

ADAPTING TO A CHANGING CLIMATE WORKSHOP REPORT

Koror, Palau
October 29 – November 2, 2012



Background

In 2010, The Micronesia Conservation Trust (MCT) supported the development of community based climate change (CC) 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 Toolkit¹ - 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 guidance¹, 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. A first training was carried out January of 2012 for Palau where eight states were represented. This workshop was carried out to provide an opportunity for additional states and agencies to attend who could not be at the first workshop. Support for this workshop was provided by the Micronesia Conservation Trust, the Pacific Islands Managed and Protected Area Community (PIMPAC), Hatohobei Organization for People and the Environment (HOPE), Koror State, and the Palau International Coral Reef Center (PICRC).

¹ Since the completion of the first phase of this project, much of the Outreach tool and the revised PIMPAC management planning guidance have been combined into one streamlined process and further revised in collaboration with Micronesia Conservation Trust and the US Coral Triangle Initiative and is now called the *Guidance for Vulnerability Assessment and Local Early Action Planning (VA-LEAP)*.

Workshop Objectives

From October 29 – November 2, 2012 PICRC and HOPE launched a training in Koror, Palau 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 with the necessary skills to effectively communicate climate change concepts and foster community-based vulnerability assessments and adaptation planning.
- To provide community leaders and practitioners who facilitate management and adaptation planning processes 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 participants to carry out the vulnerability assessment and adaptation planning process in at least one site within one year.

The training utilized two tools the "Adapting to a Changing Climate Outreach Toolkit" and the "Guide to Vulnerability Assessment and Local Early Action Planning (VA-LEAP)."

Workshop Participation

The training was attended by approximately 40 people (participants and trainers). Trainees were present from various state governments within Palau as well as local resource agencies and organizations. Participants included:

#	Participants' Name	E-mail	Phone	State/Agency
1	Pauline Reklai	kotreklai@yahoo.com	544-2966/779-3991	
2	Joy Ueki	uekient@palaunet.com	488-3607/775-4488	Aimeliik State
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4	Jack Masters		779-5099	Airai State
5	Mike Henry		488-5282	Angaur State

6	Rosania Victor	helenreefa@palaunet.com	488-8044	
7	William Andrew	tobi.andrew@gmail.com	488-8044	
8	Tracy Marcello	lewa_04@yahoo.com	488-8044	Hatohobei State
9	Stalin Stanley		488-8044	
10	Gloria Patris		488-8044	
11	Prince Antonio		488-8044	
12	Lazarus Smand		876-2966	
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15	Mengkur Rechelulk			Koror State
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18	Joseph Maldangesang			Ngarchelong State
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20	Witness Elbelau			
21	Lorenzo Osilek		535-1013/1882	Ngatpang State
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29	Loretta Kintoki	lorettakintoki@palaunmoe.net	778-4263	Sonsorol State
30	Felisa K. Andrew		488-4969	
31	Rena Kloulechad			Auditor
32	Clarinda Ziegler			PAN Office
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34	Charlene Mersai	charmairsai@gmail.com		
35	Carol Emaurois	cemaurois@picrc.org	488-6950	

36	Del. Wayne Andrew	tpacmte@palaunet.com	488-8044	
37	Maecy Theodore		488-8044	HOPE office
38	Ines Kintoki	ikintoki@gmail.com	488-6950	PICRC

The training was led by PIMPAC mentor Delegate Wayne Andrew; PICRC staff, Carol Emaurois; and PIMPAC regional advisors Meghan Gombos and Scott Atkinson.

Workshop Approach & Outputs

The workshop utilized a variety of methods including lectures, group discussions, classroom exercises, and fieldwork to help participants understand climate change concepts and practice utilizing the tools to carry out vulnerability assessments and adaptation planning.

The workshop opened with inspiring words from the Delegate Wayne Andrew regarding the importance of this work in helping Palauan communities to understand the potential impacts of climate change and making necessary preparations to minimize negative impacts. Additionally he emphasized the importance of ensuring that the workshop leads to action by the group of participants.

The workshop began by focusing on using the new CC outreach materials including the flipchart illustrations and participatory exercises to understand climate change concepts and discuss ways to communicate key messages to communities. This session included answering the following questions:

1. What factors contribute to a community being healthy vs unhealthy?
2. What is the difference between weather and climate?
3. What is El Nino and La Nina and how do they effect weather patterns?
4. What is climate change and why is it happening?
5. What are the likely and potential impacts from climate change to Micronesian communities?
6. How will climate change impact a healthy community vs an unhealthy community?
7. What can communities do to prepare for these changes?

To support an understanding these key concepts, the group carried out several participatory exercises that would help them develop a local climate story which explains past, current and projected climate hazards, and impacts the community is most concerned about. Among these were the historical timeline to review past climate events and their impacts to local communities, and a seasonal calendar to explore changes being noticed to normal weather patterns and seasons. Pictures of some of the outputs from these exercises are below.

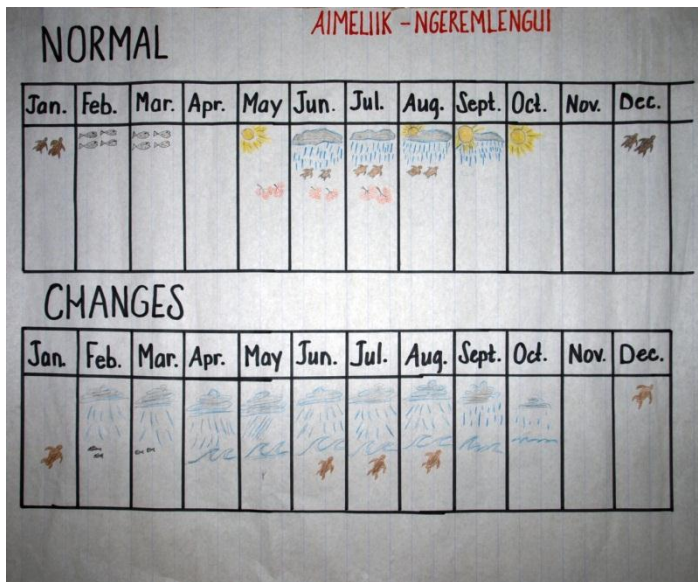
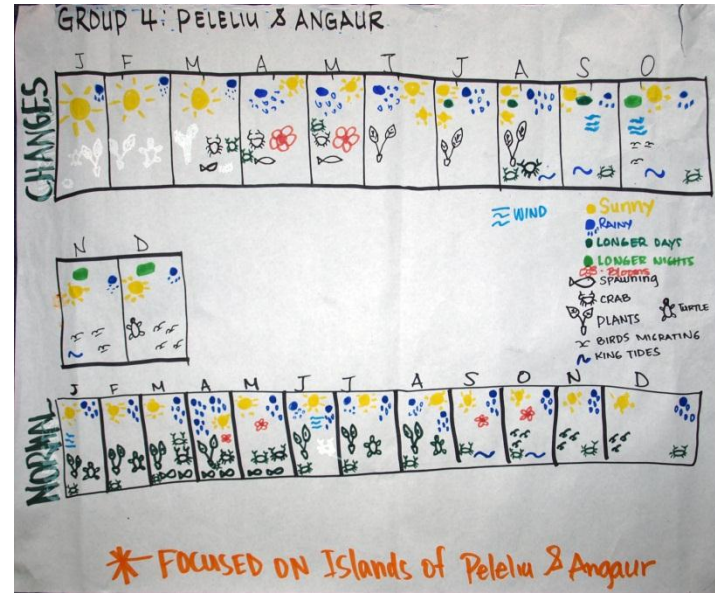


Figure 1: Historical Timeline for Aimeliik and Ngeremlengui States



* FOCUSED ON Islands of Peleliu & Angaur

Figure 2: Seasonal Calendar for Peleliu & Angaur States

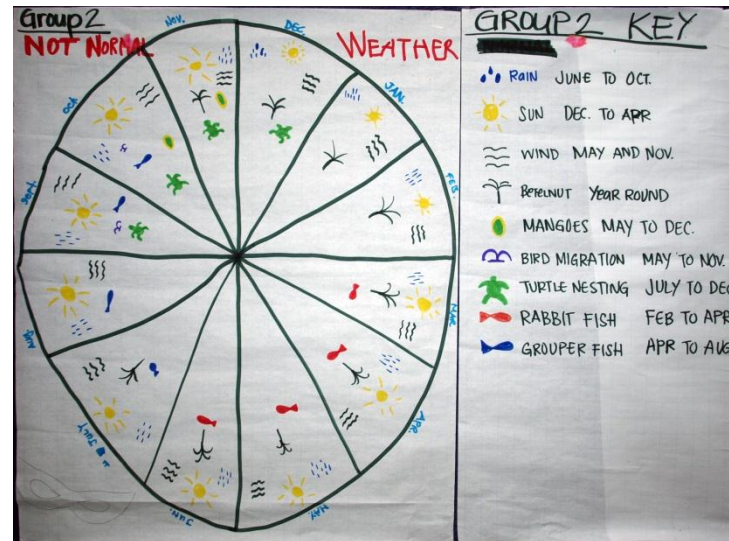
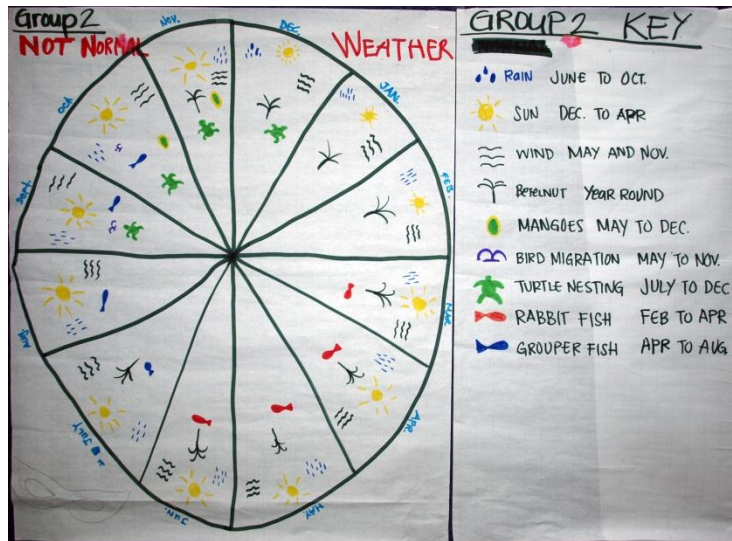


Figure 2: Seasonal Calendar for Ngarchelong, Ngaraard and Ngchesar States

Next the group focused on understanding climate impacts and concepts that are being used globally to discuss climate change adaptation and are critical for community facilitators to complete a vulnerability assessment and write reports and grant proposals regarding climate adaptation. These terms include Vulnerability, Sensitivity, Exposure, Potential Impact, Adaptive Capacity, and Resilience.

These concepts help us understand how vulnerable a system is to the impacts of climate change. To simplify the concept of vulnerability one can think of it as sensitivity “plus” exposure (tells you the potential negative impact on a system from climate hazards) “minus” its ability to adapt to the changes with minimal cost, will provide an understanding of vulnerability.

$$\text{(Exposure + Sensitivity) – Adaptive Capacity = Vulnerability}$$

As part of this exercise in understanding these terms, workshop participants were asked to describe what exposure, sensitivity, adaptive, resilient, and vulnerable meant in an everyday situations rather than climate change. Although these words may not have the “same” meaning as the climate change term, they can be helpful when used to explain the concept behind the term, develop analogies, or consider for translation into local language, see Appendix C. The group also spent time to discuss ways in which these concepts could be translated in Palauan, and practiced how they would explain them to local communities.

Next the group participated in a one-day field trip to Ngaraard where they split into five groups to carry out a threat and vulnerability assessment for priority natural resource and social targets. These targets included: 1) mangroves, 2) infrastructure, 3) coastlines, 4) taro patches, and 5) water resources. A perception map of the community was developed to provide an overview of locations of these resources and to be used in the field.



Figure 3: Ngarard State Perception Map

Each group physically viewed their resource and explored the following with local community members: Current condition of the target

1. Non-climate threats and root causes of those threats on the target
2. Existing and potential climate hazards that could impact the target
3. Exposure, Sensitivity, Potential Impact, Adaptive Capacity and Vulnerability of the target to climate hazards
4. Vulnerability of the community to potential changes in the resource (particularly highly vulnerable resources)
5. Actions that could be take to reduce vulnerability or prevent future vulnerability of the resource target or community

The field trip helped participants relate climate change concepts to real examples and gain a better understanding ways to understand vulnerability and therefore meaningful actions that could be taken to reduce vulnerability.

The last day of the workshop focused on reviewing the vulnerability assessments, discussing actions and how to prioritize those actions, as well as how to integrate actions into existing plans. Many states in Palau have undergone management planning for their conservation areas to become part of the Palau Protected Area Network. As such, the workshop aimed at supporting revisions to these existing efforts by including new steps to help community members and managers understand how their natural resource and human related targets might be impacted by climate change.

To conclude the workshop, participants were asked to develop a timeline and activities to move climate change adaptation forward in their respective communities. The following commitments were made:

1. Participants decided to formalize the group into a Palau Climate Change Network (PCCN) where they could work together to share information and help each other further climate change adaptation efforts in the various states.
2. The group committed to meet every 4-6 weeks to share progress on their efforts and support one another in going through the Vulnerability Assessment-Local Early Action Planning process.
3. The next PCCN meeting was set for November 29, 2012 at 1pm at the Palau International Coral Reef Center conference room.
4. Each participant will complete a next steps plan before the PCCN meeting, outlining the actions they will take to complete a LEAP in their community, including their resource needs, technical support needs, and opportunities. See Appendix B
5. Each state group will also collect information about water resources in their state including number of water tanks and water condition.

Contact Information of Facilitators

The facilitators can be contacted with any questions about the tools, process, or any general support needed.

1. Delegate Wayne Andrew – 775-1969
2. Carol Emaurois – 775-1180 / 488-6950
3. Surech Hideyos – 775-1944
4. Meghan Gombos – Meghan.Gombos@gmail.com
5. Scott Atkinson - s.atkinson@conservation.org

Group picture



First row l to r: Jack Master-Airai, Denise Sambal-Peleliu, Prince Antonio-Hatobei, Rosania Victor-Hatobei, Mike Henry-Angaur, Pauline Reklai-Aimeliik, Kiblas Soaladaob-Ngaraard, Secundina Kentaro-Ngchesar, Robert Johnson-Kayangel, Carol O. Emaurois-PICRC, 2nd row L to R: Mengkur Rechelulk-Koror, Loretta Kintoki-Sonsosorol, Clarinda Ziegler-PAN Office, Felisa K. Andrew-Sonsorol, Stalin Stanley-Hatobei, Joy Ueki-Aimeliik, Meghan Gambos- Trainer, Rena Kloulechad-Auditor' Office, Surech Hideyos-Ngaraard, 3rd row L to R: Laura Miles-Sonsorol, Gloria Patris-Hatobei, Wendy Arurang-Peleliu, Scott Atkinson-Trainer, Lazarus Smand-Kayangel, Tracy Marcello-Hatobei, Joseph Maldengesang-Ngarchelong, William Andrew-Hatobei, 4th row L to R: Darwin Florencio-Ngchesar, Nolan Riungel-Kayangel, Lorenzo Osilek-Ngatpang, Rodney Marino-Ngaremlengui

APPENDIX A

Climate Change Adaptation Outreach and Planning Training Agenda Koror State Office Building Koror, Palau October 29 to November 2, 2012

Training Objectives

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

Participants

We are asking that participants be nominated by their agency/organization based on the following:

- Participants existing job should include working directly with communities to carry out outreach and/or planning activities. Sectors can include natural resource management, health, hazard management, food security, water resources.
- Participants should be willing to work in a small group of 5-7 people throughout the workshop to practice using the CC tools by using one specific geographic site (i.e. community) as an example to learn the process
- Participants should be committed to attending the training for all five days as each session will build on the previous session.
- Participants should be committed to using the tools upon completion of the workshop and willing to develop a timeline for implementation at the workshop

Participants who complete the five- day course will receive a certificate of completion of the “Adapting to a Changing Climate Training Course”

Overview Agenda

Day One	
	<ul style="list-style-type: none"> • Background and Overview of the Local Early Action Plan (LEAP) and Outreach tool • Telling Your Climate Story <ul style="list-style-type: none"> • Understanding weather/climate • Historical Timeline Exercise • Understanding Climate Change <ul style="list-style-type: none"> ○ El Nino/ La Nina ○ Causes of CC ○ Possible and Existing Impacts • Seasonal Calendar Exercise
Day Two	
	<ul style="list-style-type: none"> • Telling Your Climate Story continued: <ul style="list-style-type: none"> • What does Climate Change 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 • Climate Change Concepts and Vocabulary <ul style="list-style-type: none"> ○ CC Concepts – field exercise • Is there Anything we Can do? <ul style="list-style-type: none"> ○ What are other communities doing ○ Adaptation Strategies
Day Three	
	<ul style="list-style-type: none"> • Telling Your Climate Story continued: <ul style="list-style-type: none"> • Developing a Community Profile <ul style="list-style-type: none"> ○ Community Background ○ Identifying priority natural and social resources ○ Mapping the Community/Site and its Resources (social and biological) • Developing your Climate Story • Review of local management planning process • Getting organized for Planning – Review of LEAP Planning Steps and the outcomes of the process. • Threat and Vulnerability Assessment Field Work Preparation <ul style="list-style-type: none"> ○ Create Resource Map ○ Review worksheets – VA matrix and questions

	○ Review climate Story
Day Four	
	• FIELD WORK - Completing the Threat and Vulnerability Assessment on-site
Day Five	
	<ul style="list-style-type: none"> • Developing Your Local Early Action Plan • Completing your LEAP: <ul style="list-style-type: none"> • SMART Objectives • Work- plan • Optional Section Review

APPENDIX B

NEXT STEPS

Community:

Timeframe	Actions	Whose Responsible	Assistance Needed*	Resources Needed**	Opportunities***
Within one month					
Within three months					
Within six months					
Within one year					

*consider technical/facilitation support, support from leaders, etc

** consider funding, materials, etc.

*** consider local organizations that could provide support and funding opportunities (e.g. PAN funding)

APPENDIX C

TARGET RESOURCE:

Vulnerability and Threat Assessment Worksheets (VA Threat Assessment)

CURRENT STATUS OF RESOURCES	THREATS	ROOT CAUSES OF NON-CLIMATE THREATS	CLIMATE EVENTS	EXPOSURE	SENSITIVITY
<p>What is the current status of your target resources?</p> <p>Poor, Fair, Good, Very good</p>	<p>What are the non-climate threats to your target resource?</p>	<p>Why are the non-climate threats happening? List all of the root causes.</p>	<p>Which of current and likely future climate change events are of most concern for this target resource and why? List them individually.</p>	<p>How much of your target resource is affected by which specific climate change events?</p>	<p>What actions can be taken to improve the health of this resource or change how the community uses it to reduce vulnerability of the resource or the community? Severely/Moderately/Hardly</p>
<p>Palauan Ngera osengem ra klungel ma usbechel (target resource) ra elechal taem? Mekngit, Ndi</p>	<p>Palauan Omomdasue eng ngarngii a tellemall el kid el chad a mla remuul el mor tial (target resource)</p>	<p>Palauan Ngera kmal uchul aikal tellemall el mei er a (target resource) el kid el chad a meruul? Baches el</p>	<p>Palauan Ngerang ra ika ngodech el teletelel a yanged, yolt, ma daob a omomdasu a klou al tomelii el mor tial dousbech er</p>	<p>Palauan Ngerang a blam ues malechub e ke mla mes er elechang e mla tomelii tial dousbech er ngii? Ng uangerang a</p>	<p>Palauan Ngera mla meketmokl el ngii a mo ruii el mounkil (target resource) or ngii a omeruul el chad ra beluu a mla mo oltirakl el ngii a morullii a (target resource) mediak el lolemolm el vulnerable?</p>

ungil, Ungil, Kmal lungil		rokui and mulches.	ngii (keburs, mesei, chelechol,) e ngera uchul?	klungel a telemall el ultuuil ra ikal ngodech el teletelel a yanged, yolt, ma daob?	
Resources	Resources	Resources	Resources	Resources	Resources
Community	Community	Community	Community	Community	Community

POTENTIAL IMPACT	ADAPTIVE CAPACITY	VULNERA-BILITY	ACTIONS		
What are the current and likely impacts from these events to your target resources and your community? High/Medium/Low	Rate the ability of your target resources to adapt to impacts of climate change and your community's ability to adapt with impacts. High-Very High,/ Medium-High/ Low-Medium	Based on the potential impact and the ability to adapt, rate the vulnerability of 1. Each resource and 2. The community ability to recover from impacts to this resource High/Medium/Low	What actions can be taken to improve the health of this resource or change how the community uses it to reduce vulnerability of the resource or the community?		
Palauan	Palauan	Palauan	Palauan		

<p>Ngara omues el ngii a telemel el malechub engii a moduubch el telmellel a climate change el mor (target resources) ma morar chad loupsech a ikal (target resources?)</p> <p>Klou a Metemall/Ngarngii a metemall/Ngdiak akmal metemall</p>	<p>Kamouchais el wasei a (target resource) er kemiu ng sebechel el melemolm el ngarngii a alsekum kede mo soiseb ra tellemelel a climate change?</p> <p>Kmal Ungil/Ungil/Kora telkib el lungil/Ngdiak el sal ungil</p>	<p>Ngultuil er a klaudongei er kid el kirel a telemall el mosibechii er tial (target resource) ma klisichel el mes mechok er ngii me ngdiak el metemall, e mo langch el kmo 1) tial (target resource) 2) Ma rechad el louspech er tial (target resource) ngsebechir el moungil malechub e telmuut el mora smechir al sekum tial (resource target) a metemall?</p> <p>Klou a Metemall/Ngarngii a metemall/Ngdiak</p>	<p>Ngerang a sebeched el kutmokl el ngii a mo sobecheklii a health er tial (target resources) malechub eng kutmeklii e ngodechii el moungil a usbechel ar chad ra beluu el lousbech er tial (target resource) el ngii a mo mengesadel er a mo telmellel tial (target resource)?</p>		
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		akmal metemall			
Resource	Resource	Resource	Resource	Resource	Resource
Community	Community	Community	Community	Community	Community