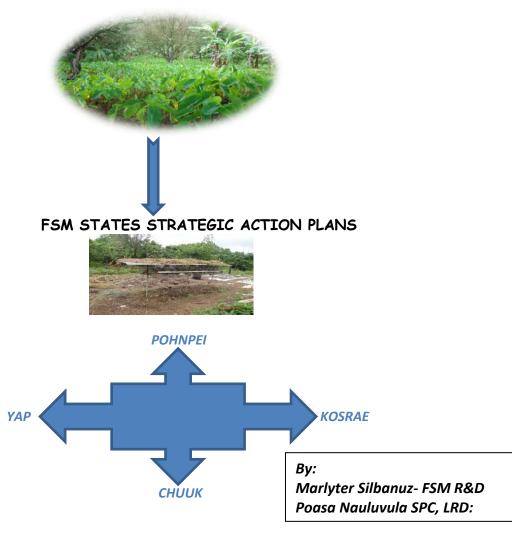
# **REPORT**

# **FSM AGRICULTURE POLICY (2012-2016) REVIEW**

# **JULY 2015**





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# **SUMMARY**

Many problems that crop up after policies and procedures have been implemented are traceable to inadequate or little to no review at all. Policies and procedures will only look good on paper without any feedbacks. No one is perfect and no policy and process is perfect. No policy and procedure is perfect so periodic review is essential and important for these working documents to be effective.

In addition it is also very important for all National and State Policies and working documents to be linked. So the linkages of the National Strategic Development Plan (2004 - 2023) to the National Agriculture Policy (2011 - 2016) and the State Agriculture Plans are very important for decision makers to concentrate on related developmental issues that are affecting all.

With all this in mind the Monitoring and Evaluation process should be an ongoing activity of FSM R&D (Agriculture and Statistics). There should be a concrete reporting format and timeline with effective and efficient data collection method which should be adhered to, to reflect Key Performance Indicators (KPI) achievements and non-achievements. The monitoring and evaluation process will be basis for any future review of the States Action Plans, FSM Agriculture Policy and the FSM Development Plan.

The present review has recommended that there is a need for and to review the FSM Agriculture Policy 2012 – 2016. Furthermore for the policy to be a living and working document the State Agriculture Departments' commitment to come up with their Agriculture Strategic Action Plans is also strongly recommended.

#### **INTRODUCTION**

The linkages of the National Agriculture Policy (2011 – 2016) to the State Agriculture Plans and to the National Strategic Development Plan (2004 – 2023) is very important for decision makers to concentrate on related developmental issues concerning all

In addition these linkages of sectoral policies within the State and National policies is also very important to gauge the achievements of States and National objectives in National Strategic Development Plans and State Strategic Action plans. If the linkages are not there decision makers will have a hard time in trying to alleviate and solve problems affecting future National developments for agriculture.

Furthermore policies and procedures will only be good if they are also effectively translated and communicated for the implementers to implement and this is why policy review is very important as it is also a means of translating what is written to what the implementers should have been doing during the review process.

It is common knowledge that many problems that crop up after policies and procedures have been implemented are traceable to inadequate or little to no review at all. Policies and procedures will only look good on paper without any feedbacks at all. No one is perfect and no policy and process is perfect. No one will write the perfect policy and procedure the first time, every time so periodic review is essential and important for policies, procedures and processes to be effective.

This review exercise was concentrated on the review of the FSM National Agriculture Policy 2011 to 2016. It was within this context that the questions for the review were based on the Strategic Objectives of the National and States Agriculture Strategic Action/Development Plans.

#### METHOD OF REVIEW (POLICY REVIEW PROCESS)

The 4 FSM States of Kosrae, Chuuk, Yap and Pohnpei were visited in the duration of two weeks from the Friday 17 July to Friday 31 July 2015 starting from Kosrae, Chuuk, Yap and Pohnpei.

All the stakeholders were supposedly to be involved in the review process. Discussions and questions were centered on the 8 Strategic Objectives of the FSM Agriculture Policy that was linked to the States Development Strategic Action Plans and programs.

With the policy review process, questions were asked on objectives or requirements were they clearly communicated, easily understood and were the objectives prioritized and categorized. Questions were also asked whether the objectives were specific, manageable, achievable, realistic, and with timeliness (SMART) objectives.

The policy review process, was both written and oral in group discussions, and was to lead with those aspects of the policy and procedures where objectives were not met or exceeded. In cases where policy and procedure objectives were not achieved possible explanations for these non-achievements were considered to be relevant for the review and for future directions. A SWOT analysis of the Agriculture Sector and Agriculture Policy was also undertaken by all who were present in the State consultations.

The review was conducted by FSM R&D (Agriculture – Ms. Marlyter Silbanuz) and SPC-NPRO LRD (Mr. Poasa Nauluvula)

# **RESULTS OF REVIEW**

The wordings presented and written by the stakeholders and staff that were present during the review sessions were recorded as they were presented as to reflect and capture their actual views and meanings rather than that of the reviewers.

# 1. KOSRAE JULY 17 – JULY 21 2015

KOSRAE STATE	LINKAGES TO FSM	ACHIEVEMENTS
ACTIVITY	AG POLICY	ACTILVEIVIEWIS
1. Sustainable crop production	Result Area 3,4;	Almost all work have been achieved or
increased.	Key Strategy 3.1,	done
ilici easeu.	4.1.2,4.2.6	done
2. Result – Sustainable livestock	Result Area 4,8;	Needs training on Pig waste
production increased	Key Strategy	management, local feed and para-vet
	4.1.2,4.2.6,8.1.1	knowledge. New breed stock through Al
		needed, commitment and funding and
	- L. A	also poultry to be included in livestock
3. Result- Marketing opportunities:	Result Area 4, 5;	Marketing opportunities have opened up
	Key Strategy 4.1, 4.3,	but need more market survey, post-
	4.3.1; 5.1	harvest improvement, awareness
		training on quality and consistent supply
		with facilities and transportation
4. Result- Improved awareness	Result Area 4,7;	Still need more work and awareness on
program for agriculture industry	Key Strategy 4.1,	nutritive values and consumption of local
and encourage new farmers into	4.2,7.1	foods
sector		
5. Result not achieve- Agriculture	Result Area 3;	Not achieved – no integration of
Research and education	Key Strategy 3.1	agriculture curriculum into elementary
strengthened		school syllabus,
6. Agriculture Office fully resourced	Result Area 1;	SAP - Not achieved still under review,
	Key Strategy 1.2 -	Coordination achieved through MOU and
		Charter between partners
7. DREA activities properly	Result Area 2;	Achieved- Submitting monthly, quarterly
monitored and evaluated	Key Strategy 2.1- 2.4	and annual reports
	]	Local farmers need more monitoring
		Some success stories but feel the need to
		do more
		Charter and MOU to be in place for
		proper and clear line of communications
		between partners.
		Need more funding opportunities
i .		reca more randing opportunities

# 2. CHUUK JULY 22 – JULY 25

CHUUK STATE ACTIVITY	LINKAGES TO FSM AG	ACHIEVEMENTS
	POLICY	
1. Increase production of staple crops	Result Area 3,4,5,6,7; Key Strategy 3.1.1,4.1,4.2,5.1.1,6.1, 6.2,7.1,	There is increase in production of staple crops – reflected in quarterly reports
2. Increase production of vegetables	Result Area 3,4,5,6,7; Key Strategy 3.1.1,4.1,4.2,5.1.1,6.1, 6.2,7.1,	There is increase in production of vegetables also reflected in reports
3. Increase production of fruit crops	Result Area 3,4,5,6,7; Key Strategy 3.1.1,4.1,4.2,5.1.1,6.1, 6.2,7.1,	No achievement – also reflected in reports
4. Increase production of forestry products	Result Area 3,4,5,6,7; Key Strategy 3.1.1,4.1,4.2,5.1.1,6.1, 6.2,7.1,	No achievement – lack of expertise in the area
5. Upgrade training of agriculture support staff and extension staff	Result Area 1,2,3; Key Strategy 1.2,2.1.1,2.1.2,2.2.1,3. 1.1,3.1.2	No achievement through lack of funding support
6. Upgrade training of local farmers	Result Area 2,8; Key Strategy 2.1,2.1.2,8.1.1,8.1.2,8. 1.3	To an extent some training were done with some achievements but there was no funding support
7. Improve and increase efficiency and effectiveness of support services in Agriculture department	Result Area 1; Key Strategy 1.2.1	Some or little achievement with no impacts as there was no clear direction on what was to be done
8. Improve physical infrastructure of Agriculture department	Result Area 1,4; Key Strategy 1.2,4.1.2	Some but little achievements as required as there was no funding support
9. Motivate people especially the youths and women toward acceptance of Agriculture as worthwhile occupation	Result Area 2,5; Key Strategy 2.1,2.2,5.1.3	Some but little achievements as required as there was no community support and poor coordination by all partners
10. Increase and improve consumer education to promote superior nutrition of locally grown food products over imported products	Result Area 3,4; Key Strategy 3.1.1,3.1.3,4.2.5	Some achievements as community trainings were conducted by partners
11. Coordinate with Education department to provide and make available agriculture curriculum and courses in all schools and FSM COM-Chuuk campus to offer and teach agriculture courses at least for certificate program	Result Area 2; Key Strategy 2.1.1,2.1.2,2.1.4	No achievement as there is no agriculture curriculum provided by education providers

# 3. YAP JULY 26 - JULY 29 2015

YAP STATE ACTIVITY	LINKAGES TO FSM AG	ACHIEVEMENTS
	POLICY	
1. Office of Chief	Result Area 1;	Chief of Agriculture in place
Agriculture/Forestry	Key Strategy 1.1.2,1.2	No media production unit because of
		no funding
2. Agriculture Survey	Result Area 1;	There is no base line data as there is
	Key Strategy 1.1.1	no survey conducted and data
		available is outdated
3. Nutrition Awareness Program	Result Area 1,3,4,5,6,7,8;	Nutritionist assistant hired but rate of
	Key Strategy	NCD still increase as still more
	1.1,3.1,4.1,4.2,4.3,5.1,7.1,	dependence on imported food - no
	8.1	funding
4. Livestock	Result Area 4,8;	Breeding stock purchased for pigs,
	Key Strategy	goats and poultry and still not enough
	4.1.2,4.2.6,8.1.1	livestock farmers to meet demand
5. Farmers Association and	Result Area 2,3,4,5,6,7,8;	Charter with FAO on funding support
Cooperative	Key Strategy	but no funding for Project Manager
	2.1,3.1,4.1,4.2,4.3,5.1,6.1,	position
	6.2,7.18.1	
6. Outer island Extension Agents	Result Area 2,3,4,5,6,7,8;	Establishment of nurseries in 3 Atolls
	Key Strategy	with community improvement project
	2.1,2.2,3.1,4.1,4.2,4.3,5.1,	with concrete taro patch established
	6.1,6.2,7.18.1	but still limited planting materials,
		farm tools and poor communication
		and coordination from main office
		with outer island extension. Lack of
		funding support and island chiefly
		support

# 4. POHNPEI JULY 30 – JULY 31 2015

POHNPEI STATE ACTIVITY	LINKAGES TO FSM AG POLICY	ACHIEVEMENTS
1. Agriculture office fully resourced	Result Area ; 1	0% More work needed
	Key Strategy 1.2	
2. Sustainable crop and livestock	Result Area 1,3,4,5,7;	70% accomplished30% constraints; lack of
production increased	Key Strategy	leadership, interest, funding, land, labor,
	1.1,3.1,4.1,4.2,5.1,7.1	equipment, facilities, markets, limited
		technology and CC
2.1 Crop yield – Increase Hectares	Result Area 3,4;	No data – no surveystill increase in imports
	Key Strategy 3.1,4.1,4.2,4.3	of goods
2.2 Improve genetic makeup of existing	Result Area 4,8;	No data in place need AI to improve
livestock	Key Strategy 4.1.2,4.2.6,8.1.1	livestock genetics and breed
2.3 Increase egg production locally for	Result Area 4,8;	No datanot enough eggs produced
domestic and tourism	Key Strategy 4.1.2,4.2.6,8.1.1	locally
2.4 Seed Bank	Result Area 8;	Established at Pilot farmneed to improve
	Key Strategy 8.1	and expand to include all traditional crops
2.5 Establish commercial nurseries for	Result Area 3,4;	No funding support and need funding source
locally grown crops	Key Strategy 3.1,4.1,4.2	
2.6 Rearing facilities for locally raised	Result Area 4,8;	Established at Pilot Farmneed funding
livestock	Key Strategy 4.1.2,4.2.6,8.1.1	support to improve services
2.7 Expand traditional Agro-forestry	Result Area 3,4;	On-going activity and only funded by US Forest
programs	Key Strategy 3.1,4.1,4.2	Services
2.8 Facilitate Introduction of livestock	Result Area 4,8;	Put on holdproject needs reviewing
types/breeds appropriate for Pohnpei	Key Strategy 4.1.2,4.2.6,8.1.1	
(goats/pig)		
2.9 Environmentally farm inputs	Result Area 3,4,5,8;	Dry Litter system have been established in
available (compost)	Key Strategy	PohnpeiNeed more training on
	3.1,4.1,4.2,4.3,5.1,8.1	composting
2.10 To improve quality of locally	Result Area 3,4,5,8;	Regulation in place – yellow card required.
produced products (crop/livestock)	Key Strategy 3.1,4.1,4.2,5.1,8.1	Food quality standard need to be in place
2.11 IFCP with Laboratory (off-island)	Result Area 3,4,5,8;	Established and in place with IFCP. There is a
	Key Strategy	need to analyze other local crops.
	3.1,4.1,4.2,4.3,5.1,8.1	
3. Increased market opportunities	Result Area 3,4,5,7;	
provided	Key Strategy	
2451	3.1,4.1,4.2,4.3,5.1,7.1	500/
3.1 Enhance value of local food	Result Area 1,3,4,5,7;	50% accomplished 50% constraints; Need
		more experts and funding support – more
2.2 Dayolon attractive next harvesting	Posult Area 2 4 5 7	work needed.
3.2 Develop attractive post-harvesting	Result Area 3,4,5,7;	0%Due to leadership obstacles???
techniques	Key Strategy 3.1,4.1,4.2,4.3,5.1,7.1	
3.3. To increases production of locally	Result Area 3,4;	FAO as TA and no baseline data in place
produced foods & other Agriculture	Key Strategy 3.1,4.1,4.2,4.3	1 AO as 1 A and 110 baseline data in place
Commercial products	NCy 311 ategy 3.1,4.1,4.2,4.3	
4. Improved awareness program on	Result Area 2;	
agriculture	Key Strategy 2.1,2.2	
4.1. To increase number of student	Result Area 2;	Increase in number of students enrolled in
graduates from Agriculture Majors	Key Strategy 2.1,2.2	Agriculture programs at COM-FSM but slow
Bradates irom Agriculture Majors	Ксу эпиську 2.1,2.2	growth due to lack of study incentives
5. AOEA activities properly monitored	Result Area 1;	6. 5 Tall due to luck of study interitives
and evaluated at State level	Key Strategy 1.1,1.2	
una crainaten at State Ievel	NCy Strategy 1.1,1.2	

5. On questions asked were objectives or requirements were they clearly communicated, easily understood and were the objectives prioritized and categorized. Objectives were also asked whether the objectives were SMART objectives (Specific, Manageable, Achievable, Realistic, and Timeliness)

General answers across the four states were that some objectives were and some objectives were not... Some stated that some needs to be clearly defined and described as what is really required and needed to be addressed. ...... (Need to re-look into some of these objectives as mentioned in States results tables)

# **6. SWOT ANALYSIS OF AGRICULTURE AND POLICY BY STATES**

#### **KOSRAE**

STRENGTHS	WEAKNESSES	
Capture Agriculture issues/development	Less people have access to plan	
priorities	Ag. Policy vision too ambitious	
Marketing tools for funding & technical	Translation needed	
assistance	Representation/commitment	
Commitment/ownership	Coordination/collaboration	
Existing Plans	Implementation/Poor coordination	
Support development plan	Market/Marketing	
Strategic direction	No commitment, No budget	
Platform for collaboration	Reporting	
OPPORTUNITIES	THREATS	
New market - Air Nauru opportunities	More new pests	
Funding/Technical assistance	Climate Change	
Healthy people, Economic growth	Land degradation-Deforestation	
Youth in Agriculture, Employment	Pollution	

### **CHUUK**

STRENGTHS	WEAKNESSES
Guide for implementation of activities	No or limited access to the plan
Performance evaluation	No public awareness of the plan
Sustainable use of resources	Lack of review/evaluation
Involvement of related agency	Lack of implementation plan
	No funding/Lack of capacity
	Political differences
	Domestic disputes/Land issues
	Stealing of produce
OPPRTUNITIES	THREATS
Good management	Natural disasters/climate change
Guideline for Youth/women in Agriculture	New Pests and diseases
Economic growth/tourism	Non commitment of partner agencies
Source of funding/grants	

# YAP

STRENGTHS:	WEAKNESSES:
Five year plan to guide	Poor community/coordination
Outer island extension agent implementing	Lack of support from community leaders
activities	Lack of funding
Technical support –R&D/SPC	Lack of transportation (sea trans)
Community leaders support	Lack of man power
Resources mobilization	Lack of interest in agriculture field
	Famers are women( Extension are men)
	Land issues-most privately owned
	Local chief not supporting/Cultural differences
	Decrease in of compact funding
	SAP need to be in place
	Politics
OPPORTUNITIES:	THREATS:
A guide for our activity implementation	Climate change (Sea level rise, drought etc.)
Funding from Congress & Donor agencies	Invasive species
Local resources & expertise	Increase of NCD/reliance on imported food
Hiring of more extension agent officers	Decreasing of compact fund
Funding for travel	

# **POHNPEI**

STRENGTHS:	WEAKNESSES:
Local manpower is available	Low market access (local & export)
Favorable climate condition	Limited transportation (local & overseas)
Unique Indigenous introduced food crops	Geographical isolation of the islands
Traditional Agro forestry in place	Limited fund source
Healthy partnership ( locally & internationally)	Limited expertise
Availability of relevant information to Agric.( soil data,	Lack of interest in farming/investment
maps, water and plant resources)	High rate of NCD
Agriculture as a priority	Poor communications
Culture helps in sustenance of crop diversity	Low level of education/Ignorance
Church activities promote use of local food crops	Poor structural support of Government
	Lack of livestock (pigs, goat, poultry)
OPPORTUNITIES:	THREATS:
OPPORTUNITIES:  Free Association with International community	THREATS: Climate change (sea-level rise, land slide,
Free Association with International community Freely Association with US	
Free Association with International community Freely Association with US Economic growth with low market	Climate change (sea-level rise, land slide,
Free Association with International community Freely Association with US Economic growth with low market Employment opportunity	Climate change (sea-level rise, land slide, storms, typhoon, drought and dry spells)
Free Association with International community Freely Association with US Economic growth with low market Employment opportunity Opportunity in Agriculture careers and other related fields	Climate change (sea-level rise, land slide, storms, typhoon, drought and dry spells) Invasive species, pest and diseases(avian/
Free Association with International community Freely Association with US Economic growth with low market Employment opportunity Opportunity in Agriculture careers and other related fields Potential to restore/rejuvenate barren lands	Climate change (sea-level rise, land slide, storms, typhoon, drought and dry spells) Invasive species, pest and diseases(avian/aquatic/marine)
Free Association with International community Freely Association with US Economic growth with low market Employment opportunity Opportunity in Agriculture careers and other related fields Potential to restore/rejuvenate barren lands Restore the Black pepper industry	Climate change (sea-level rise, land slide, storms, typhoon, drought and dry spells) Invasive species, pest and diseases(avian/aquatic/marine) Migration
Free Association with International community Freely Association with US Economic growth with low market Employment opportunity Opportunity in Agriculture careers and other related fields Potential to restore/rejuvenate barren lands Restore the Black pepper industry Agro-Tourism opportunity	Climate change (sea-level rise, land slide, storms, typhoon, drought and dry spells) Invasive species, pest and diseases(avian/aquatic/marine) Migration Political climate
Free Association with International community Freely Association with US Economic growth with low market Employment opportunity Opportunity in Agriculture careers and other related fields Potential to restore/rejuvenate barren lands Restore the Black pepper industry	Climate change (sea-level rise, land slide, storms, typhoon, drought and dry spells) Invasive species, pest and diseases(avian/aquatic/marine) Migration Political climate
Free Association with International community Freely Association with US Economic growth with low market Employment opportunity Opportunity in Agriculture careers and other related fields Potential to restore/rejuvenate barren lands Restore the Black pepper industry Agro-Tourism opportunity Value –added products ( b/fruits, cassava) taro, bananas	Climate change (sea-level rise, land slide, storms, typhoon, drought and dry spells) Invasive species, pest and diseases(avian/aquatic/marine) Migration Political climate

# 7. SUMMARY OF PROBLEMS HIGHLIGHTED BY STATES FOR NON-ACHIEVEMENTS OF OBJECTIVES

STATE	PROBLEMS			
<u>Kosrae</u>	Lack of funding support			
	Need commitment between partners			
	Need local feed for local Livestock			
	Improve coordination and communication between Agriculture, Land Grant & KIRMA			
	No agriculture curriculum in schools			
	Lack of Capacity building and training opportunities			
	Lack of Scholarship opportunities			
	Lack of awareness training on the importance of good quality for consistent supply			
<u>Chuuk</u>	Lack of funding support			
	No training/up skilling/capacity building			
	Experts are outside of Agriculture			
	A lot of stealing			
	Poor management plan			
	Lack of supplies, tools, seeds and planting materials			
	Not enough qualified staff (BA Degrees)			
	Accessibility to land (Land ownership)			
<u>Yap</u>	No funding for personnel recruitment & equipment			
	Need technical assistant in some areas – e.g. agriculture survey			
	No funding support or mechanism			
	No radio communication			
	No island chief island support			
<u>Pohnpei</u>	Lack of leadership			
	Lack of interest for agriculture involvement			
	Lack of resources (Land, money and labor)			
	Limited technology			
	Lack of facilities /equipment/tools			
	Lack of market			
	Climate change barriers			

# 8. TWO NOTABLE AREAS IDENTIFIED IN THE POLICY TO BE ADDRESSED

Apart from the two areas identified there are other areas in the Policy that needs to be addressed in the proposed revision and also identified from the present review in the 4 States. This revised version will also be the benchmark for the next of FSM Agriculture Policy 2017 onwards.

# <u>AREA 1.</u>

# **OUTCOME**

1. A well-resourced and properly focused agriculture sector operating within a stable and consistent policy framework

# **Key Strategies**

Maintain a Properly Focused and Consistent Policy framework

The Agriculture Policy endorsed by all key sector stakeholders and adopted by the representative governments at the municipal, state and national level provides the overarching policy framework for the sector.

1.1.2 An Agriculture Policy Working Team (APWT) will be constituted composed of representatives from state and national government offices responsible for agriculture, representatives of College of Micronesia, community-based organizations and the private sector. The APWT will work closely with the National Trade Facilitation Committee (NTFC) through the Agriculture Sub-committee to facilitate coordination in the implementation and monitoring of the Agriculture Policy. Along with horizontal coordination across sectors it will also be necessary to ensure good coordination at national, state and municipal government levels. Coordination should be focused around achieving the shared vision for the sector. Priority actions include:

# Establish the Agriculture Policy Working Team.

Liaise closely with the NTFC.

Identify reviews and studies required and draft Terms of Reference

Identify potential projects and funding sources.

Use information gained through monitoring, evaluation and impact assessments for policy development, review and refinement.

#### AREA 2.

#### **OUTCOME**

4. Increased volumes of saleable agricultural products to be marketed by the private sector into domestic and export markets

# **Key Strategies**

4.2 IMPROVE QUALITY, safety and consistency of supply.

Meeting sanitary and phytosanitary requirements for new export markets will be challenging, and will require concerted action by government. Furthermore, if small-scale farmers are to consistently supply different high-value crops, livestock, and other products to markets, then they must organize into producer groups so they can jointly market their products.

4.2.2 Strengthen capacity of all stakeholders to enable them to meet and comply with food safety, phytosanitary and other market access requirements. Priority actions include;

Recruit technical assistance to provide training in food safety, phytosanitary and other market access requirements.

Implement training programs for food inspectors and private sector enterprises in the food industry.

Assist with developing guidelines for product and process standards

- 4.2.4 With full participation of private sector establish quality standards for priority marketable products (e.g. sakau).
- 4.2.6 Review opportunity for establishing a livestock feed mill. Priority actions include: Explore possible private sector government partnership opportunities to establish a feed mill processing local materials for poultry, pig and aquaculture feeds and processing by-products from feed mills into fertilizer, etc..

## RECCOMENDATIONS OF FSM AGRICULTURE POLICY REVIEW JULY 2015

1. The review recommended that "The FSM National Agriculture Policy 2011 – 2016 is to be revised.

From the non-achievements of some States Agriculture Plan objectives and FSM Agriculture Policy outcomes a revised policy is warranted to reflect States basic needs and activities so that they are linked to the FSM Agriculture Policy and aligned to the FSM National Development Plan's (2004 – 2023) objectives and aspirations."

#### IN ADDITION:

1. The Monitoring and Evaluation process of the Policy should be addressed NOW and should be an ongoing activity of FSM R&D (Agriculture & Statistics).

There should be a concrete reporting format and timeline (monthly/quarterly/annually) in place with an efficient and effective data collection method which should be adhered to, to reflect Key Performance Indicators (KPI) achievements and non-achievements. This will be the basis for any review of the States Action Plans (short term), FSM Agriculture Policy (medium term) and the FSM Development Plan (long term) in future. ALL States should be reporting on ALL activities and achievements using a standard reporting format/template to FSM R&D (Agriculture and Statistics) for information and data collection and management.

2. The State Agriculture Departments should be responsible to put in place their Agriculture Strategic Action Plans – this is strongly recommended for their guidance.

For FSM Agriculture Policy to be a living document National and State Departments are to work together so that State Action Plans are aligned to the National Agriculture Policy and Plan and vice versa to reflect States and National agriculture priorities and needs. This will also help in the streamlining of activities and reporting by States to National Agriculture and Statistics Departments for future information and knowledge management

3. All stakeholders and partners are to be actively involved and committed in all consultations, planning and reviewing processes that are to be undertaken in future.

All Stakeholders should be informed well in advance of importance of National and State consultations and should be committed to participate actively in all discussions. This is to ensure that they are committed so to take up ownership of these State and National Plans.

- 4. National Partners and State Partners, (COM CRE Land Grant, USDA, NGO's, Farmers, Exporters and All other Stakeholders) are to improve on their coordination, communication, collaboration and partnership for the effective implementation of National and State Agriculture policies, and plans. This is an area that is being highlighted in ALL States that is not being effectively coordinated and has been seen as a hindrance to progress. With these in mind it is also proper to define Agriculture Research and Extension roles and responsibilities in all State and National entities to cut off red tape, duplications and also to gauge performances. In addition reporting channels should also be clearly defined for the efficient management of proposed reporting timeline to the States and National Agriculture and Statistics departments.
- 5. National Policies and State Plans are to be easily accessible and made available to all National and State partners and stakeholders.

States should be responsible for translations if they feel that there is a need for these plans to be clearly communicated to ALL their stakeholders.

#### **SOME FUTURE CHALLENGES**

#### AGRICULTURAL DEVELOPMENT AND FOOD SECURITY

#### 1. RESEARCH

How can the allocation of resources to improve agricultural research, development and growth be increased? How can agricultural research to promote agricultural growth be expanded? How can research agencies and technology users be more effectively linked? What is the best way to promote and encourage farmers to adopt new production practices to increase productivity and food security?

#### 2. TECHNOLOGY FOR LOCAL PRODUCTION

What appropriate technology and inputs use would intensify productivity for small landholders to produce enough food without any implications? What alternative job opportunities are there to diversify rural income besides farming income to improve livelihoods? How can tree crop based farming systems with limited irrigation capacity be diversified to promote rural livelihood and poverty reduction? How can local crop and livestock production be improved to supply local market demands? What risks and constraints do crop and livestock producers face? How can seed and planting material services be improved to foster continuous crop production? How can livestock breed be improved to improve local breeds and production? Are sustainable, effective and efficient crop and livestock production systems promoted? What regulations and policies are in place to minimize import and to promote local production?

#### 3. TECNOLOGY TRANSFER

How can the role of the municipality councils as the effective means of technology transfer in the community be promoted? What are the effective training programs for capacity building for municipality councils for their role in technology transfer? How can private sector involvement in technology transfer for producers be promoted? How can institutional and capacity building for extension agencies be strengthened to help farmers increase productivity more effectively? How can more resources be allocated to extension work?

#### 4. LAND USE PLANNING

How can better land use planning and sustainable agricultural crop and livestock production to increase agricultural growth be promoted? How can the Sakau, banana and root crop and livestock production areas be expanded to increase agricultural growth and promote food and income security? How can the law be enforced to return idle land to productive use?

#### 5. CLIMATE CHANGE

How can the risks to agricultural production and food security be reduced under the threat of climate change? How can effective crop and livestock farming systems be designed and promoted to reduce the threat to agricultural land, water systems and coastal areas?

## 6. MARKETS/MARKETTING

How can local or municipality markets be promoted and are developed for local crop and livestock producers to sell produce? How can formal trade to expand markets be fostered? What regulations are needed to improve the markets?

#### Annex I

# 20 Year FSM Strategic Development Plan 2004 – 2023

## **Agriculture Strategic Planning Matrix**

# **Mission Statement:**

The agriculture sector, including forestry, shall provide: (i) food security, cash incomes and healthy livelihoods; and (ii) opportunities for domestic and export markets, while promoting environmentally sustainable production within a stable and consistent policy framework

# Strategic Goal 1 - A well-resourced and properly focused agriculture sector operating within a stable and consistent policy framework

#### **Policies:**

- Adherence to an agreed policy framework based on solid information
- Allocation of an equitable Government budget share to agriculture
- Equitable allocation of Government budget for agriculture between staff salary related costs and operating expenses
- Delivery of effective education to rural population
- Raising the image of agriculture as a worthy and satisfying career choice
- Affordable farm monitoring system established
- Invest in border protection and agricultural quarantine

**Outcomes** 1(i) Agriculture sector policy reflects the views and priority needs of all major stakeholders by Dec. 2006.

#### **Activities**

1.1. DEA and State Agriculture staff run open meetings in State capitals and major rural centers to ensure policy documentation reflects priority stakeholder needs; DEA meets other relevant stakeholders to present investment proposals for approval

## **Outputs**

- 1.1.1. An agreed agriculture sector policy document that is formally signed by representatives from all sector stakeholders in all States.
- 1.1.2. An agreed agriculture sector investment plan that is formally signed by representatives from all sector stakeholders in all States.

**Outcomes** 1(ii) Public investments in agriculture sector are agreed by private sector and farmers in relevant States before expenditure is approved

#### **Activities**

- 1.2. Finance staff meets with budget and DEA staff to develop funding program for agriculture **Outputs**
- 1.2.1. Agriculture gets a level of funding that recognizes its status as a "priority productive sector" with 67% increase over 4 years.
- 1.2.2. Private sector funding allocations under Compact 2 recognize the legitimate needs of subsistence agriculture for funds.

Outcomes 1(iii) Less waste of scarce public resources

#### Activities

1.3. Government reviews agriculture service delivery and agrees to allow contracted extension service delivery

#### **Outputs**

- 1.3.1. Agriculture service delivery reviewed and re-structured to ensure not more than 50% of expenditures are spent on salaries, wages and associated staff costs by 2007
- 1.3.2. Agricultural extension is modelled on existing examples of community based delivery with Government role mainly funding and monitoring outcomes by 2007
- 1.3.3. NGOs and community groups are advised in advance of policy shift and asked to consider bids for service delivery contracts

Outcomes 1(iv) Budget share allocated to agriculture increases to 3% of total by 2009

#### **Activities**

1.4. Rural education services are reviewed to focus on quality teaching and learning results

# **Outputs**

- 1.4.1. Rural teachers re-training completed by 2010; rural teacher absenteeism reduced to 10% by 2010; rural education infrastructure re-constructed by 2010
- 1.4.2. Government education funds are allocated for vocational agriculture education services contracted where appropriate.

**Outcomes** 1(v) 75% of agriculture extension services are undertaken by civil society and community groups on contract basis by 2007

#### **Activities**

- 1.5. Awareness campaign run to highlight commercial agriculture as a profitable and worthy profession **Outputs**
- 1.5.1. Commercial agriculture is seen as a viable and recognized career alternative for disadvantaged youth

**Outcomes** 1(vi) Better educated rural population, equipped to improve traditional farming systems to meet demands of declining Compact support, attains at least 50% high school completion rates by 2015 **Activities** 

1.6. New HIES undertaken to act as baseline study; Simple monitoring system is established within community extension groups; Small number of farmers randomly selected for in-depth tracing of relevant issues over time; Export data provided by Quarantine service on quarterly basis

### **Outputs**

- 1.6.1. Agricultural data base established and maintained
- 1.6.2. Data gathered, analysed and distributed
- 1.6.3. Annual agricultural data report available within 6 months of year end.

Outcomes 1(vii) Rates of youth migration are contained at 2004 levels

#### **Activities**

1.7. Quarantine service is properly resourced and equipped to undertake task.; Staff training continues on regular basis; Establish bilateral trade/quarantine agreement

- 1.7.1. Inspection facilities constructed in each State near port or airport.
- 1.7.2. Fumigation facilities constructed in each state.
- 1.7.3. Heat treatment facilities built on basis of throughput feasibility in relevant States with markets where fruit fly is issue.
- 1.7.4. Volume of produce exported under agreement
- 1.7.5. Number of agreements established

# Strategic Goal 2 - Increase production of traditional farming systems for home nutritional and traditional needs and cash incomes

#### **Policies:**

- Development of a flexible, affordable extension service specifically designed to deliver quality services to traditional farmers
- Elimination of Vitamin A deficiency among the FSM population
- Develop more focused, HH food security strategy for agriculture in Chuuk
- Replace some imported foods with local product

**Outcomes** 2(i) 75% of agriculture extension services are undertaken by civil society and community groups on contract basis by 2007.

#### **Activities**

2.1. Government reviews agriculture service delivery to traditional farmers and agrees to allow contracted extension service delivery; NGOs and other civil society groups present proposals to a state selection team for assessment; Communities mobilized to participate in livelihoods extension approach; Recognition and publicity for farmers achieving regular sales of fresh produces to local markets; Sites provided by farmers for extension and applied research activities; Increase availability and quality of identified improved planting materials through private sector

## **Outputs**

- 2.1.1. Revised extension and research approach to traditional farmers is developed and accepted.
- 2.1.2. Agriculture focus groups formed and covering 50% of all rural municipalities by 2006
- 2.1.3. Food security issues in poor households are reduced by 75% by 2009
- 2.1.4. Farmer cash earnings from agriculture rise by 25% by 2009
- 2.1.5. R&D programs being undertaken and results broadly disseminated through extension groups.
- 2.1.6. Private nurseries established and collaborating with researchers and community extension staff to identify ideal products
- 2.1.7. Revised research/extension help farmers adapt systems to incorporate feasible new options
- 2.1.8. New local markets built as required
- 2.1.9. Traditional farmers have better understanding of nurseries; Review local market infrastructure and establish as needed; Streamline and defragment duplicated support services; HIES undertaken in 2009 to monitor production and profitability outcomes technical, market and business challenges and opportunities.
- 2.1.10. Eliminate duplication of support services among government, non-government organizations and the private sector.

**Outcomes** 2(ii) A livelihoods approach to traditional agriculture with community ownership results in a 10% increase in production and the consumption of local foods and 10% increase in quantity of local produce sold in local markets by 2009.

## **Activities**

2.2. Conduct community-level awareness programs and initiatives on the nutritional value of local produce; Nutritional agriculture program integrated with school curriculum; Home garden programs encouraged among women's groups

- 2.2.1. Awareness of nutritional health is delivered with community livelihoods approach
- 2.2.2. Yellow flesh fruits are eaten daily
- 2.2.3. Schools deliver nutrition programs

- 2.2.4. Women's groups home gardens established
- 2.2.5. Production and price of local fruits rises with demand

# Outcomes 2(iii) Vitamin A deficiency levels less than 10% by 2009

#### **Activities**

2.3. Review by State agriculture staff to identify key issues and possible solutions; Review is presented to community leaders for input and adjusted to reflect these suggestions; Food processing courses designed, staff recruited

## **Outputs**

- 2.3.1. Chuuk agriculture program review completed
- 2.3.2. Reduced HH expenditure on food
- 2.3.3. Food processing workshops run among all age groups reduced by 50% by 2010

# Outcomes 2(iv) 50% reduction in infant mortality by 2010

#### **Activities**

2.4. Awareness campaign undertaken on financial and health benefits of local food consumption; Home technology courses for women on interesting and varied ways of presenting local foods; Provide cash benefits for families identified by community extension group leaders as having achieved 25% expenditure reduction on food imports; Training programs for local chefs to introduce new recipes for local foods; Recognition awards for restaurants that present local foods to guests on regular basis

# **Outputs**

- 2.4.1. Reduced HH expenditure on food
- 2.4.2. More varied menus and diets based on local food.
- 2.4.3. Higher profile for local foods as premium products
- 2.4.4. Program to present local foods to growing tourism industry as part of the FSM travel experience

Outcomes 2(v) Reported morbidity rates among all age groups reduced by 50% by 2010

- 2(vi) Agriculture program in Chuuk better reflects the pressing food security issues there.
- 2(vii) Food insecurity reduces by 30% by 2009
- 2(viii) Cooked foods exports increase by 30% by 2009
- 2(ix) 5% reduction in HH expenditure on imported foods by 2010 in FSM
- 2(x) Tourism and visitor industry using local foods in 20% of meals presented by 2010.

#### **Activities**

# **Outputs**

# Strategic Goal 3 Increased volumes of saleable surpluses to be marketed by the private sector into local and regional markets

#### **Policies:**

- Establishment of regular dialogue between stakeholders (Government, private sector and growers)
- Recognition of the separate roles of stakeholders.
- Encouragement of niche commercial crops for import substitution and export
- Manage the coconut industry for the benefit of both producers and processors
- Differentiate extension services between commercial farmers and traditional farmers
- Develop small-scale agriculture/food production units and industries

**Outcomes** 3(i) More collaborative approach to domestic and export marketing by 2007 results in greater market volumes and higher prices

#### **Activities**

3.1. Meetings held quarterly – on State basis or product basis as agreed; Summary notes of key discussion points available

#### **Outputs**

- 3.1.1. Relevant Government, Chamber of Commerce (or other), and farmer rep's meeting 1/4ly to discuss issues together and bilaterally as appropriate.
- 3.1.2. Proceedings from the meetings (3.1 (i)) are published & distributed to all stakeholders within 1 month of meeting.
- 3.1.3. Greater market access for FSM exports
- 3.1.4. Assured access to air and sea freight services at fair prices
- 3.1.5. Improved supplies of farm supplies at local level

Outcomes 3(ii) - Higher cash returns for commercial farmers and exporters

Outputs 3.2. MOU signed by all parties on regional or product basis as appropriate.

## **Activities**

- 3.2.1. In accordance with Output 1.1.2:
- 3.2.2. Government provides enabling environment1.
- 3.2.3. Farmers' produce quality product in consistent quantity

in response to market requirements

3.2.4. Private sector fills most other roles in the marketing and supply chain.

**Outcomes** 3(iii) - More efficient provision of key inputs including farm supplies and freight services by 2007

**Activities** 3.3. Collaborative marketing strategy and funding shares agreed; Conduct market research & undertake promotions; Collect and provide information on marketing, management, and technical standards; Provide research back up (incl SPC/FAO sources) to meet priority needs of commercial farmers; Provide prize incentives for top farmers to visit counterparts in other Pacific countries; Review productivity of land survey & title program – consider contracting out; FSM DB reviews product range to provide for commercial farmer needs.

### **Outputs**

- 3.3.1. Market strategy in place with all stakeholders participating in agreed roles
- 3.3.2. Number of markets identified, and market surveys conducted
- 3.3.3. Number of promotional programs conducted
- 3.3.4. Appropriate data on standards disseminated to commercial farmers within 1 month of being gathered
- 3.3.5. Research data from SPC/FAO investigated & disseminated
- 3.3.6. Top farmers visit other PI commercial farms
- 3.3.7. Suitable credit available and being used

**Outcomes** 3(iv) More efficient marketing on behalf of growers results in greater market volumes and higher prices

**Activities** 3.4. Business plan prepared with input from all stakeholders; Private sector investors accept the social aspects of the coconut crop in OIs; Oil extraction plants established in each OI; Courses run in OIs to ensure premium quality grade oils are produced

- 3.4.1. Coconut oil extraction and marketing business understood and accepted by all stakeholders
- 3.4.2. Public/private sector oil extraction business established

- 3.4.3. Oil extraction plants operating with skilled staff and 900,000 gallons coconut oil sold annually by 2007
- 3.4.4. Closure of CDA by 2006

Outcomes 3(v) - Higher cash returns for commercial farmers and exporters

**Activities** 3.5. Develop capacity within FSM COM to provide quality, timely extension service on product by product basis; provide small business development training to support development of small farm business enterprises.

## **Outputs**

- 3.5.1. COM FSM cooperative research and extension service re-structured to differentiate between traditional and commercial farmer needs by 2007
- 3.5.2. Commercial growers receive specialized extension service by 2007 migration rates from OIs to main islands or USA by 2010.

**Outcomes** 3(vi) - Export receipts for agriculture increase by 2% annually compound from 2009 **Activities** 3.6. Technical back up expert support needs identified by private sector; Government finds & provides experts; Business plans written; FSM DB provides investment funds

#### **Outputs**

3.6.1. New food processing and value-adding businesses established and functioning entirely in private sector environment

#### Outcomes

- 3(vii) Import value of fruit and vegetable able to be grown in FSM decreasing by 2% annually by 2009 3(viii) Higher cash returns for commercial farmers and exporters.
- 3(ix) 50% increase in rate of new land titles registered
- 3(x) Future structure of coconut oil industry is established within private sector framework that offers social protection to OIs by 2006
- 3(xi) 20% higher cash returns for outer island (OI) farmers by 2007
- 3 (xii) At least 3 new employment opportunities in each OIs by 2006
- 3(xiii) Nil direct subsidy payments to coconut producers by 2006
- 3(xiv) 20% reduction in out
- 3(xv) Coconut crop export receipts up by 10%
- 3(xvi) Value of commercial agriculture activity grows by 5% per year from 2007
- 3(xvii) Number of commercially focused agriculture enterprises increases by 25% per year on 2004 baseline.
- 3(xviii) (i) Value of agriculture exports increases 2% per year from 2006
- 3(xix) 5 new jobs created per year from 2006
- 3(xx) Food imports reduced by 3% per year from 2006

# Strategic Goal 4 Promote environmentally sound and sustainable production.

## **Policies:**

- Establish effective mechanisms to control invasive species
- Discourage slash and burn farming/deforestation

Outcomes 4(i) - Increase in returns to organic farmers by 10%

## **Activities**

4.1. Encourage the use of technologies that minimize the use of agricultural chemicals; Run courses on organic farming; Provide organic certification opportunities

- 4.1.1. Increase number of local farmers shifting into organic farming practices
- 4.1.2. Extension services include organic farming advice
- 4.1.3. Economics of organic farming assessed

Outcomes 4(ii) - Maintenance of remaining forest cover at 2004 levels.

**Activities 4.2**. Ensure environmentally sustainable production in practiced; Community and private sector leaders actively encourage environmental issues in agricultural production

- 4.2.1. Number of public education programs
- 4.2.2. Number of workshops administered in communities
- 4.2.3.

#### Annex II.

#### **FSM AGRICULTURE POLICY 2012 - 2016**

#### Vision

By 2023, FSM will have a vibrant, robust and productive agriculture sector that sustainably supports food security, healthy lifestyles, strong social safety nets, and promotes a greener economy. The sector will provide good employment and income generation opportunities, economic growth and a decreased trade deficit. This will help ensure a happy, healthy, prosperous and peaceful nation. POLICY GOALS, DEVELOPMENT OUTCOMES AND STRATEGIES

#### AGRICULTURE SECTOR POLICY GOALS

Achieve national food security, safety and nutritional health
Improve farm incomes and livelihoods with particular focus on gender and vulnerable groups
Strengthen socio-cultural safety nets
Preserve and protect culture, traditional knowledge and practices
Support sustainable economic growth and improve the balance of trade
Improve natural resource management

# **DEVELOPMENT OUTCOME (RESULTS) AREAS**

A well-resourced and properly focused agriculture sector operating within a stable and consistent policy framework

Enhanced capacity of sector stakeholders

Increased sustainable production (and productivity) of traditional farming systems to provide for household nutrition, traditional needs and cash incomes

Increased volumes of saleable agricultural products to be marketed by the private sector into domestic and export markets

More product value adding through efficient value chains

Strengthened domestic and international transport linkages

Enhanced synergies between the agriculture and tourism sectors

Enhanced environmental services and sector resilience to natural disasters and climate change Key Strategies

# 1.1 Maintain A Properly Focused and Consistent Policy framework

The Agriculture Policy endorsed by all key sector stakeholders and adopted by the representative governments at the municipal, state and national level provides the overarching policy framework for the sector.

❖ 1.1.1 To ensure continued policy relevance and facilitate policy deepening priority attention will be focused on strengthening agriculture and socio-economic data and capacity to analyze agriculture policy issues. The offices responsible for agriculture will work closely with the national statistical services to strengthen data collection systems and reporting. An appropriate level of staff time and financial resources will be devoted to maintenance of good data systems. Priority actions include:

- Conduct a national agriculture census.
- o Collect and publish representative farm production (area and yield) data for key crops.
- Collect information on domestic market trade, volumes and prices.
- Provide better quality and more timely trade statistics.
- o Improve gender disaggregated socio-economic data on farm households.
- ❖ 1.1.2 An Agriculture Policy Working Team (APWT) will be constituted composed of representatives from state and national government offices responsible for agriculture, representatives of College of Micronesia, community-based organizations and the private sector. The APWT will work closely with the National Trade Facilitation Committee (NTFC) through the Agriculture Sub-committee to facilitate coordination in the implementation and monitoring of the Agriculture Policy. Along with horizontal coordination across sectors it will also be necessary to ensure good coordination at national, state and municipal government levels. Coordination should be focused around achieving the shared vision for the sector. Priority actions include:
  - Establish the Agriculture Policy Working Team.
  - Liaise closely with the NTFC.
  - o Identify reviews and studies required and draft Terms of Reference
  - o Identify potential projects and funding sources.
  - Use information gained through monitoring, evaluation and impact assessments for policy development, review and refinement.

# 1.2 Adequately Resource the Agriculture Sector

This overarching agriculture policy framework will be the means for coordination of investments from national and state budget revenue together with all other sources of public funds for the sector development (including, but not limited to, US Compact Funds and Federal Programs and Grants, other development partner funds and technical assistance). The government will also use this framework to facilitate and guide private investments in the sector.

- 1.2.1 The National Department of Resources and Development will, in close consultation with SBOC and the government offices responsible for agriculture in the four states, develop a Medium Term Expenditure Framework (MTEF) for the agriculture sector based on comprehensive program action plans, capturing expected internal and external resources and indicating how these resources will be allocated in pursuit of the agreed policy strategic outcomes. Priority actions include:
  - Set priorities and fully develop the action plans to deliver key strategies and estimate program and project costs.
  - o Recruit technical assistance to strengthen capacity to develop the MTEF.
  - Develop a resource mobilization strategy
  - Use the policy framework and MTEF to encourage and direct investments in the sector.

This will entail strengthening institutions responsible for coordinating, facilitating, delivering and monitoring services to the sector as well as strengthening the private sector operators as the engine of growth. Recognizing the potential scale of the task, the first step should be relevant capacity assessments to identify needs for delivery of the strategic outcomes of the Agriculture Policy.

Capacity building for entrepreneurship and in business skills requires a priority policy focus and may entail revisions in formal education curriculum as well as more grass roots approaches which encourage innovation and enterprising behavior. It will also be important to strengthen the human resource capacity of current extension staff, such as training them to use more participatory methods, and to increase their technical, management, processing and marketing skills.

# **Key Strategies**

- 2.1 Improve Access to Technical and Vocational Training Opportunities in Agriculture
  - ❖ 2.1.1 Develop a comprehensive strategy to improve access to Vocational Education.
  - ❖ 2.1.2 Ensure that capacity building and strengthening partnerships are key components in all government (and development partner) supported agriculture programs. Where appropriate use internship on-the job training and mentoring approaches.
  - ❖ 2.1.3 Strengthen small business enterprise support services.
  - Ensure gender balance in recruitment of training staff and enrolment of students on training courses
- 2.2 Strengthen the capacity of government agriculture institutions (state and national) to fulfill a more active role in facilitation, coordination across sectors and partnering with private sectors and civil society
  - ❖ 2.2.1 Carry out capacity and core functional assessments of the government departments concerned with agriculture to better define operational roles and appropriate staffing to deliver these roles. Priority actions include:
    - Review and prepare new Corporate Plans in line with fulfilling the roles envisage in the implementation of the Agriculture Policy.
  - 3. Increased sustainable production (and productivity) of traditional farming systems to provide for household nutrition, traditional needs and cash incomes.

Government recognizes that traditional and semi-commercial farming systems are an important component of livelihoods and properly managed have proven productive and sustainable. Therefore building on these systems, to enhance productivity and efficiency, to allow for greater import substitution and exports will be the guiding principle for government interventions and support. Given the limited potential for larger plantation development and the dearth of investment capital for the agriculture sector, raising production volumes will be primarily dependent on increasing smallholder production.

## **Key Strategies**

# 3.1 Increase sustainable production (and productivity) of traditional and semi-commercial farming systems

Small farmers face significant challenges to increase productivity (land and labor). More attention needs to be focused on maintenance of soil nutrients, pest control and disease management for long-term sustainable yields. Practices must also seriously consider labor productivity, recognizing that return-to-effort is a key motivational factor for small farmers. Whilst international best practice is established in regions of the world, more attention needs to be focused on adaptive research and appropriate technology transfer in FSM.

- ❖ 3.1.1 Government will strengthen producer oriented adaptive research capacity. Priority actions include:
  - Facilitate coordination between research providers at state, national, regional and international levels.
  - Review current research priorities and activities in the sector and ensure alignment to the agriculture policy framework.
  - Explore feasibility of establishing a national agriculture research center in partnership with COM-FSM.
  - o Give increased attention to economic and social research.
  - o Improve dissemination of research results to target groups.
  - o Protect and evaluate traditional crop diversity.
  - Test improved genetic material (crop, tree and livestock) for adoption into traditional and semi-commercial farming systems.
- ❖ 3.1.2 Improve the effectiveness of extension services by fostering the development of pluralistic farmer-oriented extension structures that will aim at efficiency of extension provision through reorganization (by government, COM and NGOs) and improved coordination and partnership between extension providers. Raising production know how at the household and producer level through extension is a key function to be carried out by appropriate educational and agricultural support services. Priority actions include:
  - Review extension provision across the nation to develop an appropriate and affordable extension model that addresses stakeholder needs.
  - Ensure adequate allocation for operation costs in budget preparation (recommended ≥50%).
  - Adopt participatory and community-based approaches to promote local food production, healthy lifestyles and sustainable diets.
  - Ensure extension programs are gender focused and gender responsive.
- ❖ 3.1.3 Review Pricing Policies (taxes and subsidies) to promote equitable, sustainable production of local farm products and to deter environmentally degrading and polluting activities. Priority actions include:

- In the context of high food prices recruit technical assistance to review current policy settings across the four states, recognizing the need to improve incentives for producers, but also the welfare of food deficit households.
- ❖ 3.1.4 Strengthen resources and capacity of small business enterprise support services.
- 3.1.5 Support a well-functioning bio security service to ensure adequate protection of FSM's plant and animal health status from introduced exotic pests and diseases. Priority actions include:
  - Enact harmonized bio security legislation and regulations.
  - Develop a national bio security strategic plan

# 4. Increased volumes of saleable agricultural products to be marketed by the private sector into domestic and export markets

Government recognizes that increased production and marketing will ultimately be dependent on private sector activity and will thus strive to create an enabling macroeconomic and policy environment conducive to private sector led growth in the agriculture sector. The recently adopted FSM Trade Policy identifies some key actions in this area.

At this stage of FSM's economic and private sector development, supporting market linkages for the majority of smallholders/rural population remains in many areas a public good. Also possible use of targeted subsidies to address market failures may need to be considered (examples could be for inputs, transport and information). When subsidies are considered these will be "market smart" with the aim not to distort markets for private sector activity. Government recognizes that it is the private sector traders who ultimately are the most important and sustainable link for farmers to markets, for outputs, inputs and useful information.

Currently there is heavy reliance in commercial agriculture on two main crops – sakau and betel nut, this increases vulnerability to market shifts and natural events (e.g. outbreak of pests or diseases). To reduce vulnerability strategies will focus on diversification of potential marketable products as well as increasing market opportunities. A key constraint is lack of information and understanding of market opportunities and processes.

A robust domestic market for a potential export product, which is the case for sakau and betel nut, helps reduce the vulnerability of farmers to fluctuations in the international market.

## **Key Strategies**

# 4.1 Develop robust domestic and Export Market supply chains

- ❖ 4.1.1 Government will adopt a supply chain approach to facilitate and support the establishment of viable production and marketing chains from input supplies, through farm production to end markets. Priority actions include:
  - Identify priority commodity supply chains for import substitution and export markets.
  - Establish regular dialogue between all stakeholders in the priority supply chains.
  - Facilitate and support formation of producer groups, farmers' organizations and associations.
  - Assist in identifying (and solving) specific constraints to supply chain efficiency.
  - Train farmers to target off-season production for different commodities in order to avoid over-supply and the inherent low seasonal prices.
  - Support effective participation in trade shows, missions and promotions.
- ❖ 4.1.2 Government will prioritize programming resources to ensuring the basic economic infrastructure is in place to facilitate trade on the domestic market. After adequate technical, economic and social feasibility assessment specific attention will be directed towards improving and maintaining:
  - o Rural roads and bridges.
  - Domestic wharves and port facilities.
  - Municipal market houses, food preservation, warehouse, and slaughter facilities.

### 4.2 IMPROVE QUALITY, safety and consistency of supply.

Meeting sanitary and phytosanitary requirements for new export markets will be challenging, and will require concerted action by government. Furthermore, if small-scale farmers are to consistently supply different high-value crops, livestock, and other products to markets, then they must organize into producer groups so they can jointly market their products.

- 4.2.1 Establish an appropriate SPS architecture specifying clear roles and functions. Priority actions include:
  - Review food laws and regulations at national and state level to develop comprehensive and coherent food laws and regulations which are harmonized across the nation.
  - Review food analysis needs and elaborate proposal to establish a national food laboratory.
- ❖ 4.2.2 Strengthen capacity of all stakeholders to enable them to meet and comply with food safety, phytosanitary and other market access requirements. Priority actions include;
  - Recruit technical assistance to provide training in food safety, phytosanitary and other market access requirements.
  - Implement training programs for food inspectors and private sector enterprises in the food industry.
  - Assist with developing guidelines for product and process standards
- ❖ 4.2.3 Encourage and facilitate formation of producer groups and associations to coordinate consistent supplies of high quality marketable products to meet market demands. The

associations should be encouraged to develop business plans to ensure they can be sustainably operated and funded.

- ❖ 4.2.4 With full participation of private sector establish quality standards for priority marketable products (e.g. sakau).
- ❖ 4.2.5 Ensure efficient input services properly targeted at farmers needs are in operation; recognizing that the private sector should be the primary supplier of input services and government interventions should be considered only where the market is unable to provide effective supply services. Priority actions include:
  - Close or phase out government input supply arrangements as the private sector assumes the role
  - o Promote the use of domestically produced inputs where possible
- ❖ 4.2.6 Review opportunity for establishing a livestock feed mill. Priority actions include:
  - Explore possible private sector government partnership opportunities to establish a feed mill processing local materials for poultry, pig and aquaculture feeds and processing by-products from feed mills into fertilizer, etc..
- 4.3 Seek favorable trade agreements with key trading partners
  - 4.3.1 Along with strengthening domestic market opportunities improving agricultural export trade will also be vital for sustained growth in the agriculture sector and to improve the merchandised trade balance. Through the Division of Trade and Investment, the government will continue to seek favorable trade agreements with key trading partners.

# 5. More product value adding through efficient value chains

Traditional food production systems have provided the resilience to withstand natural disasters and external economic shocks. Building on these traditional systems (including agroforestry) and developing value added marketable products from them would help to ensure that subsistence security is not sacrificed in the drive for greater productivity and economic growth. The aim is to process primary products (to alleviate quarantine issues and extend shelf life), to add value (to offset transport costs) to reduce volume (to lower freight costs) and to brand (to differentiate and make distinctive). Developing domestic market and export opportunities based on traditional crops would ensure strong backward linkages to the rural communities who have the experience and the resources to produce them. It should involve significantly less risk than ventures into new exotic crops and would protect the subsistence base thus strengthening food security.

#### **Key Strategies**

- 5.1 Increase opportunities and capacity for processing and value addition of traditional farm products
  - ❖ 5.1.1 Government will support with appropriate economic incentives and capacity building an adequate degree of processing of primary products to increase in-country value addition prior to marketing. Promotion of low-cost processing would reduce perishability and increase farm gate

prices. This requires collaboration between extension service providers and private businesses in pilot processing at the farm level as well as in packaging and market promotion.

# Priority actions include

- o Identify appropriate potential products for processing and value addition.
- Facilitate technical support for market and cost benefit analysis prior to advocating development of new value added products.
- Facilitate technical support for appropriate processing technology and practices recognizing economies of scale, utility provision and costs, product quality and safety standards.
- Consider duty concessions and fiscal incentives for capital investments to support nascent manufacturing enterprises.
- ❖ 5.1.2 Government will review the coconut sector and evaluate opportunities for development of value added coconut products which offer greater returns than can be achieved from copra and copra oil. These value added products include virgin coconut oil, coconut cream, coconut timber, high-quality soap, activated carbon, cocopeat and bio diesel. Priority actions include:
  - Undertake a strategic review of the coconut sector and the role of CDA and the private sector in development of profitable value added coconut enterprises.
  - Facilitate mentoring and sharing of experiences in coconut processing and marketing from regional neighbor countries [e.g. Vanuatu (bio-fuel), Samoa (virgin oil and timber) and Fiji (oil products and timber)].
- ❖ 5.1.3 Government will foster the development of smoothly functioning and sustainable systems of finance which provide for: Credit (micro-finance) and savings facilities to smallholders; Credit for working capital for traders and exporters; Finance for capital investments for agro-processors and agri-business. Priority actions include:
  - Design tailor made credit packages for small-scale producers to facilitate access to key inputs.
  - o Provide training in "farming as a business"
  - o Review opportunities for risk-sharing partnership between public and private sector

# 6. Strengthened domestic and international transport linkages Key Strategies

- ❖ 6.1 Government will facilitate a review of transport (air and shipping) services with the aim to identify constraints and evaluate opportunities and actions to improve freight and passenger services to stimulate growth in the productive sectors.
- ❖ 6.2 Government will consider supporting a dedicated freight coordinator working closely with the office of the Micronesian Shipping Commission to liaise between private sector exporters and shipping agents to facilitate better freight opportunities and solutions.

# 7. Enhanced synergies between the agriculture and tourism sectors

In direct support of the SDP Tourism Goal 6 "Promote inter-sectoral linkages and maximize the use of local produce and services" the following strategies will be implemented to increase linkages and synergies between the agriculture and tourism sectors.

## **Key Strategies**

- ❖ 7.1 increase the access of small-scale producers to the tourist market (hotels and restaurants). Priority actions include:
  - Conduct market studies to establish the size and characteristics of the market for fresh and processed produce in the tourist market segment (demand profile- including seasonal trends/patterns in demand; current market share of local produce by product, volume and value)
  - In cooperation with farmers associations and tourism sector strategically re-orient the production operations of small-scale farmers to meet needs of hotel/restaurant sector taking into account the variables impacting on hotel/ restaurant demand.
  - In cooperation with tourism industry associations (visitors' bureaus etc) explore opportunity for promoting local foods in restaurant and hotel kitchen menus.
  - o In cooperation with tourism associations (visitors' bureaus etc) explore opportunities for agriculture tours and farm-stays.

# 8. Enhanced environmental services and sector resilience to natural disasters and climate change

The natural environment is central to food security, livelihoods and the commodity export and import substitution industries of FSM. Therefore, sustained growth in the agriculture sector is critically dependent on the sustainable management of the natural resource base. The competing demands on the environment and differentiated impacts of climate change must be assessed and taken into consideration when formulating strategies to address the development challenges the productive sector faces. This policy respects the principles and objectives of sustainable land management (SLM)

# **Key Strategies**

- 8.1 Enhance capacities to use natural resources in a sustainable manner is in support of Sustainable growth in the agriculture sector
  - ❖ 8.1.1 Government will promote farming systems and ecosystems perspectives which encourage environmentally friendly production systems, including integrated crop management, integrated pest management, traditional agroforestry and organic farming. Government will also promote efficient waste management systems for livestock. Priority actions include:
    - Train farmers in sustainable natural resource management practices
    - Establish demonstration sites to provide practical training and raise awareness on sustainable agriculture practices
    - o Ensure the safe storage, application and disposal of agricultural chemicals
    - Ensure proper treatment of livestock manure and waste water
  - ❖ 8.1.2 Government will support and facilitate community-based approaches for management of natural resources.

- ❖ 8.1.3 Government will strengthen regulatory frameworks and enforcement to encourage sustainable farming and protect natural resources and prevent pollution adopting a "polluter-pays" principle.
- The impacts of climate change will be assessed and taken into consideration when formulating strategies to address the development challenges in the agriculture sector.

#### Annex III.

#### KOSRAE STRATEGIC DEVELOPMENT PLAN

# **Objectively Verifiable Indicator**

"By 2023, agriculture commodity trade represents at least 50% of total Kosrae export."

#### **Overall Goal**

"Improved agriculture production to support business and food security increased by healthy and committed people."

Agriculture is among the economic productive sector that has been viewed to have the potential for development, thus generate income to Kosraeans and, in effect, the Kosrae economy as well. Considerable emphasis has been placed on the agriculture sector to encourage increased production of agriculture commodities for commercial trade. Indicated above are the goal statement and an objectively verifiable indicator for the agriculture sector.

The goal for the agriculture sector is to increase production of agriculture commodities to support food security for the Kosrae populace for the near and long term as well supporting Kosrae's economic advancement and the economic wellbeing of Kosraeans through marketing of agriculture commodities. In summary, the agriculture plan is intended on ensuring increased production of agriculture commodities by increasing both crop and livestock production by 50% and 40% respectively by 2020. The agriculture plan further includes planning for improved marketing of Kosrae agriculture commodities as well as improved management and governance of agriculture activities.

# **Table 2-R: Agriculture Results and Strategic Targets**

## Results OVI

- 1. Sustainable crop production increased.
  - 50% increase in crop area and crop production by 2020.
  - At least 50% of the farmers adopt the recommended sustainable crop husbandry practices by 2020.
- 2. Sustainable livestock production increased.
  - At least a 40% increase in livestock numbers and production by 2020.
- 3. Marketing opportunities improved
  - At least a 50% increase in fresh farm produces commodities exported by 2020.
  - At least three (3) value-added agriculture commodities exported by 2020.
- 4. Improved awareness program for agriculture industry and encourage new farmers into sector.
  - By 2016 a 50% increase in the number of active farmers in Kosrae.
- 5. Agricultural research and studies strengthened
  - 2016 at least 20 climate tolerant crop varieties confirmed
  - 30% increase in number of post-secondary students enrolled in agriculture trade school(s) by 2020.
- 6. Agriculture Office fully resourced.
  - Mobilize financial resources from government, donors and development partners to implement the Agriculture SAP.
- 7. DREA activities properly monitored and evaluated.

• Periodic monitoring, evaluation and reporting conducted.

## **Table 2-S: Agriculture Result 1 - Activities and Costs**

#### Result 1 Activities Cost

# Sustainable crop production increased

- ☑ Increase land area engaged in crop production both for subsistence and commercial farming \$50,000
- Multiply planting materials for the selected priority crops for both the domestic and export market -\$40,000
- 2 Acquire more climate-tolerant crop varieties from SPC and Land Grant to increase the diversity of locally grown crops for the island \$3,000
- ② Conduct training on appropriate adaptation measures to address salt water intrusion, coastal shores erosion and invasive species. \$35,000
- ☑ Conduct training on the control of insect pests and diseases of crops \$8,000
- ☑ Conduct farmers' training on soil improvement methods \$3,000
- 2 Conduct food preparation, processing and preservation methods to communities. \$6,500
- 2 Conduct farmers' training on recommended crop rotation methods \$5,000
- ☑ Conduct on-farm demonstrations on recommended farming technologies capitalizing on traditional farming techniques. \$175,000
- Develop nutritious and healthy (reduced salt/increased herbs) recipes for households use in preparing their daily balanced meals \$1,000
- Decrease importation of poor nutritious food items \$3,000

#### Annex IV.

# CHUUK STATE AGRICULTURE STRATEGIC DEVELOPMENT PLAN (SDP – 2011- 2031)

(The Agriculture department's goals and objectives coincide with the NSDP as well as the National Agriculture and, Private and Environment Sectors strategic goals)

#### **VISION**

People of Chuuk will live happily and peacefully in a clean and healthy environment having bountiful and sustainable resources with rich biodiversity for sustainable development, social advancement, economic prosperity, spiritual enhancement and environment protection so that every generation will enjoy now and forever.

#### **MISSION**

Agriculture Department in collaboration with local, state and national governments, regional and international organizations will strive to increase food and livestock production, forest production and utilization and to develop, conserve, sustain, educate, manage, and wisely use the resources for food security, import substitution, health, domestic and export market, employment and business opportunities, social advancement, and environment enhancement and protection while preserving the traditional practices, but reaching for modern knowledge and technology within a stable and consistent policy framework.

# **CHALLENGES/ISSUES**

- 1. Funding and resources including infrastructures and communication
- 2. Food security
- 3. Private sector development
- 4. Sustainable food and livestock production
- 5. Sustainable land management and forest use
- 6. Climate change and man-induced disaster
- 7. Watershed and coastal stabilization
- 8. Youth and women and agriculture
- 9. Sustainable financing
- 10. Capacity building
- 11. Research and development

# **GOALS FOR AGRICULTURE DEPARTMENT**

- 1. Expand and optimize production of agricultural, forestry, and livestock production for self-supporting and sufficiency and for export
- 2. Promote maximum utilization of productive land while at the same time safeguarding natural amenities
- 3. Guarantee adequate daily diet for the people of Chuuk State
- 4. Increase and improved funding and resources
- 5. Sustain traditional knowledge and skills
- 6. Create and enticing agriculture environment for youths and women
- 7. Established a well-defined marketing and quality control system
- 8. Create a well stable and consistent agriculture policy framework
- 9. Increase and improve research and development

#### **OBJECTIVES**

- 1. Increase production of staple crops
- 2. Increase production of vegetables
- 3. Increase production of fruit crops
- 4. Increase production of forestry products
- 5. Upgrade training of agriculture support staff and extension staff
- 6. Upgrade training of local farmers
- 7. Improve and increase efficiency and effectiveness of support services in Agriculture department
- 8. Improve physical infrastructure of Agriculture department
- 9. Motivate people especially the youths and women toward acceptance of Agriculture as worthwhile occupation
- 10. Increase and improve consumer education to promote superior nutrition of locally grown food products over imported products
- 11. Coordinate with Education department to provide and make available agriculture curriculum and courses in all schools and FSM COM-Chuuk campus to offer and teach agriculture courses at least for certificate program

#### **STRATEGY**

- a. Impose taxes on imported foods, especially staple food and vegetables that are produced and supplied locally. Revenue may be used to fund agriculture programs.
- b. Set up demo farms for farmer's training in scientific farming methods
- c. Establish or develop integrated agro-forestry systems for bio-farming
- d. Develop municipal integrated staple crops and coconut rehabilitation to alleviate poverty but increase marketing
- e. Draft policies and regulations for agriculture, marketing, and set standards
- f. Agriculture loan application from FSM Development Bank must channel through agriculture for review to reduce duplication of work and for better control in processing
- g. Department of Education in conjunction with Agriculture department will establish agriculture courses geared towards local foods. Climate and soils; this should be done at different levels in the school system
- h. Promote local food and better nutritional diet through seminars and media
- Provide better infrastructures like freezing and chilling facilities and refrigerator for storing of produce
- j. Establish quality control to maintain high standards for seeds, pigs, chickens, and etc intended for public sale.
- k. Perform reforestation to make Chuuk State less dependent on imported woods and to increase watershed areas
- I. Landlessness will make available, accessible, and be utilized for vegetable, forestry, fruit crops, and livestock farming.
- m. Research and study new strains of local food-fast growing and producing staples needing less care but producing faster with possible high yields
- n. Study to process local animal feed from current natural resources
- o. Improve performance in creating terrestrial protected areas, endemic species preservation, invasive species, pests, and diseases prevention and control
- p. Conserve soil and water, reduce risks of landslides, and conduct conservation education
- q. Develop and strategize sustainable financial mechanisms

# Annex V Participants List from the 4 States

# Kosrae –Participant List 20-21 July 2015

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32.	Marlyter S	FSM R&D	

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# Yap-Consultation Participant List 27-28 July

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