



- PG 1 Gizo celebrates Agriculture and Trade Show
- PG 2 Door open for MAL, provincial government partnership • Farmer encourages Western cocoa farmers
- PG 3 Agriculture and Trade Show Pictorial
- PG 4 Reviving MAL's Mile 6 farm
- PG 5 New database for Quarantine
- PG 6 Staff profile: Sam Tim
- PG 7 Queens Award for agriculturalist • Showcasing organic farming
- PG 8 Organic farming pictorial
- PG 9 Agriculture funds not hitting cocoa farmers: Vella cocoa farmer
- PG 10 Column: Process of organisational development for MAL
- PG 11 Recipe: Creamy ripe pawpaw
- PG 12 Chilli leaf fact sheet

## Gizo celebrates Agriculture and Trade Show



*MAL Minister Hon. David Tome, left, at the Agriculture and Trade Show in Gizo.*



*Attracting young and old alike, the 2013 Agriculture and Trade Show was a hit with the public.*

The biggest agriculture event of the year was marked in Gizo, Western Province with the staging of the Agriculture and Trade Show from 15-22 June.

The annual show attracted hundreds of visitors daily to the stalls and information booths and to see demonstrations carried out by the Ministry of Agriculture and Livestock, farmers, community groups and MAL's event partners the Ministry of Commerce, Department of Trade, Ministry of Forests and business houses.

The Agriculture and Trade Show coincided with the 7th Premiers Conference and was marked with an opening parade from MAL's provincial office to the showground.

In opening the event, the Agriculture and Livestock Minister Hon. David Tome said the show aimed to boost agriculture awareness, and to give farmers an opportunity to talk and consult with agriculture officers from Honiara.

At the end of the three day-long showcase, Hon. Tome said "The show was successful in educating and promoting agriculture to young farmers.

"I would like to pay tribute to the farmers and traders in the

Western Province who came to Gizo to display, promote and sell their produce, their goods and their services to the people of Western Province and the people of Solomon Islands. You are the ones that have made the 2013 agriculture trade show a success. Without you there will be no Agriculture and Trade Show."

The agriculture show put focus on cocoa farming in the Western Province with the presence of a successful and innovative cocoa farmer David Kembu Junior from Guadalcanal and Vella Lavella cocoa farmer and trader Carlos Kesiana.

Kembu demonstrated cocoa grafting while Kesiana demonstrated cocoa drying techniques to the Western Province public.

"With over 80 per cent of Solomon Islands population living in rural areas, Solomon Islands is an agrarian society with our main source of livelihood coming from agriculture."

Therefore said Hon. Tome, agriculture has a very important role in feeding the people of the country and ensuring that they have livelihood."

MAL Permanent Secretary, Frank Wickham, attributed the success of the event to the partnership between stakeholders.

"MAL's partnership with the Ministry of Commerce was essential to staging an event that could attract members of the public."

"Just as important too was the involvement of community groups, farmers, associations, business houses and the

public."

MAL's Director of Extension, Michael Ho'ota, said one of the key messages of the show was on food security and healthy lifestyle.

"The three day show demonstrated to people here in the Western Province, what they can do with their resources and it has given them new ideas on what to pursue with their own agriculture development." ●

## Door open for MAL provincial government partnership

The Permanent Secretary of the Ministry of Agriculture and Livestock has encouraged provincial governments to work closely with MAL to carry out agriculture initiatives around the country.

In his address to provincial government officials, at the 7th Premiers Conference, Frank Wickham encouraged partnerships, calling for provincial governments to submit proposals for agriculture initiatives.

Wickham says both provincial governments and government ministries have the same objective in delivering service to the people.

"Our ministry is keen to distribute resources, we already have partnerships with associations, and organisations. We are open to working with provincial governments and I would encourage provincial governments to submit their concepts and proposals for agriculture initiatives."

One of the big initiatives this year is urban agriculture, which Wickham says the Honiara City Council would be able to team up with MAL to deliver.

"For something like this we could have arrangements

where MAL staff are seconded to the city council to carry out this initiative." ●



*MAL Permanent Secretary Frank Wickham talks to provincial government officials at the Premiers Conference.*

## Guadalcanal farmer encourages cocoa farmers



*Guadalcanal cocoa farmer David Kembu Jnr.*

Guadalcanal cocoa farmer David Kembu Junior has urged farmers in the Western Province to take up grafting as means of developing high quality and high yielding cocoa in the province.

Kembu who was in Gizo as part of the Agriculture and Trade Show, says cocoa farmers can greatly improve their cocoa outputs by taking on new practices such as grafting.

"Before I started grafting my trees were only producing 200 grams per tree per year.

"Now after managing my cocoa plantation and using grafting and other integrated pest and disease management methods, my trees are producing 10kg of beans each, per year."

During the Agriculture and Trade Show, Kembu Jnr demonstrated methods of top grafting and side grafting.

The key to making grafting work says Kembu Jnr is to select the right plants to graft.

"You have to go through a selection process where you choose your best plants. The ones with the high yields, manageable tree height, and tolerance to pest and disease.

"These are the parent trees you get graft material to improve your plantation."

With over 5000 trees on his plantation in GPPOL 2, Kembu says it has taken years of hard work to fine tune his cocoa stock plants

He is exporting his cocoa directly to Australia to chocolate makers at a preferential price.

Kembu urged farmers to seriously take up cocoa and to be vigilant about their practices.

"If you work hard and look after your cocoa, it will have a positive reward for you in terms of returns." ●



*MAL staff on parade at the Agriculture and Trade Show in Gizo.*

# Agriculture and Trade Show Gizo, 2013



*MAL staff showcase agriculture products and services at the Agriculture and Trade Show in Gizo.*



*Face to face consultations, MAL staff talk to the public about the benefits of agriculture to their community.*

# Reviving MAL's Mile 6 farm

Above Gizo township and high on top of Gizo's best beach spot lies the Ministry of Agriculture and Livestock's Mile 6 Farm.

The farm is MAL's main agriculture resource centre in the Western Province.

Run down after years of neglect MAL has been working to revive Mile 6 farm to become the province's main distribution point for planting materials and livestock.

MAL's Chief Field Officer for the Western Province Samson Tim says the two major developments taking place this year is the construction of a new piggery and a new poultry house.

Funding for the two initiatives is being supported by the Provincial Government Strengthening Programme (PGSP).

"Right now we have drawn up the terms of reference for the two jobs and will soon be tendering out the work," said Tim.

MAL's revival of the farm is on track with the two projects



*Small crop farming at Mile 6.*

following on the construction of new staff housing.

Funding for the much needed accommodation was sourced from surplus funding from the 2010 recurrent budget.

"For the first time in years, staff now have a proper housing," says Tim.

In June MAL Minister Hon. David Tome visited the farm as part of his visit to Gizo for the Agriculture and Trade Show.

Hon Tome said he was pleased to see developments taking place at the farm and to hear of the future plans for the farm.

"Mile 6 has a very important role to play in developing agriculture in the Western Province and MAL look at how to further support the team here."

Located on 100 plus hectares of provincial land, the building and farm infrastructure is owned by MAL.

Mile 6 consists of an apiary farm, piggery, poultry, one hectare of cocoa seed garden, 4 hectares of coconut seed



*Western Chief Field Officer Samson Tim, MAL Minister Hon. David Tome and MAL Director of Extension Michael Ho'ota at Mile 6.*

garden, and good soil for vegetable cultivation.

"Ideally we want Mile 6 to become a major resource centre, with classrooms, teachers and demonstration farm to get people in the province to come here and learn about agriculture."

The ministry is planning to develop cassava farming to provide feed for its new piggery.

"By doing this we cut back on the expenses we spend on feed, which is very expensive in the province."

The piggery says Tim will be used for a breeding programme to supply to farmers for improvement of their stock.

Mile 6 has eight heads of cattle that were part of an initial shipment from Tenavatu during the late 90's.

Tim says the plan is to bring in cattle from Tenavutu and develop a small cattle holding site for distribution.

"We are waiting for barb wires from a hardware supplier in Honiara to repair the fence lines, then we can bring in more cattle."

During the visit MAL Minister Hon. David Tome said more resources would be allocated to develop Mile 6. ●



*The piggery at Mile 6.*

# New database for Quarantine

As part of the developments in modernising its services the Solomon Islands Agriculture Quarantine Service (SIAQS), launched its new database in late June.

The MS database will provide Quarantine officers with access to forms and will enable officers to issue certificates on site.

The Director of Quarantine Francis Tsatsia says the new database is a major development for the Quarantine Service as it will allow officers out in the field to have access to the latest information, as well as forms and certificates.

The database is part of a regional initiative supported by the Secretariat of the Pacific Community to improve the work of quarantine services in the region.

Quarantine services in Tuvalu, Niue and Kiribati have also linked up to a similar database.

SPC's Biosecurity Information Technician, Luisa Korodrau has been working with Quarantine Officers over the past two years to establish the database.

"We've had training on this database in 2010 and in 2012 with Quarantine officers having a major input in the set up of this database."

The database will be installed in computers at the country's entry and exit points, such as the airport, seaport and border points.

Irene Nanau, of Quarantine says the database will help to improve the efficiency and the work of Quarantine officers, who have had to rely on paper files and forms to do their work.

"The availability of information will help to facilitate trade as certification can be made instantly.

"In addition the pest list and standards of imports and export will be accessible to officers who can now carry out the protocol should they come across pests or threats of pest."

"For example if we want to export coconut, the link will give us the details on the conditions for entry into Australia and if treatment is required it the information will be on the



*SPC's Luisa Korodrau and Quarantine officials at the database launch.*

database," said Irene.

The other major benefit says SIAQS Director Francis Tsatsia is that when it comes to making monthly reports, all the Quarantine information will be available on the database.

"No more digging through papers and folders. Because of this we can respond faster to queries from our stakeholders."

Korodrau says the use of the database will see MAL's information being more consistent, the turnaround time in responding to stakeholders should be faster, no time delay in updating of records in effect modernise the SIAQS.

Korodrau says a user manual is also being developed to assist Quarantine on how to use the database.

MAL's Under-Secretary Technical, Jimi Saelea says it's vital for the region that Solomon Islands has strong plant protection capabilities.

"Solomon Islands and Papua New Guinea are known as the bridge into the South Pacific sub-region, any pest or diseases that come down from Asia, usually comes through us before reaching our neighbouring countries. Therefore it is vital that we have plant protection capabilities in place. especially at our entry and exit points." ●



*The launching of Quarantine's new database.*

# Staff profile: Sam Tim

## Overcoming the West's communication divide

With his officers scattered across the numerous islands of the Western Province, one of the major challenges facing Chief Field Officer, Samson Tim when he arrived in Gizo was communication.

Three years on since taking up the post, Tim says the communication divide has been overcome thanks to new technology.

By using Telekom's wide network in the province, Tim has been able to keep in regular contact with his agriculture officers spread out across Rendova, New Georgia, Vella La Vella, Kolombangara and the other islands that make up the Western Province.

"Not only am I being updated by my officers through the mobile network but we are now starting to have farmers call us up for advice."

Just a few years ago, adds Tim, travel to these isolated farms would have been unfathomable due to the distance and the sheer expense of paying for fuel and boat hiring.

He says technology is changing the way MAL does business in the Western Province.

"Apart from mobile phones our officers are now starting to get online and using email as well, through the use of dongles.

"So here in the Western Province we're embracing the new technology and adopting it into our everyday work."

For Tim who is based in the Gizo, the use of 3G to access his email on his mobile phone has been an added bonus.

"It's great being able to access your email and be able to respond to queries and keep in touch with extension officers wherever you are."

Starting his agriculture career in Guadalcanal in 1989, Tim spent eight years there before moving to Makira for a further eleven years before becoming Chief Field Officer in Choiseul. In 2010 he took up a new assignment in Gizo to spearhead agriculture extension work in the Western Province.

Unlike other provinces, Tim says the Province does not have one dominant agriculture commodity, it has lots of small agriculture crops like cocoa, coconut and rice which is still in its infancy.

For Tim his focus in office is on three key agriculture commodities; cocoa, traditional foods, small livestock and cattle.

"Cocoa is my first priority, I see plenty of potential for this



*Western Chief Field Officer Samson Tim and MAL Minister Hon. David Tome.*

cash crop, particularly on Rendova and Vella Lavella

"Following the Cocoa Livelihood Improvement Programme, cocoa plantings has started to increase in on these Islands.

There is plenty of room for improvement in terms of marketing for farmers to get maximum benefit but there is plenty of area for growth," said Tim.

For traditional foods, the key initiative that agriculture is working on is to develop food banks or bulking centres for communities.

Tim says this is essential in making planting material available to communities.

"The big issue with food security is that communities and farmers say they don't have access to good planting material and that farmers are unwilling to share their crops planting material.

"To overcome this we are working with Rural Development Programme, Component Two, to help communities develop their own food banks or bulking centres."

Tim says the MAL and some farmers have good varieties of taro, kumara and pana which they will share with communities, but communities will need to look after and maintain their own food bank.

"Communities can charge for cuttings, and the small amount of money they receive can be used to maintain the food bank," said Tim.

Cattle is the major project being undertaken by a private businessman in Marovo.

MAL is supporting the cattle project with technical assistance, and once successful the Marovo cattle farm can act as the supply source for cattle farming in the province.

"In Marovo 500 hectares of pasture land is ready to take on cattle. Once we start in this project it can spread to other parts of the Province." ●

# Queens award for agriculturalist

His professionalism and his can-do attitude in getting the job done has earned longtime agriculturalist Victor Kaihou a Queens Award honour.

Kaihou was the sole agriculturalist among this year's list of nominees.

As the National Consultant for the United Nations' Food and Agriculture Organization funded TOT rice project, attached to MAL's rice programme, Kaihou has had a long history in agriculture, having joined the ministry in 1978.

For the Director of Extension, Michael Ho'ota, Kaihou represents a man with a wealth of agriculture knowledge.

"He has worked his way up through the agriculture ladder starting as a training officer supervisor in Makira in the late 70s to becoming the training coordinator for the Stabex (European Union funded support) in the mid 80s." In the 90s he was Malaita's Chief Field Officer before becoming the deputy director of extension in 2010.

"One thing that has made Victor stand out has been his attitude to work. There is no challenge too big for Victor, once he has a task in mind he'll do everything in his power to achieve it."

A good example adds Ho'ota has been the success of the FAO's Season-Long training in rice growing programme, where Kaihou was one of the driving forces, that saw the programme completing its mandate after four months than the one year anticipated.

Born on December 3, 1958 at Tawanaora Village, Are'are in Malaita, Kaihou's experience in agriculture has made him a respected figure in agriculture circles.

"I'm happy to see that the government has acknowledged Victor's service to the country with this award. It has been a very longtime that an agriculturalist has been honoured at these awards."

Kaihou resigned from agriculture in 2012 but returned to the sector as the national consultant for FAO's rice



Victor Kaihou

growing project.

"He is a good leader for our officers. The training he had from the pre-independence period really stands out in his die hard professionalism, his eye for detail and commitment to high standards."

I hope, adds Ho'ota, that our young agriculture officers utilize Victor's experience and learn as much as they can from him. ●



KGA showcase their organically grown produce at the Agriculture and Trade Show.

One group that has showcased the use and the benefits of organic farming at the annual Agriculture and Trade Show is the Kastom Gaden Association (KGA). KGA's zone coordinator for ward 12 Kolombangara, Martin Pahu

## Showcasing organic farming

says the benefits of organic farming is longterm sustainable farming for communities.

"Most villages on Kolombangara don't have access to large areas of land. If they use chemicals it will damage the soil."

Whereas organic farming, he points out, can ensure that the small tracts of land can be used over and over again, yet retain its fertility.

"Also the use of chemicals is costly, farmers can't afford to pay for these expensive imports."

The great thing says Pahu is that the same work that chemicals do, can be achieved with organic farming.

"Not only is it cheaper and more accessible for rural farmers but its also much safer."

During the three day long Agriculture and Trade Show, Pahu and the KGA team demonstrated various methods of organic farming such as composting, the use of natural pesticides and the planting of nitrogen enriching plants.

One crop that the KGA team has been actively promoting in the Western Province is Vanuatu yam (Rotundata yam).

The yam is being promoted for food security and livelihood says Pahu.

"We're teaching farmers how to grow it for their families food supply but also how to market it and sell it to earn income." The training includes rapid multiplication, nursery and planting.

The demonstrations say Pahu provide the link between organic farming and practical crop maintenance skills. ●

At the Agriculture and Trade Show, the KastomGaden Association not only showcased organic farming methods but it also demonstrated farming techniques that could help farmers expand their farming yield, by utilizing their limited gardening space.

### Table garden

This can be easily constructed from surplus or cast off wood, and is ideal as a garden for small plants or a nursery for larger plants.



### Vertical garden

Using bamboos stacked in layers above each other, the vertical garden is ideal for plants such as cabbages that do not require deep root system.



### Compost garden

The compost garden can be made from general vegetation and is highly fertile. Sticks are stuck into the ground in a circular manner, banana leaves are wrapped around it.

The base of the compost garden is filled with sticks and filled up with coconut husk and soil. Plants such as yam is placed at the bottom, beans and tomatoes are grown on the outskirts of the compost garden. Sticks are used to lead the tomatoes and beans to branch out away from the compost garden.



# Agriculture funds not hitting farmers: Vella cocoa farmer

A Vella La Vella cocoa and coconut farmer has called on members of parliament to be strategic in how they disburse discretionary funding for cocoa and coconut.

In 2012 funding for cocoa and coconut was disbursed through members of parliament through a partnership with the Ministry of Agriculture and Livestock.

Cocoa and coconut farmer Carlos Kesiana told an agriculture gathering in Gizo that the funds distributed by MPs are not making any impact because it is not going to bonafide farmers.

"People getting these funds do not seem to have experience or reputation for working in cocoa or coconut."

MPs have to be more strict in how they screen applicants who they give funding.

"The Ministry of Agriculture and Livestock or other government bodies must be strong too, in monitoring how these funds are spent.

"MAL needs to be on the ground to see if the funding is being used for the right purpose. Otherwise government funds are being wasted, without any benefit to the people of this country."

As one of the biggest cocoa farmers in Vella Lavella, Kesiana was part of the MAL team that attended the Agriculture and Trade Show in Gizo, where he demonstrated cocoa drying methods.

He says cocoa has the potential to be a major livelihood earner for the people of the Western Province especially on the islands like Vella Lavella.

Originally from Kwaio, Kesiana has lived and farmed in Vella Lavella for the past 10 years.

## Coconut

In 2003 Kesiana began his operations by buying nuts from surrounding communities. He managed to buy 30 bags, which he sold in Noro.

"From the money I made I used this as my capital to start buying copra from areas around where I live. My first lot of copra I bought and dried was about 90 bags."



*Carlos Kesiana demonstrates cocoa drying at the Agriculture and Trade Show.*



*Cocoa farmer Carlos Kesiana shows his dry beans.*

"It was from this point I started to serve the community by providing access to a dryer.

Today, Kesiana has sheds in five villages where he buys copra and sells onto agents in Honiara.

The recent drop in the price of copra has badly affected business, says Kesiana, with major capital loss recorded last year and in 2008.

Despite the hard knocks Kesiana is adamant that he will continue to serve the community.

"I have heart because even though the big traders have stopped coming I will continue to buy copra at the price on offer in Honiara.

"Even if I have to pay at 90 cents or even \$1, I'll continue because these are my customers and community.

"Most times I'm making no profit, or if lucky maybe \$10," laughs Kesiana.

With the price so low - producers are now only making up to one bag of copra.

"It costs too much to bring in people to work, as you spend on food and other things. So what's happening now is families will only work on a single bag to avoid added expenses."

## Cocoa

Kesiana began planting cocoa in 2007, after he found land that was cleared for a plantation, but people ran away from the area because of the Western tsunami that year.

He used that area to begin planting cocoa and in the same year started putting together the bits and pieces of what would become his cocoa dryer.

In 2010 Kesiana harvested his first crop and he bought the final things he needed to complete his dryers - a net and drum.

"With the dryer complete I started to buy and process copra for the whole community." ●

# Process of organisational development for MAL

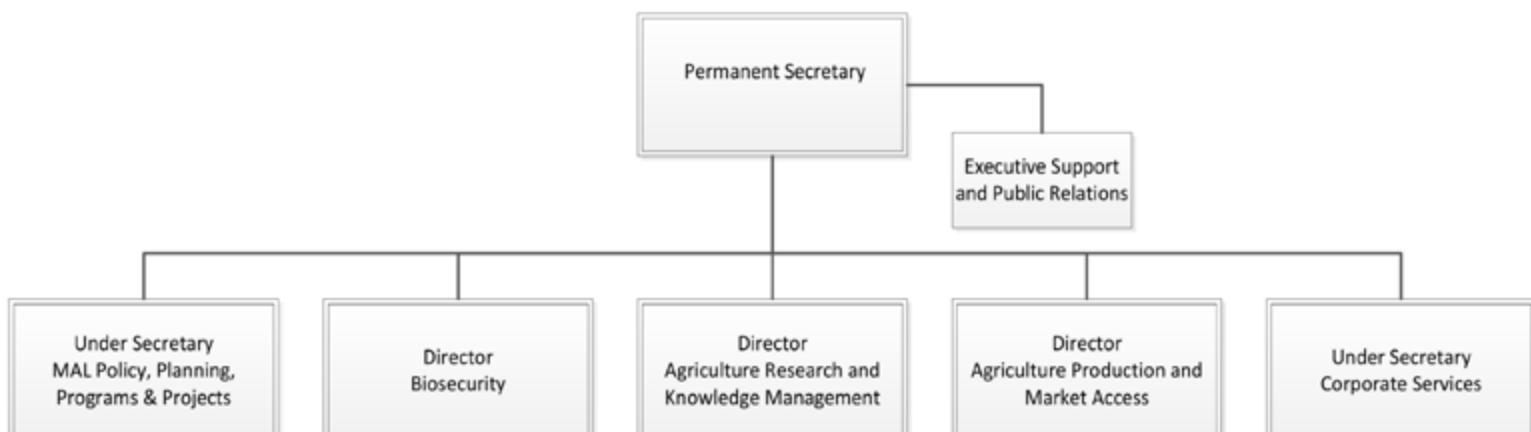
By Malcolm Bell, RDP Advisor

Consultations to date have indicated that there is recognition of the need for structural change in MAL in order to better fulfil its mandate and for MAL staff to work better together and externally. In commenting on this finding and the progress in developing a new structure, Malcolm Bell noted "This should not be interpreted as a criticism of anyone nor is it suggested that MAL has not been performing. Quite simply, we are looking to improve what we do."

After many ideas being identified, amended, rejected, modified and reconsidered, there is emerging a consensus on a new organizational structure for MAL that paves the way for enhanced service delivery and better meeting our mandate. This new structure may have the following features:

- Improve the support to rural communities and farmers by merging the bulk of the existing Extension and Livestock departments to strengthen integrated provincial advice and training service delivery and to extend the range of services to include support for market access for farmers and land use planning. Officers involved in advisory and training services would be in either generalist roles with expertise across the bulk of crop and animal processes, or specialist roles with expertise focussed at a high level of competence on one crop or animal or process for the province. This department could be titled: **Agriculture Production and Market Access**
- Improve knowledge management by focussing applied research, development and technical services more directly towards the information needs of staff and farmers, by joining specialist technical services staff with a national brief and currently in Extension and Livestock with information officers and research staff. This department could be titled: **Agriculture Research and Knowledge Management**
- Improve the management of biosecurity for Solomon Islands and ensure the full implementation of the requirements of the Biosecurity Act, by relocating some key animal and plant specialists to join with Quarantine staff. This department could be titled: **Biosecurity**
- it is proposed that these three new departments would be established with high level authority and reporting directly to the Permanent Secretary
- In addition, the current UST would head up a new function that consolidates existing Ministry policy, planning, M&E and reporting, and leads and coordinates Development and donor programs and projects. This new function would support and work with the three functional departments described above in order to strengthen coordination of consultative planning and evaluation processes, and to improve the operation of project work by operating as the vertical axis of a matrix structural model thereby gaining greater capability to move more flexibly and quickly. This department could be titled: **MAL Policy, Planning, Programs & Projects**
- The current USA would head up the existing Corporate Services function with other internal-service sub-functions such as ICT support, property services, procurement and budgeting being added. This consolidated function would provide guidance and services to support all of the other departments of the Ministry. This department could be titled: **Corporate Services**
- A coordinated public relations function could be consolidated with the Permanent Secretary's executive support unit
- There has been a progressive shift from an hierarchical organizational culture in MAL in recent years, moving more towards external focus and differentiation, and there is a general agreement that this shift should be continued and supported through organizational change and management development strategies. The new structure described above would replace the old structure and assist MAL in this positive cultural change
- In support of this proposed structural change, new function statements, job descriptions, systems design and process mapping will be developed over time in support of strengthened internal and external service delivery, mandate and procedural compliance, and improved efficiency and effectiveness
- Most existing MAL staff would remain in their current post and be automatically transferred to their new department, but there is likely to be changed responsibilities and competencies for some. For example some extensions officers will continue in their current duties unchanged, whereas others may gain an additional specialization in some priority area such as a particular crop, animal, agribusiness or marketing activity. Training assistance would be provided where needed
- Some senior posts may be advertised externally and/or internally for selection of the best candidate
- There are currently over 40 vacant posts in MAL, and a strategy to fill many of these with an intake of certificate graduates towards the end of 2013 will be developed and submitted for approval

Hence the proposed MAL structure in its simplest form may look like this:



Any comments on this structural proposal are welcomed. If you wish to comment or make a query, please send an email to the RDP Advisor, (mal.bell@bigpond.net.au) and/or the Under Secretary, Administration (d\_patternot@yahoo.com.au).

Processes for formal consultation by RDP in support of the organizational development for MAL have nearly been completed. If you haven't had the opportunity to input your ideas yet, you may request Gabriele Hiele (Phone: 21467 Mobile: 7755326 Email: ghiele@sirdp.org.sb) for a copy of a questionnaire designed to gather attitudes to structural issues.

Final structure decisions will only be made after approval by the Permanent Secretary and Minister, and will be subject to budgetary submission and discussion with the Ministry of Public Service over the course of the remainder of 2013. Any approved change could take effect from 1 January 2014. ●

## Recipe: Creamy ripe pawpaw

Contributed by Margaret Kiko, Assistant Field Officer, MAL Extension

### Ingredients

- 1 ripe pawpaw – not too soft



- 1 fruit bush lime
- 2 dry coconuts

### Instructions

- Peel pawpaw and scoop out the seeds.
- Wash the peeled pawpaw and cut into cubes.
- Put cubed pawpaw on a bowl and leave for 5 minutes to allow water to drip.
- Place cubed pawpaw in a bowl and squeeze the lime juice.
- Shift the pawpaw cubes around so that the lime juice can be evenly distributed.
- Put the pawpaw cubes in the ice and leave to frost for an hour.
- Scrape dry coconuts and squeeze (do not add water).
- Heat coconut cream until thick, leave aside to cool.
- In a bowl mix the coconut cream with the pawpaw cubes.
- Then serve while cold.

# Chilli Leaf Fact Sheet

By Australian Centre for International Agriculture Research



**Botanical name:** *Capsicum* spp. (Solanaceae)

Location specific common names: *C. frutescens* (Birdseye and Tabasco)

*C. annum* (sweet peppers or capsicum) chili, chile

**Plant characteristics:** Chilli plants are small bushes that usually grow for a year or more in warm locations. They are suitable for container growing. Many recognized species and varieties exist, ranging from sweet capsicums with no heat to the fieriest hot-fruited forms. Birds are not affected by the heat component (capsaicin) in chilli, therefore birds are effective seed dispersal agents, thus volunteer plants are often found in unusual places.

**Uses:** The leaves and very young tips can be used fresh or in cooked dishes. Leaves have a mild distinctive flavour that is not hot to taste.

**Availability:** This plant can be grown all year in most tropical and sub tropical areas.

**Propagation methods:** New plants are produced from seed. Plants often self-seed and with little care, the seedlings easily transplant.

**How to grow:** Chilli plants can be easily grown in large pots. A pot of 20 litres capacity or larger should be used, filled with a well drained loam and compost mix, in which four seeds or young plants can be placed. Chilli plants like more alkaline soils than most tropical plants so coral sand in the mix will promote growth. They are deep rooted but require occasional watering during drier conditions. Chilli plants will grow in full but a little shade produces larger, tender leaves.

Leaves should not be harvested too often as plant vigour

may be affected and fast growing younger plants produce the best leaves. For a continuous supply of leaves two or three staggered plantings of ten or more plants will be required each year. Leaf production is reduced when the plants fruit.

**Threats:** Pests like scales and spiralling whitefly will reduce plant vigour, resulting in smaller leaves or even death of the plant. Scales can be controlled by reducing ant population with well mulched moist soils.

Spiralling whitefly can be reduced by mulching the soil with light coloured materials such as shredded paper and spraying the underside of leaves with jets of water.

**Harvesting:** Leaves and tips can be neatly picked, ideally in the cooler hours of the day to prevent wilting. Harvesting too many leaves at one time will reduce plant vigour.

**Post harvest and storage:** Leaves should be washed carefully with water of drinking quality or clean seawater. If loosely bundled in moist paper and kept in cool locations, leaves should keep fresh for a day or two. If placed in an airtight container in a refrigerator they can last for up to a week. Chilli leaves are firm and therefore can be frozen.

**Project findings/nutritional value:** Sample of chilli leaves for analysis were collected from Solomon Islands, Samoa and the Torres Strait Islands. 50 to 100 grams of fresh leaf (1.5-3 handfuls) per person for a meal serving will provide useful nutrition.

We found chilli leaf to be a consistently rich source of potassium and copper, as well as being relatively high in most other minerals carotenoids: for example at a Burns Creek, Honiara site (Solomon Islands) site, chilli leaf was found to contain 829, 32 and 340 mg/kg dry weight of lutein, alpha-carotene and beta-carotene respectively, all excellent levels.

**Carotenoids:** Lutein is important for eye health (e.g. reducing risk of cataracts) and beta-carotene (pro vitamin A) is important for vision, immunity and bone health.

**Potassium:** Controls body water balance through its interactions with sodium and chloride ions, and is involved in electrical stimulation of nerves and muscles. Deficiency can cause muscle weakness, cramps and irregular heartbeat.

**Copper:** Component of enzymes, involved in iron metabolism, therefore supports production of healthy blood and generation of energy. ●

**For more information on stories in this newsletter or agriculture enquiries contact the Agriculture Information Unit within the Ministry of Agriculture and Livestock.**

**Ph:** 22143/22144 **Email:** mal.agrikalsanius@gmail.com

For the latest agriculture news and stories catch Famas Kona every week on the national broadcaster SIBC at 8.30pm on Monday and 7.30pm on Wednesday.

The Agriculture Information Unit is the public relations arm of the Ministry of Agriculture & Livestock. Its role is to disseminate agriculture information to the public and

farming communities using radio, newspapers, television, online and print media.

## Library

The Solomon Islands National Agriculture Information Centre is closed due to staff re-assignment.

The library has a major collection of books and information on Solomon Islands agriculture. Members of the public and students are encouraged to visit the library when it is reopened for information on agriculture in the Solomon Islands and around the world.