Introduction

The Rauti Para tablet training for senior citizens in the southern Cook Islands funded by SPC EU GCCA; PSIS in partnership with SRIC CC Adaptation Fund and implementing partners, Climate Change Cook Islands and ICT both from the Office of the Prime Minister (OPM), Telecom Cook Islands, and Rauti Para (NGO) continued on the island of Atiu from the 10th – 14th March 2014.

The initiative is to upskill senior citizens in the Pa Enua (outer islands) to confidently use the tablet to communicate and access information on the web to assist them with decision making in building resilience to the slow onset of climate change. Secondly, in parallel to the training is a video documentary supported by a survey to substantiate the changes that are observed by the people on their respective islands for qualitative data to establish climate change indicators.

Background

Originally named Enua Manu (land of the birds), Atiu island has since evolved as one of the most active islands in the southern Cook Islands second to Aitutaki in terms of tourism activities.

Images from Google [http://www.cookislands.org.uk/atiu](http://www.cookislands.org.uk/atiu)

Atiu is a raised volcanic island surrounded by sharp coral fringes (makatea) and thick forest on the outer layer of the circle followed by swampland, waterways and agriculture pastures before rising to a flat hill top reaching 72 metres above sea level where the five villages are situated and referred as (nooranga).
The original settlement of the people before missionary influence was situated at the lowlands referred as *(raro enua)* where the people had easy access to water and agriculture land. Like Mangaia, Atiu was once a main supplier of pineapple and citrus to the Rarotonga canning factory that produced the once famous Raro Juice in the 50s and 60s. Since the closure of the factory in the late 70s, Atiu continued to cultivate pineapple for the Rarotonga market, but was however struck by a pest infestation that devastated the industry. As a result, foreign species of trees such as pine (*mainly pinus spp.*) and eucalyptus trees were introduced with the intention to prevent erosion from pineapple cultivation. Unfortunately, these species dominate the wooded slopes of the island and has spread to the lowlands and the villages and in some areas killing off endemic and indigenous species such as kaka`o and orotea to name a few.

![Original settlement site in the lowlands with easy access to water and plantation. Looking down the lowlands through a canopy of thick trees, March 2014 (Photos by Celine Dyer)](image)

Atiu is currently experiencing its lowest population since 1902 as indicated in the table below. The population peaked at the hype of the citrus and pineapple era, gradually declined in the late 70’s reflecting the collapse of the citrus and pineapple industry. Total resident population from the 2011 census was 480 but this fluctuates as residents travel to and fro between Atiu, the other islands and internationally.

![Atiu Population 1902-2011](image)

<table>
<thead>
<tr>
<th>Census Years</th>
<th>Population Number</th>
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<tbody>
<tr>
<td>1902</td>
<td>200</td>
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<td>1906</td>
<td>400</td>
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<td>1911</td>
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<td>1916</td>
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<td>1921</td>
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<td>1926</td>
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<td>1936</td>
<td>1,400</td>
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<td>1945</td>
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<td>1951</td>
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<tr>
<td>2006</td>
<td>4,000</td>
</tr>
<tr>
<td>2011</td>
<td>4,200</td>
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</tbody>
</table>

Consequently, the demography revealed the 15-35 age group being the second highest after 0-14 age group. Although this is an encouraging situation for Atiu, but the fact remains that the mature and older population are the decision makers on the island and possess a wealth of resource knowledge and information of the island unknown to the younger age group.
Objectives
There are three components to this project:
1) Tablet training for senior citizens
2) To produce a video documentary on climate change indicators
3) Quantifying climate change indicators through a questionnaire survey

Tablet Training

The Cook Islands national vision of ‘Te Kaveinga Nui’ elaborates the desire of the government of the Cook Islands... ‘to enjoy the highest quality of life consistent with the aspirations of our people, and in harmony with our culture and environment’. This dream is further echoed in the Cook Islands National Sustainable Development Plan 2011 – 2015 under Goal 5: Resilient and Sustainable Communities, and Goal 6: Environment for Living. The Climate & Disaster Compatible Development policy 2013 – 2016 also mirrors these views through building ‘...climate and disaster resilient development...’ as its number one strategic objective, as well as its third objective which is ‘building capacity of people through education and training’. Thus, the tablet training for the mature-aged population in the Pa Enua aims to address some of these ambitions.

Since the mature-aged remain in the Pa Enua with some caring for their grandchildren, it becomes a priority to up-skill these seniors as in this instant they are the lifeline for the survival and sustainability of their particular island, their culture, and their future generations. Although they possess local and traditional knowledge and practices that have worked in the past, their knowledge and skills may not be sufficient to meet or overcome the impacts of climate change. Thus, introducing them to accessible information via the tablet will allow seniors to build upon their existing knowledge and practices. The training will certainly open new horizons for them to communicate with their families and friends living abroad while encouraging the sharing of information.

The Rauti Para project is a valuable and an historical moment for seniors in the Pa Enua as previous computer training have focused largely on Rarotonga, and the Pa Enua are often overlooked due to funding restrictions. It is arguable that the existence and future survival of these islands may not depend on government or foreign aid, but rather on the ability of the Pa Enua seniors to interweave their traditional knowledge and practices with new knowledge that will ensure a more resilient population to both economic hardship and particularly the impacts of climate change.
Documentary

Documenting the experiences of seniors are useful to capture their thoughts and lifetime skills and local knowledge that otherwise will be lost. The value of this concept will be measured against the questionnaire survey that is running in parallel to this exercise. With this information, it is possible to elucidate the causes of changes observed especially whether they are climate- or human-induced.

Survey on climate change indicators

For this component of the project, questionnaires were designed to encourage people to talk freely about their personal observances of their environment in their normal everyday activities whether they are fishermen, farmers or housewives. The target number for the survey was based on population size of the island, with at least 10% of the population surveyed to be statistically valid for any analysis.

Delegation

The team was led by Climate Change Advisor from Climate Change Cook Islands Dr Teina Rongo, and included ICT Director of the Office of the Prime Minister Ms Pua Hunter, Ms Celine Dyer and Ms Ana Tiraa Director of Climate Change Cook Islands, filmmaker Mr Ted Nia, and Mr Rob Matapo from SRIC CC Adaptation Fund of Climate Change Cook Islands.
Team members; Rob Matapo, Pua Hunter, Celine Dyer, Ana Tiraa, Dr Teina Rongo and Ted Nia 10 March 2014 (Photo by Jackie Rongo)

Logistics

All logistics arrangements were organised by Mr Rob Matapo in collaboration with the SRIC Focal Point officer for Atiu Ms Annah-Marie Takaiti.

Ms Annah-Marie Takaiti, SRIC Focal Point officer for Atiu 11 March 2014 (Photo by Celine Dyer)
Methodology

A tablet training workshop for seniors was conducted over five days. Running parallel to this were video interviews and questionnaire surveys around the whole island. The target age group for the questionnaire was from 20 years and older, while those interviewed on video were 60 years and older (see Appendix 1 for questionnaire survey). People were only interviewed once, meaning that those who were interviewed on video were not interviewed via the questionnaire survey and vice versa.

Day 1

It was a wet and windy day when the plane finally landed in Atiu. The Rauti Para team were met at the airport by the SRIC Focal Point Ms Annah-Marie Takaiti, the island Mayor Mr Taoro Brown who was on his way to Rarotong and our hostess from Taparere Lodge. After dropping off luggage at the lodge the team went to the school to set up for the training. Welcome formalities were conducted by the island representative Mr Apii Porio to which Dr Teina Rongo responded on behalf of the team. A scrumptious lunch was served followed by the training where Pua Hunter took over the class. The rest of the team went to enquire about persons suitable for the video interviews with the assistance of the Focal Point Ms Takaiti who also showed the team some interesting places and scenery for the documentary.

Day 2

Since the participants chose to have afternoon classes the team then went to shoot some scenery shots and commenced with the video and questionnaire interviews. However, this was hampered by rain which made it difficult for door knocking. So the team went around the government offices and shops and interviewed people there. Second day of training brought five new students which made a total of fourteen people with ages ranging from 37 to 78. The training started at 1pm and finished at 4pm in the afternoon.

Day 3

The research team went out to do more interviews but were told there was an overnight death on the island to which we halted the interviews out of respect for the bereaved and considering also that the whole island was at the funeral service that morning. Therefore the team went and took some more scenery shots of the island. In the afternoon Pua Hunter continued with the tablet training. Unfortunately, face book access was blocked on the school site therefore this component of the training was not delivered. The team was invited to a special humility church service at the Cook Islands Christian Church that evening and so the team took advantage of the opportunity to do a climate change presentation. After the church service everyone moved to the Sunday School Hall where Dr Rongo gave a presentation on climate change. It was a robust crowd that turned up with many young people who eagerly responded well to the presentation.

Day 4

Weather was good today and so the team went and did door knocking interviews for the whole morning. After lunch Pua Hunter continued with the tablet training while the rest of the team continued with more interviews.

Day 5

The birdman of Atiu Mr George Mateariki had previously organised to take the team to Anatakitaki a well known cave where the (kopeka) Atiu swiftlet bird roosts. Apparently this particular cave used to accommodate flocks of kopeka that obscured the interior of the cave according to eye witness accounts. Unfortunately today, only a few of these birds remain and we were fortunate to hear one or two flying about inside the cave but was difficult to pinpoint or see in the darkness. The cave experience was an eye opener for all of us realising that this specie will be permanently extinct if there is no conservation measure in place to protect the habitat from human invasion and exploitation. After lunch the team interviewed some of the participants at the training while the rest continued with the training. As this was the last day of the training, Ana Tiraa Director of Climate Change Cook Islands presented the certificates to participants. She also presented four tablets to the SRIC Focal Point Ms Annah-Marie Takaiti who received it on behalf of the Telecom officer.
Outcome
A total of fourteen people participated in the tablet training with age group ranging from 27 – 78 (See appendix 2 for list of participants). Four people were interviewed on video and 42 were interviewed with the questionnaire.

Feedback from the tablet training
- The participants challenged the teacher with many questions
- Participants were very eager to learn about the tablet
- Participants requested for a follow up training as they thought the one week training was insufficient
- Participants were so enthused with the training they didn’t want to finish at the designated time
- The participants wanted the whole island to be involved in the training
- Participants were proud to be part of the training
- Participants placed orders for their own personal tablets
- Participants requested for more of this kind of training in the Pa Enua (Outer Islands)

Feedback from the interviews and survey
- Responses from the video interviews and questionnaire were consistent with those from the islands of Mangaia and Mitiaro in terms of the changes observed by respondents, such as climatic differences, loss of terrestrial and marine species, sea level rise and the out of season fruiting of trees
- People were concerned with the introduced trees that have taken over agriculture and grazing land
- People requested for more climate change awareness programs
- More stringent measures needed to protect bird habitats and control human activities
Feedback from the climate change presentation

- People questioned why they were not informed earlier before the changes took effect
- People demanded for better communication and information channelling to keep them better informed
- People felt they were ill informed in the past

Team feedback

- The people in the Pa Enua (outer islands) are hungry for new knowledge
- Ensure that future training does not have restriction on accessing face book

Recommendations

- To identify and deliver future training that is appropriate and relevant to the needs of the people of Atiu.
- Future training in the Pa Enua should be open to everyone
- More climate change awareness programs for the Pa Enua

Considerations

- Serious consideration should be given to the concerns raised by the people to eradicate the introduced trees
- The habitat of the kopeka is under threat from human exploitation emphasising the need for better control mechanisms to be put in place
- Climate change team to consider a review of its communication strategy to ensure its effective delivery to the Pa Enua.

Conclusion

The overall project was well received by the people of Atiu based on their many pleas for more training and climate change awareness programs. On the whole it was an eye opener for the team in knowing that our people in the Pa Enua are waiting and yearning for this kind of training opportunities. Therefore, the team will endeavour to source funding for future projects to bridge the gaps in communication and climate change awareness in the Pa Enua.
Participants proudly display their certificates after completing the Tablet training workshop in Atiu 10-14 March 2014 (Photo by Celine Dyer)

Acknowledgement

We wish to thank the Mayor of Atiu Mr Taoro Brown, the Executive Officer Mr Teariki Maurangi, Mr Apii Porio, Ms Annah-Marie Takaiti the SRIC Focal Point, the Ariki Vaine Ada Rongomatane, Taparere Lodge, Atiu Birdman Mr George Mateariki and the school for hosting the workshop. We also thank the Cook Islands Christian Church for the use of the Sunday School Hall. Finally, a special thank you to all the participants of the workshop and to all those who graciously allowed us to interview them...Meitaki Ranuinui.. from the team.
Appendix 1. Quantitative questions

1. Have you heard of climate change?
2. Rank your understanding of climate change on a scale of 1-10 (10 being good)
3. Do you think that we are vulnerable to climate change impacts (e.g., cyclones, drought)?
4. Do you feel that outside assistance, such as financial support, is critical for us to cope with the impacts of climate change?
5. Is there a need to increase the awareness of climate change?
6. What seasonal resources on your island have you noticed have changed (e.g., fruiting season, spatial distribution) and how?
7. Do you know of any plant or animal on both land and sea that have declined or increased in abundance? (indicate a time period when this happened)
   - marine
   - land
8. Have you noticed any climatic changes e.g., rainfall, temperature etc.) on your island
   - Pre 1980s?
   - Post 1980s?
9. Have you noticed any hydrodynamic (e.g., currents) or tidal changes in the marine environment?
   - Pre 1980s
   - Post 1980s
Appendix 2. List of Participants

Teariki Maurangi
Maara Tairi
Nikau Tangaroa
Ada Nicholls
Allan George
Upiri Matenga
Tupuna Makakea
Mareta Tanga Atetu
Ina Tangaroa
Teatu Kura Malcolm
Rouru Maurangi
Beni Kuraia Toki
Teremoana Paratainga
Teina Toru
Piri Touna

Bibliography
