

# Adapting to a Changing Climate Workshop Report

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*Yap, Federated States of Micronesia*

*April 2<sup>nd</sup> to 6<sup>th</sup>, 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 Yap summarized in this document is the fourth workshop for the Federated States of Micronesia and conducted by in-region mentors.



## **Workshop Objectives**

From April 2<sup>nd</sup> to 6<sup>th</sup>, 2012 the Micronesia Conservation Trust (MCT) and its Micronesia Challenge partners launched the training program in Yap, 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 Yap 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 Yap 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 Yap 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 30 people (participants and trainers). Trainees were present from various agencies, sectors, and communities within Yap including Governor's Office, Dept. of Health Services Public Health and Environment Health divisions, Dept. of Resources & Development and its divisions (Agriculture & Forestry, Marine Resources), Dept. of Education Curriculum and Professional Development divisions, Office of Planning & Budget Grants Management division, Yap EPA, IOM Yap office, Women's Interest Office, U.S. Forest Service –Yap, Yap CAP, Tomil municipality, and Nimpal Channel MCA community. Participants list can be found in Appendix D.

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

1. Colonia (town area from hospital to Chamorro Bay area)
2. Tomil municipality
3. Low lying islands – focused on Falalop, Ulithi

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 and supported by Steven Victor of The Nature Conservancy.

## 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 Yap 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 Yap for climate change adaptation efforts. A translation of the flipcharts into Yapese was not done during the workshop due to age group of participants being young. The CC communication plan outline can be found in Appendix B and the team can further develop it to make it relevant for Yap.



### 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 and vulnerability matrix and discussed how these new exercises could be integrated into existing planning processes. A field trip was done in area around town to look at targets in vicinity and adjacent communities to build into discussions on vulnerabilities to climate impacts and threats. 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

Yap

April 2-6, 2012

*Five-day Agenda*

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

	<p>Outreach Session Six:</p> <ul style="list-style-type: none"> <li>• Is there Anything we Can do? <ul style="list-style-type: none"> <li>○ What are other communities doing</li> <li>○ Adaptation Strategies</li> <li>○ Adaptation Strategies</li> <li>○ Adaptation Strategies</li> </ul> </li> </ul>
3:30 – 4:30	<p>Outreach Session Seven:</p> <ul style="list-style-type: none"> <li>• Community Management and Adaptation Planning – <ul style="list-style-type: none"> <li>○ How can we understand what will happen to our community</li> <li>○ What can we do in our community to prepare for these changes?</li> <li>○ Vulnerability Assessment</li> <li>○ Taking action: A community plan to build resilience</li> </ul> </li> </ul> <p style="text-align: center;"><b>WRAP UP OUTREACH</b></p>
<b>Wednesday</b>	<b>Part Two: Carrying out a Local Early Action Planning Process</b>
	<ul style="list-style-type: none"> <li>• Practice with Outreach Tools – small groups present back/Climate quiz</li> </ul>
	<ul style="list-style-type: none"> <li>• Review of local management planning process</li> <li>• Review of LEAP Planning Steps and the outcomes of the process.</li> </ul>
	<ul style="list-style-type: none"> <li>• Developing a Community Profile</li> </ul>
	<ul style="list-style-type: none"> <li>• Getting Organized and Identification of stakeholders</li> <li>• Checklist on Providing awareness on climate change</li> </ul>
	<ul style="list-style-type: none"> <li>• Mapping the Community/Site and its Resources (social and biological)</li> </ul>
	<ul style="list-style-type: none"> <li>• Complete a Threat/Action model for target resources (social and biological)</li> </ul>
<b>Thursday</b>	
	<ul style="list-style-type: none"> <li>• Developing a Local Climate Story (part 1) <ul style="list-style-type: none"> <li>○ Historical Timeline</li> <li>○ Seasonal Calendar</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>• Developing a Local Climate Story (part 2) <ul style="list-style-type: none"> <li>○ Transect Walk</li> <li>○ SWOT Analysis – what are the most important indicators of adaptive capacity - exercise</li> <li>○ Fill Out the Local Climate Story</li> </ul> </li> </ul>
<b>Friday</b>	
	<ul style="list-style-type: none"> <li>• Completing the Vulnerability Assessment</li> </ul>
	<ul style="list-style-type: none"> <li>• Reviewing and Revising the Threat Action Model to include information from the vulnerability assessment</li> </ul>
	<ul style="list-style-type: none"> <li>• Report back on Vulnerability Assessment and new or revised actions</li> </ul>
	<ul style="list-style-type: none"> <li>• Develop a timeline for next steps to move forward</li> </ul>
	<ul style="list-style-type: none"> <li>• Wrap up/Workshop evaluation</li> </ul>



**Communication Approaches:**

*[not discussed during workshop; team can discuss and include]*

**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]*

**Other ways to explain key climate change concepts:**

Resilient	Sensitive	Exposed	Vulnerable	Adaptive
<ul style="list-style-type: none"> <li>○ Healthy</li> <li>○ Intact</li> <li>○ Strong</li> <li>○ Able to recover</li> <li>○ Excellent/gifted student</li> <li>○ Natural resource</li> <li>○ Adaptable</li> <li>○ Bounces back</li> </ul>	<ul style="list-style-type: none"> <li>○ Ticklish</li> <li>○ Soft</li> <li>○ Jumpy</li> <li>○ Women</li> <li>○ Men</li> <li>○ Feeling/easily responsive</li> </ul>	<ul style="list-style-type: none"> <li>○ Experience</li> <li>○ Open to the outside/elements</li> <li>○ Contaminated</li> <li>○ Naked</li> <li>○ Not sheltered</li> <li>○ See through</li> </ul>	<ul style="list-style-type: none"> <li>○ Weak</li> <li>○ Top priority</li> <li>○ Likely to get sick</li> <li>○ At risk (<i>bai u tuyoyo wol</i>)</li> <li>○ More prone to something</li> <li>○ Susceptible</li> <li>○ Must take action</li> <li>○ Potentially threatened</li> </ul>	<ul style="list-style-type: none"> <li>○ Ability to adjust</li> <li>○ Neutral</li> <li>○ Resilient</li> <li>○ Can change/chameleon</li> <li>○ Octopus</li> <li>○ Flexible</li> </ul>

## Key messages for specific flipchart sections

Flipchart Section	Key Message	Key Message in Yapese (other local languages)	Communication Approach & Materials Needed	Time Needed
<p><b>Understanding healthy vs threatened Micronesian Community</b></p> <p><b>Flipchart 1: A healthy Micronesian community</b></p> <p><b>Flipchart 2: A threatened Micronesian community</b></p> <p><b>Flipchart 3: A healthy Micronesian atoll community</b></p> <p><b>Flipchart 4: A threatened Micronesian atoll community</b></p>	<ul style="list-style-type: none"> <li>○ Healthy resources = healthy community</li> <li>○ There are many local threats that negatively impact a communities health</li> </ul>			
<p><b>Understanding Climate Change and Climate Variability</b></p> <p><b>Flipchart 5: What is climate change?</b></p>	<ul style="list-style-type: none"> <li>○ Climate variability is dominated by EN/LN events have caused significant social and biological impacts in Micronesia</li> <li>○ We don't know how CC will affect ENSO events. When events are predicted, it's important for communities to prepare for likely impacts.</li> <li>○ CC change is over a much longer timeframe. Climate variability is a lot of what we're</li> </ul>			9

<p><b>Flipchart 6: What is El Nino and La Nina?</b></p> <p><b>Flipchart 7: What changes can we expect to see in the region?</b></p>	<p>experiencing now.</p> <ul style="list-style-type: none"> <li>○ Human activities have caused climate change</li> <li>○ CC predictions: <ul style="list-style-type: none"> <li>● SLR</li> <li>● Inc. SST</li> <li>● Inc Air Temp</li> <li>● Inc. Ocean Acidity</li> <li>● Change in Weather Patterns</li> </ul> </li> </ul>			
<p><b>Flipchart 8: Why should our community care?</b></p> <p><b>Flipchart 9: How will these changes impact our community?</b></p>	<ul style="list-style-type: none"> <li>○ Community should care because potential impacts to food, culture, health, natural resources, etc.</li> <li>○ Communities in Micronesia already noticing changes</li> <li>○ Protecting resources now =increased chance of survival and ability to meet our community needs now and in the future</li> </ul>			
<p><b>Flipchart 10: Cumulative impacts</b></p>	<ul style="list-style-type: none"> <li>○ More threats to resources = less ability to survive changes over time</li> </ul>			
<p><b>Is there Anything we Can do?</b></p>	<ul style="list-style-type: none"> <li>○ There are things your community can do to cope with climate change</li> <li>○ Communities around the Pacific are already taking action!</li> </ul>			

<b>Community Management and Adaptation Planning</b>	<ul style="list-style-type: none"> <li>○ Understanding our vulnerability to CC impacts helps us better prepare</li> <li>○ Healthy community = More resilience/ Less vulnerable</li> <li>○ Threatened community = Less resilient/ more vulnerable</li> <li>○ Making a plan can help your community be effective in taking action</li> </ul>			

## APPENDIX C

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

#### 1) **Agriculture**

- i) Practice traditional ways of gardening
- ii) No chemical fertilizers
- iii) No machinery w/gardening
- iv) Raised bed/intensive method for gardens

#### 2) **Terrestrial**

- i) Limit burning for gardening
- ii) Protecting native trees/plants
- iii) Wildfire prevention
- iv) Utilize bamboo, nipa – fast growing materials vs. old trees
- v) Awareness on invasive species

#### 3) **Water sources**

- i) Laundromat operations (monitor)
- ii) Water hours
- iii) Catchment
- iv) Water conservation awareness/education

#### 4) **Coral reefs/fisheries**

- i) Clean and maintain polluted stream that flows into the water
- ii) Traditional conservation methods (limited take, fish weirs, regulations)
- iii) Invasive species removal/monitoring
- iv) Ecotourism, scuba diving
- v) Reduce pollution, run off, reef clean up
- vi) Law enforcement
- vii) Size limits on fishes
- viii) Protect endemic fish species
- ix) Protect endemic coral species
- x) Promote fisheries nurseries

#### 5) **Coastal land**

- i) Monthly clean-up
- ii) Sustainable development
- iii) Traditional in-land gardens, agroforestry, taro patches
- iv) Control invasive
- v) Mangroves as coastal protection

#### 6) **Support community well being**

- i) Community involvement and leadership involvement
- ii) Establish disposal site
- iii) Waste disposal/recycling
- iv) Establish community meetings
- v) Work with other communities