

THE COASTAL
COMMUNITY
ADAPTATION PROJECT

Helping Pacific Island Communities Adapt to a Changing Climate

**JANUARY 2014** 

# C-CAP NEWSLETTER

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## THEYEAR AHEAD FOR C-CAP

This year C-CAP will work with up to 60 communities from nine Pacific Island countries.

Baseline studies and climate change risk assessments will be completed in each of the participating communities. Infrastructure that will help to boost the climate change resilience of each community will also be identified and delivered this year. With C-CAP support, communities will also begin implementing strategies to reduce and manage risks associated with climate change-related disasters.

C-CAP will recruit additional Country Mobilizers from Kiribati, Tuvalu, Solomon Islands, and Nauru to help implement local-level activities in those countries.

The C-CAP team looks forward to communicating with the Pacific Island community on the range of climate change adaptation outcomes and insights being realized within the participating coastal communities and the geographically, culturally, and ecologically diverse contexts that they represent.

#### MESSAGE FROM C-CAP CHIEF OF PARTY

"C-CAP has come a long way in its first year, from learning how to operate effectively in the Pacific Island region, to expanding in nine countries, and appreciating the nuances of how coastal communities across the Pacific both view and react to climate changes. Without exception, communities understand very well how climate change is affecting their lives and livelihoods; what is less clear to the communities is what will come next."

"C-CAP continues to adjust its approach to incorporate 'traditional knowledge' that has served communities well over the years, and to infuse new concepts of adaptation and what the science tells us about the future. As we begin 2014 activities, and expand into disaster risk reduction activities with our partner communities, we will build on the climate change vulnerability and risk assessments undertaken last year. Together, we will look at traditional coping mechanisms for disasters and how adaptation can build on, rather than replace, these successful strategies."

#### **DISCLAIMER**

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## WATER TANKS INSTALLED IN SAMOAN COMMUNITIES

Asau and Auala communities in Vaisigano Sasa'e District, Samoa are now benefiting from new rainwater harvesting and storage systems delivered in January by C-CAP.

Construction of the water tank foundations began in early December. By the end of January, 47 3,500 liter tanks centrally-located for household use, five 3500-5,500 liter public tanks, and nearly all associated rainwater catchment infrastructure, were installed. The villages now have 192,000 liters of additional water storage capacity for household use. Falealupo (Falealupo District) and Sapapalii (Faasaeleleaga No. 2 District) are also set to receive rainwater infrastructure early in the year. Beneficiaries will receive special training in the operation and maintenance of the systems once installations are complete.

The rainwater catchment and storage infrastructure provided by USAID via C-CAP will help these four Samoan communities to evade shortages of fresh water during periods of prolonged drought. Drought is a weather scenario which may become increasingly frequent over this century, as predicted climate change effects in Samoa—including less dry season rainfall—become more pronounced. Rainwater tanks are sited for community use to ensure that all families have access to the resource.

## COMMUNITY IMPACT

C-CAP's Country Mobilizer for Samoa, Cecilia Amosa, asked two Asau residents how the project will benefit their families.

Fonoitumua Poasa: "The water tank was a great need to our family. As you know our family doesn't have access to the main water pump system because the main pipe doesn't reach our house. So we thank you very much for bringing this project to our village.

"As you know our region is the driest place in Samoa and we have very limited access to water during the dry seasonal period. To be honest, this tank alone cannot sustain our family if a dry spell hits us, but it is still a help to us, as it will provide us with extra water at no cost. I am very thankful for the assistance provided by the U.S. people."

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**ABOVE**: Fonoitumua Poasa from Asau village, Samoa, stands beside the newly-installed 3,500L water tank with his grandchildren. Photo by C-CAP

"We wish to thank the U.S. Government and its people for funding this initiative. It will help our family in many ways, especially providing water for the children and our whole family. Who would have thought we would get a free water tank? All we can say is thank you very much."

#### **COMMUNITY IMPACT continued...**

Masoe Tovia: "The water tank is very beneficial to our family because the village pool is very far from our house. In the past we used to pay other families' cars to transport barrels of water from the village pool for cooking, washing, drinking, and other use. So having this water tank will help us save money and I must say my children and whole family will now have access to clean water."



**LEFT**: Masoe Tovia and her grandchildren proudly posing in front of their newly installed USAID/C CAP water tank. Photo by C-CAP

"We greatly appreciate this project coming to our village and we want to thank the people of America for helping us by providing these water storage facilities. The water tanks will take us a long way! Thank you again."

## C-CAP'S SOCIAL MOBILIZER ACCEPTS CONSERVATION AWARD

In December 2013, C-CAP Social Mobilizer for Unakap village in Vanuatu, John Ronneth, accepted a Pacific Islands Environment Leadership Award for 'Excellence in Community Leadership in Environmental Sustainability and Conservation.' John accepted the award on behalf of the Nguna-Pele Marine and Land Protected Area Network, the team responsible for establishing the Nguna-Pele Marine Reserve in 2002.

Sixteen communities on the islands of Nguna and Pele collaborate to monitor and protect the reserve, which comprises 3,000 hectares of reefs, sea grass beds, mangrove forests, and intertidal lagoons. The work of the Network was also recognized with a United Nations Development Program Equator Award in 2008.

Marine protected areas have a key role to play in supporting tourism and fishing industries. By safeguarding the health of their marine environments, the Nguna-Pele villages are building ecosystem resilience to the impacts of climate change, and thereby minimizing their own vulnerability to negative climate change effects.

USAID/C-CAP is working with six villages within the Nguna-Pele Marine Reserve: Unakap, Nekapa, Woreauru, Piliura, Worasiviu, and Laonamoa. The communities' track record for successfully implementing the marine reserve initiative was one of the factors that led to the selection of these communities to take part in C-CAP.

For more information:

www.sprep.org/biodiversity-ecosystems-management/nguna-pele-does-vanuatu-proudwww.equatorinitiative.org



**ABOVE**: C-CAP Social Mobilizer accepting the award. Photo by SPREP

USAID/C-CAP is proud to be partnering with these communities, and to be working with the Social Mobilizers from each community. We extend our congratulations to John and the Nguna-Pele team!

#### C-CAP COLLABORATION

#### **V**anuatu

C-CAP is working with five communities located within Shefa Province, which includes the islands of Nguna, Pele, Emao, and Moso. In December 2013, three of these communities worked with the C-CAP team to map their existing infrastructure and areas of the community vulnerable to climate change impacts.

During the December visit, the C-CAP team met with the Secretary General of Shefa Province Mr. Michel Kalworai. Mr. Kalworai indicated that the provincial government is concerned about the impacts of climate change in communities and is planning to employ "a full time and hardworking climate change officer for the province, to work on the climate change activities and plans in the Shefa Strategic Plan... and also to work with the USAID-funded

program that the C-CAP team is leading."

C-CAP has collaborated closely with Vanuatu's National Advisory Board (NAB). C-CAP applied the NAB's recently-developed 'vulnerable community selection criteria', a decision-making tool that is very similar to C-CAP's standard selection criteria for identifying communities suitable to participate in the project. Over the next two to four years, with the support of the American people, C-CAP will continue to collaborate and work with 10 ni-Vanuatu communities and the relevant provincial and national government agencies to achieve further positive climate change adaptation outcomes in Vanuatu.

#### Kiribati

In Kiribati, C-CAP is collaborating with the Ministry of Environment Lands and Agricultural Development (MELAD) on climate change adaptation in two North Tarawa communities. Expanding its reach, MELAD has expressed interest in adopting C-CAP methodologies and procedures for risk assessment and mapping of vulnerabilities and processes for considering and selecting climate change adaptation options. C-CAP Senior Technical AdvisorJeremy Cole provided training to MELAD to help staff incorporate C-CAP methodologies in their community work. Following the training, five MELAD staff joined C-CAP in helping Noto and Buariki communities to map their climate change risks and prioritize their infrastructure needs for climate change adaptation.



**LEFT**: Members of Vanuatu's National Advisory Board Project Management Unit assist in mapping infrastructure in a participating village.

Photo by C-CAP

## **IDENTIFYING PARTNER COMMUNITIES**

By November 2015 the **USAID-funded Coastal Community Adaptation** Project (USAID/C-CAP) will have delivered climate change adaptation assistance to 120 coastal communities across 12 Pacific Island countries: Federated States of Micronesia, Fiji, Kiribati, Nauru, Palau, Papua New Guinea (PNG), Republic of Marshall Islands, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. About a third of those communities (identified from five countries) have begun working with the project, with the next third to join this year (identified from nine countries).

The communities that are partnering, and will partner, with C-CAP have several things in common.

They are located on the coast, generally on low-lying terrain; they are socio-economically disadvantaged; and they predominately live semi-subsistent lives, meaning that they rely heavily on local environmental resources for income generation, food security, and in many cases, water security. The Pacific region is home to many communities possessing these characteristics—characteristics that make them particularly vulnerable to climate change effects that are predicted to become more pronounced over this century. These effects-which include rising sea levels, increasingly intense weather events, and rising air and sea surface temperatures—can erode the health, culture, and livelihoods of communities.

Identifying 120 communities that are most suited to receive climate change adaptation assistance through C- CAP is a significant task. The C-CAP team undertakes rigorous investigations to accomplish this, including review of vulnerability assessments, consultation with experts, and discussions with key stakeholders including national planning committees.

Final decisions concerning the selection of communities are made in partnership with the relevant national ministry. For example, in Fiji the C-CAP team works with the iTaukei Affairs Board Conservation Unit to make these final decisions, while in PNG, the team works with the Office of Climate Change and

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#### **IDENTIFYING PARTNERING COMMUNITIES continued...**

Development's Adaptation Division. The site selection decision-making process is guided by C-CAP's site selection criteria and considerations:

- host ministry has provided its advice and/or endorsement;
- site is within suitable proximity to other C-CAP sites;
- community borders the coast;
- community has a population greater than 100;
- vulnerability of community assets to the impacts of climate change; and
- strength of community governance.

C CAP uses this approach so communities are chosen transparently and objectively.

Climate change adaptation strategies are greatly needed in the Pacific, where climate change effects are already being felt.

Many C-CAP communities have a strong connection to their land and a rich oral history. Drawing upon insights from community elders, many communities have observed that they are already experiencing challenges not encountered by previous generations—challenges which correspond to changes observed in weather patterns, the intensity of weather events, and/or change in sea levels. This is a story echoed throughout many coastal communities in the Pacific Island region.

## Five more partnering communities for PNG:

In January, the C-CAP team continued efforts to identify five new participating C-CAP sites for PNG. During a meeting on 13 January, the C-CAP team and representatives from the Office of Climate Change and Development discussed site selection considerations. A decision was made to gather more information in subsequent weeks about the prospect of working with five vulnerable coastal communities located in New Ireland Province. The communities of most interest, located outside the Provincial capital, are already experiencing climate-related issues. The Province demonstrates a strong commitment to climate change, in part evidenced by the recent establishment of a provincial Climate Change Committee, which C-CAP will be able to support and collaborate with in order to boost the region's climate change resilience. The additional five communities will be announced in the coming months, following further investigations and consultations with governments, experts, and communities.

Further updates on C-CAP's work in PNG is provided in the *Adaptation in Motion* article, while an interview with the Acting Director of PNG's OCCD Adaptation Division is provided in the *Partner Profile* article.

**RIGHT**: C-CAP (right: Stephen Smith and Isimel Tuembe) meeting with the Adaptation Division of PNG's Office of Climate Change and Development to discuss site selection (left: Jonah Auka and Jacob Ekinye). Photo by C-CAP



## **ADAPTATION IN MOTION** CHECKING IN WITH C-CAP COMMUNITIES: VANUATU, KIRIBATI, TUVALU, TONGA, PNG, AND FIJI

In this periodic series, the C-CAP team checks in on partner communities that are navigating the long term process of climate change adaptation.

## In Vanuatu...

Five additional ni-Vanuatu communities have come on board C-CAP in the New Year—Lonamilo,
Launapikruan, Laumenara, Iru and
Loanialu—all located in Tafea Province.
This takes the total number of C-CAP communities in Vanuatu to 10 (the other five are located in Shefa Province). The C-CAP technical team will revisit the new communities in February to undertake risk assessments.

## In Kiribati and Tuvalu...

Ten Polynesian communities are now set to benefit from climate change adaptation support, delivered through C-CAP—in Kiribati: Bauriki, Noto Borotiam, Evena, and Taniau; and in Tuvalu: one Funafuti island village, two Vaitupu island villages, and two Nukufetau island villages.

### In Tonga...

Development Alternatives Inc. (DAI)
Project Manager Joey Manfredo
traveled to Tonga from the United
States in January to lend short term
assistance to C-CAP Community
Liaison Specialist Teddy Fong and
Country Mobilizer 'Unaloto Puloka.
As a Returned Peace Corp Volunteer
who served in Tonga, Joey both speaks
Tongan and understands many of the
issues facing Tongan communities
living close to the sea.

The team worked with the Vava'u island communities of 'Utulei, Hunga, and Tefisi to gather baseline levels of the communities' climate change knowledge and awareness, and map their existing infrastructure assets and potential climate change risks. The team also met with representatives from various government ministries and Act for Peace, an organization involved in a Disaster Risk Reduction project being implemented in Tonga and other Pacific Island countries.

The visit also enabled the C-CAP team to assess the aftereffects of Cyclone lan on participating C-CAP communities. All but the Hunga community on Vava'u island were found to be relatively unscathed, with the main issue being the destruction of crops.

In February C-CAP's engineering design partner, NRW Macallan will begin the scoping and tendering work for construction activities in the Tongan communities that have already identified their top infrastructure needs for climate change adaptation.

**BELOW**: 'Unaloto and Joey listen while the Tefisi youth group presents their risk mapping observations (left); 'Utulei youth group work with Joey to map community climate change risks (right). Photos by C-CAP.



## In PNG...

Work is underway to assist five Papua New Guinean communities to tackle their water scarcity issues. The communities are each situated within a 'rain shadow' cast by the Owen Stanley Ranges, which creates drier conditions than experienced in other parts of the country. All of the communities report experiencing a significant and worsening water scarcity problem. These communities are susceptible to reduced fresh water availability in the coming decades due to a number of combined climate change factors. These risk factors, prevalent across Pacific Island coastal communities, include: contamination or loss of fresh water resources due to salt water intrusion caused by sea level rise or from storm damage; more intense weather events; the possibility of drier dry seasons; and more frequent and intense days of extreme heat.

The village of Pari is the first of the four communities to receive assistance to tackle this issue.

Work has begun there to install three free-standing rainwater harvesting structures, as well as five new tanks attached to existing community buildings. Four existing community tanks will also be restored for use. In January, 21 construction firms competed for the contracts to deliver rainwater harvesting infrastructure to the other four communities. In total, the contracts will deliver 51 polyethylene tanks (representing 400,000 liters worth of storage) and accompanying catchment structures to the communities.

Together, these USAID-funded interventions will improve the water security prospects of approximately I 3,500 residents.

C-CAP is currently working to identify five additional PNG communities to participate in the project (refer to article entitled *Identifying Partnering Communities*).

## In Fiji...

In late January, community leaders from Daku and Buretu committed to work with USAID/C CAP on a climate change adaptation activity within their respective communities. Buretu will receive assistance to improve riverbank protection infrastructure, while Daku community will receive infrastructure support for their drainage management system. The event grabbed the headlines, with Fiji One News, Fiji Sun, Fiji Times, and Fiji TV covering the event.





**ABOVE**: Scenes from the C-CAP agreement signing ceremony and site visit at Daku, Fiji.

**LEFT**: Construction of C-CAP rainwater infrastructure in Pari, PNG Photos by C-CAP



## PARTNER PROFILE

## JACOB EKINYE, OCCD ADAPTATION DIVISION



Q. Broadly speaking, which regions in the country most need adaptation assistance?

Within the context of the Pacific Island region, PNG is a large country, comprising various kinds of landscapes, ranging from snow-covered mountains to coastal lowlands and atoll islands. Seven-hundred language groups and about the same number of cultures exist in the country, so the development problems faced in this country are complex and diverse. These factors mean that the task of providing adaptation assistance across the country is a significant challenge.

Generally speaking, through our work at OCCD, we have found that the North coast of the country—stretching from Sandaun Province right down to Milne Bay Province—seems to be particularly vulnerable to various climate change impacts. In highland areas, communities are dealing with the emerging risk of malaria infections, caused by the migration of mosquitoes to higher elevations as temperature increases as well as frequent landslides that are

Mr. Jacob Ekinye talks with USAID/C-CAP about the vulnerability of Papua New Guinean communities to climate change risks, and the value of climate resilience-building initiatives.

## Q. What is your background?

I am the Acting Director of the Adaptation Division within Papua New Guinea's Office of Climate Change and Development (OCCD). Coming from an economics background, I was initially engaged as a Senior Policy Analyst within the organization which was created in 2010. Two years ago, I took on the Director role of the seven-person adaptation team, after Mr. Varigini Badira was elevated by the government to become the Executive Director of OCCD.

being experienced. Coastal flooding and salt water intrusion are big issues for communities along the Southern coast.

Q. C-CAP is working with Papua New Guinean provinces to implement climate change adaptation interventions. In what ways do you think OCCD, as PNG's national climate change agency, supports this undertaking?

The OCCD provides climate change policy direction and coordinates the many climate change interventions that are occurring within the country. The PNG Government directs significant amount of funding to the districts and local level governments and climate change adaptation work can be funded this way. Projects such as C-CAP that equip local communities with the skills and knowledge necessary to identify adaptation needs and apply for available funds are very valuable.

We would like to see climate change adaptation action being increasingly driven by communities. In this way, the community members are engaged and meaningfully participate in the development processes.

Ultimately what is important after any intervention is its sustainability and ownership.

Q. In your experience, how do you think the climate change adaptation needs of coastal communities differ from the needs of inland and highland communities in PNG?

Some of these differences I have mentioned already. In addition to increased malaria risk, PNG's highland communities are also experiencing more intense rainfall events, causing serious landslides. Landslides are not only dangerous, they also come at significant economic cost to communities when they occur along the national highway—the main conduit for the flow of traffic from gold and copper mines to markets.

Coastal communities face different challenges, including coastal flooding, coral bleaching and climate- induced migration, which are some of the Adaptation Division's nine priority areas.

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#### **PARTNER PROFILE continued...**

Q.As you know, C-CAP is working in 12 Pacific Island nations. What are your thoughts on the contributions that C-CAP will make to OCCD's climate change agenda for PNG?

OCCD, as well as other stakeholders in the region can benefit from the project in several ways. We appreciate that C-CAP involves OCCD officers in the journey of delivering this project, enabling the team to acquire new skills and knowledge that builds the capacity of the Department.

C-CAP could also influence the operational approach of other actors in the region. For example, we have discussed that many of C-CAP's sites are located in places that are difficult to reach, presenting operational challenges. The lessons learned to overcome those challenges can be shared with others in the region to show how this kind of work can be done.

Q. What kinds of measures can empower vulnerable coastal communities in PNG to implement climate change adaptation solutions over the long term?

Over the long term, communities that implement adaptation skills and practices will be better positioned to face climate change impacts. This means acquiring new skills and expertise, and it also means adopting different technologies or approaches. For instance to safeguard their food security and livelihoods, coastal communities need to find ways of growing or maintaining healthy coral reefs, while communities reliant on agriculture may need to adopt new hybrid food crops or farming techniques. One thing is clear: climate change is here to stay, so it is very important that we continue to help vulnerable communities adopt adaptation strategies that provide the greatest long-term advantage.

End of interview

#### NOTE OF THANKS

USAID/C-CAP values the support of the Adaptation Division of the OCCD. The team thanks Mr. Ekinye for his time and insights.



The USAID/C-CAP Newsletter is a regular source of information on the implementation of C-CAP. To SUBSCRIBE send an email request to:

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