# Kosrae, Federated States of Micronesia Training and Assessment Report



Socioeconomic Monitoring Guidelines for Coastal Managers in Pacific Island Countries (SEM-Pasifika)

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### **Workshop Summary**

SEM-Pasifika is a set of community-based socioeconomic monitoring guidelines developed specifically for coastal managers in Pacific island countries. Since its launch in 2008 several SEM-Pasifika trainings have been conducted throughout Micronesia. Assessments have taken place in the CNMI, Palau, the Marshall Islands, Chuuk, Pohnpei, and Yap in the Federated States of Micronesia. Between September 23-October 3, 2013 Kosrae was host to the island's first SEM-Pasifika training.

For the training, a number of objectives and outputs were identified:

#### Objectives:

- To build socioeconomic monitoring capacity of the participants based on SEM-Pasifika
- To understand basic principles of data coding, management, and quality control
- Introduce quantitative data analysis using EXCEL, provide hands-on exercises of collected data when possible
- To understand principles of qualitative research and data analysis
- Complete a socio-economic assessment for a field site in Kosrae
- To communicate results of data analysis and effectively communicate data visually
- To be able to use analyzed data in conservation planning and adaptive management
- Produce an assessment report

#### Expected outputs/outcomes from workshop:

- Participants trained to undertake a socioeconomic assessment with some guidance from trainers
- Participants trained to use EXCEL to code, enter and run descriptive data analysis
- Participants understand basic statistics concept and sampling design
- Understand and appreciate mixed research methods with quantitative and qualitative approaches
- Greater understanding and appreciation of socioeconomic monitoring as an important tool to improve site management of the coastal and marine areas in the Pacific region
- Commitment of participants to future SEM-Pasifika activities, possible sharing information and skills with greater PIMPAC regional group
- Socio-economic assessment completed and data analyzed for the Kosrae field site
- Report back to community on assessment results

Working closely with KIRMA, KCSO, YELA, and the EU-GCCA Project the team selected the community of Walung as the focus for the training and assessment. This isolated coastal community was selected in response to concerns related to climate change and community vulnerability.

During the ten-day workshop, participants visited the site three times. First they traveled to Walung and conducted key informant interviews to gain a better understanding of the site and the community. The team then used the information to develop a household survey which sought to gather information and answer questions regarding Walung. Participants then implemented the survey by walking house to

house and speaking to members from every home. Questions addressed issues such as livelihoods, climate change knowledge, resource conditions and sustainable solutions. Following the survey, the team analyzed the results and went back to Walung for a final visit to share the information gathered with the community.

The training, in addition to building the capacity of participants, was also an opportunity to build regional relationships between resource managers as well as to provide support for the ongoing European Union Global Climate Change Alliance Project facilitated through the University of South Pacific, Pacific Center for Sustainable Development.

The training was also host to the launching of the Micronesia Challenge socioeconomic indicators. During the workshop the MC indicators which were selected at the First MC SE Measures Meeting held in Palau in 2012 were field tested for the first time.



Team members work together to prepare community presentation

#### **Background**

The socioeconomic assessment was conducted in Walung to provide managers and the community with information regarding the community's knowledge, concerns, and opinions about climate change and vulnerability. In addition the assessment was the first opportunity to field test the MC Indicators.

For this assessment, the following objectives were developed:

- To develop an understanding of the level of community knowledge and attitudes toward climate change
- To explore the current status of livelihood resources in the community
- To identify the most prominent community concerns and propose appropriate solutions for long-term sustainability
- To identify the most feasible and culturally appropriate adaptation measures using the PACE-SD Strategic Adaptation Framework as a implementation strategy
- To implement the MC indicators as appropriate



Team heads to Walung to conduct household surveys

#### Site description:

Kosrae is a state within the Federated States of Micronesia. The total population of Kosrae is 6,616. Walung, which is part of the Tafunsak municipality, is located on the western side of Kosrae. This isolated coastal community is only accessible by boat, although there was once a road connecting it to the other parts of the island. Walung also does not have access to the island's power grid. As a result, wood fuel and kerosene are used for cooking and lighting. Walung has one public elementary school, but does not have a medical clinic. The community's population is 176 (92 males and 84 females) and there are 33 households.<sup>1</sup>



Kosrae SEM-Pasifika Team at Walung after the community presentation

#### Methodology

#### **Indicators**

After identifying the objectives for the assessment the team selected indicators to by which to gather information most useful to the team and the community. The indicators helped to guide the development of questions for the key informant interviews and the household surveys. The selected indicators for the Walung assessment are as follows:

- 1. Perceived community problems (T1)<sup>2</sup>
- 2. Perceived resource conditions (T2)
- 3. Perceived threats to coastal and marine resources (T3)

<sup>&</sup>lt;sup>1</sup>Kosrae and Walung information comes from the 2010 FSM Census. However, in the Census Walung is noted as having 36 households. When preparing for the assessment it was brought to the attention of the team that as of September 2013 only 33 households were currently living in Walung.

<sup>&</sup>lt;sup>2</sup> The letters and numbers in parentheses following the indicators reference their codes identified in the SEM-Pasifika Guide.

- 4. Perceived coastal management problems (T4)
- 5. Management success and failures (M14)
- 6. Perceived solutions
- 7. Perceived alternative and supplemental livelihoods (CC4)
- 8. Awareness of HH vulnerability to climate hazards (CC5)
- 9. Ability of community to reorganize (CC8)
- 10. Access to and use of climate related knowledge (CC6)
- 11. Household participation in Micronesia Challenge management planning or decision making (MC2)
- 12. Change in violations and illegal activities related to fishing, harvesting, and use of natural resources (MC4)
- 13. Community awareness of the Micronesia Challenge (MC8)
- 14. Community support for the Micronesia Challenge (MC9)
- 15. Commitment of the Micronesia Challenge to human wellbeing objectives (MC10)

#### **Data Collection**

After identifying objectives and indicators the Kosrae team developed questions to ask key informants and focus groups. With the help of the councilman from Walung, the team identified several community members, youth, resource managers, and other individuals who were thought to have information that would provide important insight into the situation at the site. Key informant interviews were held in Tofol and in Walung. Unfortunately due to miscommunication and short notice the team was unable to hold a focus group.



Workshop participants interview Walung community member

Following the key informant interviews the group developed the household survey. The household survey was made up of 67 questions aimed to address the objectives and indicators selected earlier. Due to timing issues the team was not able to pretest the survey on community members and instead pre-tested within themselves. This is not an ideal situation and pretesting is always recommended. Following the review of the questions, the team broke into small groups and translated the questions into Kosraean.

During the ten-day workshop, participants visited the site three times. First they traveled to Walung and conducted key informant interviews. Then participants traveled again to Walung to implement the survey by walking house to house and speaking to members from every home.

#### **Communicating Results**

Following the survey the team designed a data entry sheet. On this sheet team members entered the data from the surveys collected. After inputting all the data the team analyzed it and selected pertinent information to report back to the community. The group then developed a presentation to take to Walung for a final visit to share the information gathered with the community. Over forty community members attended the presentation and listened as the team used both Power Point and printed materials to communicate the results. Because Walung is not connected to the island's power grid, a generator was hooked up to the community center where the presentation was conducted.



Walung community members attend final presentation

#### Discussion

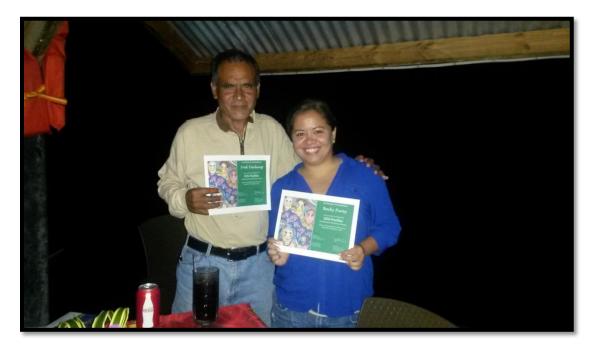
The results of the assessment led to significant discussion among the group. While the household survey was able to provide significant information for the team, it also raised a number of questions. These questions provide an opportunity for the team to follow up on the assessment and further clarify the issues facing Walung. In particular the following questions were raised:

- Why are men not participating in education and outreach and planning efforts as much as women?
- Why is knowledge pertaining to climate change low?
- Is there additional information about the impacts of drought on the community?
- If there is no opportunity for outside assistance, what can the community of Walung do to address issues by themselves?

#### Recommendations

In addition to discussing the results and raising further questions the team made several recommendations for management in response to the data collected:

- Reassess education and outreach efforts addressing the Walung community
- Conduct coastal assessments for Walung
- Use the data from the household survey as a resource for resource management
- Use the data from household survey to push for the development of resource regulations and a management plan for Walung
- Compare data from survey to existing data on marine resources
- Enhance existing enforcement strategies
- Use the data to inform the EU-GCCA project



SEM-Pasifika training participants display their certificates of completion

ATTACHMENTS
Survey with results
Agenda
Key informant interview notes

Walung Community Sur	vey			
Interviewer Code:	<del></del>	Survey #:	Date:	
<u>Demographics:</u>				
First, I am going to ask y kisensiyuk keim and loo	-	ions about you and your	household. <b>Ma se mee</b> t	t ngac tufa
1. Sex (do not ask, just  □ 0 Male <b>Mukul</b> 58%	mark appropri	ate answer)	%	
2. What is your marita	l status? <b>Kom p</b>	ayuk ku tia?		
□ 1 Married payuk 76%	6	□ 2 Never mar	ried <b>lolacp</b> 12%	
☐ 3 Widowed <b>katin mas</b>	s/tumanmas 39	√6 □ 4 Divorced <b>ti</b>	lac payuk 9%	
3. What is your occupa	ation (Farmer, F	isherman, business and	etc.)?	
Orekma fukah lom uh?				
Farming	23%			
Fishing	30%			
Farming and Fishing	7%			
Farming and Mangrove	7%			
Housewife	17%			
Government employee	7%			
Self employed	3%			
Unemployed	3%			
*3 households did not a	nswer this que	stion		
4. How old are you? (c	bock minimum	200)		
Kom yac ekasr?	neck millimum	age)		
23-33 26%				
34-43 23%				
44-53 29%				
54-63 <b>12</b> %				
64-over 1%				
04-0VEI 1/0				
5. What is your religio	us denominatio	n? Alu fukah lom uh?		
□ 1 Protestant 100%	□ 2 SDA	□ 3 Mormon	□ 4 Pentacostal	
□ 5 Baptist	□ 6 Catholic	☐ 7 Jehovah Witness	□ 8 Other	_
6. What is your highes	t level of educa	tion? <b>Piyak kac level saf</b>	la kom sun ke lutlut?	
□ 1 no formal education		□ 2 elementar		

□ 4 college

18%

46%

☐ 3 high school

7. How many people are in your household? Mwet ekasr ke lohm sum uh?

1-4 people5-9 people9 and more1

## Community problems/threats

Thank you. Now I would like to ask about some issues facing Walung today.

Kulo. Inge nga ac tufah kisensiyuk ke kutu elyah ma saap oasr fin acn Walung misenge.

8. What do you see as the two most important problems facing Walung? Mea 2 sin elyah ma kom akihlen muh pa yok omeet fin acn Walung?

1.	Climate change hazards	12.5%
	Coastal erosion	50%
	Invasive species	12.5%
	Income generation	6.3%
	Access to public services	12.5%
	Resource depletion and habitat destruction	3.1%
	Social problems	3.1%
2.	Climate change hazards	17.9%
	Coastal erosion	14.3%
	Invasive species	14.3%
	Access to public services	35.7%
	Resource depletion and habitat destruction	7.1%
	Solar installation	3.6%
	Social problems	7.1%

9. What do you see as two possible solutions to the first problem? Meac 2 naweyuk kom liye muh ac fal nuke elyah se met ingan?

1.	Coastal protection/restoration	42.9%
	Awareness	7.1%
	Leadership	7.1%
	Improved infrastructure	7.1%
	Enforcement	14.3%
	Eradication/control measures	7.1%
	Others	14.3%

2. Coastal protection/restoration 26.7%Awareness 20%Improved infrastructure 6.7%

Enforcement	26.7%
Eradication/control measures	6.7%
Others	13.3%

**10.** What do you see as two possible solutions to the second problem? **Meac 2 naweyuk kom liye muh** ac fal nuke elyah se ahkluo ingan?

1.	Coastal protection and restoration	21.7%
	Awareness	13%
	Improved infrastructure	43.5%
	Eradication and control measures	4.3%
	Others	17.3%
2.	Coastal protection/restoration	17.6%
	Awareness	5.9%
	Improved infrastructure	35.3%
	Enforcement	11.7%
	Eradication/control measures	5.9%
	Leadership	5.9%
	Others	17.7%

11. What are the two most important threats to the coastal and marine resources in Walung? Meac elyah 2 ma yohk omeet nuke we acn kuh nuke mwe kasrup ke inkof Walung uh?

all 2	tina your officet nake we ach kun nake niwe kasi ap ke nik	oi vvaiuli
1.	Decrease in mangrove resources and deforestation	3%
	Unsustainable fishing practices	21.2%
	Pollution	15.2%
	Mining (rock, sand and coral)	18.2%
	Sedimentation	3.0%
	Coastal erosion	18.2%
	Others	21.2%
2.	Decrease in mangrove resources and deforestation	6.1%
	Increase in temperature	6.1%
	Lack of sustainable resource management	9.1%
	Unsustainable fishing practices	21.2%
	Pollution	12.1%
	Mining (coral, rocks, sand)	12.1%
	Sedimentation	3.0%
	Coastal erosion	3.0%
	Others	27.3%
	4 41 41 41 18/-1	

12. What are two things that the Walung community or state government has done well in managing coastal and marine resources in Walung? Meac 2 sin oiyac ma acn Walung kuh government akfasrye tuh wo nuke karinginyan we can ac mwe kasrup ke inkof Walung uh?

1.	Sea wall projects	11.5%
	Coastal and mangrove regulations	19.2%
	Regulations for development projects	30.8%
	Trochus management	15.4%
	Others	15.4%
	N/A	7.7%
2.	Sea wall projects	31.6%
	Coastal and mangrove regulations	21.1%
	Regulations for development projects	15.8%
	Trochus management	10.5%
	Others	15.8%
	N/A	5.3%

13. What are two things that the Walung community or state government has done that has not worked well in Walung? Meac 2 sin oiyac ma acn Walung kuh government akwasryela tuh tiac arlac orekma wo nuke karinginyen we can ac mwe kasrup ke inkof Walung uh?

1.	Incomplete solar power	5.9%
	Circumferential road	47.1%
	Seawall	5.9%
	Awareness program	11.8%
	Enforcement of existing environmental laws	29.4%
2.	Incomplete solar power	12.5%
	Circumferential road	12.5%
	Seawall	12.5%
	Enforcement of existing environmental laws	37.5%
	Restoration projects	12.5%
	Dispensary	12.5%

14. Household participation. How often have members of your household participated in management planning and decision making related to resource management? (check only one answer)

Kasru luhn mwet in lohm sum. Fukah luhpan kasru luhn mwet in lohm sum ke mukuikui in pwacpa ac orala naweyuk nuke karinginyan kasrpowos?) (sulala top siefanna)

Statement	Never	Seldom	Some-	Frequent	Always
	tia wi	sesala in	times <b>wi</b>	wacna	wi pacl
		wi	ke kais	wi	nukewa
			kutu		
			pacl		
Members of my household participate in management planning and	15.2%	15.2%	36.4%	15.2%	18.2%
decision making related to resource management					
Mwet lun lohm sihk uh elos wi akfasrye pwacpa ac otelah naweyuk nuke					
karinginyan kasrpen can uh					

# Climate Change

The next questions I am going to ask you are related to climate change. **Kisensiyuk nga ac siyuk tok inge** ac kupasr nuke eklac luhn puhlun pacl uh.

I am now going to read a number of statements. Even if you are not sure, we are interested in your opinions. Remember, this is not a test. Nga ac riti ma ekasr inge kom in topuk lah paye, stuu, ku kom tia etu. Tia test se pa inge. Kom finne nukanla lah piyac kac top fal uh, kut ac ke etu nunak lom an. Nunak munas, topukla kais sie fwak inge:

Statements	1=True	2= False	3= unsure
	1=paye	2=stuu	3= tia etu
15. Extreme events, such as storms, floods and droughts are	True	78.8%	
going to become more severe.	N/A	3.0%	
Af/eng upac, sronot, ac paholah luhn can uh ac upaclah liki	Unsure	18.2%	
met ah.			
16. People are the main cause of climate change.	True	75.8%	
Oruh luhn mwet uh pa panang eklac luhn puhlun pacl uh.	False	9.1%	
	Unsure	12.1%	
	N/A	3.0%	
17. Sea level is most likely going to get lower.	True	27.3%	
Fulatan kof inkof uh ac kuh na in foloki.	False	54.5%	
	Unsure	15.2%	
	N/A	3.0%	
18. Warm water does not cause coral bleaching	True	18.2%	
Fol luhn kof inkof uh tiac kuh in pwanang misac lun eka uh.	False	42.4%	
	Unsure	36.4%	
	N/A	3.0%	

Have you ever been involved in any of the following community activities? **Nuh oasr pal kom wi mukuilac kuh kasru kain oiyac inge fin acn Walung?** 

Activity / Mukwikwi kuh ohiyac	No (C	) or Yes (1)
	Moh	(0) kuh
	Ahok	(1)
19. Coastal Restoration and Protection (ex. Mangrove replanting,	No	12.1%
coconut tree seawall) Ohiyac in ahkwoye kuh karingin we acn lasr	Yes	84.8%
uh? (ex. Yohk sahk, rek siwohl)	N/A	3.0%
20. Education and Outreach about climate and its impact? Ohiyac in	No	39.4%
tafelah ku loteang ke eklac lun pulan pacl uh ac elyah ma ac in	Yes	57.6%
sikyak kac?	N/A	3.0%
21. Community Planning about climate and its impact? Akfwasryeyan	No	39.4%
pwacpa nuke eklac lun pulan pacl uh ac elyah ma ac kuh in sikyak	Yes	57.6%
kac?	N/A	3.0%

I am now going to ask you some questions about climate hazards and how it impacts your household. Ingena nga ac tufah kisensiyuck ke kutu mwe sensen ke eklac lun pulan pal uh ac ma kom ac mwet in lohm sum an pulakin ke sripen elyah ma sikyak ke sripen eklac luhn pal uh.

Climate hazards and impacts  Mwe sensen ac elyah ma sikyak ke sripen eklac luhn pulan pal u.	Has your household experienced this event in the past 20 years? 0=No (skip to next event) 1= Yes (ask A & B) Ke yac 20 somlah ah, nuh oasr pacl (event?) sikyak kowos pula? 0=Moh (som nuke event se tohkoh an) 1=Aok (siyuk A&B)	A: How would you rate the degree of negative impact on your household by this hazard?  3 = high 2 = medium 1= low Fukah lupan elyah kowos pula elyah se inge orala nusuwos?  3=yok/upac na paye 2=ma na fal 1=tia yok/upac	B: How would you rate the difficulty of coping with this hazard, for your household?  3 = high 2 = medium, 1 = low Fukah pula loswos ke kowos srike in mutwacnglah kuh nawela elyah kowos pula ke oiyac se inge?  3=yok/upac na paye 2=ma na fal 1=tia yok/upac
22. Tropical storm Eng tuhyak	No 24.2% Yes 75.8%	High 48% Med 40%	High 40% Med 40%
		Low 12%	Low 20%
23. Typhoon	No 80.6%	High 57.1%	High 50%
Pahkah	Yes 19.4%	Med 28.6%	Med 50%
		Low 14.3%	Low 0
24. Storm surge	No 9.4%	High 50%	High 36.7%
Noa tuhyak	Yes 90.6	Med 43.3%	Med 56.7%
25 Can lavalui	NI 0 40/	Low 6.7%	Low 6.7%
25. Sea level rise	No 9.4%	High 41.4%	High 32.1%
Kiluckyak luhn ahlong	Yes 84.4%	Med 44.8%	Med 53.6%
26 6	N/A 6.2%	Low 13.8%	Low 14.3%
26. Coastal/beach erosion  Mongolac luhn we acn	No 6.1%	High 48.5%	High 54.8%
wiongolac luilli We acii	Yes 87.9%	Med 32.3%	Med 35.5%
27 Coltuptor intrusion into	N/A 6.1%	Low 16.1%	Low 9.7%
27. Saltwater intrusion into gardens/fields	No 33.3%	High 40.9%	High 42.9%
Utyak lun kihfinte nuke	Yes 60.6% N/A 6.1%	Med 45.5% Low 9.1%	Med 47.6% Low 9.5%
imac	IN/A U.170	Low 9.1% N/A 4.5%	Low 9.5%

28. Changes in seasons, leading to changes in	Yes 71.9% No 28.1%	High 27.3% Med 45.8%	High 37.5% Med 41.7%
planting and harvesting time.	NO 28.1%	Low 16.7%	Low 20.8%
Eklac luhn puhlan paci,			
pwanang eklac ke pal in			
yokyok ac kosrani			
30 Burnelet	Yes 90.6%	High 72.4%	High 55.2%
29. Drought	No 9.4%	Med 20.7%	Med 31%
Tuhka pahola lun can uh		Low 6.9%	Low 13.8%
	Yes 6.5%	High 0	High 0
30. Flood	No 90.3%	Med 25%	Med 0
Sronot	N/A 3.2%	Low 50%	Low 100%
		N/A 25%	
31. Increased sea surface	Yes 83.9%	High 22.2%	High 33.3%
temperature	No 16.1%	Med 66.7%	Med 48.1%
Follah luhn kof uh		Low 11.1%	Low 18.5%
	Yes 53.1%	High 29.4%	High 23.5%
32. Coral bleaching	No 46.9%	Med 47.1%	Med 58.8%
Misac lun Eka		Low 17.6%	Low 17.6%
		N/A 5.9%	
33. Other (specify)	Yes 0	High	High
Ohiyac sahyac	No 88.2%	Med	Med
	N/A 11.8%	Low	Low

Now, I am going to read you some statements about you and Walung. Please tell me to what extent you agree with them.

# Ingena, nga ac riti nusum ke fwak ekasr ac ngisre kom in nunak munas akkalemye lah fukah lupan insese lom nuke fwak inge:

Statements about me and my	Do not	Agree a	Moderately	Strongly	Very
community	agree	little	agree	agree	strongly
	Tia	Insese	Insese kutu	Yok	agree
	insese	kutusrik		insese	Arulana
					insese
34. I have adequate access to medical	42.4%	24.2%	18.2%	12.1%	3.0%
facilities as needed.					
Oasr inkanek luk nuke lohm ono fal					
nuke enenu.					
35. I know what to do when there is an	12.1%	42.4%	24.2%	15.2%	6.1%
impending drought.					
Nga etu lah meac nga ac oru ke pacl					
oasr paholah lun acn uh.					

impending flood. Nga etu lah meac nga ac oru ke pacl oasr sronot.  37. I know what to do if tidal surges are approaching.  Nga etu lah meac nga ac oru fin noa tuhyak.  38. I know what to do if a typhoon is approaching. Nga etu lah meac nga ac oru fin oasr pahkah sikyak.  39. We have reliable food resources. Oasr akola fal nuke enenu lasr ke kof.  40. We have reliable water resources. Asr kof ahkolah  41. I am continually monitoring local environmental conditions. Nga sikaleni in intein lah fukah onacngacn acn uh.  42. Our village works well together and will meet future challenges. Akacsruhi inmasrlosr Walung wo ac kut ac kuh in sikyak ke pal fwasru uh.  43. We sustainably manage our natural resources. Kut karungunacng kasrpasr.	<b>36.</b> I know what to do when there is an	24.2%	39.4%	15.2%	12.1%	9.1%
nga ac oru ke pacl oasr sronot.  37. I know what to do if tidal surges are approaching.  Nga etu lah meac nga ac oru fin noa tuhyak.  38. I know what to do if a typhoon is approaching. Nga etu lah meac nga ac oru fin oasr pahkah sikyak.  39. We have reliable food resources.  Oasr akola fal nuke enenu lasr ke kof.  40. We have reliable water resources.  Asr kof ahkolah  41. I am continually monitoring local environmental conditions.  Nga sikaleni in intein lah fukah onacngacn acn uh.  42. Our village works well together and will meet future challenges.  Akacsruhi inmasrlosr Walung wo ac kut ac kuh in tukeni akwot nuke elyah ma ac kuh in sikyak ke pal fwasru uh.  43. We sustainably manage our natural resources.		24.270	33.470	13.270	12.1/0	9.170
37. I know what to do if tidal surges are approaching.  Nga etu lah meac nga ac oru fin noa tuhyak.  38. I know what to do if a typhoon is approaching. Nga etu lah meac nga ac oru fin oasr pahkah sikyak.  39. We have reliable food resources. Oasr akola fal nuke enenu lasr ke kof.  40. We have reliable water resources. Asr kof ahkolah  41. I am continually monitoring local environmental conditions. Nga sikaleni in intein lah fukah onacngacn acn uh.  42. Our village works well together and will meet future challenges. Akacsruhi inmasrlosr Walung wo ac kut ac kuh in tukeni akwot nuke elyah ma ac kuh in sikyak ke pal fwasru uh.  43. We sustainably manage our natural resources.  12.1%  42.42%  42.42%  43.4%  9.1%  24.2%  18.2%  27.3%  24.2%  15.2%  18.2%  27.3%  24.2%  15.2%  18.2%  27.3%  27.3%  24.2%  18.2%  27.3%  27.3%  27.3%  27.3%  27.3%  27.3%						
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40. We have reliable water resources.  Asr kof ahkolah  41. I am continually monitoring local environmental conditions.  Nga sikaleni in intein lah fukah onacngacn acn uh.  42. Our village works well together and will meet future challenges.  Akacsruhi inmasrlosr Walung wo ac kut ac kuh in tukeni akwot nuke elyah ma ac kuh in sikyak ke pal fwasru uh.  43. We sustainably manage our natural resources.  9.4%  28.1%  27.3%  24.2%  15.2%  15.2%  15.2%  15.2%  15.2%  18.2%  27.3%  24.2%  15.2%  18.2%  27.3%  27.3%  24.2%  15.2%  18.2%  27.3%  27.3%  27.3%  27.3%  27.3%  27.3%  27.3%  27.3%  27.3%  27.3%  27.3%  27.3%  27.3%  27.3%  27.3%	Oasr akola fal nuke enenu lasr ke					
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environmental conditions.  Nga sikaleni in intein lah fukah onacngacn acn uh.  42. Our village works well together and will meet future challenges. Akacsruhi inmasrlosr Walung wo ac kut ac kuh in tukeni akwot nuke elyah ma ac kuh in sikyak ke pal fwasru uh.  43. We sustainably manage our natural resources.    Value   Value   Value	Asr kof ahkolah					
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onacngacn acn uh.  42. Our village works well together and will meet future challenges.  Akacsruhi inmasrlosr Walung wo ac kut ac kuh in tukeni akwot nuke elyah ma ac kuh in sikyak ke pal fwasru uh.  43. We sustainably manage our natural resources.	environmental conditions.					
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will meet future challenges.  Akacsruhi inmasrlosr Walung wo ac kut ac kuh in tukeni akwot nuke elyah ma ac kuh in sikyak ke pal fwasru uh.  43. We sustainably manage our natural resources.	onacngacn acn uh.					
Akacsruhi inmasrlosr Walung wo ac kut ac kuh in tukeni akwot nuke elyah ma ac kuh in sikyak ke pal fwasru uh.  43. We sustainably manage our natural resources.	42. Our village works well together and	15.2%	24.2%	15.2%	18.2%	27.3%
kut ac kuh in tukeni akwot nuke elyah ma ac kuh in sikyak ke pal fwasru uh.  43. We sustainably manage our natural resources.  12.1% 39.4% 21.2% 18.2% 9.1%	will meet future challenges.					
elyah ma ac kuh in sikyak ke pal fwasru uh.  43. We sustainably manage our natural resources.  12.1% 39.4% 21.2% 18.2% 9.1%	Akacsruhi inmasrlosr Walung wo ac					
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resources.	fwasru uh.					
	43. We sustainably manage our natural	12.1%	39.4%	21.2%	18.2%	9.1%
Kut karungunacng kasrpasr.	resources.					
	Kut karungunacng kasrpasr.					

# **Household livelihoods and resources**

Now I am going to ask a few questions about your household's livelihood and resources.

Ingena nga ac kisensiyuck nu sum ke mutacngowos ac kasrpowos (kom ac mwet ke loom sum an).

What are the local resources that your Household relies on? Please choose from the following: Ke ma nga ac oek inge, meac ngac ma kowos payekihn nuke mutwengowos kuh kasrpowos?

Resources	44.	45. How much does	46. What do you
Resources	0= No	your household	think about the
	1= Yes	depend on these	current status of
	0=Moh	resources	the following
	1=Aok	1=Low (once a week or	resources?
	1-AUK	less)	1= Poor
		2=Medium (several times a week)	2=Ok 3=Good
		,	Mea akilen lom ke
		3=High (every day)	
		Fukah lupan	ma ingan?
		orekmakinyen ma inge	1=koluk
		suwos nuke enenu	2=ma na fal
		lowos u?	3=wo
		1=srik (len 1-2 in week	
		ku supus liki)	
		2=ma na fal (len 3-4 in	
		week)	
		3=yok (len 5-7 ke week)	
A. Fish	No 0%	Low 9.1%	Poor 30.3%
lk	Yes 100%	Med 66.7%	Ok 57.6%
		High 24.2%	Good 12.1%
B. Mangrove wood	No 9.1%	Low 40.4%	Poor 26.7%
Sahk insack	Yes 90.9%	Med 46.7%	Ok 70%
		High 13.3%	Good 3.3%
C. Mangrove crab	No 24.2%	Low 56%	Poor 48%
powac	Yes 75.8%	Med 36%	Ok 44%
		High 8%	Good 8%
D. Food plants	No 3%	Low 21.9%	Poor 18.8%
Sahk( mwe mongo)	Yes 97%	Med 43.8%	Ok 43.8%
		High 34.4%	Good 37.5%
E. Medicinal plants	No 24.2%	Low 60%	Poor 24%
Sahk (nuke ono)	Yes 75.8%	Med 36%	Ok 28%
		High 4%	Good 48%
F. Pipe Water	No 3%	Low 0	Poor 6.3%
Kof ke pipe	Yes 97%	Med 3.1%	Ok 34.4%
		High 96.9%	Good 59.4%
G. Other (Fill out)	No 50%	Low 50%	Poor 0
Ma sayac	Yes 40%	Med 0	Ok 0
,	N/A 10%	High 50%	Good 100%
H. Other	No 66.7%	Low 100%	Poor 0
Ma sayac	Yes 16.7%	Med 0	Ok 50%
	1.03 10.770	High 0	Good 50%
	l	111611 0	3000 3070

What are the livelihoods for your household? Choose all that apply (primary or secondary) **Meac kutu** ohiyac ma usot kasrpowos? Ahkkalemye kewa ma fal nusum ke ma inge: (mase ma kom payekin ac ohiyac in kasru sayac)

Sources (Check all that apply)  Kain in Ohiyac	Primary (payekin)	Secondary (oiyac sayac)
47. Salary from employment. Sacluhri	20.7%	37.9%
48. Fishing for finfish. <b>Pahtuhr</b>	71%	22.6%
49. Harvesting other marine life (Trochus, sea cucumber, eels, crabs,	38.7%	54.8%
etc) Tihpusrik ke ma inkof (tukasungai, wac, semis, powac, etc)		
50. Farming Imac	46.9%	43.8%
51. Wood harvesting <b>Ti etong</b>	28.6%	42.9%
52. Money received from relatives not living in household <b>Sacn kom eis</b>	15.4%	65.4%
sin met lom saya		
53. Handicrafts <b>Tuhfahlfahl/Otwot</b>	10%	35%
54. Private business owners (e.g. stores) <b>Kuhka</b>	18.2%	22.7%
55. Pension/social security <b>SS</b>	20%	20%
56. Tourism Utuck mwet muhtacta	10.5%	21.1%
57. Rentals Ren (oak, lohm, etc)	9.5%	33.3%
58. Others (please specify) <b>ohiyac sayac</b>	0	0

**59.** If your household is no longer able to continue the livelihoods just mentioned, can you think of something else you can do to support your family? **Ac fwin oiyac ma kowos payekin uh wanginlac, na oiya fuka sayac kom nunku muh ac kuh in sang kasru sucu lom an?** 

# Micronesia Challenge

Kuht ac fahf	<sup>f</sup> ahlac in saflah pa inge.	Kisensiyuck safla inge ma ke Micronesia Challenge.	
Thank you.	We are almost finished.	The last questions are about the Micronesia Challenge.	Kulo nusum

60.	Have you heard	d of the Micron	esia Challenge? (If resp	ondent ans	wers "no" or "unsure" end the		
	survey). Kom n	uh long ke Micı	ronesia Challenge? (Ac	fin top an	"moh" kuh "nukanlah" na tui inse		
	□ 0 No <b>Moh</b>	97%	☐ 1 Yes <b>Ahok</b>	3%	☐ 3 Unsure <b>Nuhkanlah</b> 09		
61.	What are the to	wo most import	tant goals of the Micror	nesia Challe	enge? <b>Meac finsrak yohk luo ke</b>		
	Micronesia Challenge?						
	1. No answer given by one respondant						
	2	2					
	☐ Check here	if you don't kno	w what the goals of M	C are. <b>Mah</b>	kiyac pohk se inge kom fin tiac etu		

# finsrak yohk luhn MC.

62.	2. Do you support the Micronesia Challenge? <b>Kuh kom wi pahtok Micronesia Challenge?</b>				
	□ 0 No <b>Moh</b>	☐ 1 Yes <b>Ahok</b>	100%	☐ Unsure <b>Nukanlah</b>	
*of	the one person who answered "yes"	to having heard o	of the MC.		
63.	What have you done to support the tahpuhk Micronesia Challenge?	Micronesia Challe	enge? <b>Meac kutu ma</b>	kom oruh in kasruh	
No	answer given by respondant				
64.	What would you like to do to suppo tahpuhk Micronesia Challenge?	rt the Micronesia	Challenge? <b>Meac kon</b>	n ke oruh in sang kasru	
No	answer given by respondant				

Thank you very much for participating in our survey. Please give me a few minutes to look this over. We will return next week to share the results with the Walung community.

Kulo ma luhlahp ke pacl lom ma kom wikut ke lohlngohk lasr uh. Nunak munas, meet liki kut safla use kitin pacl ngan liye lah kut orala kewa kisensiyuk uh. Kut ac folohk ke week tok uh in ahkkalemye ma kahlem ke lohlngohk se lasr inge. Sifil kalweni in fwak, kulo na ma lulap.

# SEM-Pasifika Workshop Agenda Kosrae, Federated States of Micronesia September 23-October 3, 2013

#### Objectives:

- To build socioeconomic monitoring capacity of the participants based on SEM-Pasifika
- To understand basic principles of data coding, management, and quality control
- Introduce quantitative data analysis using EXCEL, provide hands-on exercises of collected data when possible
- To understand principles of qualitative research and data analysis
- Complete a socio-economic assessment for a field site in Kosrae
- To communicate results of data analysis and effectively communicate data visually
- To be able to use analyzed data in conservation planning and adaptive management
- Produce an assessment report

#### Expected outputs/outcomes from workshop:

- Participants trained to undertake a socioeconomic assessment with some guidance from trainers
- Participants trained to use EXCEL to code, enter and run descriptive data analysis
- Participants understand basic statistics concept and sampling design
- Understand and appreciate mixed research methods with quantitative and qualitative approaches
- Greater understanding and appreciation of socioeconomic monitoring as an important tool to improve site management of the coastal and marine areas in the Pacific region
- Commitment of participants to future SEM-Pasifika activities, possible sharing information and skills with greater PIMPAC regional group
- Socio-economic assessment completed and data analyzed for the Kosrae field site
- Report back to community on assessment results

#### Training team:

Supin Wongbusarakum, TNC Brooke Nevitt, PMRI Betty Sigrah, MCT Peter Edwards, NOAA Mae Adams, TNC

Day & Time	Activity	
Monday, 23 <sup>rd</sup>	DAY 1	
	(presentations & group activities all day)	
8:30-9:30	Welcome: Introduction of participants and trainers and guests	
9:30-10:00	Discussion: Training objectives and expected outputs; Expectations for participants; Ground rules	
10:00-10:15	Break	
10:15-10:30	Overview of workshop schedule	
10:30-10:45	Presentation: Purposes of socioeconomic (SE) monitoring	
10:45-11:15	Presentation: Case studies	
11:15-11:30	Presentation: What is SEM-Pasifika? The background	
11:30-12:30	LUNCH	
12:30-1:00	Presentation and large group discussion: Overview of SE monitoring in	
	Kosrae to date and existing needs	
1:00-1:30	Presentation: Overview of SE monitoring process	
1:30-2:00	Presentation: Developing human well-being objectives	
2:00-2:15	Break	
2:15-2:45	Presentation: Management goals and objectives for Walung	
2:45-3:45	Small and large group discussion: Define goals and objectives for our	
	assessment (STEP 2)	
3:45-4:00	Presentation: Free, prior and informed consent and ethical principles when	
	conducting research	
4:00-4:30	Recap and review next day's schedule	

Tuesday, 24 <sup>th</sup>	Day 2 (morning presentations; afternoon field)
8:30-8:40	Presentation: How to use SEM-P guide to select indicators
8:40-9:10	Presentation: Good indicators and how to develop them
9:10-9:35	Presentation: Climate Change indicators
9:40-10:05	Presentation: Micronesia Challenge Indicators
10:05-10:20	Break
10:20-11:20	Small group activity: Select and develop indicators (STEP 3)
11:20-11:45	Presentation: Key Informant Interviews & Focus Group interviews
11:45-12:45	LUNCH
12:45-1:35	Small group activity: Develop KI and Focus group questions; Report back; Revise
1:35-2:00	Activity: Role play KI and FG interviews
2:00-3:00	Transport to Site
3:00 - 6:00	Site reconnaissance (STEP 4)
	Conduct KI and FC interviews at site (STEP 5)
HOMEWORK	Each group: Type focus group and KI notes

Wednesday, 25th	Day 3
	(presentations and group activities all day)
8:30-9:00	Check in and debrief on KI and FG
9:00-9:30	Presentation: Analyzing qualitative data
9:30-9:45	Break
9:45-11:15	Small group activity: Analyze qualitative data
11:15-11:45	Presentation: Survey design and data collection
11:45-12:45	LUNCH
12:45-2:45	Small group exercise: Design survey questionnaire (STEP 6)
2:45-4:30	Large group exercise: review the survey questionnaire

Thursday, 26th	Day 4
8:30 - 8:45	Check-in
8:45-9:15	Presentation: How to conduct a household (HH) survey?
9:15-9:30	Break
9:30-9:45	Facilitated discussion: Why we pretest
9:45-12:00	Activity: Pre-test survey (STEP 7)
12:00-1:00	LUNCH
1:00-1:30	Large group discussion: Debrief on pretest
1:30-4:30	Small groups: Revise questions, translate and finalize survey (STEP 8)

Friday, 27th	Day 5
8:30-8:45am	Check-in
8:45-9:15	Presentation: Basic statistics
9:15-9:45	Presentation: Sampling design
9:45-10:00	Break
10:00-11:00	Refresh on survey plans and transport to site
All Day	Field surveys (HH interviews) done at site (may need evening time) (STEP 9)

Monday, 30 <sup>th</sup>	Day 7
8:30 - 9:00	Debrief on HH survey field work
9:00-9:45	Presentation: Spread sheet and database design
9:45-10:00	Break
10:00-11:30	Activity: Draft data entry sheet
11:30-12:00	Presentation: Data entry, cleaning, managing with Excel
12:00-1:00	LUNCH
1:00-3:00	Small Groups: Data entry and cleaning (STEP 10)

3:00-3:15	Break
3:15-4:00	Cont.: Data entry and cleaning
4:15-4:30	Wrap-Up

Tuesday, Oct. 1st	Day 8
8:30 -9:00	Check in
9:00-10:00	Presentation: Data analysis: Intro to data analysis (Step 11)
10:00-10:30	Presentation: Descriptive analysis by Excel 1: Percent, mean, median, mode
10:30-10:45	Break
10:45-11:45	Small groups: Descriptive analysis
11:45-12:45	LUNCH
12:45-1:30	Presentation: Descriptive analysis by Excel 2: Pivot tables and frequency
	distributions
1:30-2:30	Small groups: Making pivot tables
2:30-3:00	Report back and discussion: Results of descriptive data analysis
3:00-3:30	Presentation: T-test
3:30-4:30	Small group activity: T-test

Wednesday, Oct. 2 <sup>nd</sup>	Day 9
8:30-9:00	Check in
9:00-9:30	Presentation: Running chi square
9:30-11:00	Small groups: Running chi square
11:00-11:30	Presentation: Communicating data visually
11:30-12:30	LUNCH
12:30-2:00	Activity: Making graphs and charts
2:00-2:30	Facilitated discussion: Community presentation
2:30-2:45	Break
2:45-4:30	Small group: develop communications materials for community meeting (Step 12)

Thursday, Oct. 3	Day 10
8:30-9:00	Check in
9:00-10:30	Activity: Finish up community presentation
10:30-11:30	Facilitated discussion: Adaptive management
	Break
11:30-12:30	LUNCH
12:30-2:30	Activity: Using results from qualitative and quantitative data, what
	recommendations can be made for management
2:30-2:45	Break
2:45-3:45	Group Activity: Final reportdevelop an outline
3:45-4:15	Evaluations and close

6:00-8:00 pm	Community meeting to present results (STEP 13)
(tentative-	
whatever is best	
for community)	