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The urban supsup garden revival



MAL officials and Taiwanese Technical Mission officers at an urban farm in Burns Creek, Honiara.



Urban backyard garden in Tingge, Honiara.

In this day and age of processed foods, unhealthy yet easily accessible cheap meals such as noodles and tinned food, the Ministry of Agriculture and Livestock is reviving the urban supsup garden as a means of providing Honiara residents with fresh foods in the fight against non-communicable diseases (NCDs).

While Solomon Islanders still pride themselves on the availability of natural fruits, vegetables and abundant fish, data from the Ministry of Health reveals that Solomon Islands, like many of our Pacific neighbours is suffering a crisis of lifestyle diseases.

"We are facing a major nutrition crisis in Honiara where our young and old people have turned their backs on our traditional and natural foods. Whether its due to cost or access, it is literally killing them," said MAL's Director of Extension, Michael Ho'ota.

Solomon Islands' rate of heart disease, diabetes and NCDs is on the rise.

For MAL one way of fighting NCDs is through the humble supsup garden. Once a common sight in most Honiara

homes, the backyard garden has disappeared over the past decade in the wake of Honiara's rapid urbanisation.

For MAL, work on reviving the initiative started last year with the urban supsup garden project in Honiara to develop the farming skills of urban dwellers.

The project included a week-long training at the Taiwanese Technical Farm where urban farmers were given basic skills on growing supsup gardens.

"What we found was it was people living on the outskirts, such as the settlements of Honiara who were very interested in taking up this training," said Assistant Field Officer, Caroline Houkura.

Ten farmers were trained on how to grow Chinese cabbage, pakchoi, saladia, bean tomato and capsicum.

These crops were chosen because they are able to be grown in backyards with little maintenance.

"We know we can't completely stop people from buying food from the shop, all we can hope for is to get them to balance their diet."

"What I personally want to see is that every house in



An urban farmer in Burns Creek, Honiara, with her garden.

Honiara should have their own supsup garden where they can access fresh vegetables and fruits to help them with their nutrition."

She points out that apart from the health benefits, there will be major household budget savings with families cutting down on the need to buy expensive fruits and vegetables from the market.

"Basically you spend less at the shops and the markets because you have your own supply."

Senior Field Officer, Joseph Maelende says the initial feedback from the participants of the training has been positive with many now wanting to expand their gardens.

The training participants were selected from Honiara's three constituencies including those living in settlements at the capital's outskirts.

The Taiwanese Technical Mission has also provided support

by assisting farmers with tools and fertilisers.

Maelende says the next phase of the programme will target residential areas in Honiara.

Collaboration with Health

MAL is also collaborating with the Ministry of Health later this year to carry out a major survey on market produce and on the cost of food in shops to track food behaviour.

"The idea is to look at the price of goods in markets and shops and work out what people are buying and why. This will give us a picture of their nutritional status as well," said Houkura.

The project will also involve MAL providing training on how to make supsup gardens and organic fertilisers, while the Ministry of Health will also teach mothers how to make meals that are healthy.

The final phase says Houkura will include the documentation and creation of booklets for training.

Fruit trees for students

Another project that the Honiara Unit of the MAL's Extension Department has in the works is the distribution of fruit trees.

Maelende says this initiative is also targeting NCDs.

"We want to discourage kids from eating snacks as they should be eating fresh fruit. We are planning on distributing fruit trees to households.

"We're looking at pawpaw, guava and carambola."

Although they are yet to get funding from the MAL budget, he says other projects within the Ministry have indicated their willingness to support the initiative. ●

Taro garden for East Rennell community

Farmers and communities in East Rennell are now able to cultivate their own taro gardens, thanks to new taro planting material made available through a new communal garden.

Taro, a traditional diet of the community, has been in the decline with farmers finding it hard to access planting material.

"Before, we knew when we would be in the rainy month, the rainy season, so we planted appropriate crops. And we were aware in which month we would likely get pests. Now it's all different, our food production is lower and soil is not fertile," said Renbel Acting Chief Field Officer Kendrick Tango'eha.

He says the concerns were raised with agriculture officers during a community Participatory Rural Appraisal where communities highlighted food security as their main concern with agriculture.

"The agriculture division in Renbel decided that the best option would be to develop a big taro garden. Then suckers from the taro could be distributed to everyone, so they can all grow their own gardens.

Tango'eha says the best part is that it was a community solution with the community prioritising what their agriculture issues are, and which ones they wanted addressed first.

"So far it has worked out well in working towards achieving agriculture's main priority of food security, in Renbel Province." ●



Community members at work in the taro garden.

NZ to manufacture Solomon cocoa value-added products

By C-Corp

The first export of Solomon Islands cocoa bound for New Zealand was shipped from Honiara in June with cocoa exporter, C-Corp Limited shipping six tonnes of its premium cocoa beans to its newly established processing facility at Tauranga, in the North Island.

C-Corp NZ will initially manufacture and distribute cocoa block, liquor and nibs products to New Zealand chocolate manufacturers and catering industry consumers. Chocolate samples were initially produced in Honiara early this year and were judged by consumers to be of premium quality with delicate but full flavour.

The Tauranga manufacturing facility was built to meet all domestic and international food grade standard manufacturing requirements. The facility design allows for modular expansion of production capability. The facility will be commercially commissioned over the coming months.

C-Corp Managing Director, Clive Carroll said, "The Tauranga manufacturing facility will now give Solomon Islands cocoa specific origin identity, something our cocoa has never enjoyed before".

"We are hopeful to move from being a producer of intermediate product to a producer of a 100% Solomon origin chocolate bars sometime during 2014. However, in the meantime it's very much a step by step process".

By fourth quarter of 2013 C-Corp NZ hopes to be producing approximately 10 tonnes of value added product per month requiring approximately 15 tonnes of dry cocoa beans. Apart from New Zealand, C-Corp has also received requests for commercial samples from chocolate manufacturers in Australia, Japan and Switzerland.

From a longer term perspective, Carroll believes that with



C-Corp's Managing Director Clive Carroll and New Zealand High Commissioner Mark Ramsden with Solomon Islands cocoa bound for NZ. Picture courtesy of Solomon Star.

appropriate marketing support, up to 2,000 tonnes per annum of quality Solomon Islands dry cocoa beans can find their way into high quality, Solomon Islands Single Original chocolate bars.

C-Corp NZ also plans to act as fulfilment centre for other Pacific Islands agricultural product producers and distribute these products into NZ, Australia and the US. Already, Heads of Agreement have been reached with Vanuatu coffee producer, Tanna Coffee in Port Vila and discussions are underway with others.

Numerous NZ government agencies have been assisting C-Corp NZ to reach the strict international food grade standards necessary to fulfil C-Corp NZs ultimate vision to manufacture and export internationally a range of quality added cocoa products sourced from Solomon Islands and Vanuatu.

The NZ High Commissioner, Mark Ramsden said "it was great to see another Solomon Islands firm step up exports to New Zealand, deepening the economic partnership between the two countries. Increasing two-way trade between Pacific countries and New Zealand is a firm objective of the New Zealand Government, and this is another step towards that". ●



Did you know?

The cocoa drink published in the last issue of Agrikalsa Nius may have health benefits.

A US study suggests that adding cocoa powder to your diet could reduce inflammation, which is a known risk factor for diabetes.

Researchers from Pennsylvania State University fed mice a high fat diet that could lead to type two diabetes and found the mice had less inflammation when cocoa powder was added to their diet.

They believe the same may be true for humans.

Cocoa is rich in flavanols, which are chemicals that widen blood vessels to boost blood flow.

Cocoa was used medicinally by the Mayan and Aztec ancient civilisations to help fever, heart pain and bowel problems.

In recent years scientists have started recognising its benefits.

The tribal coffee choice

For the 30 families of the Urutani tribe of West Are'are coffee farming was the obvious livelihood choice for their families and their future generation.

The tribe made up of more than 280 people formed the Urutani Coffee Growers Association and began planting coffee in 2012.

Association member, Joseph Torekeni says coffee was their choice of cash crop because it was seen as a more sustainable commodity that could provide lasting benefits to future generations.

"We believe things like marketing of betel nut, which our people in Are'are are well known for, is only short term. With coffee once we start harvesting and sell our beans for processing it will take us into the future where our children will also benefit."

To date it has planted over three hectares of coffee consisting of 15,000 trees.

One of the social benefits of coffee farming says Torekeni is that it has helped to keep the young members of the tribe busy and occupied.

"As well as helping to improve our livelihood we wanted an activity that would make use of our young people and stop them from drifting into urban centres.

"We believe that farming will keep our young people working at home by developing their land."

Torekeni says one of the major challenges that the tribe is facing is the lack of proper roads from their village near the coast to the coffee farms in the highland.

"Right now we only spend three hours of the day actually farming, the rest of the time is spent travelling to and from the farm."

One option is to build houses closer to the farm to enable people to work throughout longer, but Torekeni says this would only be a short term solution.



Association members at work on the coffee nursery.

"We still need government to develop proper roads as we will need to transport the coffee once we start harvesting." The other challenge that the association is seeking support for, from the Ministry of Agriculture and Livestock, is to up skill its workers.

"We want training about the rest of the coffee farming process – right now we have planted but we need to be trained on what to do during harvesting, processing and marketing."

The association received support from MAL to start coffee planting in 2012, this was further supplemented by funding from the European Union.

Funding from the EU will end next year ahead of harvesting, so Torekeni and the association members are looking to source further funds.

"All we are looking for is support to take us beyond the harvesting period. We are new to this but we are confident that after the first harvest we will be able to stand on our own feet." ●

September harvest for rice schools

Rice farmer field schools at St Joseph's Tenaru and St Martin's Rural Training Centre on Guadalcanal are on course for a September harvest.

The two schools were set up in early February to teach students how to cultivate rice by trainers who took part in last year's Training of Trainers programme organised by the Ministry of Agriculture and Livestock and funded by the Food and Agriculture Organization of the United Nations (FAO).

The trainers utilised the Solomons wet season, which was unusually heavy, around February and April, to set up rice paddies and begin transplanting.



MAL officials make a site visit to one of the farmer field schools.

FAO National Consultant, Victor Kaihou said the two farmer field schools have provided a great opportunity for students and community members to get practical experience in rice cultivation.

“These field schools have set the example on the FAO training as how rice farming can be replicated in other parts of the country.”

“The rice crops look really good at this stage, their colour is very healthy and they haven’t even used insecticide.”

Last year, 19 agriculture officers and agriculture teachers from the nine provinces of Solomon Islands took part in the first ever, training of trainers on rice cultivation, held over four months at the Don Bosco Rural Training Centre.

Finding food solutions in traditional knowledge and new technology

By Acting Chief Field Officer Choiseul, Andrew Melanolu

The Agriculture Division in Choiseul Province is turning to traditional knowledge combined with new technology as a means of finding solutions to food security issues in the province.

Choiseul’s Acting Chief Field Officer, Andrew Melanolu, says the use of traditional subsistence mixed cropping will be a key part in addressing food security for the community.

“While traditional systems have their strengths, they also have their weaknesses, such as the assumption that shifting cultivation with bush fallow will naturally replenish fertility of over gardened areas.

“Intensive land use exacerbated by increasing population pressure on limited arable land for household food production has accelerated rate of soil fertility degradation in Choiseul like most rural communities in our country.

“Thus in most cases gardening activities are encroaching into less productive land such as sloping land areas, and this in turn is affecting local natural ecological systems and reducing environmental quality.”

Melanolu says the Agriculture Division in Choiseul is working with the Secretariat of the Pacific Community (SPC) and stakeholders under a component of the Choiseul Integrated Climate Change Adaptation Programme (CHICCAP) to test and promote technological intervention in pilot sites hosted by rural communities around the province.

A CHICCAP team, comprising personnel from the Ministry

The training covered the rice cycle from seed to harvesting. Other trainers who took part in the programme included MAL’s provincial officers who are waiting for funding support before they can set up their farmer field schools.

Rice is main subsistence food in Solomon Islands but nearly all rice is imported from Asia. One of the Government’s main priorities is to develop a local rice industry.

Kaihou says the Government will need to provide support if it wants to expand rice farming into the provinces.

“These officers who have received training are our most experienced people when it comes to rice. They are experts. We now must utilise their skills for the benefit of Solomon Islands.” ●



Agriculture community demonstration in Choiseul. Picture courtesy of the Choiseul Integrated Climate Change Programme.

of Agriculture and Livestock, SPC, GIZ and UNDP, recently visited five communities in Sepa, Loimuni, Loloko, Sasamunga and Vouza in Choiseul Province to establish food security priorities, after carrying out vulnerability and adaptation assessments.

In consultation with the communities, the team identified adaptation strategies to address land-based food security issues. Over the next few months, CHICCAP will deliver materials to establish community nurseries; develop agroforestry and small livestock demonstration farms and introduce climate-ready crops, which are more tolerant to drought, waterlogging and salinity. Community members will receive training in plant propagation techniques, nursery management and farming practices. Water catchment, land use and forestry management plans will also be developed.

Melanolu says the success of the intervention will depend largely on improving local knowledge and understanding about the interventions that work best.

“At the same time we need to consider rural communities’ affordability in the long run of any technological interventions that works best in addressing food security in spite of the impacts of climate change on existing food crop production systems they have.” ●

Boosting agriculture development through research

Farmers and agriculture stakeholders will benefit from better agriculture research work, thanks to a programme to develop the capacity of agriculture researchers in Solomon Islands, Papua New Guinea and Vanuatu.

Papua New Guinea's National Agriculture Research Institute (NARI) scientist Dr Keshav Kshirsagar says a three-year programme funded by European Union through the ACP is coming to an end with clear indications by national agriculture bodies of gains through improvement in research capacity.

Dr Kshirsagar who visited Honiara in May to get feedback from institutions that took part in the programme says countries have been satisfied with the outcome of the programme.

Four hundred and ninety researchers took part in the training organised by NARI that targeted project cycle management, biometrics, technical report writing, scientific reporting and GIS.

Dr Kshirsagar says the programme underlines the importance of agriculture to national development for Pacific countries like Solomon Islands, Vanuatu and Papua New Guinea where the majority of population live in rural areas and are reliant on subsistent agriculture

But Dr Kshirsagar says looking at the agriculture sector is clear that there is not an enhanced growth rate in agriculture productivity.

"Research therefore is vital to ensure that we can develop



Agriculture staff during a recent research workshop.

technologies that are useful to our farmers and that our productivity in agriculture is improved."

"Agriculture is facing a lot of challenges in food security, nutrition and the impacts of climate change. We can't overcome these challenges without research.

"For conducting effective research we need trained staff and skilled staff. Research is necessary for agricultural development."

Apart from enhancing the capacity of individual researchers Dr Kshirsagar says the programme also enabled participants to take their newly acquired skills and knowledge back to their country and pass it on to their colleagues.

Dr Kshirsagar says he's been pleased with the feedback with most participants saying they were now more confident in their work and skills thanks to the training they have received.

"From the feedback I've seen I would say the programme has been successful." ●

Trainers develop rice growing curriculum

Work on developing a rice growing curriculum, syllabus and a training manual for Solomon Islands took place in mid May.

Agriculture officers and agriculture teachers who were part of the Training of Trainers on Integrated Rice Crop Management under National Rural Rice Development Programme met in Honiara to look at a draft national curriculum, syllabus and training manual for rice cultivation. National FAO consultant Victor Kaihou says once finalized the documents will be given to schools, rural training centres and the Solomon Islands National University for use in their training.

"These materials will be the first locally produced material on how to cultivate rice in the Solomon Islands. Even after all these years there is still no local guide on rice growing."

Kaihou says the curriculum and syllabus is based on the training the Training of Trainers Programme, that 19



Rice trainers work on the new rice growing curriculum.

participants took part in last year.

“We have brought back participants from the training to look at the draft text and whether they agree with it or not.”

The curriculum contains the topics of the training which are expanded within the syllabus. Kaihou says the training manual provides a resource book for teachers and instructors.

Senior Research Officer, Malaita, Rex Filia said the syllabus covers everything in rice growing from seed to harvesting.

“This includes seed selection, incubation, rice management of nursery, transplanting and a host of other activities that take place during rice cultivation.”

Filia credits the experience gained from last year’s training of trainers course as vital to helping develop content for the curriculum.

“Rice is a relatively new crop so that experience gave us the confidence to put what we have learnt on paper for others to learn from.”

Once the text is finalised the material will be laid out and printed before it is distributed.

Kaihou says the curriculum and materials developed will have a long term benefit in boosting rice production in the Solomon Islands.

The programme is funded by Food and Agriculture Organization of the United Nations. ●

Process of Organisational Development for MAL

Processes for consultation by RDP in support of the organisational development for MAL have largely been completed for HQ, however interested officers who have not yet been involved are still able to give their thoughts. The consultation team will also soon commence visits to provinces for further and more focussed consultations regarding structural options and required systems, responsibilities and competencies.

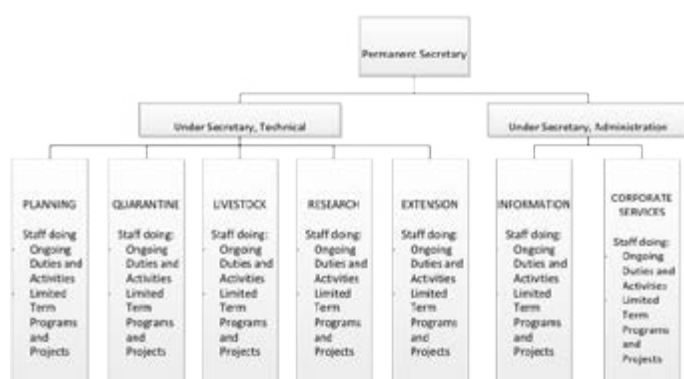
The recent management workshops resulted in a lot of quantitative information being collected as well as triggering a variety of discussions on structural and related issues. Where possible, a consensus was reached, but individuals were also given full opportunity to express and sustain their own opinions. Amongst the issues discussed and evidenced in the data collected have been a number of worthy ideas and majority opinions emerging of:

- There is acceptance of the need for structural change in MAL in order to better fulfil the mandate and for MAL staff to work better together and externally
- There have been a number of areas of strengthened performance of MAL over recent years and RDP has strongly contributed to these in a number of ways
- Some areas are performing better than others
- Improvements have been achieved in facilities, equipment, staff coordination, work planning, participatory processes for smallholders, services to farmers, and staff competencies
- There is a continuing need for resolution of many problems, some of which are caused by lack of resources, poor systems, need for competency development, and weak staff supervision
- Managers in MAL are generally better regarded if they are innovative, confident, mentoring, consultative and open
- Managers should deal with problems more quickly to give more time for being proactive
- There is more work to be done to improve MAL’s departments, units and sections, and managers have expressed thoughts for change including reconfiguring

some functions or parts of functions

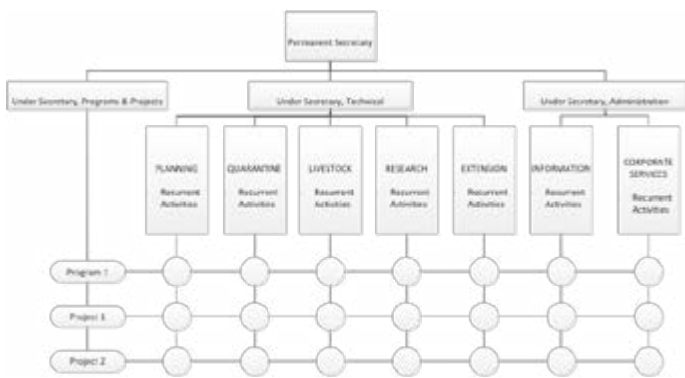
- Merging parts of Livestock Production and Veterinary Services and the Agriculture Information Unit with Research and Development is seen as having benefit
- Moving some sub-functions to Corporate Services is seen as having benefit
- There has been a progressive shift from an hierarchical organisational culture in MAL in recent years, and there is a general preference that this should continue
- Better management of programmes and projects is seen as essential, with one structural solution being to separate them from specific departments, and to place them under the responsibility of a new Under-Secretary (Programmes & Projects) position

The MAL structure in its simplest form currently looks like this:



As mentioned above, programmes and projects could be separated from individual departments and placed under the authority of a new Under-Secretary position. If this were to gain approval, the structure (so called a ‘matrix structure’) could look like this:

In a structure like this, staff in any department may be allocated to a particular programme or project as required, and when the project or project or their role in it is finished, they simply return to their department for allocation of work. It may also allow for external persons of high calibre



to be appointed to a relevant programme or project on a short term basis.

No decisions have been made regarding this and other structural changes being considered. Your thoughts are still welcomed. You can discuss your ideas on structure with or send an email to the RDP Advisor, (mal.bell@bigpond.net.au) or the Under-Secretary, Administration (d_patternot@yahoo.com.au). Decisions will only be made after approval by the Minister, and by the Permanent Secretary after discussions within the Advisory Committee, and will then be subject to budgetary submission and discussion with the Ministry of Public Service and the Ministry of Finance and Treasury. ●

Baked fish in coconut cream

- 1 medium whole fish
- 1 lemon
- ½ cup pure coconut cream
- 1 dessertspoon grated ginger
- Salt to taste

Method:

- Wash and clean the fish and place on soft banana leaf.
- Thinly slice the lemon and arrange on the fish from head to tail.
- After, sprinkle with salt and grated ginger and pour the coconut cream around the fish
- Wrap the fish well with the banana leaf, making sure to use three to four leaves and bake in oven for 40 minutes, or in a stone oven for about one hour

DIY newspaper poly bag

One cheap and useful way of recycling old newspapers is to use them as a substitute for poly bags. The homemade, handmade newspaper poly bag is an ideal way of using up those old newspapers. Newsprint is ideal as it is biodegradable and can be easily shaped and sized according to the size it is needed. To make a newspaper poly bag in four easy steps all you need is nylon string or any other form of string.



Step 1
Fold a newspaper in half. Bend it into a cylinder shape.



Step 3
Fill it with small stones to keep it stable. Add soil, compost.



Step 2
Tie it up with the nylon string, sealing bottom end.



Step 4
Put in your plant and like magic you have your own newspaper poly bag with plant.



*Thomas Kaonifera, 1984.
Agriculture Teacher at Tenaru School)*



*Jacob Pitu, 1984
Field Officer, Isabel*

Flashback

Back in this issue due to popular demand, *Agrikalsa Nius* takes a stroll down memory lane with these picture contributions from MAL staff. ●

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

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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.