform to gain the competence in the techniques under supervision by a vet.

#### • Forum Trade Officials and Ministers meetings and Pacific ACP Trade Officials and Ministers meetings, 8–20 June, Apia, Samoa

The Biosecurity and Trade Support Coordinator attended a series of meetings between senior trade officials of Pacific ACP countries which were followed by another series of meetings between of senior trade officials of Forum countries on 8–12 June. These meetings were followed by Trade Ministers of

both Pacific ACP and Forum Countries which were held on 15–18 June. LRD presented updates on the biosecurity component of the Pacific Regional Economic Integration Programme to the Pacific ACP trade officials and ministers and an update on the PACER-RTFP to the Forum officials and ministers.

### • Pacific Organics and Ethical Trade Community meetings, 27–30 April and 6–9 June, Nadi, Fiji

Two meetings of ROTF, now known at the Pacific Organic and Ethical Trade community, were held to consolidate organic and fair trade development in the Pacific. The meetings were held to continue the work under the current IFAD-funded organic project facilitated by LRD.

#### Vanuatu capacity evaluation, 1–5 June, Port Vila, Vanuatu

The Biosecurity Information Assistant assisted Vanuatu to undertake its phytosanitary capacity evaluation. The results of the evaluation will now be used as a baseline for phytosanitary capacity in Vanuatu and used also in determining future biosecurity assistance to Vanuatu. The workshop was attended by 15 participants including officers from Santo.

## • Regional consultation on forest conservation and protected area management, 15–17 June, Nadi, Fiji Islands

A three-day consultation meeting was held to give representatives of government, NGOs and other interested stakeholders and experts an opportunity to present and discuss forest conservation and protected area management in their respective countries and in the region. The meeting was organised by the Forests and Trees Programme in collaboration with FAO, GEF and the National Forest Programme Facility.

# • APCC–SPC roundtable on the state of the art of coconut processing and market prospects of coconut products in the Pacific Islands, 17–18 June, Nadi, Fiji Islands

This discussion focused on the state of the art of coconut processing and market prospects in the Pacific. The FACT project collaborated with the Asian and Pacific Coconut Community (APCC) to coordinate the roundtable-discussion meeting for the Pacific countries. ACIAR and the Fiji Coconut Industry Development Authority (CIDA) also provided support for this meeting.

### • Taveuni mini summit on integrated and sustainable agriculture, 9–12 June, Taveuni, Fiji Islands

The Forests and Trees Programme contributed to the organisation and facilitation of this meeting to develop an integrated and sustainable agriculture concept for the island.

### • Fiji Consultation meeting on the review of the Fiji Forest Decree, 19 June, 2009, Suva, Fiji Islands

The meeting conducted with main forestry stakeholders included discussions on the inclusion of the carbon trading instruments and institutional framework.

### • PHOVAPS regional workshops, June 22–24, Nadi, Fiji Islands

The PHOVAPS forum is the body responsible for identifying, guiding and prioritising issues for inclusion in the work programme for SPC's AHP team.

### • GF-TADs regional workshop, June 25–26, Nadi, Fiji Islands

SPC AHP, in collaboration with OIE and FAO, held its first GF-TADs workshop back-to-back with the regional PHOVAPS workshop.

#### • 6th meeting of Regional Technical Board of the Pacific Plant Protection Organisation and 14th Regional Technical meeting for Plant Protection, 29 June–3 July, Port Moresby, PNG

This was second joint triennial meeting of the heads of the national plant protection organisations in the PICTs, Australia and New Zealand, and their counterparts working on plant protection research and management since they moved from biennial to triennial meetings.

## • SPC/GTZ/PINA regional training workshop for media on climate change and food security, July, Port Vila, Vanuatu

The main objective of this journalists' training workshop was to increase the awareness and knowledge of Pacific journalists' on the implications of climate change on the food security of Pacific Islanders. The workshop was a lead up to the PINA summit and involved resource persons from the GTZ, SPC Land Resources Division, SPC Fisheries section, SPREP, and the Fisheries Forum Agency.

### Sub-regional workshop on media production 13–16 July, Pohnpei, FSM

This sub-regional workshop for the Northern Pacific conducted in conjunction with the SPC Regional Media Centre was aimed at developing the skills of DSAP staff and agricultural staff in the countries in radio script writing and writing effective press releases.

#### • Designing integrated financing strategies for combating land degradation in the Pacific workshop 27–31 July, Nadi, Fiji Islands

To facilitate the implementation and sustainability of national action plans in the Pacific, the Global Mechanism (GM) of UNCCD has designed a capacity building initiative to

enhance national competencies for resource mobilisation to combat land degradation. This workshop offered participants an opportunity to share their experiences on the design and implementation of their national action plans, and to work to improve their strategy for securing sustainable financing. In addition it will invite the SPC and the SPREP reflected upon their experience of mainstreaming sustainable land management, and identified regional programmes and financing opportunities that would support the combat of land degradation.

## • SPC/GTZ/DoE/DoF Fiji national policy scoping workshop for REDD+, 27 August–1 September, Suva, Fiji Islands

The Fiji REDD policy scoping workshop saw the development of a draft policy framework for REDD+ in Fiji. Participants from various sectors, with strong representation from resource owners, deliberated on the policy, institutional, and technical needs and requirements for Fiji to prepare for the implementation of REDD+.

### • DSAP/FACT National workshops on food technology in Marshall Islands, FSM and Palau

National workshops on post harvest handling, food safety, food preparation, food processing and food preservation were conducted in Marshall Islands 14–18 September; in FSM 21–25 September; and in Palau 29 September–1 October. These workshops completed the cycle of the DSAP Project where farmers (men, women, youth), local food market vendors and agriculturalists learned how to properly prepare farm produce for nutritious meals as well as processing and preserving surplus food for future use.

### • Third Pacific Regional Heads of Forestry meeting, 21–24 September, Nadi, Fiji Islands

The meeting, themed 'Forest, Climate Change and Markets' was officially opened by the Deputy Director General of the Secretariat of the Pacific Community, Ms Fekitamoeloa Utoikamanu. The meeting was attended by eighteen country delegates from seventeen Pacific SPC member countries.

The presence of up to fifteen regional and international experts provided the meeting with valuable information and innovations encompassing an array of topics relevant to the meeting theme of 'climate change and markets'. Regional and international partners, donors, and supporting agencies included FAO, EU, GTZ, ACIAR, CSIRO, USDA Forest Service, JICA- Samoa and APAFRI. Pacific regional organisations present were USP and SOPAC and the private and NGO sector included the National Trust of Fiji, Future Forests Fiji, Salwood Asia Pacific Pty Ltd, and Mamfiri Oils.

The meeting also acknowledged the presence of the UNFF (United Nations Forum on Forests) secretariat, attending the regional meeting for the first time.

The four-day meeting ended on 24 September with the confirmation of recommendations by Heads of Forestry delegates. These recommendations will be submitted to the wider Heads of Agriculture and Forestry Sector (HOAFS) meeting for endorsement and for tabling at the Ministers of Agriculture and Forestry meeting (MOAF) in Tonga in 2010.

#### • Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific, 12–15 October, Nadi, Fiji Islands

In collaboration with GTZ IWP of Germany, the EU-FAO ACP FLEGT Programme and the SPC/GTZ Pacific German Regional Programme on Adaptation to Climate Change Project, organized and held the 'Regional Workshop/Training on Forest Policy Processes for the Sustainable Management of the Forest Resources in the Pacific'.

Twenty-five forestry professionals and key stakeholders from 12 SPC member countries, representing Governments and Civil Societies/NGOs and Industries participated in the workshop.

### • Information and Communication Strategy Workshop, 14–17 September, Nadi, Fiji

The key focus of the meeting was supporting countries develop strategies to manage information and communication products within their organisations. Coordinated by ICE team with funding assistance from CTA.

#### Pacific Biocontrol Strategy Development Workshop, 16–18 November, Auckland, New Zealand

A major milestone for experts on biocontrol of invasive species after a lapse of over 17 years. Participants discussed a way forward strategy on biocontrol work in the Pacific. A subcommittee was established to draw up an integrated strategy for biocontrol work as a management tool for invasives. The meeting was organised by Landcare New Zealand, US Forest Services, and SPC.

### Pacific Organic and Ethical Trade Community meeting, November–3 December, Nadi, Fiji

The meeting aimed to share updates on progress of organic development in the region, review existing policies, and finalise a farmer's version of the Pacific Organic Standard,

### • PAFPNet Strategic Planning meeting, 1—4 December, Nadi, Fiji

The meeting aimed to develop a medium term strategic plan for the network and a resource mobilisation strategy. This is only the second time network members have met and will seek to develop priorities for the PAFPNet secretariat.

### • Pacific Vegetable Production meeting, 1–4 December, Nadi, Fiji

The meeting aimed to strengthen partnerships for vegetable research and development between AVRDC-The World Vegetable Center, Taiwan Technical Missions, National Agricultural Research and Extension Systems, Secretariat of the Pacific Community and other organizations with similar interests,

