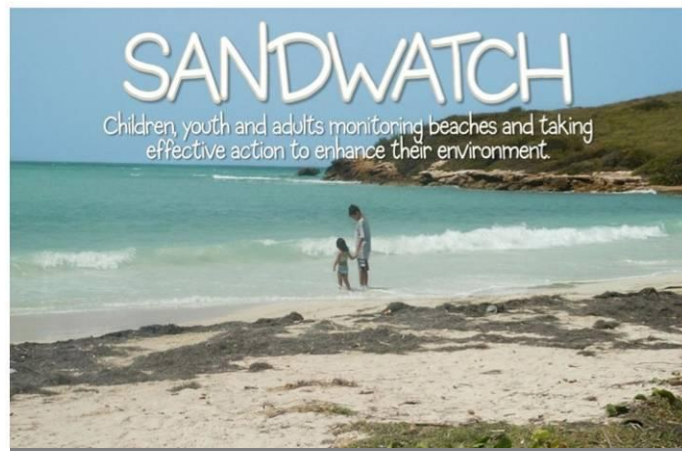




Report on the Samoa Sandwatch Training Workshop, August 27th and 28th, 2010





Executive Summary

The first *Samoan Sandwatch Training Workshop* was held from 27 – 28 August in Apia, Samoa, facilitated and supported in collaboration among the UNESCO Office for the Pacific States, the UNDP GEF Small Grants Programme and the Sandwatch Foundation.

Sandwatch is a long-standing and well-established programme, in which different age groups in the community, children, youth and adults jointly monitor and evaluate the problems and conflicts facing their beach environments. Sandwatch teams design and implement activities and projects to address selected issues, whilst also enhancing the beach environment and building ecosystem resilience to climate change.

The Samoan Sandwatch Training Workshop provided background information and outlined basic requirements to initiate Sandwatch activities on school and community-level. Step-by-step instructions covered monitoring methods and data analysis, including beach observation and data recording procedures, erosion and accretion patterns, beach composition, human activities, beach debris, water quality, waves, longshore currents, plants and animals.

Ways were discussed on how to design, plan and implement a Sandwatch project that fulfils one or all of the following criteria by (a) addressing a particular beach-related issue; (b) enhancing beach condition; and (c) promoting climate change adaptation.

Participants found that, being based on a series of very simple protocols, Sandwatch appeals to persons of all ages and all backgrounds.

The training was based on the “Sandwatch Manual”, which can be accessed at www.sandwatch.ca/New%20Sandwatch%20Manual/Manual.pdf

Background:

UNESCO has been supporting the Sandwatch program for more than a decade, with particular success in the Caribbean. Besides Samoa, Sandwatch has been introduced and used in the Pacific in the Cook Islands and Fiji, while another training workshop is planned in Kiribati in September 2010. In collaboration between UNESCO and UNDP SGP the potential use of the Sandwatch methodology in Samoa was initially discussed in early 2009 in support of village-based UNDP SGP CBA projects. UNDP saw Sandwatch as a strong asset to the CBA programme and used the Sandwatch booklet to help build capacity with communities while they developed village-based coastal management proposals.

Making use of the opportunity that the Global Director of Sandwatch, Dr. Gillian Cambers, attended a regional climate change workshop in Samoa, UNESCO and UNDP SGP facilitated a two-day Sandwatch training workshop, which was held on Friday, August 27th in the UN compound and on Saturday, August 28th on the South coast of Upolu at Utulaelae. The Sandwatch Foundation, UNDP SGP and UNESCO hoped to build local capacity by supporting local models for participatory monitoring of Samoan beaches and coastlines.

Aiming to provide an opportunity to consider inclusion of Sandwatch components into the school curriculum UNESCO invited Government representatives from the Ministry of Education, Sports and Culture,



the Ministry of Natural Resources and Environment, the National University of Samoa, the media as well as local schools and agreed to fund and implement the training workshop in close collaboration with UNDP SGP. In a complementary fashion the UNDP SGP CBA program invited 23 community members from 8 villages on Savaii and Upolu.

Training Activities:

Day 1: Friday, August 27th, 2010

Thirty-six people attended the first day of the workshop. Twenty-three participants represented communities from the 8 villages involved in the UNDP SGP Community Based Adaptation Programme, other participants represented MESC, MNRE, NUS and UN agencies.

The Samoan Sandwatch Training Workshop was opened by Mr. Kevin Petrini from the UNDP SGP CBA Programme. Dr. Gillian Cambers was then invited to review the schedule for the day (Annex I) and continued with an introductory presentation on the core concepts of the Sandwatch program. The following plenary discussion covered a range of related issues, such as the impacts of building seawalls and beach sand mining – acknowledging that both topics can be much better addressed if information about beach changes over time is available.

The second session of the first day focused on receiving feedback from participants through discussions in 4 parallel working groups, addressing the following questions in each group:

- What do you like about the Sandwatch approach?
- O le a se mea taua ua e maua mai le folasaga?

- Are there other things you would like to know more about regarding Sandwatch?
- E iai nisi faamatalaga e te fia silafiaina e uiga i le folasaga?

- Do you want to start Sandwatch in your community or organizations?
- O le a se fuafuaga o iai, pe talafeagai ona amataina lenei polokalame i le puipuia o gataifale?

- What are the next steps?
- Afai o le a amataina o a isi laasaga?

In a following plenary session all groups reported on their findings:

- Group 1 indicated that they were interested to apply Sandwatch, and proposed to develop related rules in the village accordingly.

- Group 2 found that Sandwatch could assist them to protect their village environment. The group representative stated, “We now know more on how to protect our sandy beaches” and “Cooperation is needed, including the matai, women, etc...”. The group also asked the organizing agencies to supply them with necessary Sandwatch equipment and underlined that they would like to start village-based monitoring programmes as soon as possible. Finally, the group representative stated that the next steps should be to “Observe the problems, plan action to be done,

cooperate, put plans into action, ask UNDP for help on the field level and translate the Sandwatch manual into Samoan.”

- Group 3 stated that, “before the session, we thought there were no differences among beaches, we now notice similarities and differences”, questioning now e.g. whether all villages needed sea walls. The group underlined its interest to know more about appropriate methods and how sand moves and beaches change. The group also pointed out that they would like to start Sandwatch as soon as possible. Finally, they declared that they would like to strengthen their coastline by planting coastal vegetation and requested related guidelines.
- Group 4 pointed out, that they liked in particular the first step on beach monitoring to recognize how to protect their beach and detect the loss of sand. They additionally underlined the need to keep beaches clean. The group was interested to know how the communities may ultimately benefit by more stable coastlines and stated that they needed further training and education to monitor beach erosion. The next steps proposed were to initiate a related education programme and to establish a committee in the village.



Figure 1: Measuring the width of the beach

All participants received a Sandwatch manual for reference and in support of planned future activities.

A number of key points were made in the closing session:

1. Sandwatch is of particular use for community-level coastal resource management, because it might often yield the only and therefore best data that villages can get. Government Ministries in Pacific Island Countries rarely have sufficient resources to monitor several hundred village beaches on a regular basis. Participants also noted that Sandwatch was likely to raise general awareness within the community.
2. Every beach is unique and different, just like people, and may therefore need an individual approach to localized coastal management.
3. The Sandwatch programme is applicable for everyone including children, youth, adults and different stakeholder groups on community level.
4. Sandwatch needs local Champions
5. There is a perceived need by the large majority of training participants for follow-up on the Samoan Sandwatch programme
6. Supporting Government and UN agencies declared their interest



Figure 2: A fetau tree was selected as a fixed reference point.



to support follow up activities.

7. Supporting agencies will aim to strengthen a regional Sandwatch network, by initially facilitating cross-visits between Samoa, Fiji and the Cook Islands to learn more about local Sandwatch application.
8. Participants requested the translation of the Sandwatch manual into Samoan

Finally logistics for the field visit on the following day were discussed, followed by closing remarks at 3:30pm.

Day 2: Saturday, August 28th, 2010

The participants left Apia by bus for Utulaelae at 7:30 am and arrived at 8:50 am.

The day's programme started with a short introductory talk from Dr. Gillian Cambers. After a brief a demonstration of the measuring principles, four teams of participants began to collect information in four different beach sectors for an initial mapping exercise. Team members were measuring the distance between the high-tide mark and a fixed reference point, in most cases a tree or other fixed object. The distance was recorded to monitor changes in beach width over time, in order to determine whether beaches are eroding or accreting. The second activity focused on general observations characterizing each beach sector, including e.g. presence or absence of beach rock, and noting the sand or sediment type, as well as the vegetation in the vicinity.

The teams returned to the community meeting fale to create maps of the surveyed areas. Each group reported on their findings. Differences and similarities among the surveyed beach sectors were noted and discussed. Participants found that the east sectors of the beach appeared very healthy with dense vegetation cover, while the western area of the beach showed signs of erosion. Some members of the groups indicated a potential relationship with the position of a break in the reef.



Figure 3: The group analyzing water samples

Participants took a short tea break and then began the second set of field activities. In this session the measurement of various water-related parameters was introduced, including current direction and strength, wave height, water turbidity, as well as nitrate and phosphate levels.

Field work was finished at 12:30pm and participants returned to the meeting house to discuss the training results and to close the workshop. The participants left Utulaelae by bus at 01:20 p.m..

Analysis

The Sandwatch workshop provided a unique opportunity to engage with a diverse group of stakeholders focusing on the common purpose to protect Samoa's shoreline. Participants included members of the curriculum development unit of the Ministry of Education, staff of the Ministry of Natural Resources and Environment, 8 village communities, UNDP SGP, UNESCO and Sandwatch.



The learning environment was conducive to sharing and it inspired participating community members to consider adaptation of the Sandwatch techniques for monitoring local coastlines.

Results

Participants stated that the individual capacities of the attending community members was increased and the general awareness of coastal erosion impacts and to the importance of related monitoring was raised. Discussions showed that once the dynamics of the local situation is understood better through monitoring, more sustainable solutions are likely to be determined.

At the Ministerial level, the curriculum development experts from the Ministry of Education and Land Degradation experts from MNRE shared their interest for a new programme.

Next steps

Following up on the first National Sandwatch Training Workshop in Samoa, a number of actions have been proposed by participants and supporting agencies:

1. Adaptation of Sandwatch methodology for potential use by different involved target groups:
 - a. Curriculum development units, MESC
 - b. Teacher trainers, NUS
 - c. Coastal Resource management extension work on village level (MNRE)
 - d. Application of the Sandwatch approach on 'adopted beaches' by interested schools and school teachers
 - e. Application of the Sandwatch approach by village communities
2. Support for documentation of Sandwatch monitoring data on village level to inform future decision-making processes on village-based beach resource management.
3. The UNDP SGP CBA programme is interested to conduct further Sandwatch training sessions, particularly one on Upolu and one on Savaii over the next 6 months.
4. The following villages showed interest to be involved: Lelepa, Fagamalo, Aofaga, Utulaelae, Fasi-tootai, Satalo and Tafatafa.
5. In close collaboration with MESC and MNRE, UNESCO and UNDP aim to provide all involved village and stakeholder groups with a Sandwatch toolkit.
6. Utulaelae village volunteered to become a pilot/ demonstration site for Sandwatch in Samoa, aiming to involve nearby schools in the monitoring
7. Stakeholders involved in education discussed the possible adaption of Sandwatch components as part of climate change education



Annex I: Programme

**National Sandwatch Training Workshop
27 – 28 August 2010
Apia, Samoa**

Programme

Friday 27 August 2010

Opening - Discussion and Practice of Sandwatch Procedures (1)

11:00	Workshop Opening Outline of the workshop programme Climate Change Education – ESD – Sandwatch: Integration of concepts What is Sandwatch? Background Sandwatch Procedures – Session 1 - Concepts Observation and recording Beach changes – erosion and accretion Beach composition Waves and currents
13:00	Lunch
14:00	Sandwatch Procedures - Session 2 Group discussions: a) Sandwatch in Curriculum Development b) Sandwatch application in schools c) Sandwatch use for community-based coastal zone management Presentations of Group findings, Analysis of results, Discussion
15:30	Afternoon tea
15:45	Overview of field program
16:30	Closing Summary

***Saturday 28 August 2010: Sandwatch and Community Action; The
Practice of Sandwatch Procedures; Ways forward***

7:30	Departure by bus, from UN compound in Apia
9:00	Arrival in Utulaelae, Upolu: Sandwatch procedures – Session 3 – Concepts Beach users Beach debris Water quality Plants and animals Sandwatch Procedures – Beach Practice Analysis of results, Discussion of findings
12.30	Lunch
13:00	Community involvement in Sandwatch: Starting Sandwatch in Samoa – Comments and Commitments - Discussion Expanding Sandwatch in the Pacific - Discussion
14:00	Closing, return by bus to Apia