

Adapting to a Changing Climate Workshop Report

Chuuk, Federated States of Micronesia

February 6th to 10th, 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 Chuuk summarized in this document is the second workshop for the Federated States of Micronesia and conducted by in-region mentors.



Workshop Objectives

From February 6-10, 2012 the Micronesia Conservation Trust (MCT) and its Micronesia Challenge partners launched the training program in Chuuk, 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 Chuuk 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 Chuuk 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 Chuuk 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 25 people (participants and trainers). Trainees were present from various agencies within Chuuk including Chuuk State divisions of Agriculture and Marine Resources, Chuuk State Health Services, Public Health and Environmental Health divisions, Chuuk Conservation Society, FSM Quarantine - Chuuk, Weather Services Office, Chuuk Womens Council, U.F.O. Conservation Society, U.F.O. Womens Organization, U.F.O. Youth Organization, Public Affairs – Youth division and Broadcast & Information, Chuuk EPA, and COM-FSM Cooperative Research Extension. Participants list can be found in Appendix D.

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

1. U.F.O. site (terrestrial)
2. Piherarh site (marine)
3. Chuuk – high islands
4. Chuuk – low laying islands

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

The training was led by PIMPAC regional mentor, Berna Gorong, from Yap.

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 including the flipchart and facilitators notes to understand climate change concepts and develop locally appropriate ways to communicate key messages about these concepts. The Chuuk 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 Chuuk for climate change adaptation efforts. This included some initial translations of key concepts into Chuukese. 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. 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 one of the local communities.

APPENDIX A

Climate Change Adaptation Outreach and Planning Training Agenda

Chuuk

February 6-10, 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
	Outreach Session Four: <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>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

Outreach:

[not discussed at workshop; team to include in follow-up meetings if deemed relevant to include in communication plan]

[illegible]

Communication Approaches:

- Radio communication - (V6AK – AM/FM [lagoon islands], SSB/CB [out-lying islands])
- Programs through schools/church - [lagoon and outlying islands]
- Posters/billboards - [lagoon and outlying islands]
- Floats/parade/banners - [lagoon]
- Utilize community leaders both elected and traditional
- Train more community members in outreach
- Walk the talk & talk the walk
- Utilize annual leadership conference
- Utilize Facebook/social media

- Notes from workshop:
 - most of these have been done but we don't see actions being taken by communities. Another approach is directly engaging communities, share information with them (awareness) and have them come up with actions that they can take
 - a goal can be collectively working together and collaborating on outreach efforts. If above are done compartmentalized where individual agencies/entities are working on their own, then it would be ineffective and inefficient; however, if one-way radio broadcasting is coupled with follow up programs in schools/churches and community outreaches then it would be more efficient and resources are shared in the effort.

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]

ASPECTS OF HEALTHY VS. THREATENED COMMUNITY:

HEALTHY	THREATENED
Good/clean water source	Overexploitation of natural resources
Clean environment, people are more healthy	Overpopulation/more activities happening (dredging, dynamite fishing, etc)
More food on land and in water	Less food on land and in water
Mangroves are intact	Land erosion
Natural resources are managed from ridge to reef	Coral bleaching
Intact seagrass meadow	Marine species displacement
Undisturbed vignarina (type of grass growing on shoreline)	Increase in non-communicable diseases (NCD)
People are physically active	People more dependent on imports/move towards cash base economy
Home gardens	Barren land/soil depleted of nutrients/harder for crops to grow
	No greens (less tree/vegetation)/no energy [less oxygen in the air since less trees available]

	Overfishing
	Unable to grow native plants & food crops due to poor soil quality
	Breakdown in traditional stewardship (traditional management practices no longer practiced; traditional leaders not engaged)
	No coordination between government and traditional authorities (clarification of roles and responsibilities)

Other ways to explain key climate change concepts:

Resilient	Sensitive	Exposed	Vulnerable	Adaptive
<ul style="list-style-type: none"> • strong • flexible • high endurance • coping • can withstand • adaptable • health 	<ul style="list-style-type: none"> • woman • soft • fragile • touchy • dangerous • has limits (limited) • delicate • easily senses 	<ul style="list-style-type: none"> • open • attracts • endangered • vulnerable • uncovered • naked • introduced to • well known 	<ul style="list-style-type: none"> • susceptible • dangerous • gets hurt easily • sensitive • easily affected • affected • easily manipulated • lovable • poor • weak • sad 	<ul style="list-style-type: none"> • inviting • changing • adjustable • get used to • Chameleon • accepting • flexible • bouncy • acquiring • able to cope

Key messages for specific flipchart sections

Flipchart Section	Key Message	Key Message in Chuukese (other local languages)	Communication Approach & Materials Needed	Time Needed
Understanding healthy vs threatened Micronesia Community Flipchart 1: A healthy Micronesia community Flipchart 2: A threatened Micronesia community Flipchart 3: A	<ul style="list-style-type: none"> ○ Healthy resources = healthy community ○ There are many local threats that negatively impact a community's health 	Aeaochun ach kewe tufich mi pusin wor non pwunun fonuach ina afei feitan me nonomochun neniach		

<p>healthy Micronesian atoll community</p> <p>Flipchart 4: A threatened Micronesian atoll community</p>				
<p>Understanding Climate Change and Climate Variability</p> <p>Flipchart 5: What is climate change?</p> <p>Flipchart 6: What is El Nino and La Nina?</p> <p>Flipchart 7: What changes can we expect to see in the region?</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>Akesiwinin kookotun me mokukutun fan nang</p> <p>A popuseni: otun ekkei, apuo, me pisekin kek ren</p> <ul style="list-style-type: none"> • Vivi • Taraku/chitosa • Sepenin • Nenien foor pisek • Pekin atake ira me man • Kata eramong • Kanon ira watte ren kek <p><i>[group note: omit volcanoes; irrelevant to community]</i></p> <p>Ierin nuwa, nefinen pat me pwich</p> <ul style="list-style-type: none"> • Asapwal a pe seni etiw ngeni notow • Sat a watte/tekia me notow, ewe pwichikaren sat a ioi fengen asan me notow • Sat a kukkun me etiw, nge a pwal patapat • Eut a eto me etiw sa ngeni notow 		

		<p>Ierin pwas</p> <ul style="list-style-type: none"> • Kukkununo pochokulen asapwal a eto seni notow ngeni etiw. Pwal usun chok ren ewe guten sat • A kuun/wahe sat me etiw. A tolong lon ach kewe chontul ito (a angawa ewe konik lon) • Watte pwas <p>Ierin pat/chechenun fonu me ne set</p> <ul style="list-style-type: none"> • Wattenon no • Watten pungun ran 		
<p>Flipchart 8: Why should our community care?</p> <p>Flipchart 9: How will these changes impact our community?</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 ○ More threats to resources = less ability to survive changes over time 	<p>Upland forest/iran won Chuuk</p> <ul style="list-style-type: none"> • Tumunueochu manawen me mareochin ach kewe tufich won fonu me aroset <p>Iran won Chuuk</p> <ul style="list-style-type: none"> • Unuseoch/manaw • Amochu pwul pwe esap seen • Awora nenien nonom ru maan, machang <p>Iran arroset</p> <ul style="list-style-type: none"> • Eppeti senun pwun/fonu • Morei/eppeti nimengaw seni neset • Atoto/efisato pien arosset <p>Chia</p> <ul style="list-style-type: none"> • Eppeti talan tonu 		

		<ul style="list-style-type: none"> • Morei ewe sat seni nimengaw • Nenien oupup/tunun <p>Chew/epino</p> <ul style="list-style-type: none"> • Otufichi chomong monun nessel <p>Woch /reef</p> <ul style="list-style-type: none"> • Nenien monun nessel • Nenien uputiw • Nenien ar mong o <p>Nenien ar mour</p>		
Flipchart 10: Cumulative impacts				
Is there Anything we Can do?	<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! 			
Community Management and Adaptation Planning	<ul style="list-style-type: none"> ○ Understanding our vulnerability to CC impacts helps us better prepare ○ Healthy community = More resilience/ Less vulnerable ○ Threatened community = Less resilient/ more vulnerable ○ Making a plan can help your community be effective in taking action 	<p>Ew neni a mecheres ngeni efeiengawen ekkesiwinin mokutun nonomun fonufan:</p> <ul style="list-style-type: none"> • Pwasenio ira... • Moreta/Nafengaw konik... <p>Ngawenon monun neset/neni non sat...</p> <p>Watte osupwang, kukkun angangen eouchuono, me tumunun.</p> <ul style="list-style-type: none"> • Mecheres ngeni osukosuk me efeiengaw 		

		<ul style="list-style-type: none"> • Mecheres me mutik ngeni met a fis... met mi och ika met mi ngaw • Kukkun ach sipwe epeti, tumunu, me weweiti angangan me tumunun <p>Fonoach me neset</p> <p>Epwe fis kei ika ese tumun</p> <ul style="list-style-type: none"> ○ Ew neni mi tumwun mi weires an epwe tori osupwang me osukosuk mine epwe esenipato tanon menun me masowan, nge mi mecheres ngeni an epwe sefaniti nonomun me nomw ○ Sipwe weweiti tumunun nonomwochun tufich ich kewe ○ Wattenon angangen tumun kukununon osukosuken tufichich me nonomuch 		
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APPENDIX C

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

- 1) Agriculture
 - a) For low lying islands, elevated potting for gardening (example: Fiji use of bamboo stilts to raise garden area)/use of concrete taro patch
 - b) Segregation of trash – composting, recycling
- 2) Terrestrial
 - a) Public awareness on importance of protecting upland forestry
 - b) Create state laws to protect upland forest
- 3) Water sources
 - a) Public awareness on importance of protecting water sources
- 4) Coral reefs/fisheries
 - a) Public awareness
- 5) Coastal land
 - a) Public awareness

APPENDIX D

Participants List

	Participant name	Organization/Community	Contact info
1	Carla Billy	Chuuk Women's Council	corab090@gmail.com / 931-8575
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