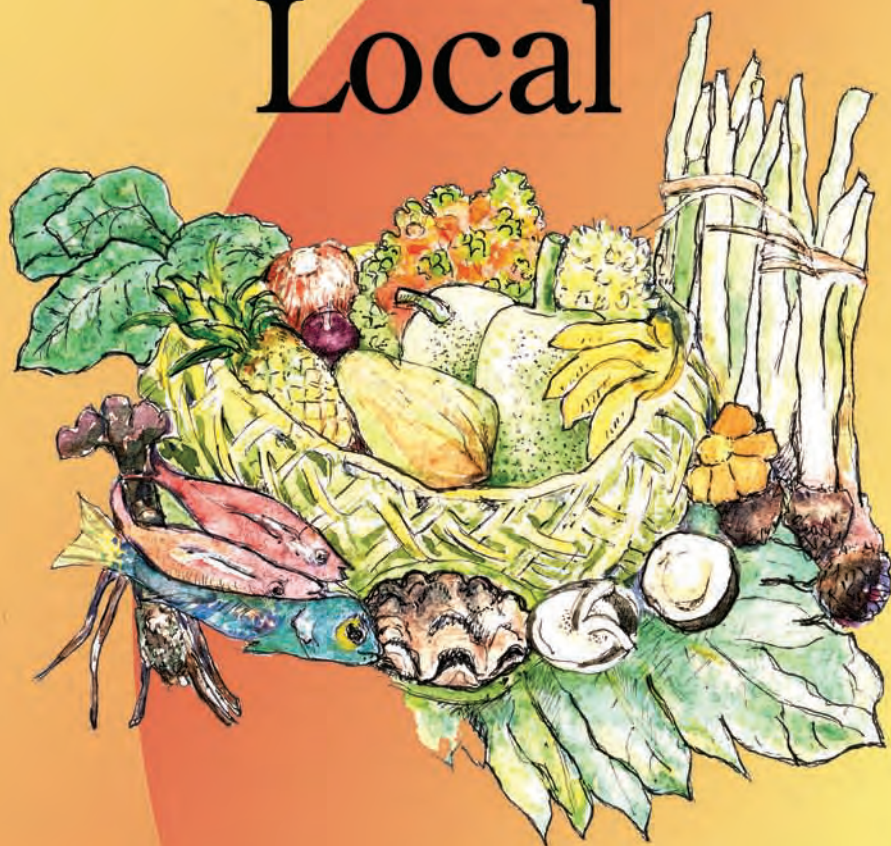


# Let's Go Local



*Guidelines promoting  
Pacific Island Foods*



Lois Englberger

## “Let’s Go Local” Guidelines for Promoting Pacific Island Food

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FAO Consultant, 2011

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FAO SUB-REGIONAL OFFICE  
FOR THE PACIFIC ISLANDS

**“LET’S GO LOCAL”**  
*Guidelines Promoting Pacific Island Foods*

Prepared by Dr. Lois Englberger  
FAO Consultant  
Pohnpei, Federated States of Micronesia

2011

**LET'S GO LOCAL**

**FOOD SECURITY**

**CULTURE**

**LOCAL FOODS**

**ECONOMIC**

**HEALTH**



**have many benefits**

**ENVIRONMENT**

"Let's Go Local" advocates for the growing and eating of nutritious local foods. Among the many benefits of going local are those relating to Culture, Health, Economic issues, the Environment and Food Security, also known as the CHEEF benefits of local foods.

For more information on "Let's Go Local" or for a copy of the "Let's Go Local Guidelines", please contact:  
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## Foreword

Over the past decades, food and dietary patterns in Pacific Island Countries have undergone significant changes. Traditional diets consisting of fresh fish, root crops, breadfruit and local fruits and vegetables have been increasingly replaced by imported, often highly processed foods such as white rice, flour, instant noodles, canned foods, fatty low grade meats and soft drinks with a high sugar content. At the same time, a more sedentary lifestyle is becoming common among many Pacific Islanders

As a result, Pacific Island Countries now face a wave of dietary and lifestyle-related health problems. Chronic non-communicable diseases including diabetes, heart disease and cancer are now the main causes of death, illness and disability among adults in the Pacific Island Countries. Furthermore, countries are burdened by micro-nutrient deficiencies related to a lack of essential vitamins and minerals in the diet, such as vitamin A deficiency and anaemia.

There is evidence that the traditional diet, lifestyles and food systems of the Pacific protected people in the past against these health problems. Food composition data provides scientific evidence of the rich nutrient content and health benefits of the traditional foods, including breadfruit, banana, taro, yam, cassava and sweet potato, as well as coconut, fish and seafood, and various fruits and vegetables.

In addition to these health and nutrition issues, the role of local food has taken on additional dimension in view of the recent global food price crisis. Research shows that high international food prices have serious consequences for developing countries, especially those that are dependent on food imports, which includes the majority of Pacific Island Nations.

The author of these guidelines, Dr Lois Englberger, was a pioneer and highly motivated researcher and proponent of the benefits of local foods, having lived and worked in many Pacific Island Countries since the early 1980s.

It was as part of this work that she and wider groups of colleagues did research on the emerging problem of vitamin A deficiency among Micronesian populations. However, since vitamin A deficiency had only started to become a problem fairly recently, it was suggested that something in the traditional diet must have helped the local population avoid this type of malnutrition. As the search for possible answers focused on the traditional diet, it was discovered that certain banana cultivars were exceptionally rich in carotenoids, which are converted into vitamin A by the body. Continuing the research with the aid of modern food analytical methods, a range of other local foods rich in carotenoids and other vitamins were identified, including different types of banana, giant swamp taro, pandanus, and breadfruit.

After having moved to the Federated States of Micronesia (FSM) in the late 1990s, Lois and a group of interested Pohnpei colleagues eventually formed the Island Food Community of Pohnpei (IFCP) in 2004. Their vision was “to live on a productive, environmentally sound island where a diversity of locally grown Island Food is produced and consumed, providing food security, sustainable development, economic benefits, self-reliance, improved health, cultural preservation, and human dignity, and at the same time protecting natural resources”.

A major immediate challenge was to change the existing mind-set regarding the consumption of local foods, which was seen as a sign of poverty, and people eating them only did so because they had no money to buy rice or other processed imported foods.

Hence the concept of “go local” was borne. “Go local” refers to growing and consuming more local foods and preserving the culture related to traditional food systems. The concept highlights the most important values of local food under the acronym “CHEEF”, because the benefits of local food relate to Culture, Health, Environment, Economic issues, and Food Security.

With the help of FAO and others, the Island Food Community of Pohnpei has been reinvigorating interest and knowledge about traditional local food crops through a participatory approach involving communities. Initially focused on the main island of Pohnpei, the outreach activities have spread to the other states of FSM, Kosrae, Chuuk and Yap.

However, FSM is not the only Pacific Island experiencing changes in diet, lifestyle and traditional food systems and there appears to be great potential in applying the “go local” approach in other countries that are facing similar food and health challenges. To help share the knowledge gained in FSM with other countries and communities, Dirk Schulz, FAO Food and Nutrition Officer, and Lois decided to document the experiences and develop a step-by-step guide of how to carry out a “Let’s go local” campaign. This booklet was written to provide a simple summary of the IFCP “go local” concept and to suggest how people and groups in other countries or regions can adapt this approach to suit their situations.

While initial work on this manual was ongoing, the need for such an approach to promote local food was further validated by the Pacific Food Summit, held from 21 to 23 April 2010 in Port Vila, Vanuatu. Attended by senior delegates from more than 20 Pacific Islands Countries and territories, the summit endorsed “enhanced and sustainable production, processing, marketing, trading and use of safe and nutritious local food” as key theme for a food secure Pacific.

Encouraged by this, Lois continued in her passion to inspire the people of the Pacific to return to cultivating, preparing, and consuming local food.

Tragically, her noble quest came to an abrupt end when she passed away on September 29th, 2011, bringing great sadness and despair to the people who knew Lois and her work.

This guideline is a tribute to Lois and the passionate and informed way in which she promoted the value of healthy local foods for people’s cultures, health, environments, economies and food security. It is hoped that this guideline will be of interest to those wishing to promote local foods and thus carry on the legacy of Lois’s work.

Rest in peace – you will always be remembered as a true CHEEF!

Vili A Fuavao

FAO Representative for the Federated States of Micronesia

FAO Subregional Representative for the Pacific Islands

## Glossary

Anemia	Locally known as “weak blood”; it is most commonly due to lack of iron in the diet, blood loss, or red blood cell destruction as in malaria.
Beta-carotene	The most important provitamin A carotenoid, which is converted to vitamin A in the body.
Beta-carotene equivalents	Unit equal to the content of beta-carotene and half the content of other provitamin A carotenoids, having less provitamin A activity.
Calcium	Essential mineral, especially important for bones and teeth.
Cardiovascular disease	Diseases that involve the heart or blood vessels, including heart disease, heart attacks, stroke, circulatory problems.
Carotenoid	Yellow, orange or red pigments occurring in nature; about 600 have been identified; less than 10 have provitamin A activity; recent research shows that foods rich in carotenoids help protect against certain cancers, diabetes, and heart disease.
Cultivar	A cultivated variety; some are particularly nutrient-rich with important health benefits, e. g. yellow-fleshed banana varieties.
Diabetes, type 2	A condition where the body can no longer control the level of sugar or glucose in the blood often related to being overweight, diet and lack of physical activity.
Ethnography	A systematic approach including interviews and discussions to document human behavior, useful to help develop behavior change programs relating to practices and beliefs, e.g. dietary change.
Fe'i banana	Type of banana with upright bunches, such as Karat.
Fiber	Substance in food that is not digested but is excreted. Fibre makes the faeces soft and bulky and absorbs harmful chemical, and so helps to keep the gut healthy. Taro and breadfruit are examples of foods rich in fiber.
Food composition	The nutrients and substances of which a food is composed.
Food security	Exists when all people, at all times, have physical, social and economic access to sufficient, safe, nutritious food to meet their dietary needs and food preferences for an active and healthy life.
Grams (g)	Metric unit measure for weight; 30 gram = 1 ounce (oz)

Iron	Essential mineral, a part of the red blood cell pigment hemoglobin in our blood, which carries oxygen throughout our body.
Microgram (µg)	Metric Unit measure for weight; a millionth of a gram; used to express beta-carotene and other micronutrients content.
Micronutrients	The life-sustaining nutrients of vitamins and essential minerals needed in very small amounts.
Milligram (mg)	Metric Unit measure for weight; a thousandth of a gram; used to express vitamin and mineral content.
Mineral, essential <sup>1</sup>	A substance originally from the soil but essential in our daily diet. Iron, calcium, and zinc are those that are often deficient in our diet.
Non-communicable diseases	Diabetes, heart disease, stroke and cancer, which are not infectious but due to lifestyle, genetics, or the environment; also called lifestyle diseases.
Overweight/obesity	Excess body weight; contributes to non-communicable diseases including diabetes, cancer, heart disease and other health problems.
Participatory	A program approach which involves the program organizers and participants and recipients working together to plan program activities.
Processed food	Food changed by preparation and packaging before sale.
Provitamin A	Carotenoids (e.g. beta- and alpha-carotene, beta-cryptoxanthin) capable of being converted to vitamin A in the body.
Vitamin	A substance essential to health and wellbeing that cannot be synthesized in sufficient quantities by our bodies, and must be obtained from the food in our diet.
Vitamin A deficiency	A lack of vitamin A weakens the immune system, often causing people (especially children) to become ill. Severe deficiency causes night blindness and other serious vision problems.
Zinc	Essential mineral, important for fighting infection.

<sup>1</sup> Vitamins and minerals are micronutrients needed in very small amounts in the body. For simplicity, only the main functions for some vitamins and minerals are listed. However, it should be known that each vitamin and mineral may have many functions.



## Abbreviations and Acronyms

ACIAR	Australian Centre for International Agricultural Research
BCC	Behavior Change Communication
CHEEF	Cultural, Health, Environmental, Economic, and Food Security benefits of local foods
CDC	Center for Disease Control and Prevention
CINE	Centre of Indigenous Peoples' Nutrition and Environment
COM-FSM	College of Micronesia-Federated States of Micronesia
COM-FSM CES	COM-FSM Cooperative Extension Services
CSP	Conservation Society of Pohnpei
FAO	Food and Agriculture Organization of the United Nations
FSM	Federated States of Micronesia
IEC	Information, Education and Communication
IFCP	Island Food Community of Pohnpei
NCD	Non-communicable disease
NGO	Non-governmental organization
PIHOA	Pacific Islands Health Officers Association
SPC	Secretariat of the Pacific Community
UNICEF	United Nations Children's Fund
USAPI	United States Affiliated Pacific Islands
USDA	United States Department of Agriculture
USP	University of the South Pacific
WHO	World Health Organization



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## 1 Background to FSM “Let’s Go Local”

In recent years, throughout the Pacific Islands, there have been great lifestyle and dietary changes (Parkinson 1982, Coyne 2000, Englberger et al. 2003b, Hughes and Marks 2009). In general, people now eat more processed, refined foods and less local foods, and have less physical activity.

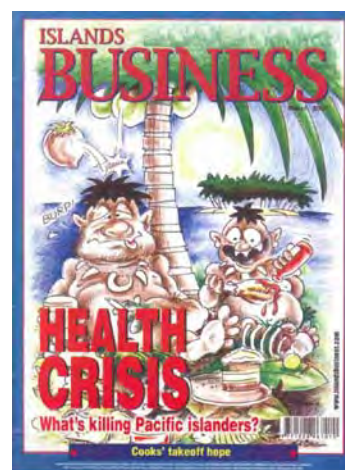
In the Federated States of Micronesia (FSM) the dietary shift has been most marked since the 1970s (Englberger et al. 2003b). For many people, imported processed foods, in particular refined rice, flour products, sugar, fatty meats, vegetable oils, and other processed foods low in nutrients and fiber and high in fat, salt and sugar, have become the main part of their diet. Healthy locally grown traditional foods, such as taro, breadfruit, banana and other starchy staples, coconut, fish and seafood, are still consumed, but much less so compared to previously.

These dietary and lifestyle changes, including decreased physical activity, have led to an epidemic of health problems. These include overweight/obesity, diabetes, heart disease, cancer and other non-communicable diseases (NCDs), and micronutrient deficiencies, such as vitamin A deficiency and anemia (Coyne 2000, Englberger et al. 2003b, Hughes and Marks 2009, PIHOA 2010).

Many people in FSM have started to think that diabetes is only genetic and that they will get the disease as their parents have had it. However, this is not quite correct. There is data to show that the reason for the increase in NCDs is due to change in diet and lifestyles, including decreased physical activity.

Between 1948 and 1951, a large study was carried out by the US Navy to assess the health problems in Pohnpei and other islands that are now part of FSM (Richard, 1957). Diabetes was not documented at all. However, one in three Pohnpei adults now has diabetes, as shown by the Pohnpei STEPS<sup>2</sup> survey (WHO 2008). Over half of Pohnpei’s under-five year old children are vitamin A deficient, which leads to increased vulnerability to infection and other health problems (CDC 2001, Yamamura et al. 2004). This represents a health crisis, as was highlighted on the cover page of the Island Business magazine (March 2007).

On May 25, 2010, the Pacific Island Health Officers Association (PIHOA) proclaimed a state of health emergency due to the epidemic of non-communicable diseases (NCDs) in the United States Affiliated Pacific Islands (USAPI). This includes the Federated States of Micronesia and also American Samoa, Guam, the Republic of the Marshall Islands, the Republic of Palau, and the Commonwealth of Northern Mariana Islands (PIHOA, 2010).



<sup>2</sup> The STEPS is a World Health Organization research process tool for non-communicable disease risk factor surveillance.

Moreover, there is an increasing concern about loss of traditional knowledge, biodiversity and food security (Englberger 2003, Raynor 1991, Guarino et al. 2005).

Fortunately, there is an effective way to change lifestyles with the goal to alleviate the present health problems<sup>3</sup>. It is to “go local”, to work more on the land, to plant, harvest and prepare more local foods. These activities provide the physical activity required to stay healthy and allow us to produce and consume more valuable local foods.

## 2 Our “Let’s Go Local” Project in the Federated States of Micronesia

We started this project when we realized that not enough was known about Micronesian local foods and varieties. In 1997, there was great concern about the newly emerging problem of vitamin A deficiency among young children in FSM (Lloyd-Puryear et al. 1991).

The FSM Department of Health and Social Affairs supported by the United Nations Children’s Fund (UNICEF) initiated a high dose vitamin A supplementation program and an awareness campaign on eating local foods rich in provitamin A carotenoids, following similar advice in other tropical areas with similar foods (McLaren and Frigg 2001). The promotion of green leafy vegetables was a big part of the project.

However, by talking to key informants and groups and considering their responses<sup>4</sup>, we realized that green leafy vegetables were not usually consumed in the past. Many people considered them as “pig food”! Yet, vitamin A deficiency was previously not a problem when vegetables were not consumed. The people must have been acquiring vitamin A from other local foods.

Local health officers began discussing Karat, a banana with yellow-orange flesh, and other “yellow-fleshed bananas.” Possibly these ripe bananas might contribute to the vitamin A status, similar to ripe papaya and mango, which are known as good sources of provitamin A carotenoids. A characteristic of carotenoids is the yellow and orange coloration.

Karat and other yellow-fleshed bananas were grown commonly in the past but had become rare due to neglect. Karat was still, however, considered as an important infant food. Unfortunately, there was no information on Karat’s nutritional composition, in particular its content of beta-carotene and the other provitamin A carotenoids that are converted to vitamin A in the body.



*A yolk colour fan helps classify beta-carotene rich foods.*

<sup>3</sup> For an in-depth review of our approach to alleviate micronutrient deficiency using a food-based approach, see Englberger et al. 2010b.

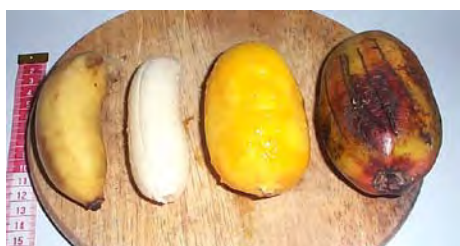
<sup>4</sup> This is called ethnography, a methodology commonly used by anthropologists (Fitzgerald 1997). In this case, a systematic anthropological approach to understanding traditional food practices and beliefs was used.

Research on the nutrient content of Karat was initiated, which then led to a PhD research project to identify natural food sources of vitamin A in FSM, and practices and beliefs relevant to improving vitamin A status. This project provided a foundation on which the Island Food Community of Pohnpei could build the present “go local” project.

This also demonstrates that research, including research by university graduate students, can result in practical benefits to the community.

## 2.1 Local varieties are found to be nutrient-rich

An analysis in early 1998 showed that Karat was very rich in beta-carotene and other carotenoids (Annex 1). This was followed by a systematic study of other local foods and dietary practices and beliefs (Englberger 2003).



Left photo: Karat fruit (right unpeeled and 2nd from right peeled) compared to white-fleshed banana variety (left unpeeled, and 2nd from left peeled). Right photo: A whole bunch of Karat. Carotenoids are characterized by a yellow, orange and red flesh color. Thus, a simple field method to identify foods and varieties rich in provitamin A carotenoids is to look for a yellow or orange flesh color. For example, ripe Karat banana, pandanus, papaya, mango, and pumpkin can be assumed to be carotenoid-rich foods due to their color. However, data was not available on Karat and other Pohnpei and FSM banana or pandanus varieties and it was agreed that we should initiate analyses on these and other traditional foods of Pohnpei, which were consumed in large quantities in the past.

Ripe papaya, mango and pumpkin are generally known for their rich carotenoid content. Since data on these foods were available and as they are introduced crops, and not eaten in large quantities in the past, we decided to analyze banana and pandanus varieties, as well as giant swamp taro and breadfruit after informants explained that these crops had some yellow-fleshed varieties/species.

Many yellow- and orange-fleshed varieties of banana, giant swamp taro, pandanus and other foods were analyzed and found rich in provitamin A carotenoids, vitamins and minerals (Englberger et al. 2003a, c, 2006, 2008, and 2009).

One tasty banana variety locally known as Daiwang, was not valued and was considered by people recently as the “banana that we feed to the pigs”. Once analyzed, it was also found to be carotenoid-rich and we started a

*Ripe papaya, mango and pumpkin are generally known for their rich carotenoid content.*

campaign to promote it along with the other yellow-fleshed varieties for their health benefits. This became known as the “Yellow Varieties Message”.

Karat was also analyzed for riboflavin (vitamin B2) and found to be rich in this essential vitamin important for iron utilization and nervous system function, and therefore, important for building healthy blood cells and healthy bodies<sup>5</sup>. Riboflavin contributes to the coloration of the yellow flesh. It also causes the urine to turn yellow after consuming the banana, which is a harmless effect and simply reflects the body’s excretion of excess riboflavin.

Based on the nutritional analysis of these banana varieties, we were able to scientifically explain what causes the urine to turn dark yellow. Using scientific findings helps to convince people that these are foods that contribute to good health.

#### Key lessons learned:

- ✓ Find out about traditional foods and diets from elders;
- ✓ Use scientific data (e.g. food analysis, food composition tables) to show the value of local foods.

## 2.2 Establishment of our NGO

Our organization was formed on World Food Day, October 16, 2003. A small group interested in the cultivation and use of local foods met to establish the Island Food Community of Pohnpei (IFCP) as a non-governmental organization (NGO). Adelino Lorens was instrumental in forming IFCP and became IFCP chairman of the board. He has held this position up to the time of writing these guidelines. As the Pohnpei Chief of Agriculture of the Office of Economic Affairs, he was a government leader, and also, he was a deacon in his church and held a high title among the traditional leaders in his community.

In early 2004, the IFCP was chartered with our primary goal to promote local food for its many benefits. The vision is to promote the production and consumption of local island foods to improve self-reliance, food security, health, cultural preservation, and human dignity.



At that time we also developed our logo, in collaboration with Wehns Billen, who drew it as based on a previous photo taken for promoting Pohnpei island food. The

<sup>5</sup> Vitamins and minerals are micronutrients needed in very small amounts in the body. For simplicity, only the main functions for some vitamins and minerals are listed. However, it should be known that each vitamin and mineral may have many functions. See this website: <http://www.nutristrategy.com/nutritioninfo2.htm>



foods presented are the important staple foods: breadfruit, banana, giant swamp taro, coconut, fish, and pele leaf (as a symbol for vegetables), as placed on the traditional woven coconut plate.

#### Key lessons learned:

- ✓ Identify an appropriate leader who can be a champion for local foods;
- ✓ Create interest and ownership in community problems.

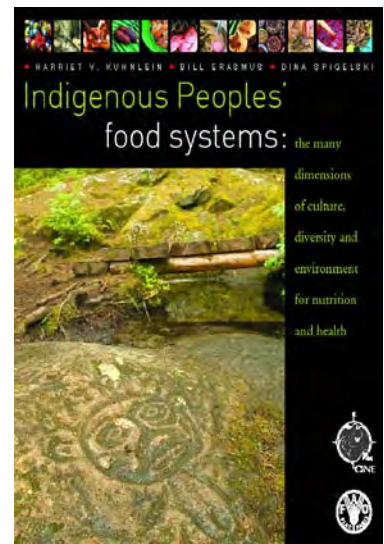
### 2.3 Involvement in academic projects and books

In 2005, IFCP was involved in a food systems for health global program led by Professor Harriet Kuhnlein and the Centre of Indigenous Peoples' Nutrition and Environment (CINE). The program aimed to assess traditional food systems and to implement a two-year intervention to promote local foods for improving health in 12 international areas.

This project in Pohnpei was focused in Mand Community, Pohnpei, FSM, a rural community of about 500 people (Englberger et al. 2009). An inter-agency approach was used, involving Pohnpei Agriculture of the Office of Economic Affairs, College of Micronesia-FSM Cooperative Extension Services, Pohnpei Department of Health, Pohnpei Department of Education, Pohnpei Department of Land and Natural Resources, Natural Resources Conservation Services, the Conservation Society of Pohnpei, and other groups. Some striking findings were made:

- In 2005, the dietary study in Mand Community showed a high intake of imported nutrient-poor food and serious health problems. At the end of the project in 2007, there was a significant increase in use of banana and giant swamp taro and increased dietary diversity in the household dietary study. There was an improved attitude in the community towards local foods.
- In 2005, community events served great amounts of imported processed foods, but by 2007 community events included more local food. People even reported that the local food dishes were often consumed before the imported foods.

The findings were presented in Chapter 6 in the CINE book co-published with the Food and Agriculture Organization (FAO) of the United Nations (Kuhnlein et al. 2009, Englberger et al. 2009).



Graduate students from Emory University, University of Arizona, McGill University, and Johns Hopkins University public health schools contributed to understanding problems and to creating promotional campaigns by carrying out collaborative research projects with IFCP. An undergraduate student from the University of Hawai'i also assisted IFCP. The students assisted in writing newspaper articles and editing IFCP's annual newsletters. In 2009, three overseas students working with IFCP, Kim Del Guercio, Alyssa Bittenbender and Kaleigh Emerson, developed an IFCP bag (refer Annex 2) as a gift. We then had these bags made locally as a promotional tool.

The IFCP was involved in the Pohnpei ethnobotany project led by Professor Michael Balick, New York Botanical Garden, and contributed two chapters (banana and taro) to a publication that resulted from that project. Professor Balick mentioned the "go local" work in his introductory chapter and included IFCP's photograph of the Utin Iap banana on the cover of the book.

We were happy to promote Pohnpei local foods in both beautiful books and to collaborate with such dedicated people.

**Key lessons learned:**

- ✓ Find out about the dietary changes in your community, area or country;
- ✓ Where possible try to get support from relevant agencies and academic institutions;
- ✓ Promote local foods as much as possible.



*A plate of local foods from the Kingdom of Tonga.*



*A plate of local foods from Vanuatu.*

## 2.4 The approach in the community

Major activities included community meetings where not only were the new findings shared about the local foods and their nutrient content and health information, but activities that the community wanted were jointly planned. These included cooking classes, container gardening, school activities, and a drama club. Youth activities are very important.

### Key lesson learned:

- ✓ Promote a participatory approach involving the community.

## 2.5 Our “Let’s go local” slogan

In the 1980s, Bermin Weilbacher started using the “go local” slogan as part of his work with the FSM National Government to encourage local foods and customs. In 2005, the IFCP decided to revive this slogan and received his approval.

Our community leader, Kiped Albert, suggested that we add the word “let’s” to this slogan to lend a group-type approach, i.e., “Let’s go local.” The slogan was a hit as it was easily understood and many people were familiar with it. We also have a “Let’s go local” song (Annex 2) composed by Gibson Santos, one of IFCP’s close partners through the USDA Natural Resources Conservation Services.

Songs are a good way to promote awareness, especially in cultures where singing is common practice.

### Key lessons learned:

- ✓ Use a catchy slogan appropriate to your situation;
- ✓ Develop a song to help pass on your slogan.

## 2.6 The “CHEEF” acronym and slogan

In 2007, we created an acronym- CHEEF- to explain the benefits of local food: Cultural, Health, Environmental, Economic, and Food security. We also have a song to present the “CHEEF” benefits (Annex 2). This was written in 2009 by McKean Allen Peter from our “Let’s Go Local High School Club”.



The idea is to help people consider the benefits that local food provides for the family, as well as the wider community, state and nation. The acronym can be used to guide discussions around these benefits of local food.

It is a particularly appropriate acronym for our community because Chiefs are traditionally important and influential members in the community.

**Key lessons learned:**

- ✓ Get people to think about and recognize the benefits of local food;
- ✓ Create simple key messages;
- ✓ Use terms and acronyms that are relevant to the community.

## 2.7 Our Pohnpei-wide local food promotion

Along with community work, we developed an array of communications and promotional materials<sup>6</sup> and activities. These had a state-wide and even nation-wide outreach and complemented the community activities. We tested the materials and messages to see which would have the best impact. Radio releases were prepared and broadcast numerous times. Newspaper articles focused on project activities like those in Mand. Photographs of persons participating in events were included and were popular. Recipes of local food dishes were collected and shared.

Visual items were particularly important. Our local food posters became a tool used for each presentation. They were practical in remote areas where electricity may not be available for showing power point presentations and films.

Still many areas in FSM do have electricity and relevant films were very important. These were shown on local television as well as during workshops or school visits.

We worked with other agencies on collaborative projects, such as IFCP's popular "Going Yellow" film, developed with Micronesian Seminar. This DVD was distributed widely, including local video shops where families rented it for a nominal fee (\$1).

It was produced in English to be useful in all FSM and we did a Pohnpei version (voices were recorded and the sound dubbed in). The film was available in the local libraries.

We call our set of materials "The 'Let's Go Local' Communications Toolkit". This kit includes many of the collaboratively developed products. See the following and Annex 2.

<sup>6</sup> Other terms for these are Information, Education and Communications (IEC) and Behavior Change Communication (BCC) materials.

## THE “LET’S GO LOCAL” COMMUNICATIONS TOOLKIT

### MASS MEDIA & PRINT

Local Food Posters

Pohnpei Bananas Booklet

### PROMOTIONAL HANDOUTS

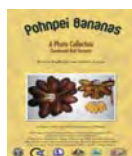
Let’s Go Local T-shirt

### AUDIO/VISUAL RESOURCES

“Going Yellow” DVD- IFCP

“Let’s Go Local” Conserve Plant Diversity & Health”

DVD- SPC



Carotenoid-rich Foods Chart; Newspaper Articles	“Grow-Eat Yellow Varieties” Yellow Pen	“Pohnpei & their Traditional Foods” DVD-CINE/KP /IFCP
Songs: “Let’s Go Local” and “The CHEEF Benefits””	“Let’s Go Local” Red Pen	“Pohnpei Breastfeeding” DVD - SPC
Recipes, Calendars IFCP Brochure, Newsletters	“Be Happy - Eat a Banana” Pencil	“The Double Burden of Malnutrition” DVD; Sight and Life
Recipes; Calendars; Carotenoid-Rich Foods Chart	“Karat” Sticker; “Breast is Best” sticker	“World Food Day” 2004 and other years- DVD
Radio/Email Releases	Charcoal Oven	Standard Talk Powerpoint Presentation
FSM Telephone Directory- Two page Insert on IFCP	Karat and other Postal Stamps	Powerpoint Presentations for International Conferences
FSM Karat Phone Card	Karat Necklace, IFCP Bag	Radio Panel Discussions
“Go Local” Billboard	Proclamation: Pohnpei State Banana FSM Food Security	Website: <a href="http://www.islandfood.org">www.islandfood.org</a>
Quizzes and Question Lists	Proclamation: FSM President mandates to use local food in government functions	Songs: “Let’s Go Local” and “The CHEEF Benefits”

### Key lessons learned:

- ✓ Develop a range of promotional and educational materials;
- ✓ Contact public, private and government organizations to help sponsor activities and materials;
- ✓ Pre-test communications tools;
- ✓ Depending on the context, use local language;
- ✓ Draw donor attention to help fund communication tools.



*Local foods from Niue.*

## 2.8 Island Food “Go Local” Network

The Island Food “Go Local” Email Network was initiated for sharing updates on local food, nutrition and health, and to share comments on these, serving as a forum. Participants were from other Pacific Island countries and beyond and also included participants from overseas academic institutions and donor agencies, increasing awareness and communication in many ways.

Over 700 participants are currently on this network, which is constantly growing in membership. Participants email their comments and contributions, making this a dynamic group with lively discussions.

The private sector is involved in the network, including individuals who have businesses and who actively participate in the email discussions<sup>7</sup>.

### Key lessons learned:

- ✓ Spread the news and network to get people to join the campaign;
- ✓ Consider meetings, email lists, newsletters, word of mouth, etc as appropriate;
- ✓ Get the private sector involved.

<sup>7</sup> The private sector has been involved in the “go local” campaign in other ways as well. We asked shops and businesses about displaying our posters at their shops and many agreed. Some shops also agreed to put one of our display boxes of materials in a prominent place on their shop counters.

## 2.9 The return to local foods

There is strong evidence that the “go local” campaign has been successful. In 1998, prior to the campaign, the Karat banana, which is the traditional infant food of Pohnpei, was neglected and not available in markets. After the campaign it appeared in markets, and sales are steadily increasing.

Many people started talking about local foods, nutrient content and the importance of these foods. Communities in Pohnpei responded to the simple message.

An exciting new approach was started in 2010 to initiate local food policies. Mand Community adopted a policy to ban soft drinks from all community events. This was followed by another group, the Pingelapese Peoples’ Organization, Inc., which banned soft drinks from their events.

Early 2010, the FSM Department of Health and Social Affairs initiated an innovative move, which was a ban on imported foods in their offices. Doughnuts or soft drinks were no longer allowed at the desks.

IFCP has a policy to serve only local foods at all functions: thus, no rice, imported chicken, soft drinks or pastries are allowed.

### Key lessons learned:

- ✓ Engage government departments and ministries, such as health, education and agriculture, to institute changes among civil servants;
- ✓ Adopt a multi-sectoral approach to involve as many sectors and agencies as possible;
- ✓ Talk to church and community leaders to promote going local at regular events;
- ✓ Create local food policies as a way to develop awareness and set the example.

## 2.10 World Food Day and support by the FSM President

An annual event is World Food Day, supported each year globally by FAO. The World Food Day is a good opportunity to promote local foods. The guest speaker for Pohnpei’s World Food Day 2009 event was FSM President Manny Mori. President Mori presented economic statistics on local versus imported foods as follows:

“Pohnpei, although blessed with fertile soil and an abundance of local farm produce, still imports \$17 million worth of food items each year- over 95% are processed foods.”

He supported the “go local” project and his closing words were: “Let’s go local!”

On June 7, 2010, FSM President Manny Mori assisted in another powerful way, by a Presidential Proclamation to encourage use of local foods at government-supported events (FSM 2010, MiCARE 2010, and see Annex 4). The proclamation presented the importance of food security and problems relating to the shift from the traditional diet to imported foods of less nutritional values and the detrimental effects on the health of the people. An excerpt is this:

“I proclaim that the National Government of the Federated States of Micronesia is committed to a policy that encourages enhanced local food production, consumption of local products and import substitution to the fullest extent possible... In all government events and festivities and official ceremonies, utilization of local food is encouraged... All the departments and agencies in the National Government are to give effect to this mandate... June 7, 2010”

The development of this proclamation involved many people and groups, including the FSM 2009 World Food Day Committee (where the idea was first put forth), the 2010 FSM Food Summit Task Force and the FSM Department of Resources and Development.

An article in the MiCARE Newsletter in 2010 pointed out that the Proclamation was issued in line with the Proclamation by the Pacific Island Health Officers Association (PIHOA) of the regional “state of health emergency due to the epidemic of non-communicable diseases in the Pacific Nations” (MiCARE 2010, PIHOA 2010).

Thousands of dollars are spent each year during government-supported workshops and other functions. A great impact is made if primarily local foods are served at such functions. This can have both health and economic implications. The proclamation can be used as a tool for advocating for the use of local food at government functions.



*A display of local foods at World Food Day, Palau.*



### Key lessons learned:

- ✓ Use annual events to promote local foods, such as the World Food Day or other events, such as the International Year of Biodiversity;
- ✓ Seek the support of national leaders;
- ✓ Work in line with regional proclamations, such as that from PIHOA 2010..

## 3 How to Get Started: Key Questions

Key questions to consider when starting a project are: What are the problems? What are their causes? What is the underlying situation and what are possible solutions?

### 3.1 What are the major nutrition and health problems?

In most Pacific Island countries, non-communicable diseases related to overweight and obesity are among, if not the most serious health problems. Malaria is a health problem in some Melanesian countries. Vitamin A deficiency is a problem in the Federated States of Micronesia, Marshall Islands, Kiribati, Solomon Islands and Papua New Guinea (Coyne 2000). Iron deficiency and anemia are common throughout the Pacific.

The “go local” awareness project can address all nutritionally-related health problems or can focus on specific ones.

For example, foods rich in provitamin A carotenoids, beta-carotene being the most important of these, help protect against vitamin A deficiency. At the same time, carotenoid-rich foods - those foods rich in provitamin A carotenoids (e. g. beta-carotene) and other carotenoids, (e. g. lutein, zeaxanthin, lycopene) may also help protect against NCDs, such as certain cancers, build healthy blood cells and help alleviate anemia. Calcium is important for building and maintaining bones and teeth, aids blood clotting and assists healthy functioning of the nervous system. Zinc is a vital component of many enzyme reactions and is important for a wide range of functions in the body, including cell reproduction, tissue growth and repair, and maintaining a healthy immune system.



*Pandanus fruit at a market in Majuro, RMI*

Giant swamp taro, breadfruit and all local traditional staple foods are high in fiber, which can help protect against overweight, diabetes, cancer and other health problems, by absorbing harmful chemicals and slowing down digestion and the uptake of nutrients. Imported processed foods tend to be low in fiber.

Fresh fish and seafood, which are local foods throughout the Pacific, are rich in fatty acids (omega 3), protein, iron, calcium and other nutrients.

Annex 1 presents a summary of the nutrient content of some local foods and a comparison to a few imported foods. See also other Pacific Island nutrition resource materials for further information on local foods, their nutrient and health benefits, as well as how to maintain a healthy weight (Parkinson 2004; SPC 2006, Snowdon et al. 2003).

Information on nutrition composition of many foods can be found in the Pacific Island Food Composition Tables (Dignan et al. 2004) . Check also the SPC Pacific Food Leaflets (SPC 1992 to 2006).

### 3.2 What are the relevant data and what are people presently consuming and growing?

In Pohnpei there is good data from the STEPS survey (WHO 2008). Further STEPS data should be available for other FSM states and other Pacific Island countries. Check available relevant data from health and agriculture surveys and Household Income and Expenditure Surveys (HIES) (FSM 2007).

Dietary data may be available from past studies and can be collected to help initiate a “go local” project (see section 5 on evaluating your progress).

Community discussions (informal focus group discussions) and key informants interviews are valuable to find out what people are growing and eating, and to identify problems. This is not about a quantitative approach with statistically representative figures, but rather a qualitative, ethnographic approach for giving insight on the situation (Fitzgerald 1997, Kuhnlein et al. 2006). This may involve talking to elders about changes that have taken place over the years and making efforts to retrieve traditional knowledge and practices.

A combined approach using quantitative and qualitative research methods is ideal if possible. Some examples of this include research by Corsi et al. (2008) and Englberger (2003).

*The “go local” awareness project can address all nutritionally-related health problems or can focus on specific ones.*



In addition, it is important to know what crops and what varieties of crops a community is growing, and what a community understands about the nutrient content and health benefits of the local food crops and varieties. A short survey was developed by IFCP for collecting information from a community (Annex 3). This could be adapted for other countries.

### **3.3 What are the agriculture resources and potential for local food crop production?**

Atolls and mountainous islands face quite different problems relating to agriculture production. Atolls have dry sandy soils and now face climate change problems: rising sea levels and salt water intrusion in the taro patches, which has traditionally been an important source of sustenance. Atolls are more vulnerable to food insecurity. Both can benefit from a “go local” campaign. However, there are major differences in food crops and varieties on which a “go local” project may be based.

For example, pandanus, giant swamp taro, and seeded breadfruit varieties are likely to be more important for atoll islands. Soil fertility, limited land and water supply as well as climate change, are barriers for overall food production on the atolls. On the other hand, a revival of interest in local foods and taking greater care of traditional crops is likely to help many atolls. Pandanus plants planted at the shoreline help hold the soil. Composting taro patches helps prevent salt water intrusion.

In general the Pacific islands are highly prone to natural disasters and catastrophes, such as droughts, floods and typhoons which can affect food production and supply. Traditional production systems and practices can offer more resilience towards these events. In many cases local farmers have adapted these practices to ensure their survival over centuries.

What local foods and local varieties can be most effectively promoted? What foods and varieties grow well in an area, are well-known and have cultural value? Community members are the best sources for answers to these questions.

### **3.4 What data is available on the local food crops and what data is still needed?**

It is essential to have a list of the local foods and varieties that thrive in a particular area and it is also important to know what data is available on the local food crops. Some questions include:

- Is there a list available providing the scientific, common and local names of all the locally grown varieties of bananas, giant swamp taro (*Cyrtosperma*), common taro (*Colocasia*), other taro, breadfruit, yam, sweet potato and pandanus?
- Does this list provide information on whether the food or variety is recently introduced, whether it is well liked, which part of the plant is consumed, how is it traditionally prepared, and whether photographs are available of the particular food or variety?

- Does the list provide alternate local names, for example names used by people on outer islands for the same variety grown on the main island?

A literature review may be needed to pull together the various studies that have been done on specific food crops and their varieties. There may be a need to collect this data. This is an area where sponsors can be an assistance. Food analyses can be expensive, but, given the social and political climate today, many organizations are willing to provide assistance.

### **3.5 What is the economic situation and what may drive local food production?**

The rise in food and fuel prices in recent years may provide a impetus for many families to reconsider their regular purchases of imported foods and start to plant more crops and maintain them more carefully. There is a growing emphasis by many governments on food self-sufficiency, and import substitution. This could be supported by a policy initiative from the government.

Urban dwellers may consider how they may start container gardening or more carefully maintain food crops they have been growing around their homes. It may also give them a reason to re-establish ties to homelands where these crops can be more readily grown.

### **3.6 What policies are in place that affect local food production and consumption?**

What are the school food policies in place, and could some work in this area help children establish better food habits and achieve health improvements? For instance, are vendors allowed to sell soft drinks high in sugars to students or are there existing school canteen guidelines?

What about the tax policies relating to unhealthy food imports? Could work be done in this area to help promote local foods? Check available information on this in other countries to provide the needed information (Snowdon 2008).

### **3.7 Who could lead the local food promotion project?**

People make the difference. It is essential to know whether there are key people available in an area who have the interest and the passion to work on a project such as this one. People who have determination and resourcefulness are needed to effectively carry out a “go local” project.

It is helpful to have both academic leaders and community leaders who can work together in planning and implementing the project, and who can approach others to assist. Changing food habits is a challenge. It will not happen overnight. It is important to engage as many people and agencies as possible.

It is important to include major government and non-governmental agencies (e. g., agriculture, education, and health). Form an inter-agency group or task force of key groups or use an already established one.

### 3.8 What are the key groups in the area who could play a major role?

A good knowledge of the key groups is essential for planning the campaign and building up the key coordinating body. The community, government and NGO leaders may already have this information or may need to gather it. There are women's groups, farmers' groups, church groups and youth groups among many others.

The Pohnpei project showed that teenage youth can be organized for taking the message back to the elementary schools. They did this through the organization of a "Let's Go Local High School" club. This club became an important part of the campaign.

### 3.9 What is the interest in-country for carrying out a "go local" campaign?

If there is strong interest in the area for executing a "go local" project, then there is already a good basis from which to start. There has already been a recommendation made at a regional workshop held in Nadi, Fiji in 2009 (WHO 2009) that the "go local" theme, based on healthy traditional foods and organic farming, complemented by scientific research on nutrient content of local foods, should be expanded to other Pacific Island countries. Participants represented atoll and high islands, demonstrating the wide-spread belief that this approach is now a serious need.

More recently, the Pacific Food Summit held April 21-23, 2010, in Port Vila, Vanuatu, recommended the "*enhanced and sustainable production, processing, marketing, trading and use of safe and nutritious local food*", as necessary to enhance food security in the Pacific region. (Pacific Food Summit, 2010).

## 4 Going Forward: "Let's Go Local"!

How is a "Go local" campaign implemented in a new community or country? The campaign can vary from country to country. Depending on the situation and available resources, a campaign can take many directions, but the main components are enthusiasm, passion and action.

Some overall findings from the IFCP's FSM experiences include the following:

- There is a lack of understanding between the relationship of diet to health, the relationship of nutrients to diseases and that certain varieties are richer than others in nutrients and other health giving substances like fiber and carotenoids. It helps to compare nutrient content of imported food and different varieties of local food.
- There is often a perception of low status for local foods. In rural areas people may think that serving or eating local food means that you are poor and have no money to buy rice or other imported and processed foods. People often lack awareness that local foods have high nutrient content. It helps to raise awareness of the nutritional value of local foods.

- Consuming imported foods has become a regular part of many families' lives and are often more convenient than harvesting and preparing local foods. They also cater to the taste drives for “sweet, salt and fat” without attention to good nutrition. A big effort is needed to reintroduce local foods to the local diet and way of life.
- There is a need for fun, colorful and interesting materials and group activities to attract interest in local foods and provide impetus to the “go local” movement.
- Organizational and writing skills are needed for carrying out this campaign. Media releases help to raise the status of local foods and local food promotion activities.
- The “Go Local Plus” campaign involves promoting traditional island foods along with introduced vegetables and other foods that can be locally grown for improving family diets. These foods can also be slowly introduced into family meals.

#### 4.1 Some basic steps on “going local”

Here are some basic steps, based on the IFCP’s ”going local” experience in the FSM:

1. Select and meet with your inter-agency team of facilitators and community leaders;
2. Identify funding needs;
3. Meet with your community; Be sure they are true collaborators and are actively involved in all aspects of the project;
4. Review existing sources of information (section 3.2) and perhaps carry out a short survey (Annex 3) or community discussions to identify nutrition problems, common dietary intake and local crops;
5. Analyze foods or varieties if needed, and if resources are available; Literature reviews (looking at available nutrient information) may provide useful insights;
6. Present survey results and discuss with community members what they want to do. For example, do they want trainings on planting methods, composting, container gardening, cooking classes using local food, or how to build a charcoal oven?
7. Make a plan of action and set realistic and achievable goals. Start activities that will allow you to move forward.
8. Develop a toolkit of materials that can relay your messages (See section 2.7 and Annex 2 for examples and ideas).



9. Initiate discussions and trainings on the relationship between diet, nutrition and health.
10. Repeat your promotional messages as often as possible (e. g. Let's go local!).
11. Continue community meetings and discuss the progress made.
12. Develop policies (whether guidelines, proclamations or tax policies) to help promote local food and help people make wiser selections relating to diet and lifestyle. These may be at the community, state or national level.
13. Evaluate your progress towards meeting your goals.
14. Discuss lessons learned and continue.

#### 4.2 "Let's Go Local" toolkit and awareness materials

One of the findings of the campaign was that it is helpful to have a toolkit of materials and methods with which the social marketing<sup>8</sup> campaign can be most effectively carried out. Everyone likes to receive a gift, and especially in the Pacific, where sharing is highly valued, gifts can be an important tool and way for sharing a message. At our workshops we often gave out our "Let's go local" pens or our "Be Happy-Eat a Banana" pencils, depending on the age-group and interest. We may use our "Let's go local" t-shirts as prizes for short quizzes or for willingness to lead in the singing of the "Let's go local" song.

*Everyone likes to receive a gift, and especially in the Pacific, where sharing is highly valued, gifts can be an important tool and way for sharing a message.*

See Annex 2 for examples of awareness materials IFCP produced in the "Let's Go Local" campaign. These are simply prompts to help you to develop ideas that fit your island. You can also check our IFCP website at [www.islandfood.org](http://www.islandfood.org) and some materials are on the CINE/FAO or other websites. You can also find many more materials throughout the region to provide more ideas.

As to newspaper articles, we have provided articles for a regular column in the Kaselehlie Press and its predecessor paper since 2004. Periodically we place the articles and accompanying photographs on our website at [www.islandfood.org](http://www.islandfood.org). The Kaselehlie Press also initiated an on-line version and back issues are archived from August 2009 and can easily be found in the Nutrition section, providing further awareness. See this link: [http://bild-art.de/kpress/index.php?option=com\\_docman&Itemid=26](http://bild-art.de/kpress/index.php?option=com_docman&Itemid=26).

<sup>8</sup> Social marketing has been described as the application of marketing principles to the design and management of social programs. It is a systematic approach to solving problems, in this case public health nutrition problems related to the adoption of health-promoting behaviors (Griffiths 1994).

## Guidelines to Developing Awareness Raising Materials

<b>Catchy messages</b>	“Breast is best” continues to be a winner. “Be happy ~ Eat a banana” is fun and relates the good mood food message <sup>9</sup> .
<b>Special features</b>	The stress ball push pen (push ball to release stress) offers humor and fun. The pen color or t-shirt color relays a message. Color choice is important.
<b>Postcards</b>	Focus on staple foods and varieties, which are neglected, providing messages and information on the values of those foods and varieties. Find a business who can help you produce your postcards. See ours below <sup>10</sup> .
<b>Local food list</b>	Provides local, English and scientific names. This is useful as it can provide other relevant information. The list can also be expanded to provide part eaten, seasonality, if marketed, if rare, how to prepare, and other information.
<b>Songs</b>	IFCP’s “Let’s Go Local” song has movements, which is a way to capture involvement and interest.
<b>Newspaper articles</b>	Provide information on the values of local foods, recipes and reports of “go local” activities. Some writing rules are to: answer “who, what, where, when and why”, acknowledge partners and donors. Such articles are periodically placed on our website ( <a href="http://www.islandfood.org">www.islandfood.org</a> ).
<b>Newsletters</b>	See Local Food Trends 2004 to 2010 ( <a href="http://www.islandfood.org">www.islandfood.org</a> ).
<b>Quizzes</b>	Local food and nutrition quizzes create interest and share information. These may also be used to help evaluate how effective the advocacy work has been.

<sup>9</sup> Bananas are rich in tryptophan, which is converted in the body to serotonin, a mood enhancer.

<sup>10</sup> Tim Harrison, Constellation Design, [tim@constellationdesign.net](mailto:tim@constellationdesign.net). Tel: 206-730-1345, Fax: 866-526-4842, <http://constellationdesign.net>



### 4.3 Mass media and print materials

A wide variety of materials is important to attract people of various ages and interests. Different materials are helpful to present relevant information on local foods and varieties. These materials may convince people to actually start changing their diets and lifestyles.

The IFCP has had a wide request for posters. These can be hung up and seen again and again. Posters can present photographs and data. Our posters have three main aims:

- 1) To raise awareness about nutrient-rich varieties and to help people learn about the differences in nutrient content, using color as an indicator of beta-carotene content;
- 2) To help people to understand the health benefits provided by these varieties; and,
- 3) To help people discuss and learn about and improve recognition of the varieties, some of which may be rare or uncommonly eaten.

The materials must reflect the island and region. People are happy to see their own foods or varieties highlighted in a poster or other material. For example, the Pohnpei banana calendar, featuring one Pohnpei banana variety for each month, attracted much attention from people on the main island of Pohnpei. The Mwoakilloa pandanus calendar, featuring 12 pandanus varieties from the outer atoll of Pohnpei, Mwoakilloa, one per month, attracted much attention from the Mwoakilloa community.

### 4.4 Handouts, cooking tools and other promotional items

A pen is a useful gift and is an important tool at a workshop where people may want to take notes. We have two promotional pens:

- 1) “Grow and Eat Yellow Varieties” yellow pen



Our yellow pen focuses on the “Yellow Varieties Message”. Our red pen focuses on the present health crisis with such high rates of overweight, obesity, diabetes and other chronic disease and with high rates of micronutrient deficiency. We decided that getting people’s attention is a priority. Red is a color to signify warning.

- 2) “Let’s go local” red pen

“We chose red as the color for our pen because Pohnpei is now in a crisis, and red is the color for warning, like a red stop sign. We are now in a crisis in Pohnpei. One in three adults has diabetes. But there is a solution...it is on your pen!... .Let’s go local!”



The following are some steps to producing a promotional pen:

1. Decide on the imprint. We included our name, slogan, banana design (as representative for one local food), website address and telephone number.
2. Confirm funds: This is an educational tool which small grant funds would cover.
3. Decide on the number of pens.

Jim Hollyer at the University of Hawai'i has been involved in Pacific Island agriculture work for many years. He introduced the stress ball push pen to the IFCP and put us in contact with the business<sup>11</sup> that supplied the pen. He advised us to look at how things were done elsewhere (“don’t try to re-invent the wheel”).

#### 4.5 Audio/visual resources

This includes our collection of DVDs, the IFCP Standard Talk and other power point presentations, and electronic copies of our radio programs and song. Be sure to file these well for easy finding, share with libraries and keep ready at hand for repeated use.

### 5 Evaluating your Progress

You can evaluate your progress with two types of data—process and outcome indicators—both of which are important for measuring change, adapting activities and obtaining funding.

**Process indicators:** Data on process indicators measure activities, such as the number of workshops, participants, or brochures distributed. The number of banana varieties presented at trainings can be meaningful. This data may be of interest for a particular reporting period. If collected over several reporting periods, you may see an increase in the number of participants etc, which may be noted.

Be sure to create a basic database in Excel or other system. Columns can be set up and labeled for the information, such as: Date, Group, Venue, Time, Number of Participants, Contact Details, and Numbers of specific handouts or other materials distributed. After each event or workshop is conducted, the information can be filled in. Later a good set of process indicator data is available.

**Outcome evaluation indicators:** When starting a community project, a short preliminary survey on the dietary habits would be helpful to establish the priority areas needed to improve the community’s diet. The presentation of the results to the community at the onset of a project helps the community to understand its own problems and become motivated to initiate work for dietary and lifestyle changes.

<sup>11</sup> Patti Deputy, BB Specialties, 1711 Hoe Street, Honolulu, Hawaii 96819, USA. Tel. 808-841-7992, Fax 808-847-6667, Email: Pdeputy@hawaii.rr.com.

Such a survey can be used as baseline data. The survey can be repeated at the end of the project and the results of the two surveys can be used to evaluate progress. The survey may help to consider any need for project adaptation. Such evaluation helps satisfy donor requirements.

A 7-day food frequency questionnaire (FFQ) has been developed for work in Micronesian communities and can be modified for use in other Pacific Island countries (Annex 3). The FFQ encompasses seven days as this provides a better representation of the normal diet than a 24-hour recall, which is for just one day.

The questionnaire asks only for the number of days in the last seven days that a particular item was consumed. The participant does not have to estimate amounts consumed, or how many meals in a day an item was consumed. With guidance in a workshop setting, community members can fill out the form themselves, saving time and resources.

This questionnaire can easily be modified for a particular community (inserting the common local foods and using local names). Only one questionnaire per household should be collected to present a valid picture of the diet in the community (as members in the same household tend to eat similar foods).

Collect baseline data on food crops and varieties that are grown in a community. This gives good information from which a “go local” project can be launched.

Preliminary results from this survey can be analyzed and collated in a short amount of time. It is possible to conduct a survey of a community of about 30 households in one day and analyze the data in the evening to present the results to the group the following day if needed<sup>12</sup>.

A survey like this can generate interest, as the community starts to understand the importance of making dietary and behavior changes. Also the survey can provide the basis for later assessing the progress made as a result of the project.

*When starting a community project, a short preliminary survey on the dietary habits would be helpful to establish the priority areas needed to improve the community's diet.*



<sup>12</sup> When visiting the other 3 island states of Kosrae, Chuuk, and Yap, the IFCP conducted the community survey in one day, analyzed the results in the evening, and presented the results to the community the following day.

For example, the same survey can be repeated at the close of the project, and the results can be compared.

Baseline and end result data for these simple questions can be compared:

- What number and % of households ate rice all 7 days in the week;
- What number and % of households ate local food all 7 days in the week;
- What number and % of households ate non-yellow fleshed bananas 7 days in the week;
- What number and % of households ate yellow-fleshed bananas 7 days in the week.

Similarly, data on diversity of crops grown can be compared:

- What number and % of households grew less than 5 varieties of yellow-fleshed bananas;
- What number and % of households grew 5 or more varieties of yellow-fleshed bananas;
- What number and % of households grew no papaya;
- What number and % of households grew 1 or more varieties of papaya.

Data can be entered in a simple Excel spreadsheet with one line per respondent. Results can be analyzed and presented in a table. A sample presentation of how results can be tabulated is also presented in Annex 3. For example, the number of households consuming local foods 0 days, 1-2 days, 3-6 days and 7 days can be counted and presented in the data from the 7-day food frequency questionnaire. Multiple ways of presenting the data can be used. However, if several communities in one locality or country participate in the survey, it would be important to follow a standard format for presenting the results.

Similarly, data on the diversity of crops grown can be entered into the spreadsheet. This data can then be used to compare within and across communities. For example, for each community it can show the number of households growing none of a certain crop, or 1-2 varieties, 3-4 varieties, and so on, or the number of households growing particular banana varieties or other varieties of a traditional crop can be presented.

Health and local food knowledge questions can be included. Waist circumference is now accepted as a good health indicator for obesity<sup>13</sup>. Weight measurements and height measurements can also be collected for calculating Body Mass Index, but this requires two measurements, instead of one, more equipment than the tape measure needed for waist circumferences, and more calculations. For this reason, we selected waist circumference as our health indicator.

<sup>13</sup> Waist circumference can be measured with a simple tape measure. Start at the hip bone and bring around, level with your navel and parallel with the floor, holding snugly, but not tightly. High risk (obesity) is shown by a waist circumference of over 40 in (102 cm) for men and over 35 in (88 cm) for women. Moderate risk (overweight) is shown by over 37 ins (94 cm) for men and over 32 inches (81 cm) for women. (WHO 1997).

The survey and data collection can be carried out at the beginning and at the end of the project to assess the change. Make sure to use the same methods both times, so that the results are comparable. For more information on the methodology and possible presentations of these types of data, see examples from the CINE global health study (Kuhnlein et al. 2006 and 2009) and Pohnpei studies (Corsi et al. 2004, Englberger et al. 2010a, Kaufer et al. 2010).

## 6 Overall Lessons Learned

The IFCP has some overall messages to share; these are only a few key lessons, although the list could be expanded. They are as follows:

<b>Motivation</b>	Leaders and all involved need to be motivated. Knowledge can affect motivation and attitudes. Motivation and attitudes can affect food habits. Leaders need to be motivated.
<b>Incentives</b>	Try to get local businesses to sponsor gardening competitions by donating prizes (e.g. competition: who can grow the best local foods?).
<b>Working together</b>	Working together at all levels and between agencies is needed. This means also developing many partnerships.
<b>Repetition</b>	Multiple methods to enhance messages impact are needed. Standard messages and a standard talk should be repeated often.
<b>Slogans/acronyms</b>	IFCP's "Let's Go Local" slogan and "CHEEF" benefits acronym helped. These can also be shared through songs.
<b>Use photos + color</b>	A picture is worth a thousand words. A photograph can be a meaningful gift, evoke memories, and unite people. Choose a standard color for the theme, and use it repeatedly.
<b>Use the media</b>	Use media to convey messages to many people. Plan newspaper and radio releases; collect photographs from activities.
<b>Be consistent</b>	If you have a meeting or workshop, serve local foods and drinks. Walk the Talk - practice what you preach.

<b>Use proven ideas and materials</b>	Don't try to re-invent the wheel. Be informed as to what has worked elsewhere.
<b>Have fun</b>	Sing songs, have competitions, make it enjoyable.  Give small amounts of information, interspersed with fun activities.
<b>Local food policies</b>	Develop these at different levels, from community to island to nation. Call them guidelines if the term fits better.
<b>Passion</b>	Passion and commitment are needed to lead to change.
<b>Time is needed</b>	Change will not happen overnight. It takes time.
<b>Funds</b>	These are important but you can also use projects already in place. Whom to approach for assistance? Try: Local businesses and NGOs, government ministries/ departments such as agriculture, health, women and culture, education; international and regional agencies such as FAO, SPC, UNICEF, WHO, UNDP academic institutions (e.g. USP).

## 7 Examples of "Going Local"

### 7.1 Solomon Islands

An example of applying the lessons learned in Pohnpei to another Pacific Island country with some similar and some differing nutrition circumstances is that of a project begun in 2007 - 2008 in the Solomon Islands. This project was led by ACIAR/ HarvestPlus, Secretariat of the Pacific Community, the Island Food Community of Pohnpei, in collaboration with the Solomon Islands Ministry of Agriculture and Livestock and Ministry of Health and Medical Services, Kastom Gaden Association, Makira and Malaita community groups, champions of producing local foods, expatriate academics from agriculture and nutrition backgrounds who had lived and worked in Solomon Islands.

Field trips were made to two different rural areas: firstly in 2007 in Makira, an island well known for its banana diversity, to collect information about local banana and sweet potato varieties as well as collect fruit and tuber samples for nutritional analysis. The analyses found high carotenoid levels in some yellow fleshed varieties (Englberger et al. 2010a).

The project also included community awareness workshops using some of the FSM toolkit including posters, pens, pencils, quizzes, songs and stories about the links between health and nutrition and the high value of local foods. The material in the FSM toolkit was appreciated by the community in the Solomon Islands as people

there could relate to the stories about food and health in Pohnpei.

The following year a field trip was made to a different island, Malaita, where we again ran awareness workshops with community groups in villages and trialed two draft posters promoting local fruit and vegetables and yellow-fleshed varieties of bananas. Supporting and promoting the village workshops were radio broadcasts from the capital, Honiara. The following year two colorful Solomon Islands posters were launched. In each setting, urban and rural, people were keen to hear about the CHEEF benefits of their local foods and felt proud and empowered by the knowledge of their nutritional value.

Applying the lessons learned in Pohnpei proved that they worked very well in the Solomon Islands context; however, the project in Solomon Islands will need further input on a more regular basis from within the country to maintain and increase the momentum of the project in a culturally-diverse country with 88 languages scattered over many islands.

Government backing of the ‘Go local’ message for improving food and nutrition security is embodied in the Solomon Islands National Nutrition and Healthy Lifestyle Plan 2010-2020.

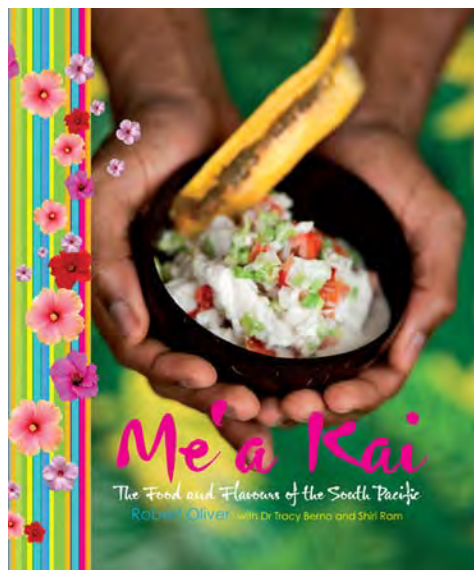
“Go local” activities are also of increasing interest in other Pacific Islands and it is hoped that this guide will provide ideas and motivation to continue and expand the approach throughout the region.

## 7.2 Me’a Kai

*Me’a Kai: Using tourism and cuisine as a means to support local agricultural production*

Despite an abundance of locally produced foods and food products in most Pacific island nations, much of the food served in the tourism sector is imported. There are many reasons for the reliance on imported agricultural products in Pacific Island Countries, which include availability, price, consistency and quality of local products. Another issue is the “international” menus favoured by many large hotels and resorts and the proliferation of transnational fast food and restaurant chains at the expense of small locally owned enterprises.

Food and beverage consumption represents a significant part of tourist expenditure, but often not much of the value stays in the country, because many of the foods in the tourism industry are



imported. This is also called “economic leakage”, because importing foods results in a loss of foreign exchange earnings and lost opportunities to expand and modernise local food production and processing.

Tourism and agriculture are both critical to the economies of most South Pacific island countries. Many countries have identified the need to improve food choice and quality (improve the tourism product) and reduce food imports (improve economic retention) as part of their overall tourism strategies. Enhancing linkages between agriculture and tourism presents significant opportunities for stimulating local production, retaining tourism earnings in the locale, improving the distribution of economic benefits from tourism to rural people and enhancing food security.

Recent research undertaken in the South Pacific on the relationship between tourism, food and agricultural production (Berno, 2006) identified ways to increase the use of local products in the tourism industry. This includes the need to highlight the food of the Pacific in a way that would appeal to the taste of the tourists, and the need for a resource, such as a cookbook, to communicate this.

In response to this, Oliver, Berno and Ram (2010), formed a partnership between an academic, professional chef and a photographer, to produce a cookbook based on the culture, cooking and festivities of six South Pacific nations. The book, *Me’a Kai: The Food and Flavours of the South Pacific*, was developed to highlight Pacific cuisine, and as a tool to create linkages between the farmers and the tourism sector. It was designed to improve the quality of the food offered in the South Pacific region’s tourism market, so that the demand for the food is increased and local prosperity grows as a result. More than just a cookbook, *Me’a Kai* promotes a new facet of South Pacific culture; it enhances the tourism product; it contributes to sustainability (culture, health, environment, economic and food security); and, it creates new opportunities for sustainable livelihoods.

The book was named Best Book of the Year 2010 in the Gourmand World Cookbook Awards, demonstrating that there is interest in the cuisine of the South Pacific. The authors are working with local governments and non-governmental organizations to implement farm-to-table projects based on the Me’a Kai philosophy.



## 8 To Conclude: Let's go local!

The “let's go local” approach is receiving growing interest by organizations and individuals throughout Pacific. This is encouraging from health, education, agriculture and community development perspectives.

Other Pacific Island countries including Cook Islands, Papua New Guinea and Solomon Islands have initiated “go local” activities, and the topic has been discussed and endorsed in many regional meetings. Most significantly perhaps, “Go Local to Enhance Food Security” was one of the keynote presentations at the 2010 Pacific Food Summit held 21 - 23 April 2010 in Port Vila, Vanuatu. The regional summit, which was attended by senior participants from more than 20 Pacific Islands, chose “*enhanced and sustainable production, processing, marketing, trading and use of safe and nutritious local food*” as a key strategy to achieve a food secure Pacific. Having local food recognized in a regional policy document is another important step in bringing about positive change in the Pacific.

*Enhanced and sustainable production, processing, marketing, trading and use of safe and nutritious local food is a key strategy to achieve a food secure Pacific.*



Lois Englberger

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Comparison of nutrient content of local foods and imported foods (100 grams or ~ ½ cup\* edible portions)

Food item	Energy Kcal	Fiber g	Calcium mg	Iron mg	Zinc mg	Provitamin A beta-carotene equivalents	Vitamin B <sup>2</sup> Riboflavin mg	Vitamin B <sup>3</sup> Niacin mg	Vitamin C mg
<b>LOCAL FOODS</b>									
Banana, white-fleshed ripe, raw	103	0.8	11	0.6	0.2	46	0.08	0.7	17.3
Banana, white-fleshed, green, boiled	111	1.2	5	0.5	0.2	116	0.04	0.5	9.0
Banana, yellow-fleshed, <i>Karat</i> , raw	na	na	68.6	na	na	2473	14.3	22.6	na
Breadfruit, unseeded, mature, boiled	75	2.5	18	0.2	0.1	30	0.05	0.7	22
Breadfruit, seeded, ripe, boiled	na	na	na	na	na	939	na	na	na
Taro, common taro, white, boiled	99	0.8	34	1.0	0.8	38	0.03	0.6	5
Taro, giant swamp taro, unspecified, boiled	72	2.5	165	0.6	1.9	27	0.01	0.3	7.9
Taro, giant swamp taro, yellow-fleshed, boiled	na	na	305	0.8	7.0	4486	na	na	na
Pandanus, yellow-fleshed, fresh	86	3.5	88	0.4	0.3	941	0.02	0.9	5.2
Garlic pear fruit (apuch), yellow-fleshed, raw	58	1.5	11.3	0.6	na	1080	0.04	0.5	45.3
<b>IMPORTED FOODS</b>									
Apple, raw	54	2	5	0.2	0.1	10	0.01	0.1	5
Biscuit, plain sweet	451	2	31	1.1	0.4	6	0.02	1.6	0
Rice, white, boiled	123	0.8	4	0.3	0.6	0	0.01	0.6	0

Sources: Dignan et al., Pacific Island Food Composition Tables 2<sup>nd</sup> Ed, 2004; Englberger et al. 2003, 2006, 2008. na: not available

\* For comparison of other local or imported foods, see Dignan et al. 2004 and scientific papers.

\*\* Approximate weights of some common items are: one *Karat* banana ~100 to ~300 g, one apple ~130 g, one sweet biscuit ~7 g.Notes on scientific names of local foods: banana-*Musa sp.*; breadfruit-*Artocarpus sp.*; common taro-*Colocasia esculenta*;giant swamp taro-*Cyrtosperma merkusii*; pandanus-*Pandanus tectorius*; garlic pear-*Crataeva speciosa*.

Note: Traditional dietary patterns included a consumption of up to 4 cups of starchy staples per day or 1000 grams (Malolo et al 1999).

## Annex 2 Samples of “Let’s go local” materials

### ORGANIZATION LOGO

The IFCP logo presents a symbolic plate of local foods: giant swamp taro (left), banana (right), breadfruit and coconut (center), green leaf (vegetable symbol, lower right), and fish. The foods are placed on a traditional Pohnpei woven eating plate made from a coconut frond.



### GO LOCAL BILLBOARD

The “Go Local” Billboard presents a symbolic presentation of local foods and a family. The father is planting local foods and teaching his child, while the mother is preparing the family meal. IFCP’s logo is in the lower right corner. Three billboards were constructed and placed in strategic spots in Pohnpei, including at the Pohnpei State Hospital.



### GO LOCAL T-SHIRT

The IFCP t-shirt has our slogan “Let’s Go Local” on the front and IFCP logo on the back. The colors are: yellow, orange, and green. The first two colors represent yellow and orange-fleshed carotenoid-rich varieties and provide an opportunity to discuss these varieties and their health benefits. The green color represents growth, plants and agriculture.

The t-shirt text can be varied. For example, we have a “Let’s Go Local” High School Club” for one version. The Pohnpei Diabetes Control Project name was included on the back with the IFCP name for a project with that group.

As an affiliate of IFCP, the newly formed Island Food Community of Kosrae adopted the same design, but used its own name on the back.



### LET’S GO LOCAL SONG

IFCP’s theme song is “Let’s Go Local”. This song focuses on physical activity (planting) and dietary improvement (promoting local food, particularly, the yellow-fleshed varieties, which help protect against 1) non-communicable diseases, such as cancer, diabetes, heart disease and 2) micronutrient deficiencies (such as vitamin A deficiency and anemia). Handouts of the song are printed on yellow paper to strengthen the “Yellow Varieties Message”. Local food educators wear their “Let’s Go Local” t-shirts when teaching the song.

Go Local Song  
“Let’s Go Local”  
Composed by: Gibson Santos

LET’S GO LOCAL  
LET’S GROW LOCAL  
LET’S EAT LOCAL  
LET’S STAY LOCAL

VITAMIN A,  
GOOD FOR EYESIGHT,  
NO HEART PROBLEMS  
DIABETES

YELLOW VARIETIES  
COMES FROM LOCAL  
KARAT BANANA  
AND MANY OTHERS MORE



## Annex 2 Samples of “Let’s go local” materials

### “CHEEF” BENEFITS OF LOCAL FOOD SONG

This song teaches the “CHEEF” benefits of local food: Culture, Health, Environment, Economy, and Food security. As the shift to rice as a daily food is a major dietary problem, one verse suggests to not eat rice as it has no beta-carotene or provitamin A, which helps protect against vitamin A deficiency, certain cancers, heart disease, and diabetes. Handouts of the song are printed on green paper to represent plants and growing food.



### GOING YELLOW DVD

This DVD presents a humorous family drama, along with a wealth of information on health and nutrition. The story tells about a wacky family which receives the name of “the yellow family” as they learn about the benefits of *Karat* and other yellow-fleshed nutritious varieties and other local food. The DVD is available both in English and Pohnpeian. There is a Teachers Manual with questions and answers to provide further guidance to those using the DVD.



### TRADITIONAL FOOD OF POHNPEI DVD

This DVD is one product of the Pohnpei case study in the global health study led by the Centre for Indigenous Peoples' Nutrition and Environment (CINE). The script focuses on the rapid shifts in lifestyle and the adverse effects on dietary quality and health. The film presents both the “old” and the “new” along with discussions about the importance of local foods and varieties and efforts to promote them.



### POSTERS AND PRINT MATERIAL

#### Pohnpei Bananas: Carotenoid-rich Varieties Poster

This poster presents photographs of 15 yellow-fleshed carotenoid-rich Pohnpei bananas varieties, information on classification, carotenoid content, and a message explaining the health benefits of growing and eating carotenoid-rich banana varieties. This includes protection against cancer, diabetes, heart disease, vitamin A deficiency and anemia (weak blood). This poster focuses on carotenoid-rich and rare varieties, whereas a more total collection of photos and information is presented in the Pohnpei Bananas booklet. Varieties are ranked according to their beta-carotene content, starting at the top left-hand corner for the variety having the most.



## Annex 2 Samples of “Let’s go local” materials

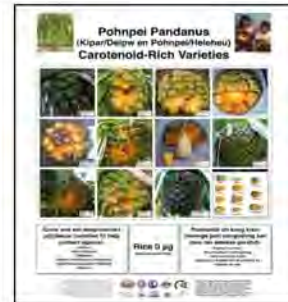
### Pohnpei Carotenoid-Rich Foods Poster

This poster focuses on the “Yellow Varieties Message” for banana, giant swamp taro, breadfruit and pandanus. It shows that the varieties with deeper color have higher beta-carotene content. The poster is designed to also show that the white-fleshed Utin Menihle is still better than the common imported food of rice, as it contains at least some beta-carotene but rice contains none at all. Information on varieties of giant swamp taro, breadfruit, and pandanus is also presented.



### Pohnpei Pandanus: Carotenoid Rich Varieties Poster

This poster presents photographs of 11 carotenoid-rich Pohnpei pandanus varieties, information on carotenoid content, and health benefits. Nine of the varieties were taken from Mwoakilloa Atoll and two were taken from Kapingamarangi Atoll. The poster again presents the message that rice contains no beta-carotene at all, whereas pandanus varieties do. The poster also helps the Pohnpei community learn about the different varieties, for the first time presented visually as a poster.



### Pohnpei Bananas: Carotenoid-rich Varieties Booklet

This booklet presents information on Pohnpei bananas, including photographs of 31 varieties. The names of all Pohnpei banana varieties (over 50) is presented, as agreed upon at a farmers workshop in 2003. Primary identifying characteristics of the varieties are listed in a preliminary table, and the health benefits of yellow-fleshed carotenoid-rich bananas are explained, along with flesh colors and relationship to carotenoid content. The varieties having the richest concentrations of presented first. Three banana recipes are shared at the end of the booklet.



This is the fourth poster in a global series by FAO, CINE and CRDI. The poster focuses on banana, breadfruit, taro, fish, coconut, green leafy vegetables, and pandanus and presents issues of biodiversity, nutrition/health, taste, economics, and availability. Data are presented on the number of species and varieties estimated for the Pacific Islands and ranges of nutrient content of the species and varieties presented. IFCP was involved in the collection of information and development of this poster as a part of the project on traditional food systems led by CINE.



## Annex 2 Samples of “Let’s go local” materials

### IFCP Brochure

This double fold brochure presents overall information on IFCP, including its vision, mission, contact details, a recipe and other information on local food and health issues. The brochure is available both in Pohnpeian and English. Photographs are presented for some of the staple foods of Pohnpei, including banana (Karat), breadfruit, and giant swamp taro. A recipe is given for banana (Daiwang) pancakes. Both outer folds present the IFCP logo.



### FSM Telephone Directory Entry for IFCP

A colourful two-page entry in the FSM Telephone Directories since 2007 provides information on the Island Food Community of Pohnpei, including background, vision and main areas of focus. These are awareness, conservation of rare varieties, small-scale processing of local foods and research.

The photos include the Go Local billboard (see first item in this appendix), *Karat* phone card, an end scene in the *Going Yellow* film (above), students in Let’s Go Local t-shirts (below) learning about Pohnpei bananas, and container gardening in the Traditional Food for Health case study in Pohnpei, part of the CINE global health project. The Pohnpei Bananas poster is featured in two photos.



### IFCP Newsletter

The *LOCAL FOOD TRENDS* is a four-page newsletter, presenting a summary of activities for the year. Most articles are taken from articles prepared for the bi-weekly Kaselehlie Press newspaper. This issue presented items on the completion of the Island Food Multipurpose Building, the Let’s Go Local High School club as they sing food promotion songs, research on resistant starch in Pohnpei banana varieties, a display of IFCP awareness materials, recipe, workshop on the health values of eating fish, the charcoal oven, the rising prices workshop, World Food Day, and the 2009 summer team of 11 visiting researchers, interns and staff.



## Annex 2 Samples of “Let’s go local” materials

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## Annex 2 Samples of “Let’s go local” materials

### OTHER ITEMS

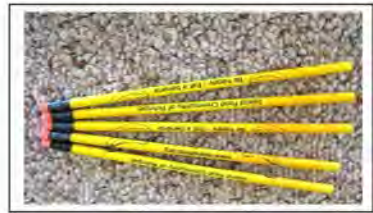
#### IFCP Promotional Pens

The yellow IFCP pen presents IFCP’s website [www.islandfood.org](http://www.islandfood.org), and the message “Grow and Eat Yellow Varieties.” The bright yellow color represents yellow-fleshed varieties, such as *Karat*. The red IFCP pen presents IFCP’s slogan “Let’s Go Local”. The red color signifies warning, and relays the message of the present health crisis related to diet and lifestyles.



#### IFCP “Be Happy- Eat a Banana” Pencil

This presents the name and website of IFCP and this message: “Be Happy- Eat a Banana”. The pencil attracts interest as it changes color from orange to yellow (after rubbing it, or if placed in a warm place). Bananas contain tryptophan, which is converted to a mood-enhancer in the body, and are known as a “good mood food”, the message taught here.



#### IFCP *Karat* Sticker

This presents a *Karat* banana bunch drawing and the message: “Grow and Eat *Karat*, Pohnpei State Banana.” The Pohnpei governor proclaimed *Karat* as the state banana in 2005, due to its cultural importance and rich nutrient content. The IFCP logo is on the lower right corner. The sticker can be used for car bumpers or other places.



#### FSM Telephone Card

This card was developed as another tool to promote *Karat*. It presents a mother feeding *Karat* to her child, showing the peeled banana and its deep yellow orange color. The message is “Promote *Karat*: the State Banana of Pohnpei”. The \$5 denomination was selected as it is commonly used.



## Annex 2 Samples of “Let’s go local” materials

### POSTAL STAMPS

#### Karat Stamp Series

The *Karat* stamp series is a four stamp set of commemorative stamps, produced with the FSM Philatelic Bureau. There are four denominations, 4, 10, 22, and 37 cents. The message is: “*Karat* has a very unusual texture. It is very smooth and thus perfect for babies as their first food to complement breastmilk at around 6 months.” The photos include a mother feeding *Karat* to her infant, a harvested bunch, the bunch still on the plant with its erect growth, and the peeled fruit showing the yellow coloration compared with another variety.



#### Micronesian Banana Series

The FSM Micronesian Banana stamps are a Definitive Series of eight stamps, with one Pohnpei banana variety featured per stamp along with the name of the variety. All these eight varieties are among the yellow-fleshed carotenoid-rich varieties. They are all particularly valuable for their health benefits. Most are rare. The *Daiwang* banana is included as it is carotenoid-rich and very tasty, but has been considered by many as a low status banana, due to particular perceptions.



#### IFCP *Karat* Necklace Ivory Nut Carving, made locally



#### IFCP “Let’s Go Local” Cloth Bag Pohnpei Bananas (e.g. *Karat*)



## Annex 2 Samples of “Let’s go local” materials

### POSTCARDS

#### **Karat Postcard**

This presents a mother feeding her baby Karat, a banana with deep yellow flesh, quite different from most banana varieties. The message says: “Karat is rich in carotenoids and has important health benefits. Karat has a very unusual texture for a banana. It has smooth and thus perfect for babies as their first food to complement breastmilk, at around six months.”



#### **Giant Swamp Taro Postcard**

This postcard presents different parts of the giant swamp taro plant: flower, the stem showing varietal differences by stem color, whole plant and the corm. The message states: “Giant swamp taro..., is an important staple food for Pohnpei. The corm... is rich in essential minerals, vitamins, carotenoids and fiber, all important for health.”



#### **Pandanus Postcard**

This postcard presents a pandanus variety photo. The message on the back states: “Pandanus fruit is an important food for Pohnpei, especially the outer islands. There are many varieties, including this one called Majak. The deep orange-fleshed varieties are rich in provitamin A carotenoids. They have important health benefits....”



#### **Fishing Postcard**

This postcard promotes fish and fishing, a good physical activity which has health benefits. The message is: “Setting a net to catch reef fish. Fish is an excellent source of protein, several vitamins and minerals, and omega-3 fatty acids, which promote health benefits.” The card also presents an idyllic view of the ocean and island life.



## Annex 2 Samples of “Let’s go local” materials

### CHARCOAL OVEN

The development of the portable charcoal oven has been one of the popular projects the Let’s Go Local campaign. It provides an alternative to cooking with kerosene, making use of available coconut shells for making the charcoal. It promotes baking, which is a healthier way of cooking than frying, which has become popular in recent years in Pohnpei. It is more convenient than the earth oven, is energy-efficient and reduces emissions to the environment due to open fire cooking. The charcoal oven can be built locally and a design is available and list of materials needed. The photo shows that there are two shelves. The hot charcoal is in the tray at the bottom.



### LAMINATED NAME CARDS

Laminated name cards for the rare banana varieties are useful for displays to help people to learn the varieties and the spellings. Laminated cards may be used many times, reducing preparation time for displays. These were made on yellow paper to strengthen the “Yellow Varieties Message”.



### RECIPE COLLECTIONS

The Women of Mand Recipe Collection presents recipes and photos of the women of Mand Community in Madolenihmw with their cooked products. These were collected in the documentation of the Traditional Food System of Pohnpei as part of the CINE-led global health project. The recipes include those on breadfruit, banana, taro, and coconut, and snack foods and drinks (hibiscus tea).



### IFCP CALENDARS:

One calendar focused on one variety of banana for each month, and another calendar focused on one variety of pandanus (from the outer atoll of Mwoakilloa) for each month.





### Annex 3 Sample survey tool for evaluation purposes

Community \_\_\_\_\_ Date \_\_\_\_\_

Name \_\_\_\_\_ Interviewed by \_\_\_\_\_

Thank you for participating in this community project for improving agriculture and health. This information will be kept confidential and will be used to help you and the community to improve your food production and health and to serve as a baseline for this project.

**Have you eaten (name the item) in the past 7 days?** If no, mark 0 and go to next question. If yes, ask how many days that the person ate that food item. To help explain what that food item includes, read off the individual items and circle any that they ate.

Food Item	# days /week
Rice in any form: cooked alone, in soup or in any dish	
Any kind of flour-based food: bread, ramen, doughnut, cake/cooky, cracker, other	
Any kind of local food: banana (uht), breadfruit (mei), taro (sawa), giant swamp taro (mwahng), Hawaii taro (sawahn awai), yam (kehp), cassava, sweet potato	
Any kind of local fruit: raw banana, papaya, pineapple, pandanus, mango, local apple (apel in pohnpei), rose apple (apel in wai), guava, citrus-karer,	
Banana, non-yellow fleshed: Utin Menihle, Utin Ruk, Inahsio, Utin Pihsi, Kaimana, Preisihl, other	
Banana, yellow-fleshed: Utin lap, Utimwas, Karat, Akadahn, Daiwang, Ihpali, Mangat, Karat en lap, Utin Kerenis, lemwahn, Utiak, Peleu, Utin Rais/Kudud, other	
Any kind of imported fresh fruit: apple, orange, grapes, other	
Any kind of local vegetable: cabbage, cucumber, eggplant, pumpkin, banana flower, chaya, pele, sweet potato tops, kangkong, spinach, pepper leaves, tomato, beans, bell pepper, squash, tomato, other	
Any kind of imported vegetable: corn, tomato, carrot, cabbage, frozen vegetables, tomato ketchup	
Any kind of fish chicken meat (sali) or egg, milk	

We would like to talk with you about your farm and involvement in this project. We are focusing on banana and tree crops and would like to know about the varieties that you grow. Can you tell us what varieties you are growing of the following?

Banana Variety	Breadfruit Variety
1.	1.
2.	2.
3...	3...

Annex 3 Sample survey tool for evaluation purposes

Coconut Variety	Citrus Variety
1.	1.
2.	2.
3...	3...
<b><u>Other</u></b> Guava	Chestnut
Soursop	Papaya (list varieties)

**What do you need for improving your farm (in reference to the above crops)?**

- Technical advice
- Planting materials
- Other \_\_\_\_\_

**Have you heard about the health benefits of the yellow- and orange-fleshed banana varieties rich in beta-carotene?**

- Yes
- No

**What disease or diseases do they help protect against?**

- a) Cancer      b) Diabetes      c) Both      d) Neither      e) Don't know

**Which banana variety has the most beta-carotene?** \_\_\_\_\_

**What is the most important recommendation for preventing those cancers related to food, nutrition and physical activity?**

- a) Eat local foods    b) Eat healthy    c) Keep a healthy weight    d) Don't know

Waist circumference \_\_\_\_\_    Cut-offs: men-37 inches    women-32 inches

Do you smoke or chew betel nut:

- Yes
- No

Thank you!

### Annex 3 Sample survey tool for evaluation purposes

#### Sample Tabulation Form for Selected Survey Results

##### Sample presentation for 7-day food frequency results for food consumed

Name of Project \_\_\_\_\_ Date \_\_\_\_\_

Name of Community \_\_\_\_\_ Number of households \_\_\_\_\_

(Data represents the number of households consuming that food item; percentages can also be calculated)

Rice	Flour	Local Food									
0 days n	1-2 days n	3-6 days n	7days n	0 days n	1-2 days n	3-6 days n	7 days n	0 days n	1-2 days n	3-6 days n	7days n

Local Fruit	Local Vegetable						
0 day	1-2 days	3-6 days	7 days	0 days	1-2 days	3-6 days	7days

Non-yellow Fleshed Banana	Yellow Fleshed Banana						
0 days	1-2 days	3-6 days	7days	0 days	1-2 days	3-6 days	7days

##### Sample data presentation for banana varieties (or other crop) grown

(Data represents the number of households growing that number of varieties of bananas)

0 Varieties	1-2 Varieties	3-4 Varieties	5-6 Varieties	7-8 Varieties	9-10 Varieties	11-12 Varieties	13-14 Varieties	15-16 Varieties

Annex 4 FSM National Government Proclamation on Food Security Issue,  
June 7, 2010



*The President*  
*Palikir, Pohnpei*  
*Federated States of Micronesia*

**PROCLAMATION**

**TO ENCOURAGE AWARENESS ON FOOD SECURITY ISSUE IN THE FEDERATED STATES OF MICRONESIA**

**WHEREAS**, the Government recognizes the importance of food security as an issue that must be addressed in the Federated States of Micronesia, due to the growing trends of shifting from a traditional diet, based mainly on starchy fruits and root crops, coconut, fish and other seafood, rich in nutrients and fiber, to imported foods that contain less nutrients and have excessive levels of fat, salt, sugar and those with artificial preservatives that have detrimental effect on the health and wellbeing of the people; and

**WHEREAS**, one way to address food security concerns is to ensure that all the people have physical, social and economic access to sufficient, safe and nutritional food supply that meets sustainable dietary needs consistent with a healthy life; and

**WHEREAS**, the FSM Strategic Development Plan sets a goal towards food security, enhanced cash incomes, healthy livelihoods, and opportunities for domestic and export markets, that at the same time promotes environmentally sustainable food production through a meaningful and achievable policy framework; and

**WHEREAS**, the Government must take the initiative in introducing innovative efforts that sustain the Micronesian culture, given the Nation's resources and potential.

**NOW THEREFORE**, I proclaim that the National Government of the Federated States of Micronesia is committed to a policy that encourages enhanced local food production, consumption of local produce and import substitution to the fullest extent possible, and practices based upon sustainable use of food resources. In all government events and festivities and official ceremonies, utilization of local food is encouraged to create people's awareness on the continuing need to adopt a healthy and balanced lifestyle. All the departments and agencies in the National Government are to give effect to this mandate.

Issued on this 7<sup>th</sup> day of June, 2010 at Palikir, Pohnpei.

*Manny Mori*  
Manny Mori  
President



Over the past decades, food and dietary patterns in Pacific Island Countries have undergone significant changes. Traditional diets consisting of fresh fish, root crops, breadfruit and local fruits and vegetables have been increasingly replaced by imported, often highly processed foods such as white rice, flour, instant noodles, canned foods, fatty low grade meats and soft drinks with a high sugar content. At the same time, a more sedentary lifestyle is becoming common among many Pacific Islanders

As a result, Pacific Island Countries now face a wave of dietary and lifestyle-related health problems. Chronic non-communicable diseases including diabetes, heart disease and cancer are now the main causes of death, illness and disability among adults in the Pacific Island Countries. Furthermore, countries are burdened by micro-nutrient deficiencies related to a lack of essential vitamins and minerals in the diet, such as vitamin A deficiency and anaemia.

There is evidence that the traditional diet, lifestyles and food systems of the Pacific protected people in the past against these health problems while also conserving the environment and preserving traditional customs and culture. Food composition data provides scientific evidence of the rich nutrient content and health benefits of the traditional foods, including breadfruit, banana, taro, yam, cassava and sweet potato, as well as coconut, fish and seafood, and various fruits and vegetables.

This booklet written by Dr. Lois Englberger is based on the “go local” concept developed by the Island Food Community of Pohnpei. The guidelines suggest how people and groups in other countries or regions can adapt this approach to suit their situations in order to promote the sustainable production and consumption of nutritious local foods.

