REDD+ for sustainable forest management

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

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

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

Carbon assessment for the Nakavu site uses a community carbon accounting (CCA) approach, based on the full enumeration of all trees with a DBH of more than 35 cm; tree selection is based on Fijian Landowner Tree Selection (FTS) system, a species-specific selection. Three carbon pools are being used for sampling: above ground living biomass (trees and non-woody vegetation), dead wood (standing, lying, stumps), and litter. The other two carbon pools have been extrapolated: below ground biomass (root/shoot ratio), and soil carbon default values. Results of the assessment are expected in the beginning of 2013.

Tree selection will be finished in August, and logging is scheduled to begin by October 2012, after which full scaling of the harvested trees will be conducted to analyse the actual yield and carbon sequestration potentials linked to the SFM approach, and crucial data for REDD+ support.

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

SPC Animal Health and Production Team recently visited their counterparts in Solomon Islands to discuss and make arrangements on a way forward on some pending national and regional activities.

The two member team led AHP by Coordinator, Dr. Ken Cokanasiga and AHP Animal Production Specialist, Mr Nichol Nonga, visited Honiara from 16 – 20 April, 2012.

The consultations with Solomon Islands stakeholders included meetings with Solomon Islands College of Higher Education (SICHE), Department of Livestock and Veterinary Services (DLVS), the Rural Development Project (RDP) and the Ministry of Agriculture & Livestock (MAL). The visit was organised in collaboration with the Director of Livestock and Veterinary Services, Ministry of Agriculture & Livestock, Mr Barney Keqa and the SPC Country Office in Honiara.

The SPC team first met the director of the School of Natural Resources, Mr. Aaron Kama to discuss the SPC Paravet Training Programme being incorporated into the curriculum of Solomon Islands College of Higher Education (SICHE). The discussion focused on harmonising stakeholder training programmes including SPC, the Ministry of Agriculture and Livestock (MAL) and the Rural Development Programme (RDP). The Paravet programme is now being offered to the first 25 students in 2012. SICHE has requested SPC to provide technical assistance for tutorials and practical sessions for the students.

The second consultation was a meeting with the Director of Livestock & Veterinary Services (DLVS), Mr Barney Keqa. Discussions included the appointment of an Animal Genetic Resources (AnGR) National Coordinator for Solomon Islands was discussed. The position serves as an important link to FAO and the dissemination and sharing of relevant animal genetics resources information. Also discussed with the Director was the Food and Animal Biosecurity Network (FABN) project funded by AusAid covering Fiji, Solomon Islands, PNG and Vanuatu. Activities proposed for the Solomon Islands include prevalence sampling survey for bovine brucellosis and a livestock disease prioritisation framework. AHP PhD students, Mr Andrew Tukana and Dr Aurelie Brioudes have now started research on the activities.

Solomon Islands have requested SPC for assistance to develop Import Risk Analysis (IRA) for the importation of goats and ducks.
The EU and SPC signed a Contribution Agreement for a new F$9M project aimed to help Fijian farmers to diversify their income from cane, such as by helping them to seize new opportunities in the horticultural sector and to strengthen the fair-trade sugar cane farmers associations to provide better sugar cane prices.

**SPC implementing EU project on improving key services to agriculture**

Fiji’s sugar industry has seen better days with production figures showing a drop from 341,000mt in 2000 to less than half that figure today, consequently farmers have not received a sweet deal with prices paid dropping from €24.4/t of cane to €18.4/t in 2010 harvest season. Subsequently, it is likely that 20% of the land presently used for cane production, in particular on steep slopes with poor and shallow soils, is expected to be released for other uses. This is equivalent to around 5000 farmers leaving the industry, on the top of another 5000 farmers that have left the industry since 2000.

An EU project aimed to help farmers reduce dependence on cane farming by helping them to diversify into horticultural crop opportunities have started upon signing of the Contribution Agreement between EU and SPC as implementation agency.

The signing of the new F$9M project took place on Tuesday 12 June 2011 at the EU office in Suva. Mr Inoke Ratukalou, acting director of SPC Land Resources Division represented SPC. Dirk Meganck, Director for European Commission DEVCO H1 signed for EU.

The EU-funded Improvement of Key Services to Agriculture project promises to deliver better livelihood outcomes for the families of Fiji’s sugar belt region. To allow this to happen farmers rely on better access to improved farming technologies and marketing methods.

The Fiji Government Sugar National Adaptation Strategy Agricultural Diversification Component identified new opportunities in vegetable export and import substitution. However, it also identified that technical support such agricultural extension services were stretched and unable to provide needed inputs such seedlings of improved crop varieties, and assistance with quality control and marketing – required to supply these new markets. It identified that there were opportunities to work through the private sector to provide planting material and extension support, and to help build the capacity of growers to supply these markets. It identified that farmer groups and associations were instrumental to helping with the quality control and marketing of agricultural produce to these markets. It identified that poor watershed management led to major losses of soil and income, and that land use would need to be addressed so that we can identify those areas which will be best able to supply the market with fruit and vegetable products, in a sustainable manner. And it identified that all interventions need to be geographically targeted to ensure that the communities supported under this project are those most likely to benefit from it.

SPC as provider of premium technical services to Pacific island countries is helping farmers improve the income they receive from current sugar cane production.

In 2011, SPC assisted the sugar cane growers of the Labasa area to re-organise as a fair trade certified co-operative, enabling the farmers to renegotiate an improved price with Tate and Lyle. The big increase in demand for fair trade chocolate in the UK has increased demand for Fair Trade sugar, with few countries currently able to supply it. The 26% price increase the Labasa growers were able to negotiate led to over FJD 1m in fair trade premiums being paid to farmers and to support the growers’ representative body. This is an approach that can be replicated with other cane growers in other parts of Fiji, in order to help them receive higher sugar prices and household incomes.

For more information, please contact the LRD Helpdesk (lrdhelpdesk@spc.int)
SPC hosts regional consultation on plant protection and quarantine

Heads of national plant protection organisations (NPPOs) held their triennial meeting in Nadi from 25 to 29 June 2012. The 7th Regional Technical Board Meeting of the Pacific Plant Protection Organisation (PPPO) met to review national activities on biosecurity, plant protection and regional standard-setting procedures. They also deliberated on the PPPO Strategic Framework and Business Plan. PPPO is mandated to provide advice on phytosanitary measures in order to facilitate trade without jeopardising the plant health status of the importing members and countries. PPPO is one of the regional plant protection organisations recognised by the International Plant Protection Convention (IPPC).

The meeting was attended by over 60 delegates representing the Pacific region, including New Zealand, Australia and the United States of America. The same consultation also ran the Regional Technical Meeting on Plant Protection (RTMPP), attended mainly by national plant protection officers. The two bodies have for a long time guided the work of plant protection, biosecurity and trade facilitation agencies in Pacific Island countries and territories (PICTs), both at the policy and operational level. Countries are being motivated to increase crop production for food security and trade, but must first overcome production challenges, such as pests and diseases that constrain the production of marketable produce.

Fiji’s Minister of Primary Industries, Mr Joketani Cokanasiga, opened the meeting, which was organised by the SPC Biosecurity and Trade Facilitation Service, the Secretariat for PPPO. Mr Cokanasiga emphasised the need to protect island food security and meet the demand for trade facilitation. This message was re-iterated by the Acting Director of the Land Resources Division, Mr Inoke Ratukalou, who reminded participants of the important role SPC plays in sustaining Pacific Island livelihoods through technical assistance in plant protection and biosecurity services.

Most PICTs are parties to various trade agreements and arrangements, so it is imperative that PPPO continues to ensure that biosecurity needs of member countries comply with international standards to facilitate regional and international trade. PPPO assists in the development and implementation of effective and justified phytosanitary measures. In addition, it strengthens the capacity of member countries to monitor and manage insect pests that pose a particular threat to trade, such as fruit flies, invasive ants and giant African snails.

A new PPPO Executive Committee was elected at the meeting: from Melanesia — Fiji and Vanuatu; from Micronesia — Guam and Kiribati; and from Polynesia — Samoa and French Polynesia. The new PPPO ExCo Chair is Cook Islands and Vice-Chair is the USA.

One of the projects discussed at the meeting was the NZAID Pest Identification Project led by Dr Lalith Kurmarseinge of the New Zealand Ministry of Primary Industries. The project involves six Pacific countries and aims to strengthen the skills of quarantine officers in plant and disease diagnostics. The project has two streams: development of diagnostic tools (pest and pathogen identification manuals, development of virtual collection), and diagnostic training (hands-on identification using actual samples).

Countries that have completed the training expressed appreciation for the assistance of the Project.

Josua Wainoqolo, PPPO Secretariat, welcomed delegates to the 7th PPPO Board Meeting. Seated left to right are, Dr Russel Campbell (Guam Entomologist, and outgoing PPPO Chairman), Fiji Minister for Primary Industry, Hon Joketani Cokanasiga, and LRD Acting Director, Mr Inoke Ratukalou.

PPPO assists in the development and implementation of effective and justified phytosanitary measures; it strengthens the capacity of member countries to monitor and manage insect pests that pose a particular threat to trade.
EU project helps evaluate new banana export variety

SPC’s European Union-funded Facilitating Agricultural Commodity Trade (FACT) project is working with banana farmers in Fiji to evaluate a new variety for export.

The Blue Java banana, known locally as paka or vata, grows wild on Fiji’s coastal areas and can occasionally be found at farmers’ markets.

Now, moves are under way to develop this variety commercially, primarily for use in processed fruit pulp for export markets.

Sigatoka-based Agrana Fruit Fiji Ltd exports organic fruit pieces and pulp made from locally grown guavas, mangoes and bananas to Australia, Europe, New Zealand and South Korea. For its banana pulp, the company uses the Cavendish banana, which requires the use of ascorbic acid (a costly import) to prevent oxidisation and so act as a preservative.

The Blue Java, on the other hand, does not require preservatives because of its already high acid content. It also yields more pulp than the Cavendish, due to its thinner peel. But in order for Agrana to make this cost saving, it must first confirm the variety’s suitability for its aseptic puree market before establishing a regular supply of the Blue Java variety from banana farmers.

This is where the FACT project is helping in a number of ways. Firstly, it is helping source some five tonnes of Blue Java bananas from areas where it is naturally occurring for a processing trial at Agrana.

Secondly, in collaboration with the Fijian Ministry of Primary Industries, the project will be encouraging banana farmers in the Sigatoka area to plant Blue Java on a commercial basis.

‘We could potentially export a container a month to start with, which would mean 33 tonnes of raw materials,’ says George Fung, Agrana’s general manager.

He is hoping there is a market for Blue Java pulp in Europe where Agrana’s clients have shown an interest in importing a natural product (free of preservatives), which doesn’t discolour. FACT Project team leader Dr Lex Thomson believes it may be a timely move to develop the new variety. ‘Banana pathology experts reckon it is only a matter of time before Cavendish type varieties, which lack genetic diversity, are affected or possibly devastated by a fungal disease,’ he says.

Dr Thomson adds that the Blue Java is highly underrated as a dessert fruit. ‘This banana, when fully ripe, can be pureed in a blender and turned into a delicious, nutritious and fully natural dessert — akin to banana-flavoured ice cream.’

The project’s assistance will also result in Blue Java and other banana varieties being more readily available at local markets.

Now in its final year, the FACT project has been working to increase agriculture and forestry exports from the 14 Pacific members of the African, Caribbean and Pacific Group of States.

It is implemented by the Land Resources Division of the Secretariat of the Pacific Community.

PHAMA is subject to submissions from countries. PHAMA recently completed trials on cooked breadfruit exported from Samoa to New Zealand. Phase two of PHAMA is subject to submissions from the countries.

For more information, contact Rajan Sami (email: rajans@spc.int) or visit the SPC website: www.spc.int/lrd.
Vulnerability of Pacific crops addressed by CePaCT

Nothing has demonstrated the vulnerability of traditional Pacific Island food crops more than the impact of the taro leaf blight that decimated Samoa’s taro crop in 1993,’ says Valerie Saena Tuia, Officer in Charge of the Genetic Resources at the Secretariat of the Pacific Community (SPC) Centre for Pacific Crops and Trees (CePaCT).

‘A narrow genetic base, such as that of Samoa’s taro, indicates that many of our traditional taro resources and crops are particularly vulnerable to diseases,’ she warns.

The intensive monocropping and reliance on one popular variety of taro (Talo Samoa, also known as Talo Niue) for the local and export markets, as well as the susceptibility of all the local varieties to disease, exacerbated the spread of the taro leaf blight (TLB). Within months, the taro industry was wiped out, causing the loss of foreign exchange and millions of tala, as well as the loss of a staple food crop and a cultural icon.

Although people substituted crops such as banana, breadfruit, cassava and yams for taro, there was an increase in imports of polished white rice and white flour, which have less nutritional value. Taro leaves, a food source rich in vitamins and minerals such as folic acid and potassium, were also lost, which had an additional negative impact on the diets of the population.

In the early years of the blight, Samoa received taro varieties from the Philippines, Palau and Federated States of Micronesia, enabling farmers to try to cultivate taro again for local consumption. However, there was still a demand for more tolerant varieties and taro that tasted more like the popular Samoan variety.

Then, in the mid 1990s, Samoa’s Ministry of Agriculture and Fisheries (MAFF) and the University of the South Pacific (Alafua Campus), embarked on a collaborative programme through the SPC/Australian Agency for International Development (AusAID) Taro Genetic Resources Conservation and Utilisation (Tarogen) project to cross local tolerant taro varieties with exotic varieties.

‘In its early days, CePaCT’s work was in response to the crisis,’ said Ms Tuia. ‘The majority of all Pacific taro genetic resources were collected under the Tarogen project, being characterised, DNA fingerprinted and virus indexed.

MAFF released new varieties and thousands of new taro seedlings were dispersed to farmers. ‘The good work carried out by Mr Iosefa, Manager of the Taro Improvement Programme at USP’s Alafua Campus, the staff of MAFF, and partners of SPC and other agencies that contributed to this work, has seen the rehabilitation of Samoa’s taro crop,’ said Ms Tuia.

Later, with the inclusion of new diversity obtained by CePaCT from the EU Taro Network for Southeast Asia and Oceania (TANSAO) in 2004–2005, new, more tolerant varieties were produced at Alafua in collaboration with MAFF.

Ms Tuia explained that the new generation of taro hybrids is more vibrant than previous hybrids and is locally known as tālou tamu (resembles the Alocasia) or tālou lauli’īa (taro with waxy leaves), a characteristic of the Asian taro used as parent material.

Samoan farmers trial the new varieties and send the “best varieties” to CePaCT for virus testing and safe distribution to the rest of the Pacific region and SPC project partners.

Thus CePaCT, a part of the SPC Land Resources Division, plays an important supporting role in agricultural development in the region. It holds more than 1,000 taro accessions from the Asia-Pacific region, as well as TLB tolerant varieties acquired from breeding programmes in Samoa, Papua New Guinea and Hawaii.

The Centre’s ongoing breeding programmes in collaboration with USP, MAFF and some of the countries produce varieties that are more tolerant, not only to TLB, but also to other climate extremes (drought, waterlogging, salinity), which will ensure that Samoa and other countries in the region are better prepared to face any future possible outbreaks of TLB, as well as climate variability. And with the new diversity of taro growing there, Samoa’s narrow genetic base has been broadened.

‘As well as ongoing work with taro, CePaCT is a germplasm storehouse of crops that are culturally significant to individual countries. It is also a research centre, investigating, amongst other things, climate-ready crops that can withstand changes in salinity and drought,’ concluded Ms Tuia.

For more information, please contact lrdhelpdesk@spc.int
A four-year pilot project called ‘Developing commercial breadfruit production systems for the Pacific Islands’ is testing the viability of growing breadfruit as a commercial crop and thereby enhancing livelihoods through the development of an effective and sustainable breadfruit supply chain at the commercial level.

‘The aim is to assist farmers to treat breadfruit as an agricultural commodity for export, not just as a backyard crop that grows everywhere,’ said Valerie Saena Tuia, Officer in Charge of Genetic Resources at the Secretariat of the Pacific Community (SPC) Centre for Pacific Crops and Trees (CePaCT).

The Pacific Agribusiness Research for Development Initiative (PARDI) project initially focused on Fiji, and its first stage is to address the major constraints to commercial production by working to establish viable small-holder orchard production systems, ensuring the ready availability of market-preferred planting material that allows for year-round production, and implementing best practice post-harvest handling for fresh exports.

The role of CePaCT in the project is to develop a rapid multiplication system for breadfruit in tissue culture to supply planting material to farmers, using a bioreactor system, reported to work well with commercial propagation of breadfruit and other crops. Research Technician Arshni Shandil and Ms Tuia both work on this research.

CePaCT acquired a bioreactor system in August last year. Ms Shandil explained that this is a temporary immersion tilting system, which utilises a liquid nutrient medium to support and boost plant growth. The system holds individual large chamber culture vessels maintained on different shelves and the whole system tilts every five seconds.

‘The system improves plant material quality and growth through better aeration of the roots, better survival of plants in the screenhouse and better establishment in the field than plants produced through the normal semi-solid tissue culture system using glass tubes or bottles.

Using this system minimises the workload, shelving area and number of containers used. These improvements in efficiency could reduce the production costs significantly.

The second stage of the project will deal with commercial processing of the breadfruit. Breadfruit has also been identified as a priority product for market access by the Pacific Horticultural and Agricultural Market Access Project funded by the Australian Agency for International Development.

According to Ms Tuia, CePaCT also conserves a collection of breadfruit from the Pacific region that needs to be evaluated for year-round fruiting, nutritional content and tolerant traits to climate variability, in line with the purpose of the project.

She said that the benefits of this pilot project would be shared with other Pacific Island countries.

The PARDI breadfruit project is based on the model that was developed for the successful Australian Centre for International Agricultural Research (ACIAR) Fiji Papaya Project, which is based at Nature’s Way Cooperative in Nadi and is managed by Koko Siga Fiji.

This breadfruit project is also funded by ACIAR and implemented by Koko Siga (Fiji), in collaboration with SPC, Fiji’s Ministry of Primary Industries Research Division (Koronivia Research Station), Biosecurity Authority Fiji (BAF) and private sector partners (exporters, farmers and commercial nurseries).

For more information, please contact Valerie S Tuia: ValerieT@spc.int
POETCom meeting takes steps forward

The Pacific Organic and Ethical Trade Community (POETCom) meeting held in French Polynesia from 3 – 6 May ended on a high note with the establishment of an advisory board to take the organics body forward in achieving its vision: ‘Pacific organics — the key contributor to sustaining our cultures and improving farmer livelihoods, communities, people’s health and our environment’.

The POETCom meeting was funded by the French Pacific Fund of the Government of French Polynesia, with assistance provided by the EU-funded Increasing Agricultural Commodities Trade (IACT) project, which is implemented by the SPC Land Resources Division.

POETCom members from ten Pacific Island countries attended, representing different services along the organic and ethical trade value chain, from smallholders to exporters, certifiers and ministries of agriculture.

POETCom has developed a governance structure that was facilitated by an FAO Technical Cooperation Programme. The meeting elected the first POETCom advisory board, comprising Mr Anthony Brown (Chair and Director of Agriculture), Cook Islands; Mr Stephen Hazelman, Samoa; Mr Gilles Tehau Parzy, French Polynesia; Mr Nambo Moses, Vanuatu; and Ms Vanessa Lolohea, Tonga. The Board will be elected every two years at the general assembly of POETCom members.

The advisory board is tasked with ensuring sound governance and management of the regional organic guarantee system, which was also moved forward at the meeting, with the objective of facilitating increased access to various forms of organic certification to the Pacific Organic Standard. One of the primary tasks of the advisory board will be to raise awareness of POETCom and the work of the organic and ethical trade movement at national level, and expand the base of membership and interest.

The meeting also addressed cross-cutting issues such as biodiversity, climate change, and food and nutritional security.

Senator to the French Parliament, Hon Tuheiava, addressed the meeting, highlighting the role of organics in managing climate change. He also agreed to present a statement from POETCom about the role of organics in assessing climate change to key UN committees on which he serves to feed into the RIO+20 dialogue.

The Minister for Agriculture, Hon. Kalani Teixeira, gave a keynote address on food security and the value of traditional crops such as breadfruit, presenting a convincing argument that the Pacific can feed the world with its rich agro-biodiversity.

A highlight of the meeting was a day of field trips to organic farms belonging to the new participatory guarantee system (PGS), Bio Feti, including a traditional ceremony to hand over the PGS documentation to POETCom for review. The ceremony was followed by an organic dinner which showcased the variety and quality of organic produce available in French Polynesia.

On the final day of the meeting, the President of French Polynesia, His Excellency Oscar Temaru, invited a small delegation from the meeting to meet with him at his office. The delegation included Cook Islands’ Associate Minister for Agriculture and Director of Agriculture; POETCom Advisory Board Chair Anthony Brown; Niue Speaker of the House, Hon. Ahohiva Levi; POETCom Coordinating Officer Karen Mapusua; and POETCom Founding Member and Executive Director of Women in Business Samoa, Adimaimalaga Tafunai. The delegation was joined by French Polynesia Minister for Agriculture, Hon. Kalani Teixeira, and Senator Tuheiava.

Mrs Tafunai carried a letter from the Hon. Tuilaepa Malielega, Prime Minister of Samoa and Chair of the Pacific High Level Organics Group, inviting President Temaru to join this informal group of Pacific leaders who actively support and advocate for organic agriculture. The invitation was warmly accepted and President Temaru spoke enthusiastically about organics and the value of working together as a region to further our common interests.

For more information, contact Karen Mapusua, POETCom Secretariat: KarenM@spc.int).
Major Pacific events attracting large numbers of Pacific islanders present a biosecurity challenge to national quarantine service. The Festival of Pacific Arts (FOPA) held in Solomon Islands in July involved the movement of people and cargo from Pacific neighbours into Solomon Islands. During such large gatherings quarantine is always an issue with overseas travellers, and the movement of pests to new areas is critical.

As a lead up to the festival, SPC assisted Solomon Islands Agriculture Quarantine Service (SIAQS) in coordinating the regional quarantine awareness campaign, amongst other technical assistance provided. On quarantine awareness posters and leaflets were developed and distributed to Pacific Island delegations about their responsibility not to bring with them any quarantine risk items, but that if they do, they must declare these upon arrival. The focus is on public education and awareness to prevent the introduction of new pests, which can impact national biodiversity and food security.

SPC biosecurity team assisted SIAQS conduct an efficient pest surveillance and monitoring system in and around the festival sites and venues to capture any exotic pests. The livelihoods of the majority of Solomon Islanders depend on subsistence agriculture; hence the importance of preventing the introduction of new pests that threaten livelihoods.

The regional quarantine awareness campaign developed a unique quarantine message highlighting Solomon Islands’ food sources, culture and pristine environment. New pests can have a negative impact. The awareness materials were sent to heads of cultural delegations for distribution to national representatives prior to departure to Solomon Islands. In addition, national quarantine service helped provide information on quarantine risk items. To further prevent movement of pests participating countries were requested to send ahead a list of items they plan to take to the Festival. This crucial step allowed SIAQS to advice on proper treatment of items before leaving national shores. This effectively stopped any pest movement at source.

SIAQS seconded senior quarantine officer, Mr Akipu Patteson to the National Festival Planning Committee to provide advice on quarantine matters. The SPC biosecurity team of Mr Feroz Khan and Mr Lesio Saurara assisted SIAQS in clearing flights and festival delegations. Various plant products were intercepted and either confiscated for destruction or fumigated with methyl bromide gas and released to the owners. Some animal products were declared and were confiscated as they were prohibited items. Other animal products (such as feathers) were either treated with phosphine gas or confiscated. Live pests were also intercepted from some of the imported handicrafts. It was very promising to see that most of the delegations had already fumigated their handicrafts in the country of origin, and the team was able to clear these delegations much faster than those that did not take this step before departure.

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SPC strengthens collaboration on integrated crop management practices

The Heads of Agriculture and Forestry Services (HOAFS) in their 2010 meeting endorsed an outcome for SPC to develop three Technical Cooperation Programmes (TCPs) to reduce the use of hazardous pesticides in ACP countries.

- Promotion of techniques to reduce hazardous pesticide use in Pacific agriculture;
- Development of a regional harmonised system of pesticide registration in the Pacific;
- Development of communication tools to support pesticide risk reduction in the Pacific.

The first TCP (Promotion of techniques to reduce hazardous pesticide use in Pacific agriculture) has now been approved and an inception meeting to launch it was held from 31 July to 3 August in Nadi, Fiji. The TCP will be implemented concurrently with a similar project launched in April, the ACIAR funded: Strengthening integrated crop management in the Pacific Islands in support of sustainable intensification of high value crop production.

Dr Vili Fakava of the FAO Sub-regional Office for the Pacific Islands (Samoa) assisted with funds to bring over country coordinators for the launch of the TCP. The meeting was held in Sigatoka, Fiji, and attended by over 15 participants. Dr Fuavao said the two projects will complement each other as they have a common goal — to reduce the use of hazardous pesticides in agriculture production. Research will use the farmer field school extension method to teach farmers strategies to control pests using environment friendly practices.

The two developing partners are the Food and Agricultural Organisation (FAO) and the Australian Centre for International Agricultural research (ACIAR) with SPC, with its pool of expertise and resources, as implementing agency.

The four project countries are Fiji, Samoa, Solomon Islands and Tonga, and participants are national research scientists and extension officers. Each project country has appointed a coordinator for the ICM project to manage national activities and identify farmers. Research activities will focus on high value vegetables — the cucurbits (e.g. pumpkin, cucumber) and brassicas (e.g. cabbage, cauliflower) — which traditionally are very dependent on chemical pesticides. The main concern is health safety; chemicals are present in vegetables as a result of overdependence on pesticides and insect pests developing resistance to them. Contaminated waterways and ground water, as well as the negative impact on the natural enemies of pests are other important issues caused by indiscriminate use of pesticides.

As food security ranks high on the agenda of national governments, food production systems should not compromise human and environmental safety with the use chemical inputs — there are ways of reducing the use of chemicals in agriculture, striking a balance between good crop yields and maintaining the integrity of the ecosystem.

On the extension side the introduction of plant health clinics with associated plant doctors will allow for greater networking with farmers at the community level and interception of new pests. Other related activities include the introduction of a wider spectrum of vegetable varieties provided by the Asian Vegetable Research Development Centre; an integrated pest management approach for brassicas and other important vegetables; an insecticide resistance management strategy; farmer field schools; and training-of-trainers capacity training.

In the research trials to be carried out, a naturally occurring soil bacterium, Bacillus thuringiensis, or simply Bt, will be introduced as an alternative to chemical pesticides. The project will also be an exercise to allow farmers to adopt the use of Bt so as...
PNG hosted 2nd Pacific Fairtrade Sub-Network Meeting

Fairtrade Australia & New Zealand’s Producer Support and Relations team hosted the second Fairtrade Pacific Sub-Network Meeting in Papua New Guinea at the end of July. Nearly 50 Fairtrade stakeholders from Papua New Guinea (PNG), Fiji and New Zealand recently convened in Madang to share their experiences and make plans for the future of the regional Fairtrade sub-network. The highlight of the meeting was the session conducted by Fairtrade buyers, their perspective of the market shedding light on opportunities for Pacific-based Fairtrade Certified producers; business opportunities that could improve Pacific participation in the global Fairtrade market worth a total of €5 billion in 2011.

Fairtrade is a certification system that empowers smallholder producers in developing countries to reach international markets and guarantees that products carrying the Fairtrade Label are produced and traded under fair conditions. In 2011, Fairtrade certification brought benefits to more than 60,000 people in the Pacific region.

During the meeting in Madang, traders brought new ideas for crop diversification to certified producers, who learnt about the demand in the Australian and New Zealand markets for Fairtrade Certified cocoa, coffee, fresh fruit, spices and coconuts from the Pacific islands and about the market-based potential for development in the agricultural sectors of Pacific countries like PNG, Samoa and Fiji.

Presentations from the Secretariat of the Pacific Community (SPC) and PNG’s Coffee Industry Corporation (CIC) informed participants about the support available for producer organisations in the areas of organisation and business development, offered by these two Fairtrade ANZ partners in the Pacific. During these sessions, there was special mention of the goals achieved with Neknasi Coffee Growers Cooperative Society, certified in 2011, as it has been elected by CIC as the national model for the development of smallholder coffee grower organisations in PNG.

The meeting provided an opportunity for producers to share their experiences participating in events with Fairtrade ANZ in the past year.

At the close of the meeting, producer participants made a commitment to work together to build a strong Fairtrade Pacific Sub-Network. Fairtrade ANZ will facilitate this collaboration, ensuring that the Pacific voice is represented in Fairtrade International’s General Assembly, the highest decision-making body of the Fairtrade system and the main channel for influencing and shaping Fairtrade’s future strategies for development.

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TCP LAUNCHING....

to create a demand on the market for chemical suppliers to import and stock this biopesticide.

The farmer field school extension approach will be used to introduce integrated pest management strategies, especially in reducing the use of pesticides and adoption of alternatives.

The FAO Pest and Pesticide Management Programme Officer, Dr Francesca Mancini, was the principal resource person at the TCP launch and assisted by Dr Mike Furlong of the ACIAR ICM Project. SPC Plant Health (Tony Gunua and Fereti Atu) will have general oversight in programme monitoring, technical assistance and disbursement of funds to national counterparts.

A baseline farmer survey will be the first activity to gauge essential data such as farming activities and pesticide knowledge and use. Farmer sites will be geo-referenced for better planning of activities.

It is expected at the end of the project there will be an increase in adoption of integrated pest management practices, greater appreciation of insecticide resistance, increased varieties of vegetables cultivated, increases in areas cultivated and production per unit area, and a drop in pesticide use in the crop production system — all leading to sustained food security and safety, improved human health and a protected ecosystem.

AHP VISIT TO SOLOMONS....

Another important regional issue discussed centred on OIE WAHIS reporting and updating of 2010 and 2012 six monthly and annual OIE reports for Solomon Islands. The reports are a requirement under a current OIE/SPC agreement and an essential requirement for the export of aquatic ornamental products to the European Union.

Development of Import Risk Assessment (IRA) for PICTs is an important online service provided by the AHP team. Discussion focussed on assistance SPC can offer in the development of IRA for the importation of beef cattle and other livestock species from Australia, New Zealand and other countries in the region.

During the period of the visit, a national livestock conference with the theme Empowering Communities through Quality Livestock and Veterinary Services Delivery was held at the Iron Bottom Sound Hotel, Honiara 16 – 20 April 2012. SPC was invited to the discussions, hearing first-hand the successes, failures and way forward for the livestock industry in Solomon Islands. SPC made relevant presentations including an overview of SPC programmes, technical assistance offered by SPC, and potential areas for collaboration.

Discussions were also held with the Minister of Agriculture and Livestock, Hon. Connelly Sadakabatu, Permanent Secretary, Mr. Frank Wickham and the Under Secretary, Mr. Jimi Saelea on areas of mutual interest for the livestock sector. In the discussions, one of the immediate requests was for SPC to assist Solomon Islands to find sources for, and develop IRAs for the importation of goats (Boer Goats) and ducks (Muscovy, Peking and Indian Runner) into the Solomon Islands.

The Hon Minister Connelly Sadakabatu thanked SPC on behalf of the Ministry for the continued assistance rendered to Solomon Islands over the years in the area of Agriculture and Livestock.

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Protection of primary forest as carbon reservoirs — previously not included in the Clean Development Mechanism (CDM) in Kyoto Protocol — is now accepted and promoted by the United Nations Framework Convention on Climate Change (UNFCCC) as REDD+. Importance of forests as carbon sink has been recognized for long time. Recent technological developments, especially in remote sensing have enabled us to monitor the changes in forest carbon stock with some degree of accuracy. Significant capacity building on forest carbon assessment and monitoring is required for PICs to participate in REDD+.

In this context, the regional workshop was held to improve understanding of, share information with, and to discuss regional cooperation among Pacific foresters.

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

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

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

Dr Hitofumi Abe, SPC/JICA Regional Forestry Advisor, advanced the argument of logging versus REDD+. He said “People tend to consider logging as opponents of REDD+ like development vs. conservation. However, logging can also be important component of REDD+ mechanism.

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

Dr Joel Scriven of FAO Forestry and UN REDD Programme presented the UN Framework Convention on Climate Change (UNFCCC), the international environmental treaty launched at the Earth Summit in Rio de Janeiro (1992), which sets an overall framework for intergovernmental efforts to tackle the challenges posed by climate change. IPCC recognises the contribution of emissions from the forestry sector in developing countries at 17.4% (transportation at 13.1%). Research shows that reducing emissions from the forest sector is an opportunity to reduce emissions and increase removals cost-effectively. This has led to addressing the forest sector in developing countries under the Bali Action Plan (Decision 1/CP.13) as a means to mitigate climate change, informally known as REDD+.

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

A presentation on the roadmap towards developing a regional policy framework for REDD+ was delivered by Mr. Karl P. Kirsch-Jung of the SPC/GIZ Regional project. Current climate change negotiations under the UNFCCC have put forestry at centre stage of international policy discussions. The current fund-based grant financing mechanism for REDD+ readiness activities offers an excellent opportunity for forestry support in Pacific Island countries. The regional policy framework aims to support REDD+ policy strategy development in the region. A final draft is expected to be ready for the HOAFS meeting in September to consider for endorsement. The meeting also heard of a proposal for a centralised regional satellite forest monitoring system, a centre of excellence for remote sensing, and GIS training for REDD+. The centre of excellence proposes to support Pacific Island countries in (a) provide training to assess land use changes for the measurement of REDD+ activities; (b) allow countries to assess the outcomes of their REDD+ activities; (c) generate geospatial information and expertise on REDD+ specifically relevant to PICs; and (d) facilitate the transparent sharing of information on PIC REDD+ activities.

In addition, a proposal for a forestry inventory regional training centre was presented for discussion.

The regional workshop on forest carbon assessment and monitoring was organised by SPC with funding support provided by ACP-EU FORENET, JICA, GIZ, FAO, FPRI and APFNet.

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