

Forestry Department

Food and Agriculture Organization of the United Nations

Forest Genetic Resources Working Papers

*Regional Consultation Workshop on Forest Genetic Resources in
the Pacific countries*

Nadi, Fiji

*Prepared by FAO in collaboration with the Secretariat of the
Pacific Community (SPC)*

October 2012

Forest Assessment, Management and
Conservation Division FAO, Rome, Italy
Forestry Department

Working Document FGR/xxx

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For Quotation

FAO (2012). Regional Workshop Report on the State of the World Forest Genetic Resources for North Africa and the Near East. Forest Genetic Resources Working Papers, Working Paper FGR/xxxx. *Forest Assessment, Management and Conservation Division*

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1.0 Introduction

Genetic resources, including forest genetic resources, are among the most valuable assets that a country possesses. Throughout the Pacific Islands, and especially in Melanesia, there is a need to improve forest management to ensure a more sustainable use of forest and tree genetic resources. Reforestation and tree planting programs using both indigenous and introduced tree species need to be further encouraged and developed in the Pacific Islands.

The regional “Strategies and Action Plan for the Conservation, Management and Sustainable Use of Forest and Tree Genetic Resources in the Pacific Island Countries and Territories (PICTs), 2007-2015 was formally endorsed by Pacific Heads of Agriculture and Forestry Services and approved by Ministers of Agriculture and Forestry at their regional meeting in Apia, Samoa in September 2008. The Action Plan presently serves as a framework for planning and implementing the conservation, management and sustainable use of forest and tree genetic resources within the PICTs.

The Commission on Genetic Resources for Food and Agriculture (CGRFA) acknowledged the urgency to conserve and sustainably utilize forest genetic resources. The Commission requested that a *State of the World’s Forest Genetic Resources* (SOW-FGR) report be prepared and presented to the Commission at its Fourteenth Session, in April 2013.

The SOW-FGR is prepared through a country-driven approach. Country Reports on Forest Genetic Resources (FGR) are the primary source of data and information for the preparation of the Report. Detailed guidelines for Country Reports were prepared to assist countries undertake a review of existing data and information, and to perform an assessment of the status and trends of FGR, including management capacities and needs.

In January 2011, SPC, in collaboration with FAO and CBD, organized and held a regional workshop to train and assist National Focal Points in preparing country reports on forest genetic resources. Following the workshop, most countries have been preparing their national reports using a participatory approach involving concerned stakeholders, and using this exercise as an opportunity to prepare or update national strategies and programs for the conservation and sustainable use of forest genetic resources. Although it was not possible to satisfy all the requests, FAO provided support to a number of countries in the Pacific to prepare their reports.

A second series of regional synthesis workshops was organized in September 2012 to discuss the findings of the country reports. The workshops had two specific objectives: 1) to share main findings and recommendations of country reports for the SoW-FGR; 2) to review, identify and finalize a regional synthesis report including needs, priorities for action at regional and global levels, and options for follow-up to the SoW-FGR.

The workshop was an opportunity for FAO and its partners to provide technical assistance in the review of the initial drafts of Country Reports assess progress made, discuss issues and limitations of their elaboration, and provide recommendations for finalization.

2.0 Opening Ceremony

In their welcome address, Mr. Cenon Padolina of SPC and Mr. Oudara Souvannavong of FAO thanked the participants for their continued commitment to contribute to the preparation of *The State of the World's Forest Genetic Resources*.

In the keynote address of the Chief Guest, the Permanent Secretary of the Ministry of Fisheries and Forest of Fiji, Mr. Inoke Wainiqolo, warmly welcomed all participants to the meeting and thanked FAO for their support. He mentioned that the workshop marks the continuation of the progress made since the January 2011 regional workshop in Nadi (Fiji) on the “preparation of the State of the Worlds Forest Genetic Resources” and the achievements to date on this collaboration in the Pacific and between Stakeholders and Development partners.

3.0 Technical Session – Country Presentations of their Findings and Recommendations

The Technical Session formally started with Mr. Oudara Souvannavong of FAO providing an update on SOW FGR- preparation process including preparation of country reports and thematic studies, workshop objectives and programme, clarifications. He reminded all participants on the process of preparation of the State of the World Forest Genetic Resources itself and of the different steps which have been taken to date and where we are now and which are the next steps.

The following were the highlights of the country presentations:

a. Australia (by Dr David Cunningham)

- Australia's forests at a glance
 - Total log volume harvested: **26.5 million cubic metres**
 - Total imports of wood products: **\$4.4 billion**
 - Total exports of wood products: **\$2.5 billion**
 - Employment in forestry, logging and wood manufacturing: **66 000 people**
- Australian forest genetic resources
 - Approximately 2500 tree species
 - Approximately 200 are of current commercial significance in Australia or overseas
- Global use of Australian FGR
 - Trees of several Australian genera (*Eucalyptus*, *Acacia*, *Grevillea*, *Casuarina*, *Melaleuca*, *Macadamia*) are grown extensively overseas for a variety of commercial wood products, fuel, food and soil conservation uses
 - The Australian Tree Seed Centre (ATSC) has supplied more than 200,000 certified seed lots from over 1000 tree or shrub species to researchers in over 100 countries since the early 1960s
- Australian use of global FGR
 - 2 million hectares of plantations
 - Half are native species (*Eucalyptus globulus*, *E. nitens*, *E. grandis* etc.)
 - Half are exotic species (*Pinus radiata* and other *Pinus* species and hybrids)
- Regional engagement with FAO processes on genetic resources
 - Australia and New Zealand co-chair the FAO South West Pacific region
 - Australia represents the SWP region on the Bureau of the Commission on Genetic Resources for Food and Agriculture (CGRFA)
 - SWP member countries, including Australia, represent the region on a number of Intergovernmental Technical Working Groups (ITWGs) on Genetic Resources for Food and Agriculture – plant, animal, forest GR and access and benefit sharing (ABS)
 - PNG and Vanuatu represent SWP on the ITWG-Forest Genetic Resources
- CGRFA ABS working group

- Australia and Palau will be attending the meeting of the working group on access and benefit sharing from 11-13 September 2012 (in Norway)
- Working group's focus is to identify options to assist countries in implementing Article 4 (the Plant Treaty) and Article 8 (special needs of food and agriculture sector) of the Nagoya protocol
- Papers for the meeting have been circulated to SWP members through SPC (contact: Valerie Saena Tuia)
- A list of discussion questions have been provided to gather information for the SWP representatives on the needs of the region

b. Federated States of Micronesia (by Ms. Marlyter Silbanuz)

- Mainstream environmental considerations, including climate change, in national policy and planning as well as in all economic development activities
- Improve and enhance the human environment (improve waste management and pollution control)
- Reduce energy use and convert to renewable energy sources/minimize emission of greenhouse gases
- Make FSM's genetic resources accessible for utilization and ensure benefits derived are equitably shared amongst stakeholders
- Manage and protect natural resources/protect, conserve, and sustainably manage a full & functional representation of the FSM's marine, freshwater and terrestrial ecosystems
- Improve environmental awareness and education and increase involvement of the citizens of the FSM in conserving their country's natural resources
- Establish effective Biosecurity (border control, quarantine and eradication) programs to effectively protect the FSM's biodiversity from impacts of alien invasive species
- Create sustainable financing mechanisms for environmental and sustainable resource initiatives
- Enhance and employ in-country technical capacity to support environmental programs.

c. Fiji (by Mr. Binesh Dayal)

- FGR diversity is well distributed in the 2 main islands but there are some cases of species endemism to specific sites only
- Prudent to initiate biodiversity study to determine the main endemic species in order to develop FGR conservation strategies for the important species
- Utilization of FGR, the major commodity exploited from the forest is that of timber trade through forest logging
- Over 30 different tree species are classified as obligatory species
- NFTP resources utilization is not well documented except for *Santulum* trade which is going on at some unregulated intensity
- Low demand for seed sales while medicinal plants are well appreciated in the different sector's of the community
- Trees serve at least 12 ecological functions, 70 cultural uses and provide up to 75% rural income

d. Kiribati (by Ms. Tearimawa Natake]

- Pandanus highly used for foods, construction materials, grafting, medicines
- Mangroves found in most of the islands
- 4 mangrove species native to Kiribati (*Rhizophora stylosa*, *Sonneratia alba*, *Lumnitzera littorea*, & *Bruguiera gymnorhiza*) all found in Butaritari Island

e. Nauru (by Ms.Taralyn Hiram)

Due to increase threats from climate change and variability, sea level rise, loss of biodiversity and the current economic situation in Nauru, there is a critical need for a three-pronged program to ensure sustainability of ecology and cultural benefits.

The 3 Components of this program are:

1. Coastal & inland forest protection and conservation
2. Coastal planting and household agroforestry, and
3. Rehabilitation, replanting and resettlement of the mine out lands on Topside

f. Palau (by Mr. Larry Mamis)

- Lack of policy- Palau Forestry has been assisted at state level on building their Forest Act (two states have already started with their Forest Act development)
- Population increase as well as development-Palau Forestry through FRM has been helping farmers on sustainable forest management
- Lack of understanding on the importance of forests and trees- method of agro-forestry been taught and implemented in most states
- Inadequate knowledge on the importance of forests and trees- Created more public awareness on forest and tree importance.

Conclusions and Recommendations from Palau:

- Workshops and public awareness programs should be conducted to address the importance of forests and trees.
- Survey to be carried out to identify species near extinction
- Information/knowledge sharing with other Pacific Island countries
- Formulate policies regarding Forests and Trees

g. Papua New Guinea (by Prof. Simon Saulei)

- The Current State of Forest Genetic Resources
 - PNG covers a land area of approximately 46.17 million ha, of which 5.6 million ha comprises the islands, including New Britain, New Ireland, Bougainville, Manus and other smaller islands.
 - Over 63% (294,000km²) is the forested land comprising over 20,000 vascular species of plants, of which approximately 30% are considered Endemic.

This great diversity can be accounted for from the country's origins:

- Gondwanaland Southern Continent Flora e.g. Gymnosperms at high altitude
- Southeast Asian Flora e.g. Some of the lowlands Flora – Dipterocarps
- Native or Indigenous Endemic Flora - e.g., Lowlands/High altitude floras – orchids, bamboos,
- Oceanic

- Non native invasives
 - Recent introductions (exotics)

- The State of *in situ* Genetic –Conservation
 - Protected forests – Conservation Areas Conservation Areas
 - Conservation Areas
 - National & Provincial Parks & Reserves
 - Reserves
 - Wildlife Management areas
 - Wildlife sanctuaries
 - Production forests
 - FMA with >30% for conservation
 - Buffer Zones and areas of cultural, scientific and educational importance
 - Forest Management areas (Plans and LCP, Certification)
 - Natural Seed Sources
 - Phenological Studies
 - PSPs

- The State of *ex situ* Genetic Conservation
 - Trials of native and exotic tree species
 - Seed banks and seed orchards
 - Germplasm collections
 - Clonal banks
 - Tissue culture
 - Tree breeding
 - Arboreta
 - Village gardens
 - Species and provenance trials

- The Contribution of Forest Genetic Resources to Food Security, poverty Alleviation and Sustainable Development
 - SFM, RIL

- NTFP
- PES including REDD plus
- Future Mainstreaming of NTFP, PES and REDD
- The State of Use and Sustainable Management of Forest Genetic Resources
 - Commercial
 - Traditional
 - Future potential use
- Threats – Economic development programs, fire, insect and pathogenic attacks and invasion by non native invasive
- Impacts of Climate Change
- 75% of the Country report is now completed

h. Samoa (by Mr. Aukuso Leavasa)

- Forest Resources will continue to play a major role in the socio-economic well being of Samoan people
- Conservation and protection of forest genetics resources must be a priority
- Several tree species with high significant in terms of cultural and economical values and are becoming rare & threatened due to over exploitation high rate of deforestation in Samoa
- *Intsia bijuga*, *Manikara hoshinoi* and *Terminallia richii* are some of Samoa's rare and threatened species
- They should be given priority for conservation
- Establishments of new conservation areas
- 4 new National Parks were approved by cabinet 2008
- Develop and formulate appropriate forest policies
- Sustainable Forest Management Policy 2007
- Developed a code of logging Practices. COLP 2004
- Control Measures Applied for Invasive Species
- A consultant is required to compile this report

i. Solomon Islands (by Mr. Richardson Raomae)

- Assessment of Reports from Government Ministries, NGOs, Institutions and organization
- Travel to Provincial centers (Malaita, Western & Renbel Provinces to solicit additional data)
- First Draft report produced & circulated to Ministries and stakeholders
- Second Draft produced during a one day stake holders' meeting, the second draft was circulated.
- Customary land owners don't link FGR to food security
- Agriculture department programs focus mainly on; national food security, provincial food banks, crop diversification, tolerant crop species and rapid response to disasters
- Forestry functions confine mainly to; log & timber export, downstream processing and reforestation
- NGO's work in isolation
- Country report is in its third draft now awaiting endorsement from government

Recommendations from Solomons

- Directing forest management objectives to people's food security need
- Broaden the range of products produced by forests- food and other items- and improving their supply to local people through new management approaches and access arrangements
- Encourage tree growing on farms using species management approaches that complement crop and livestock production, help protect the environment, provide income to farmers, and assist them spread risks
- Promotion of agro forestry systems and supporting small scale forest-based enterprises by ensuring a sustainable supply of input materials, providing managerial and technological assistance
- Providing market support to help rural people get a better price for the forest products they sell, and secure a more sustainable livelihood

j. Tonga (By Ms. Olivia Funaki)

- Lack of skilled staff – continuous training, upgrading needed for sustainability
- Land Tenure system – do not protect trees

- No national inventory – need to identify areas and declare National Park / Reserves / Protected
- Record keeping - documented data
- Lack of Fund and Technical support
- Lack of public awareness & education
- Review of Forest Legislation
- National Forest Inventory
- National Forestry Strategic Plan
- Enforcement of Forest Legislation and Forest Codes of Conduct
- Building capacity – FGR
- Encourage tree planting on tax allotments and leased land
- Encourage harvesting of senile palms and replanting
- Sandalwood policy – replanting / utilization
- Develop sawmill policy

k. Vanuatu (by Mr. Hanington Tate]

- Funding – Government does not have the money for this activity
- Everybody busy or have their own work to do
- Nobody want to help although all say it's important
- Data sources – no uniform storage
- Collection & update of data
- Implement forest conservation strategies (Kauris, whitewood and sandalwood)
- More effort on in-situ & ex-situ conservation of certain species
- Good documentation of use and development of FGR

4.0 Sub-Regional Synthesis on Priorities and Strategies, Achievements, Constraints, And Actions to be Undertaken for Conservation, Management and Sustainable Utilization of Forest Genetic Resources in the Pacific

The Workshop participants were divided into three groups, namely the Melanesian, Micronesian and Polynesian Groups to discuss and present their priorities and strategies, achievements, constraints

and actions to be undertaken for conservation, management and sustainable utilization of forest genetic resources in the Pacific.

A. MELANESIAN GROUP – FIJI, PNG, SOLOMON ISLANDS & VANUATU

R&D Priorities & Strategies	Achievements	Constraints	Actions to be undertaken
Germplasm supply & exchange	<p>FJ -MTA developed.</p> <p>Germplasm for <i>Myristica</i> spp supplied for research purposes outside the region, seed collection for reforestation, plantation establishment, seed storage & sales</p> <p>PNG – MTA developed – processed for approval. National Tree Seed Center supplying seeds to China, Australia, SE Asia, Fiji.</p> <p>Exchange seeds – Uruguay, Paraguay, and also seed collection for reforestation, plantation establishment, seed storage & sales</p> <p>Vanuatu – MTA endorsed. Supplying seeds to local tree farmers,</p> <p>SI – MTA developed.</p> <p>Supplying seeds to the member countries and outside the region.</p> <p>Tree breeding and improvement program continue in SI</p>	<p>FJ - Processes with SG’s office – lack of understanding FGR, bio-security issues for all countries, low seed production, quality seed, phenological changes, funding to do the collection, private seed sales.</p> <p>Lack of expertise in SI.</p>	<p>FJ - PS to follow up with SG’s office.</p> <p>Policy developed for private seed sales – FJ & PNG.</p> <p>Storage facility to commence storing seeds.</p> <p>Specific training for Forestry officers on tree breeding and improvement in SI.</p>
Food security, nutrition & health	<p>FJ – reforestation programs under the COWRIE, WANI & One Million Tree incorporated Food security as one of the thematic areas to be tackled by planting fruit & medicinal trees and promoting food security & health. List of tree species known to be medicinal plants have been prepared jointly with USP-IAS and incorporated in a manual produced under the COWRIE project. Also, to promote agro-forestry (inter-cropping).</p> <p>Awareness was also a crucial component of these programs promoting forest foods – community forestry & watershed management</p> <p>PNG – community forestry programs that looks into agro-forestry (inter-cropping) practices to promote food security</p> <p>SI – Agro forestry activities developed with ACIER, National programs on food production and improvement by the Agriculture dept.</p> <p>Vanuatu – promote agro-forestry activities, promote nut and forest fruit species (<i>Canarium</i> & <i>Terminalia</i>)</p>	<p>PNG - Lack of interest in forestry agency; growers are not interested as they are very much dependant on their cash crops,</p> <p>Vanuatu – govt. financial support to forestry has continued to decrease.</p> <p>Lack of mainstreaming between forestry and agriculture in SI.</p>	<p>Policies to be develop to address food security issues and research work to be undertaken.</p> <p>Strategy to be developed for <i>Canarium</i> & <i>Terminalia</i> for TI and domestication.</p> <p>A need to establish network between stakeholders in SI.</p>
Reforestation and forest rehabilitation	<p>FJ – reforestation programs under the COWRIE, WANI, One Million Tree (IYOB & IYOF), Forest Ecosystem rehabilitation & Conservation International’s reforestation program – 62 tree species (50 natives & 12 exotics) – area managed under specific projects 1,943.28 ha for 2010 to current, research on woodiness of plant (ability to</p>	<p>Land tenure issues, implementation and monitoring, increase or diversifying species use in plantation to cater for potential impacts of climate change.</p>	<p>Reduce & eventually ban log exports, develop and implement mechanisms for accessing land, increase R&D efforts</p>

	<p>recover), reforestation programs targeting thematic areas such as climate change mitigation and adaptation, food securing, watershed management , totem plants, medicinal plants, traditional plants, ridge to reef initiatives, invasive species,</p> <p>PNG – Policy developed on reforestation, IYOF – planted 3 million trees, domestication of native tree species for plantations, development strategies and Vision 2050 basically to increase size of plantations,</p> <p>Forest Development & Reforestation in the SI with communities- 14,500 hectares, KFPL, 14,000 ha. Eagon, 14,500 ha</p>	Lack of marketing opportunities in SI for thinned trees.	for domestication and improvements of native species for use in plantations
Climate Change	<p>PNG – Policy framework, REDD Plus Strategy, Adaptation strategy yet to be put in place</p> <p>FJ – REDD Plus Strategy developed, govt. provided support to implement REDD Plus activities (mitigation & adaptation) including conservation in a watershed system, mangrove ecosystem and river forest system – achievement</p> <p>Emalu forest assessed for watershed systems.</p> <p>Coastal protection – planting mangroves under specific reforestation programs and JICA funded program (OISCA) of planting ideal tree species in coastal areas on sites identified as being threatened from rising sea levels from global warming.</p> <p>Development of a climate change policy in SI is in progress.</p>	<p>Understanding the science of climate change,</p> <p>National focal point is from the Ministry of environment and conservation and Forestry programs are key climate change mitigation programs under the Ministry of Forestry in SI</p>	National Policy, financial mechanism for REDD, R&D on trees for adaptation for susceptible to cc impacts
Traditional Knowledge	<p>PNG – Documentation, IP Policy</p> <p>FJ – community awareness, reforestation program also included the cultivation of traditional important trees and the production of “A Guide to Forest Restoration using Tree Species” under the COWRIE project briefly describes some 100 native tree species thus promoting traditional knowledge and “How to build a Simple Low Cost Community Nursery” promoting the use of available resources and using local traditional knowledge to build the nursery and propagate seedlings. Also creating awareness on traditional knowledge on important tree species for medicinal,</p> <p>Documentation of traditional uses of medicinal trees in SI joint program with JICA</p>	<p>Access,</p> <p>FJ – limited funding to print more copies for distribution</p>	National Policy on TK and related IP issues
Environmental Services provided by forests	<p>PNG – NGOs education and awareness Programs, Environment and Conservation Policy, Forest Policy</p> <p>FJ – strengthened awareness programs incorporated in reforestation programs (COWRIE, WANI, One Million Tree – IYOB & IYOF, Forest Ecosystem Rehabilitation, Community Forestry, CI and NGO’s. List of tree species that provide environmental services developed jointly that was produced with USP-IAS under COWRIE project</p>	<p>Education and awareness, implementation and monitoring</p>	PES Policy, R&D into PES

	<p>for some 100 native tree species, Implementation of the SI- National Environment Strategy. Establishment of various conservation programs promoted by NGO's such as WWF, Tetepare association and other agencies in SI.</p>		
Invasive species, pests and diseases	<p>PNG - collaboration with SPC and AQUIS, R&D into pests and diseases FJ – ACIAR project – detecting monitoring systems for forest pests and diseases in the Pacific, Fiji Forest Policy Statement 2007 highlighting forest protection priorities, strategies and actions developed during the APFISN workshop in Beijing 2011, FH activities on-going currently incorporated in our BP for its implementation</p>	<p>Capacity and funding, Awareness and education FJ – staff transition, lack of knowledge, indiscriminate burning of forests is a critical issue</p>	<p>PNG - National Policy & Management plus FJ – capacity building for new staff through research collaboration with international research institutions & greater awareness on forest fires importance of FGR</p>
Forest and tree products market development	<p>FJ – commodity profile for 4 species developed (Mahogany, Sandalwood, Coco Wood & Bamboo) Sandalwood development project at national level – funding support provided by the govt 2010 - 2013 PNG - Database established. Value added timber association currently established by the Forestry Department to promote marketing of sawn timber in SI.</p>	<p>Lack of capacity</p>	<p>FJ – need for additional staff to undertake activities PNG – Promotion and Marketing, Market surveillance for product niche, standards and certification Policy</p>
Community and agro-forestry management	<p>FJ – awareness to communities to promote the conservation of FGR and moreover FGR through the specific reforestation programs. 2 agro-forestry plots established in Naitasiri under the One Million Tree Program – soil stabilization program PNG - R & D programs. Small holder reforestation program is also targeting agro forestry and social forestry activities.</p>	<p>Lack of interest, value and appreciation of forest</p>	<p>Need for more networking and collaboration with the Land-use Division of the Ministry of Agriculture PNG - Policy</p>
Endangered species, populations and habitats	<p>FJ – 9 bio-diversity surveys conducted in the country and reports compiled for field assessments made PNG - R&D, Collaboration with DEC, DAL, NARI. Studies are planned for assessment of endangered species in SI.</p>	<p>Funding is the main issue. Lack of expertise in SI.</p>	<p>PNG - Policy and Management Plans</p>
Sustainable forest management	<p>FJ – assessment of SFM pilot project sites, awareness programs for the sustainable use of FGR, value adding to promote the maximum utilization of forest resources and reduction of wood waste Policy, NLCOP, P & NFP, NFD, OP, EIS SI forestry bill is currently facilitated for approval. Currently work on creating a reforestation Policy.</p>	<p>Funding is the main issue. Timber industry dominates economy making it hard for resource owners to manage forest in SI.</p>	<p>Carbon assessments in project sites PNG - Evaluation of effectiveness of current strategies</p>

B. MICRONESIAN GROUP – KIRIBATI, PALAU, NAURU & FSM

	Achievements	Constraints	Actions to be undertaken
Knowledge of FGR	Germplasm supply and exchange- Pohnpei and Yap has received assistance on this from SPC	No documentation been shared on varieties and types received for what purposes	Need to conduct a national census on germplasm supply and exchanges materials
	Flora books (2) have been completed (Nauru)	Minimum distribution due to lack of copies	To be widely distributed (schools, USP centre)
	Flora collection started since 2002 in Kiribati		
	Food Security , Nutrition & Healthy- Agroforestry home, kitchen garden in most households	Limited supplies Poor soil for plant growth Pest & diseases Marketing access Poor transportation & facility	Develop genebanks Composting techniques Use local materials-control methods Need support of government, local leaders , government leader
	Reforestation & forest rehabilitations –Pilot Programs	Lack of equipments Lack of technical expertise	Seek financial support
	Climate change-More awareness outreach has been conducted and solution (replanting resistant crop varieties)of mitigation to CC	Need to identify more potential crops	Seek more collaboration with corp. agency for technical assistance
	Traditional knowledge- We learned from our grand-grandparents through partners passed to our young generation Youth-youth programs	Lose of traditional of doing good stuffs Parents not teaching own children Not highlighted in school curriculums	Include more local knowledge in school curriculums Followed traditional way of life Parents – start on early childhood learning on traditional knowledge
	Environmental services from forest- Rehabilitation has begun , water, eco-tourism ,productive soil and clean environment	Lack of proper planning in place Lack good varieties of trees to plant Lack of restrictive measures	Proper planning More proactive planning Identify and initiate restrictive measures EIA in place
	Invasive species Pest & Diseases- Task force committee established and control measures taken more forward planning	poor coordination within communities and implementation agencies	Seek more support from government Awareness campaign Improve implementation approach in communities
	Forest & Tree products market development- More market established for domestic and tourism	No tree policy in place More potential tree species need to be identified	Need a technical assistance in established tree product policy Potential species tree to be replanted There should be an EIA in place
Community and agro-forestry	Lack of essential garden tools	Financial assistance from Donor	

	management- Introduced and practiced at grass-root level Integrated Farming system	Needs of Planting materials Control measures on Pest & Diseases.	Agencies Training on propagation methods and techniques Identification of the best control measures
	Endangered species populations & habitat In-situ & Ex-situ (Field Gene Bank)	Limited land space to accommodate more species Lack of accessibility to and fro	Need for national Government's support on extension of Land- use Need to establish budget for transportation means
	Sustainable Forest Management Sustainable land-use practices; Proper Waste Management (Organic Waste material) Proper harvesting practices	Lack of appropriate policies in place Lack of facilities and appropriate space Lack of environmental capacity in waste management	Train personnel in integration proper practice measures Rehabilitation methods (FUKUOKA) aerobic methods Expand capacity building with at higher degree levels
Area	Achievements	Constraints	Actions to be undertaken
Management of FGR	Germplasm supply and exchange- conserve biodiversity , assist in sustainable management developments	Country have limited knowledge	Improve country driven approaches
	Food Security , Nutrition & Healthy- conserve and mass produce of nutritional species of crops	Limited knowledge of nutritional species	Conduct more public awareness on nutritional crops Need to link up with involve agency to move forward
	Reforestation & forest rehabilitations –shade house in place, more indigenous species propagated with control measures	Limited awareness of reforestation practices Lack of essential equipment and facilities	Conduct community outreach program on reforestation Seek donor supports agencies
	Climate change - Ongoing awareness programs - Identification of NPCC Demo sites	Limited technical expertise to administer programs Too many vulnerable sites to streamline selection	Need for technical expert Need technical assistance, financial support for expansion of site selection
Traditional knowledge - Collection of vital traditional practices and skills through interviews - Database and compilation - Utilize existing traditional knowledge	- Lack of funds for compensation measures when initiating interviews - Technical problems with database system - Conflict of interest between traditional and westernized knowledge	Need of financial support from all relevant agencies. - Need training for technical person in this specific area - Need to emphasize and to re-adopt old ways in terms of	

			traditional practices
	Environmental services from forest - Sustainable land management - Water quality and quantity - Improve and promote environmental values by conservation measures and rehabilitation of FGR	Lack of research to address environmental services values Limited hydrological skills & knowledge Lack of coordination and awareness	Need to emphasize the importance of capacity building in attachment studies
	Invasive species Pest & Diseases-Local Task force committee established to maintain eradication program	Lack of coordination among country communities and task force committee Lack of involvement with implementation agencies	Improve community involvement in terms of management of their task force program activities
	Forest & Tree products market - development- Legislation Act - Non- timber forest product (Noni Juice) value added	- Poor management -	- Appropriate training in tree product marketing
	Community and agro-forestry management- - Continues monitoring community and agro-forestry	- inconstence monitoring within the agro-forestry units	Assigning of an officer (s) in responsible of monitoring & Reporting
	Endangered species populations & habitat - In Situ & Ex-Situ	- Insufficient staff - Lack of Government support - Lack of data input	-need government support
	Sustainable Forest Management Sustainable land - Clean & Green Project	- Lack of community support and involvement.	- Need to develop a policy to address SFM
Area	Achievements	Constraints	Actions to be undertaken
Research, Training, Awareness	Germplasm supply and exchange - Production & information of FGR	- Lack of publication of FGR information	Expansion of FGR to low-lying islands with appropriate activities to implement
	Food Security , Nutrition & Healthy - Actively Progressing	- Limited knowledge on the importance of food security and healthy	- Training of Trainers on nutritional crops

		food crops	
Reforestation & forest rehabilitations - Ongoing programs & projects	- Limited seedlings and garden tools	- Improve the Nursery or Shade house and supplies - Improve propagation methods	
Climate change - Ongoing Program and Projects - Identification and establishment of demo site vulnerability to CC - Identification of tolerant species that are more adaptable to the impacts of CC	- Lack of “know how” - Lack of proper facilities (laboratory) - Lack of coordination	- More funds for training and facilities - Capacity building for CC key players -	
Traditional knowledge - Ongoing at grass-root level	- No proper documentation	- Seek proper traditional knowledge for documentation -	
Environmental services from forest- - Promotion of numerous environmental services - Feasibility Study	- Lack of existing budget - Feasibility study out-dated	- Need of financial support from Government and Donors agencies	
Invasive species Pest & Diseases- - Ongoing Program	- Lack of information and lack of budget	- Need of financial support from Government and Donors agencies	
Forest & Tree products market development - Non- timber forest product (Noni Juice) value added	- Lack of training on processing	- Need to identify potential Market value	
Community and agro-forestry management - Ongoing Program	- Limited awareness program	- Need community and Government support	
Endangered species populations & habitat - NA	- NA	- NA	

	Sustainable Forest Management Sustainable land - Ongoing	- Needs more Community awareness	- Promotion Workshops on SFM
Area	Achievements	Constraints	Actions to be undertaken
Policies and Institutions	Germplasm supply and exchange - NA	- NA	- NA
	Food Security , Nutrition & Healthy - Established (long term crops)	- Limited planting materials	- Need of financial support from Government and Donors agencies
	Reforestation & forest rehabilitations - Nauru Rehabilitation Corp.	- Limited funds and rehabilitation equipment - Land dispute	- Review and revise the existing rehabilitation Plan
	Climate change - Ongoing Programs	- Lack of collaboration with Stake-holders	- Encourage team work
	Traditional knowledge - NA	- NA	- NA
	Environmental services from forest - Established	- Lack of collaboration with Stake-holders	- Need of consultation workshops
	Invasive species Pest & Diseases - Bio-security established	- Lack of Public awareness	- Need Government support
	Forest & Tree products market development - In place	- Lack of policy implementation	- Need Government support
	Community and agro-forestry management - NA	- NA	- NA
	Endangered species populations & habitat - Established	- Lack of policy implementation	- Need of technical assistance to identify the endangered

			species population and habitat
	Sustainable Forest Management Sustainable land		
	- In place -	- Limited budget for implementation	- Need Government support and the Community as well

Area	Achievements	Constraints	Actions to be undertaken
Regional and International Cooperation	Germplasm supply and exchange- SPC	- Mortality high due to unskillful - Fragile	- Need training how to handle young plantlets - Skillful personnel to be in place
	Food Security , Nutrition & Healthy--- SPC, Australia, UNDP, FOA,USP,WHO,GEF, TTM, China	- Poor communication - Limited information	- Strength communication among countries
	Reforestation & forest rehabilitations - FAO & SPC	- Lack of capacity in	- Need more training
	Climate change - CCRG ongoing	Lack of capacity	- Need more training
	Traditional knowledge - On going	- Lack of documentation - Limited sharing of information	- Need more training - Nee of sharing information
	Environmental services from forest - FAO & SPC	- Lack of documentation	- More training
	Invasive species Pest & Diseases- - FAO & SPC	- Lack of documentation - Limited sharing of information - Lack of coordination	- Nee of sharing information - Need more training
	Forest & Tree products market development - FAO & SPC	- Lack of 'know how' - No policy or guideline in place	- Need more training
	Community and agro-forestry management - FAO & SPC	- Limited knowledge	- Need of a capacity building
	Endangered species populations & habitat - FAO & SPC	- Limited documentation - Poor communication	- Need of a proper documentation

	Sustainable Forest Management Sustainable land - FAO & SPC	- Lack of knowledge	- Capacity building - Right people in place

C. POLYNESIAN GROUP – TONGA, SAMOA & COOK ISLANDS

Area	Achievements	Constraints	Actions to be undertaken
Knowledge of FGR	<ul style="list-style-type: none"> - List of rare and threatened species - Identifications of priority species especially for cultural, commercial uses 	<ul style="list-style-type: none"> - Lack of training in the biology and ecology of endangered species - Awareness raising among relevant Stakeholders 	<ul style="list-style-type: none"> - Promote awareness, education and importance of genetic resources especially at the community level
Management of FGR	<ul style="list-style-type: none"> - establishment of demonstration plots and trials, seed orchards, nurseries - on-going development agroforestry system - balance of conservation and production objectives - new National Parks - Policies and programs on SFM 	<ul style="list-style-type: none"> - invasive species threaten FGR - Insecure of Land Tenure - Lack of capacity for land owners - Lack of capacity to include environmental services into National Policies and implement practical actions - Economic focus on short term crops as opposed to forest tree species and agroforestry system - Difficult for land owners to change practices and accept changes - Relative importance of forestry compared to other sectors - Funding - Sustainability of resources including funded projects undertaken 	<ul style="list-style-type: none"> - National Forest Inventory - Establish fruit tree seed orchards - reforestation and rehabilitation of degraded land - Promote agroforestry - Build technical capacity in management of nursery
Research, Training, Awareness	<ul style="list-style-type: none"> - successful propagation techniques (cuttings of threatened species) - yearly increments of PSPs measured - studies of climate change risks into the forestry sector - some studies include traditional knowledge - Some progress of quantitative studies linking invasive species to degradation of forests - Research on value added and new products 	<ul style="list-style-type: none"> - FGR not included in school curriculum - Capacity building – collecting and documenting of knowledge - reluctant in sharing knowledge of medicinal plants because of cultural reasons and lack of intellectual property right - Lack of Public awareness of quarantine, and capacity for control measures - Lack of processing infrastructures and technologies - Gov't support for market access for wood and non-wood forest products 	<ul style="list-style-type: none"> - Establish seed banks - Include FGR in school curriculum - Include youth in awareness and training programs (community level) - Documentation of FGR (research done, knowledge etc)

Policies and Institutions	- National Forest Policy - Forest Codes - NBSAP	- FGR not specifically included in Legislation	- Need a policy specifically for FGR conservation
Regional and International Cooperation	- Technical assistance of FAO, SPC, GEF, GIZ through consultants - MTA	- Funding	- More collaboration efforts with these organizations

V. Regional Inputs to the CGRFA/WG-ABS-1/12/3

Dr, David Cunningham of Australia led the discussion on the Paper CGRFA/WG-ABS-1/12/3 to be presented on the Access and Benefit Sharing Working Group Meeting to be held in Norway. The participants provided the following inputs:

1. Paper CGRFA/WG-ABS-1/12/3: Distinctive features of GRFA requiring distinctive solutions for ABS

- a) General agreement that FGR should be included as part of GRFA in the case of widely cultivated commercial species, but not for non-wood forest products such as medicinal uses, particularly where traditional knowledge (TK) is involved.
- b) FGR traded for specific uses can potentially be used for other purposes and this needs to be considered in any ABS discussions and agreements.

2. Paper CGRFA/WG-ABS-1/12/4: Options to guide and assist countries in developing legislative, administrative and policy measures

A. Awareness raising and exchange of information on ABS for GRFA

- a) General support for more awareness raising and interchange of information
- b) Awareness raising and education are needed together.

B. Capacity building and technical assistance

- a) Strong support, there is a need for more capacity building and technical assistance.

C. Model contractual clauses for mutually agreed terms

- a) Standard MTA exists for Pacific FGR supply and exchange, pending endorsement by SPC
- b) The standard MTA covers research and training, for other uses bilateral agreements are needed and there is a strong need for model clauses for MAT for other uses of FGR.

D. Stakeholder voluntary codes of conduct, guidelines and best practices and/or standards

- a) SPRIG (South Pacific Regional Initiative on FGR) code of conduct to facilitate the exchange of tree germplasm among around five countries in the Pacific
- b) In principle support for these measures, but preference for country-based codes, or regional approaches.
- c) There is not a level playing field for countries to engage in private sector codes and guidelines.

E. Voluntary guidelines for addressing legislative, administrative and policy measures on ABS for GRFA

- a) Supported, would be useful, important to raise the level of awareness and understanding.

F. Specialized international ABS agreements for GRFA

- a) Difficult to differentiate between GRFA and other GR in practice
- b) In some countries, lack of resources to manage different agreements, lack of capacity to monitor and regulate agreements
- c) In general, countries feel it would be better to see how the Nagoya Protocol is working for FGR and other GR, and build their understanding of the ITPGRFA and the Protocol, before considering any new international GR agreements.

3. Consideration of signing or ratifying the Nagoya Protocol on ABS

- a) A number of countries are considering signing the protocol or have signed and are considering ratifying.

4. General comments or statements on ABS

- a) Few countries are developing their own ABS legislation
- b) Prior Informed Consent (PIC) has been difficult to obtain from customary land owners
- c) Reluctance to share Traditional Knowledge (TK), particularly associated with medicinal plants, for cultural reasons and because of lack of IPR protection
- d) Conflict of interest between TK and western knowledge systems, TK is being lost due to changing lifestyles and westernisation, and depletion of natural resources. TK is not all written and some written documents (e.g. by missionaries) are not accessible or factually correct, wide range of languages
- e) Some collection of TK through interviews, documentation and databases, but lack of compensation is an issue and there is a need for capacity building in conducting these types of interviews and knowledge management (trust is essential)
- f) Need for appropriate mechanisms to share TK
- g) Biosecurity requirements can already delay seed transfers by up to several months in some cases, there are concerns that ABS requirements may also result in delays for research and afforestation work.

VI. Conclusions and Recommendations

That representatives of the following 12 Pacific Island countries and territories; Australia, Cook Islands, Fiji, Federated State of Micronesia, Kiribati, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu (supported by FAO and SPC) met for three days (4-6 September, 2012) in Nadi, Fiji and discussed the State of Forest Genetic Resources in the Pacific.

Participants shared information from their country reports on Forest Genetic Resources (FGR) including priorities and recommendations. Sub-regional groups developed priorities and actions for the Polynesian, Micronesian and Melanesian regarding FGR conservation, management and utilization. The Secretariat of the Pacific Community will consolidate the findings and recommendations into a regional report for PICTs.

In the preparation of their country reports, PICTs have documented their rich natural resource base for FGR, providing for a range of economic, social, cultural and environmental values. However there are serious threats to FGR and countries prioritize capacity building and financial support to improve their ability to conserve and manage these resources.

Representatives recognized the significant loss of the region's forest biodiversity due to activities associated with unsustainable practices for mining, agricultural activities and logging leading to deforestation. Negative impacts of climate change such as rise in sea level, salt water inundation, increased intensity of cyclones, flooding, the occurrence of extreme climatic events and temperature rise is also affecting the state of FGR in PICs.

The workshop delegates unanimously agreed that FGR country reports for the State of the World's Forest Genetic Resources have a unique role to contribute towards better understanding for sustainable management and improvement of the Pacific's Forest Genetic Resources. The workshop further agreed that FGR country reports will contribute to the formulation of policies and strategies that will address the sustainable use of forest resources.

Among other issues, participants also agreed on the following recommendations:

- It is important that the PICs sign Material Transfer Agreement's (MTA's) to facilitate the exchange and supply of trees germplasm within the Region in a timely manner.
- National forest extension programs have to be established in each country in order to optimize extension benefits. This will include production and distribution of extension materials, establishment of demonstration plots, media and awareness /education programs and stakeholder networks.
- Quality measures for the sale of seeds and other reproductive materials by individuals and private companies have to be established.
- SPC to undertake capacity building with its member countries and territories to broaden the knowledge on FGR. This includes priority research and development themes on FGR.

- The PICTs to undertake research activities on species identification and usage classification. This should be formulated in the form of priority list.
- PICTs to facilitate integration of FGR into schools and higher education/training institutions' curriculum for better awareness and decision making.
- PICTs to develop and implement mechanisms for long term access to land for FGR conservation, to ensure continuous and consistent research and development efforts.
- PICTs to develop mechanisms for mitigation and adaptations to climate change.
- PICTs to enforce and secure land use management to protect FGR and prevent encroachment of other sectors in forested areas.
- PICTs to encourage downstream processing and value adding of forest products to maximize the utilization of FGR. SPC to assist member countries secure potential markets for such products.
- PICTs to establish a working relation between National Environment and Conservation Departments, Climate Change Office and Forestry Division for better coordination of climate change activities. There is a growing dissent amongst forestry stakeholders of being sidelined on climate change issues.

In conclusion, the participants have realized the importance of the FGR country report after the three day session and were very keen to have it completed, however, they still need assistance from FAO/SPC in completion of their respective country reports.

This workshop also provided a greater platform for collaboration and information sharing.

5.0 Annexes

Workshop Programme

Date	Time	ACTIVITIES	Responsible
DAY 1	08:00 – 09:00	Registration	Organisers
Tuesday, 04 September	09:00 – 10:00	Opening Ceremony: <ul style="list-style-type: none"> Devotion Welcome Address from SPC Welcome Address from FAO Keynote Address by the Permanent Secretary, Ministry of Fisheries and Forests of Fiji Introduction of participants, Workshop Programme and Housekeeping 	MC –Vinesh Prasad SPC Ms Bale Wilikibau SPC Mr. Cenon Padolina, SPC Mr. Oudara Souvannavong, FAO Mr. Inoke Wainiqolo, Permanent Secretary, MFF Mr. Vinesh Prasad, SPC
	10:00 – 10:30	Group Photo, Coffee/Tea Break	
	10:30 – 12:30	<ul style="list-style-type: none"> Update on SOW FGR Preparation Process including preparation of country reports and thematic studies, workshop objectives and programme, clarifications. Session 1a. Presentations of Country Reports <ul style="list-style-type: none"> Presentation of Key Findings and Recommendations of Country Reports the Pacific <ol style="list-style-type: none"> Australia (<i>Dr. David Cunningham</i>) Cook Islands (<i>Mr. Noo Tokari</i>) Federated States of Micronesia (<i>Ms. Marlyter Silbanuz</i>) Fiji (<i>Mr. Binesh Dayal</i>) 	Mr. Oudara Souvannavong, FAO National Focal Points \Country Representatives
	12:30 – 13:30	Lunch	
DAY 1	13:30 – 15:00	Session 1b. Presentation of Country Reports: <ol style="list-style-type: none"> Kiribati (<i>Ms. Tearimawa Natake</i>) Nauru (<i>Ms. Taralyn Hiram</i>) Palau (<i>Mr. Larry Mamis</i>) Papua New Guinea (<i>Prof. Simon Saulei</i>) 	National Focal Points \Country Representatives
Tuesday, 04 September	15:00 – 15:30	Coffee/Tea Break	
	15:30 – 17:00	Session 1c. Presentation of Country Reports: <ol style="list-style-type: none"> Samoa (<i>Mr. Aukuso Leavasa</i>) Solomon Is. (<i>Mr. Richardson Raomae</i>) Tonga (<i>Ms. Olivia Funaki</i>) Vanuatu (<i>Mr. Hannington Tate</i>) Session 1d. Plenary Discussions on country reports	National Focal Points \Country Representatives Mr. Oudara Souvannavong, FAO/Mr. Cenon Padolina, SPC
	17:00	End of Day 1	
	19:00 – 21:00	WELCOME DINNER	

ate	Time	Subject	Responsible
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DAY 2 Wednesday, 05 September	08:30 – 08:45	Review of Activities on Tuesday 4th September Outline of Programme for the Day	Vinesh Prasad, SPC,
	08:45 – 09:10	Session 2. Sub-Regional Working Group: Preparation of Regional Recommendations a. Melanesian Countries b. Polynesian Countries c. Micronesian Countries	Workshop Facilitators (FAO and SPC)
	10:30 – 11:00	Coffee/Tea Break	
	10:30 – 12:30	Session 2. Group Works: continue	Workshop Facilitators (FAO and SPC)
	12:30 – 13:30	Lunch Break	
	13:30 – 15:00	Session 3. Presentation and Discussion of Group Works on the Preparation of Regional Recommendations	Workshop Facilitators (FAO and SPC)
	15:00 – 15:30	Coffee/Tea Break	
	15:30 – 17:30	Session 3. Presentation and Discussion of Group Works on the Preparation of Sub-Regional Recommendations	Workshop Facilitators (FAO and SPC)
	17:30	End of Day 2	

Date	Time	Subject	Responsible
DAY 3 Thursday, 06 September	08:30 – 08:45	Review of Activities on Wednesday, 5th September. Outline of Programme for the Day	<i>Workshop Facilitator</i>
	08:45 – 10:15	Session 4. Regional Working Group: Review and Finalize Regional Recommendations	<i>Workshop Facilitators (FAO and SPC)</i>
	10:15 – 10:30	Coffee/Tea Break	
	10:30 – 12:30	Session 5. Presentation of the Final Regional Recommendations	<i>Workshop Facilitators (FAO and SPC)</i>
	12:30 – 13:30	Lunch	
	13:30 – 16:00	Session 6. Closing Session <ul style="list-style-type: none"> • Final discussions • Evaluation of the Workshop • Closing Remarks • Closing Prayer 	<i>Workshop Facilitators (FAO and SPC)</i>
		Coffee/Tea Break	
	17:00	End of the Workshop	

Annex Two

LIST OF PARTICIPANTS

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Annex Three. Priority Species

A. PRIORITY SPECIES FOR THE MELANESIAN COUNTRIES

SPECIES	Conservation		Exploration and collection		Evaluation	Use in Tree Improvement			Countries
	a	b	c	d		f	g	h	
<i>Accacia mangium</i>	2	1	2	2	2	2	1	2	SI & PNG
<i>Accacia richii</i>	1	1	2	2	2	2	2	2	FJ
<i>Agathis macrophylla</i>	1	1	2	2	2	2	1	3	All
<i>Alphitonia zizyphoides</i>	1	1	2	2	2	2	1	3	FJ
<i>Carnarium indicum</i>	1	1	2	2	2	2	2	3	PNG, SI & Vanuatu
<i>Dacrycarpus imbricatus</i>	1	1	2	2	2	2	2	2	PNG & FJ
<i>Dacrydium nidulum</i>	1	1	2	2	2	2	2	2	FJ
<i>Decussocarpus vitiensis</i>	1	1	2	2	2	2	2	2	FJ
<i>Degeneria vitiensis</i>	1	1	1	1	1	1	1	1	FJ
<i>Endospermum robbiense</i>	1	1	2	2	2	2	2	2	FJ
<i>Enspermum medullosum</i>	1	1	2	2	2	2	2	1	SI, PNG, FJ
<i>Eucalyptus deglupta</i>	1	1	2	2	2	2	2	3	SI & PNG
<i>Eucalyptus pellita</i>	1	1	2	2	2	2	2	2	PNG
<i>Fagraea gracilipes</i>	1	1	2	2	2	2	2	2	FJ
<i>Flueggea fluxouosa</i>	1	1	2	2	2	2	2	2	SI, Vanuatu & Fiji
<i>Gmelina vitiensis</i>	1	1	2	2	2	2	2	2	FJ
<i>Heritiera oniticocephala</i>	1	1	2	2	2	2	2	2	FJ
<i>Myristica sp.Kaudamu</i>	1	1	2	2	2	2	2	2	PNG & FJ
<i>Pinus caribbea</i>		1	1	2	2	2	2	3	PNG
<i>Podocarpus neriifolius</i>	1	1	2	2	2	2	2	2	FJ
<i>Pometia pinnata</i>	1	1	2	2	2	2	2	2	PNG & SI
<i>Pterocarpus indicus</i>	1	1	1	1	2	2	2	2	PNG & SI
<i>Santalum spp</i>	1	1	1	1	1	1	1	1	All
<i>Sterculia vitiensis</i>	1	1	2	2	2	2	2	2	FJ
<i>Switenia macrophylla</i>						2	2	2	Vanuatu
<i>Tectona grandis</i>		1	2	2	2	2	2	2	All
<i>Terminalia catapa</i>	1	1	2	2	2	2	2	2	SI & Vanuatu
<i>Vitex coffasus</i>	1	1	2	2	2	2	2	2	PNG & SI

Legend:

Use 1, 2 and 3 to score the required activity for each species as follows:

1: High priority 2: Prompt action recommended 3: important but less urgent than 1 and 2

- a) In situ
- b) Ex situ
- c) Ecological and biological information (natural distribution, taxonomy, genecology, phenology)
- d) Collection of genetic material (seeds, herbarium samples, ...) for assessment
- e) In situ (population study)
- f) Ex situ (provenance and progeny trials)
- g) Supply of seed and other reproductive material
- h) Selection and breeding

B. PRIORITY SPECIES FOR THE MICRONESIAN COUNTRIES

SPECIES	Conservation		Exploration and collection		Evaluation		Use in TI		Countries
	a	b	c	d	e	f	g	h	
<i>Cocos nucifera</i>		3		2			1	1	Kiribati
<i>Manilkara</i>	2			3			1	1	Palau
<i>Pandanus tectorius</i>		3		2			1	1	Kiribati
<i>Gmelila</i>		3		2			1	1	Palau
<i>Rhizophora stylosa</i>	1		1		1		1	1	Kiribati
<i>Calophyllum</i>	3		3		3		1	1	Palau
<i>Artocarpus spp.</i>	1	2	1	1	1		1	1	FSM
<i>Cocos nucifera</i>	1	2	1	1	1		1	1	FSM
<i>Hibiscus tiliaceus</i>	1	2	1	1	1		1	1	FSM
<i>Tornefortia argentea</i>		1	2		1		1	1	Nauru
<i>Calophyllum inophyllum</i>	1	2	1	1	1		1	1	Nauru

Legend:

Use 1, 2 and 3 to score the required activity for each species as follows:

1: High priority 2: Prompt action recommended 3: important but less urgent than 1 and 2

- a) In situ
- b) Ex situ
- c) Ecological and biological information (natural distribution, taxonomy, genecology, phenology)
- d) Collection of genetic material (seeds, herbarium samples, ...) for assessment
- e) In situ (population study)
- f) Ex situ (provenance and progeny trials)
- g) Supply of seed and other reproductive material
- h) Selection and breeding

C. PRIORITY SPECIES FOR THE POLYNESIAN COUNTRIES

SPECIES	Conservation		Exploration and Collection		Evaluation		Use and Improvement		Countries
	a	b	c	d	e	f	g	h	
<i>Cocos nucifera</i>	1	1	1	1	1	1	1	1	Samoa, Tonga, Cook Is.
<i>Aglaiia samoensis</i>	1	1	2	2	3	3	2	2	Samoa, Cooks
<i>Ascarina diffusa</i>	1	1	1	1	2	2	2	2	Samoa, Cooks
<i>Artocarpus altilis</i>	1	1	2	2	2	2	2	2	Tonga
<i>Calophyllum neo-ebuddicum</i>	1	1	1	1	1	1	1	1	Samoa, Cooks
<i>Canarium indicum</i>	2	1	2	2	2	2	2	2	Tonga
<i>Canarium vitiense</i>	1	1	2	2	3	3	3	3	Cooks, Samoa
<i>Citrus spp.</i>	1	3	2	2	2	2	1	1	Tonga
<i>Dyospyros samoensis</i>	2	2	2	2	3	3	1	1	Samoa, Cooks
<i>Dysoxylum huntii</i>	1	1	1	2	2	2	2	2	Samoa, Cooks
<i>Dysoxylum maota</i>	1	2	2	2	2	2	2	2	Cooks, Samoa
<i>Sysoxylum samoense</i>	1	2	2	2	2	2	2	2	Cooks, Samoa
<i>Flueggea flexuosa</i>	1	1	2	2	2	3	2	2	Samoa, Cooks
<i>Garcinia sessilis</i>	1	1	1	1	1	1	1	1	Tonga
<i>Garuga floribunda</i>	1	2	2	2	2	2	2	2	Samoa, Cooks
<i>Inocarpus fagifer</i>	1	2	2	2	2	2	2	2	Samoa, cooks
<i>Intsia bijuga</i>	1	1	1	1	1	1	1	1	Samoa, Cooks
<i>Manilkara hoshinoi</i>	2	2	2	2	2	1	2	2	Cooks, Samoa
<i>Manilkra samoensis</i>	1	1	1	1	1	1	1	1	Samoa
Mango	2	3	1	1	2	2	1	1	Tonga
<i>Myristica fatua</i>	2	2	2	2	2	1	1	1	Cooks, Samoa
<i>Neonauclea forsteri</i>	1	1	2	2	2	1	2	2	Cooks, Samoa
<i>Palaquium stehlinii</i>	1	2	2	2	1	3	3	2	Samoa, Cooks
<i>Planchonella garberi</i>	1	2	2	3	2	3	3	3	Cooks, Samoa
<i>Planchonella samoensis</i>	1	2	2	2	2	2	2	3	Cooks, Samoa
<i>Pometia pinnata</i>	2	2	2	2	2	2	1	1	Cooks, Samoa
<i>Santalum spp.</i>	1	1	1	1	1	1	1	1	Tonga, Samoa, Cooks
<i>Sterculia fanaiho</i>	1	2	1	1	1	2	2	2	Samoa, Cooks
<i>Syzygium</i>	1	3	3	3	2	2	3	3	Samoa, Cook Is.

<i>inophylloides</i>									
<i>Syzygium patentinerve</i>	2	2	2	2	1	1	1	3	Samoa, Cook Is.
<i>Syzygium samarangense</i>	2	2	1	1	1	1	3	3	Samoa, Cooks
<i>Terminalia catappa</i>	1	1	1	2	2	2	2	2	Samoa , Cooks
<i>Terminalia richii</i>	1	1	1	1	1	1	1	1	Samoa, Cook Is.
<i>Pometia pinnata</i>	1	1	1	2	2	3	3	3	Tonga
<i>Syzygium malaccense</i>	1	1	1	2	2	2	2	2	Tonga

Priority Exotic species

SPECIES	Conservation		Exploration and Collection		Evaluation		Use and Improvement		Countries
	a	b	c	d	e	f	g	h	
Breadfruit spp.	1	1	1	1	1	1	1	1	Tonga
<i>Casuarina equisetifolia</i>	1	1	1	1	1	1	1	1	Samoa, Cooks, Tonga
<i>Cedrella odorata</i>	2	2	2	3	3	2	2	3	Samoa, Cooks
<i>Pinus honduras</i>	2	2	2	2	3	3	1	1	Tonga
<i>Eucalyptus urophylla</i>	1	1	2	2	2	3	1	1	Samoa, Cook Is.
<i>Eucalyptus pellita</i>	2	2	2	2	3	3	1	1	Samoa, Cook Is.
<i>Eucalyptus tereticornis</i>	2	2	3	3	3	3	1	1	Samoa, Cook Is.
<i>Swietenia macrophylla</i>	1	1	1	1	1	1	1	1	Samoa, Cook Is.
<i>Toona ciliata</i> var. <i>australis</i>	2	2	3	3	3	3	1	1	Samoa, Cook Is.
<i>Tectona grandis</i>	2	2	1	1	3	3	1	1	Samoa, Cook Is.
<i>Terminalia calamansanai</i>	2	2	3	3	3	1	1	1	Samoa, Cook Is.
<i>Terminalia superba</i>	3	3	2	2	2	1	1	1	Samoa, Cook Is.
<i>Santalum species</i>	1	3	2	2	3	2	1	1	Samoa, Cooks
<i>Vi-apple</i>	1	1	1	1	1	1	1	1	Tonga