

Adapting to a Changing Climate Workshop Report

Kosrae, Federated States of Micronesia

February 27th to March 2nd, 2012



Background

In 2010, The Micronesia Conservation Trust (MCT) supported the development of community based climate change adaptation tools for the Micronesia region. To design the most appropriate and useable products, consultants reviewed existing CC adaptation materials, spoke with various climate experts, and held a regional workshop with regional natural resource managers, community members, and climate change experts. Based on input at this workshop, the following products were developed:

Adapting to a Changing Climate Outreach Toolkit - which is designed to provide community members and stakeholders with an understanding of climate change concepts and adaptation strategies. This toolkit consists of:

- Large flipcharts visually depicting climate change concepts and actions that can be carried out to prepare and adapt to CC impacts.
- Facilitators guide to accompany the flipcharts, which include page-by-page notes on things to point out on the flipchart and concepts to explain.
- Booklets that provide the same visual content as the flipchart but offer more verbal description and explanations. These are to be used by community members and other stakeholders both during presentation of the flip chart material and afterward as they work on their adaptation projects.

Revised PIMPAC management planning guidance, which now includes a climate change lens through:

- Revised steps that ensure important stakeholders are involved and key questions are answered to address climate change in the planning process
- New steps including historical timeline, seasonal calendar, strength/weakness analysis, and vulnerability assessment to help understand the social and biological resource vulnerability to the impacts of climate change.

Upon completing these tools, a year-long training program concept was put together to identify funds that could support training on these new tools in the Micronesia region. Funding was secured through AusAid, Global Environment Facility, and the U.S. State Department to begin this training program, which included the development of a training design, and one workshop per jurisdiction in the Freely Associated States (i.e. Marshall Islands, Palau, Kosrae, Pohnpei, Chuuk, and Yap). The workshop held in the Kosrae summarized in this document is the third workshop conducted in the Federated States of Micronesia and facilitated by in-region mentors.

Workshop Objectives

From February 27th through March 2nd, 2012 the Micronesia Conservation Trust (MCT) and its Micronesia Challenge partners conducted the training program in Kosrae, Federated States of Micronesia on the use of new tools to support community-based climate adaptation in Micronesia.

The objectives of the week-long training were:

- To provide a team of community leaders and practitioners from various sectors in Kosrae with the necessary skills to effectively communicate climate change concepts and foster vulnerability assessments and adaptation planning.
- To provide practitioners who carry out community management and adaptation planning processes in Kosrae with the necessary skills to develop or revise at least one community-based management and adaptation plan within one year of the training program.
- Development of a timeline and commitment for the Kosrae team to carry out the management and adaptation process for at least one site within one year.

Workshop Participation

The training was attended by approximately 23 people (participants and trainers). Trainees were present from various agencies within Kosrae including DREA, KIRMA, KCSO, Yela, DHS Sanitation division, Kosrae Farmers Association, Public Works, and Utwe Council. Participants list can be found in Appendix D.

Participants include community leaders and/or natural resource agencies working with the following communities.

1. Utwe Biosphere Reserve
2. Awane Marine Park
3. Yela
4. Olum

These sites were used throughout the workshop to practice vulnerability assessment and adaptation planning exercises.

The training was led and co-facilitated by in-region mentors: Berna Gorong, PIMPAC regional mentor, and Liz Terk of the Micronesia Conservation Trust.

Workshop Approach & Outputs

The workshop was carried out in two sections around two new tools:

Session One: Adapting to a Changing Climate Outreach materials

Session Two: PIMPAC Management and Adaptation Planning guidance

Session One:

The first session focused on using the new CC outreach materials and facilitators notes to understand climate change concepts and develop locally appropriate ways to communicate key messages about these concepts. The Kosrae participants began to draft communications methods that could be used to help convey sections of the flipchart in local context settings. The output of this session was the development of a basic communication plan for Kosrae for climate change adaptation efforts. This included some initial translations of key concepts into Kosraen. This CC communication plan can be found in Appendix B.



Session Two:

The second half of the workshop was focused on learning new steps within a management planning process that can be used to carry out a vulnerability assessment through the use of participatory exercises. These new steps can help community members and managers understand how their natural resource and human related targets might be impacted by climate change. Throughout this session, participants practiced using new exercises in the process such



as a historical timeline, seasonal calendar, and vulnerability matrix and discussed how these new exercises could be integrated into existing planning processes. A half-day field trip was taken to Malem site in mid-week to discuss climate impacts. Additional strategies from this session can be found in Appendix C. Finally, the workshop team agreed to meet again to begin to develop a local process for using the new tools and working together to implement climate change outreach and planning in at least one of the local communities.

APPENDIX A

Climate Change Adaptation Outreach and Planning Training Agenda

Kosrae

February 27th - March 2nd, 2012

Five-day Agenda

Monday	Part One: Understanding Climate Change Concepts
	Introductions
	<ul style="list-style-type: none">• Review objectives/overview agenda of the workshop• Background and Overview of the Local Early Action Plan (LEAP) and Outreach tool
	Basic Communications: <ul style="list-style-type: none">• What makes a good presentation vs bad?• How can communications about CC be more effective in Micronesia?
	Outreach Session One: <ul style="list-style-type: none">• Understanding healthy vs threatened Micronesian Community
	<ul style="list-style-type: none">• Observations in changes in climate
	Outreach Session Two: <ul style="list-style-type: none">• Understanding Climate Change<ul style="list-style-type: none">○ El nino○ Causes of CC○ What changes can be expected?○ Possible and Existing Impacts
Tuesday	
	Outreach Session Three: <ul style="list-style-type: none">• What does this mean for the community?<ul style="list-style-type: none">○ How will these changes impact a healthy Community?○ How these change impact a threatened community –Cumulative Impacts

	<p>Outreach Session Four:</p> <ul style="list-style-type: none"> • Climate Change Concepts and Vocabulary
	<ul style="list-style-type: none"> • Continue CC Concepts – exercise – pick a local resource and define it by exposure, sensitivity, adaptive capacity and vulnerability
	<p>Outreach Session Six:</p> <ul style="list-style-type: none"> • Is there Anything we Can do? <ul style="list-style-type: none"> ○ What are other communities doing ○ Adaptation Strategies ○ Adaptation Strategies ○ Adaptation Strategies
3:30 – 4:30	<p>Outreach Session Seven:</p> <ul style="list-style-type: none"> • Community Management and Adaptation Planning – <ul style="list-style-type: none"> ○ How can we understand what will happen to our community ○ What can we do in our community to prepare for these changes? ○ Vulnerability Assessment ○ Taking action: A community plan to build resilience <p style="text-align: center;">WRAP UP OUTREACH</p>
Wednesday	Part Two: Carrying out a Local Early Action Planning Process
	<ul style="list-style-type: none"> • Practice with Outreach Tools – small groups present back/Climate quiz
	<ul style="list-style-type: none"> • Review of local management planning process • Review of LEAP Planning Steps and the outcomes of the process.
	<ul style="list-style-type: none"> • Developing a Community Profile
	<ul style="list-style-type: none"> • Getting Organized and Identification of stakeholders • Checklist on Providing awareness on climate change
	<ul style="list-style-type: none"> • Mapping the Community/Site and its Resources (social and biological)
	<ul style="list-style-type: none"> • Complete a Threat/Action model for target resources (social and biological)

Thursday	
	<ul style="list-style-type: none"> • Developing a Local Climate Story (part 1) <ul style="list-style-type: none"> ○ Historical Timeline ○ Seasonal Calendar
	<ul style="list-style-type: none"> • Developing a Local Climate Story (part 2) <ul style="list-style-type: none"> ○ Transect Walk ○ SWOT Analysis - what are the most important indicators of adaptive capacity - exercise ○ Fill Out the Local Climate Story
Friday	
	<ul style="list-style-type: none"> • Completing the Vulnerability Assessment
	<ul style="list-style-type: none"> • Reviewing and Revising the Threat Action Model to include information from the vulnerability assessment
	<ul style="list-style-type: none"> • Report back on Vulnerability Assessment and new or revised actions
	<ul style="list-style-type: none"> • Develop a timeline for next steps to move forward
	<ul style="list-style-type: none"> • Wrap up/Workshop evaluation

APPENDIX B

Climate Change Adaptation Communication Plan

Climate Change Outreach and Communication Tools Available:

MCT CC Flipchart and Booklets
MCT CC Video

Target Audience:

Community Leaders and Community Members

Focus groups:

5. Utwe Biosphere Reserve – Winton, Duffy, Marston, Norlin
6. Awane Marine Park – Leonard, Ruthey, Alik
7. Yela – William, Rick, Maxwell, Dison
8. Olum – Jason, Carlos, Jacob, Grant

Presentation Tips:

Good Presentations	Bad Presentations/ Communication
<ul style="list-style-type: none">• Language – appropriate for target audience• Rapport• PowerPoint• Refreshments• Tone of voice• Good knowledge (facilitators)• Body language/positioning• Eye contact	<ul style="list-style-type: none">• Too long• Too many pauses• Too much text on PowerPoint/posters• Speaker not audible by audience

Communication Approaches:

<ul style="list-style-type: none">• Radio spots (Q&A) with rewards• Workshops• Flyers/brochures/factsheets• Handouts

Entry Point for Discussing Climate Change with Community Leaders and Members

[not discussed during workshop; team to discuss in follow-up meetings and insert relevant and locally appropriate and accepted community entry points]

Synonyms or other ways to explain key climate change concepts:

Resilient	Vulnerable	Exposed	Sensitive	Adaptive
<ul style="list-style-type: none">• Adaptive• Resistant• Sustainable• Flexible	<ul style="list-style-type: none">• Helpless• Weak• Fragile	<ul style="list-style-type: none">• Open• Heat• Bare• Showing	<ul style="list-style-type: none">• Fragile• Rare• Responsive• While/lighter skin	<ul style="list-style-type: none">• Changes• Potential• Capability

Key messages for specific flipchart sections

Flipchart Section	Key Messages	Key Messages in Kosraen	Communication Approach and Materials needed	Time Needed
Healthy/ Threatened Communities	<p>Healthy Resources = Healthy Community because of services they provide</p> <p>There are many local threats that negatively impact a community's health</p>	<p>Kasrpen can sesr uh, ase moul wowo nuke mutangacsr</p> <p>Ma mwet uh oru, liksrenu na ahkkolukye mutangacn can uh.</p>	Flipchart, markers, easel pad, PPP	10min
El Nino/ La Nina	<p>Climate variability is dominated by the El Nino and La Nina events have cause significant social and biological impacts in Micronesia in the past</p> <p>We don't know how climate change will affect ENSO events. When events are predicted, it's important for communities to prepare for likely</p>	<p>El Nino ac La Nina pa luu aten pulan pacl ma liksreni na ekullah/ kunauslah mutangasr ac kasrpar misenge</p> <p>El Nino el sikyak ke pal upac fol lun pacl uh. Aten fasr lun eng uh tuku rohtoh lac nuh kutulacp</p> <ol style="list-style-type: none"> 1. Drought 2. Coral Bleaching 3. Forest Fire <p>La Nina el sikyak ke pal upac af ac eng pa oralah noa tuhyak. Aten fasr lun eng uh tuku kutulacp me nuh rohtoh.</p>		

	impacts.	<ol style="list-style-type: none"> 1. Flooding 2. High surge 3. Land slide 		
<p>What is Climate Change? Meah oraclah eklac luhn pulan pacl uh?</p>	<ul style="list-style-type: none"> ○ Climate variability is dominated by EN/LN events have caused significant social and biological impacts in Micronesia ○ We don't know how CC will affect ENSO events. When events are predicted, it's important for communities to prepare for likely impacts. ○ CC change is over a much longer timeframe. Climate variability is a lot of what we're experiencing now. ○ Human activities have caused climate change ○ CC predictions: <ul style="list-style-type: none"> • SLR • Inc. SST • Inc Air Temp • Inc. Ocean Acidity • Change in Weather Patterns 	<p>Sripac: Fofosr tuku ke engine ma orekmakin gasoline, diesel pa nuke;</p> <ul style="list-style-type: none"> • Fofosr ke insin in Sahrom • Fofosr ke Stosah • Fofosr ke Aksohk • Fokon ma orahkrahk/fokon pik • Pakpuck sahk • Isis/Ta e <p>*Fin yohkelik fofosr(CO2) ke ma inge na e panang in tulokinyac usren faht uh in tiac tifoklac liki facluh a fohlohk/sremlah suc panang in kihluckyak fol lun pacl uh.</p>		
<p>What changes can we expect to see in the</p>		<ul style="list-style-type: none"> • Kihluckyak luhn ahlomg 		

<p>Region? Meac kutu ekyek kuht e pulakin ke an lasr uh?</p>		<ul style="list-style-type: none"> • Kihluckyak Fol ke kof inkof • Fol ke eng u kihluckyak • Kihluckyak ke Acid/ahset ke inkof lasr uh(srano koluk se inge el uniyac ekac ac ik ke inkof lasr uh) • Ekyek ke puhlan pacl uh(af,eng,noa) 		
<p>Why should the community care? Efu kuht enenu in elyah kac?</p>	<ul style="list-style-type: none"> ○ Community should care because potential impacts to food, culture, health, natural resources, etc. ○ Communities in Micronesia already noticing changes ○ Protecting resources now =increased chance of survival and ability to meet our community needs now and in the future <p>More threats to resources = less ability to survive changes over time</p>	<p>Kuhtuh Oiyac Ma kuh in sikyak</p> <ul style="list-style-type: none"> • Muhtacngasr ac mwe mongo nacsr uh • Moul lasr mwet uh • Ekyek luhn pulan pacl uh <p>Oiyac Ma Sikyak Tari Kut Liye;</p> <ul style="list-style-type: none"> • Karyak ke noa luhlahp kuh ahlng • Utyak luhn kihfihnte nuke imac kunaoslah fukunsahk • Elyah luhn eka ke sripen follah luhn kof panang in 		

		<p>ekulah tuhnan eka uh in fasrfasrlah.</p> <ul style="list-style-type: none"> • Mongollac luhn we acn uh • Pahollah luhn acn uh 		
<p>What can We Do ? Mea kut ku in oru</p>	<ul style="list-style-type: none"> ○ There are things your community can do to cope with climate change ○ Communities around the Pacific are already taking action! 	<ul style="list-style-type: none"> • Oakiya in oasr karinginyen ma inkof lasr u ke pusren ma sap (MPA) • Akyokye in srumun nusin met u ke elya sikyak ke ekla lun pulan pal u (Awareness) • Yokela sak ke nien ma mongola(Infal, finol, insak...) (Restoration) • Aksrikyela sisi kutkut (Littering) • Musaela tank in karingin kof (Water tank) • Kaliya ku urokya paip in kof pal kom tia orekmakin (Fix 		

		<p>leaky pipe)</p> <ul style="list-style-type: none"> • Yokela ku karunganang we an lasr u in tia musala (Coastal erosion) • Poster Contest 		
<p>How can we understand what will happen?</p> <p>Kut a akilen ku etu fuka la ma inge sikyak?</p>	<p>More resilient/less vulnerable</p>	<p>Kut fwini karingin onangan an sema wowo puspukut ku in akilen ku pulakin:</p> <ul style="list-style-type: none"> • Pukanten ik (More fish) • Kof nasnas (Clean Water) • Kasrup lun fohk (soil Fertility) • Pukanten fuknsak (Different varieties of crops or vegetables) • Eng nasnas (clean Air) • Met elos fokoko tia mas (Healthy life& Community) • Engan in Mislal (Peace & 		

		Natural Life)		
	- Less resilient/more vulnerable	<p>Fin musala ku kolukla an se kutu ma nga kom ku in akilen ku pulakin:</p> <ul style="list-style-type: none"> • Wangin / fototola lun me mongo (Food Shortage) • Kolukla lun fohk nuke ima • Fokfokla lun kof (Contaminated Water) • Mongola lun we an (Coastal Erosion) • Pukanten mas sikyak • Pukanten ma orakrak misa 		

APPENDIX C

Additional Adaptation Strategies to be included in discussions about what communities can do

The following adaptation strategies were identified by workshop participants as additional strategies to ones described in the outreach tool

Coral Reefs and Fisheries Adaptation Strategies

- EMB (Environmental Mooring Buoy)
- Legislation/ Regulation
- Community Outreach/ Awareness
- Assessment (Technical Expert)
- Prohibit use of commercial fertilizer
- Add upland forest to the last bullet in #`
- Enforce existing regulations on pig pens

Terrestrial Adaptation Strategies

- Sustainable Development Practices
 - Housing
 - Rules and Regulation (Moving)
- Pollution Control
 - Littering
 - Dumpsite
- Sustainable Harvesting

Water Resource Adaptation Strategies

Adaptation Strategies for Agriculture

- Reduce sedimentation (erosion) on slopes
 - Contour lines
 - Vegetative barriers
 - Control of invasive species

For Community Well-being

- Access to clean water

APPENDIX D

Participants list

	Participant name	Organization/Community	Contact info
1	Marston Luckymis	KCSO, Marine program manager, Lelu	kcsomarine@mail.fm
2	Jacob Sanney	KCSO, Terrestrial program	kcsoterrestrial@mail.fm
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4	Remos Livaie	DREA, Crop Production	remoslivaie@yahoo.com
5	Maxwell Salik	DREA, Marine resource	fisherieskos@mail.fm
6	Leonard Sigrah	KIRMA, Invasive program	leonsigrah@yahoo.com
7	Maxon Nithan	KIRMA, Assistant forester	
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