

# **Socioeconomic Assessment for Marine Protected Areas and Watershed Management Areas in American Samoa**

## **Final Project Report**



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## **SUMMARY OF ACCOMPLISHMENTS**

This project implemented socioeconomic surveys in key villages associated with marine protected areas and watershed management areas in American Samoa. Surveys were administered during 2012-2013 in ten Community-based Fisheries Management Program (CFMP) villages, providing information to inform CFMP staff about the outcomes of their education and outreach programs, as well as which villages were the most and least aware of and supportive of program policies. Additional surveys were conducted in 2014 in the villages of Faga'alu (a priority watershed), Vatia (a CFMP village and CRCP priority site), and Aunu'u (a Sanctuary site). These surveys focused on community use of and reliance on marine resources, community responses to natural resource management efforts, issues of trash and pollution, and preliminary indicators of village adaptive capacity and community resilience. These surveys can provide baseline information against which management programs can compare future change.

Workshops were held with local natural resource managers to provide an overview on available socioeconomic information in the territory and determine local priority socioeconomic information needs. Each set of surveys was designed to address these priorities, and can be used as a base for future assessments and to monitor changes over time. Priorities from the final workshop will be incorporated into CRCP's revised Social Science Strategy for 2016-2020.

## **PROJECT ACTIVITIES & OUTCOMES**

### ***Activities***

1. A preliminary workshop was held with American Samoan resource managers in 2012 to review previous socioeconomic work in the territory and determine territorial priorities for social science.
2. In 2012 and 2013, household surveys were conducted in ten Community-based Fisheries Management Program (CFMP) village sites, in collaboration with the CFMP program. These surveys focused primarily on village resident awareness and support for the CFMP program to assess and inform village outreach efforts.
3. In 2014, household surveys were conducted in the villages of Faga'alu (a priority watershed), Vatia (a CFMP village and CRCP priority site), and Aunu'u (a Sanctuary site). These surveys focused on community use of and reliance on marine resources, community responses to natural resource management efforts, issues of trash and pollution, and preliminary indicators of village adaptive capacity and community resilience.
4. In 2015, survey results were presented to local managers and a final workshop was held to discuss survey outcomes and future social science priorities for the territory. These priorities will be incorporated into the upcoming CRCP Social Science Strategy for 2016-2020.

### ***Outcomes***

1. Workshops: Territorial priorities for socioeconomic information, as determined during the workshops held before and after survey implementation (2012 and 2015). The outcomes regarding priority assessment objectives and lessons learned from previous survey experiences have been summarized and are included in this report. Results of the final workshop will be incorporated into the upcoming CRCP Social Science Strategy for 2016-2020.

2. CFMP surveys: The CFMP village survey results were analyzed and are available as a presentation (“American Samoa Community-based Fisheries Management Program: Data Analysis from Socioeconomic Survey 2012-2013”), which was presented to the CFMP program in January 2014 and is available on CORIS. Because the CFMP program did not obtain the desired sample size of households to achieve statistically valid survey results, the results have not been written up as a formal report, but are available as a presentation that presents summarized results and highlights data gaps and challenges. However, the results were still informative to the CFMP program, particularly when aggregated to the program level. Program staff are now trained in conducting village socioeconomic surveys, and lessons learned will inform future surveys.
3. The Faga’alu, Vatia, and Aunu’u survey results are available on CORIS as a report: “Socioeconomic survey on the Marine Environment, Pollution, and Village Adaptive Capacity: Vatia, Aunu’u, and Faga’alu Villages Survey results.” These results were presented to local managers in January 2015.

### **LESSONS LEARNED FROM THE PROJECT**

Marine resources are important as a source of food/livelihood to most American Samoa families. There is considerable concern regarding issues of trash, pollution, and water quality in American Samoan villages. Villagers in the surveyed villages are generally supportive of most management measures, although support for closed areas decreases with duration of closure. Households most reliant on marine resources are also more supportive of certain types of management measures designed to improve marine resource condition. The CFMP program will benefit from additional outreach, focused on certain less-aware villages.

In-person household surveys are an effective way of conducting socioeconomic research in American Samoan villages. In general, participants were willing to take the time to answer survey questions, and providing a small bag as a survey incentive helped to increase participant enthusiasm and response rate. It is important to train all team members on skip patterns for the survey to avoid inadvertent non-response for some questions. Future CFMP surveys should strive to have a sample size that is representative at the village level in order to be able to make more robust conclusions regarding differences at the village, rather than program, level. Future efforts should avoid conducting household surveys on Election Day, when many people are not in their homes; however, Election Day would be an efficient day for conducting individual surveys in American Samoa, as many people are accessible in lines waiting to vote. The presence of vicious dogs makes it challenging to conduct random household surveys in many American Samoan villages.

## **OUTCOMES OF 2012 AND 2015 WORKSHOPS**

The following section outlines priority socioeconomic information needs highlighted by territorial agency representatives in American Samoa. Objectives, and thus priority topics, vary based on local agency priorities. A useful future exercise would be to rank these topics according to highest territory-wide priority for long-term monitoring efforts.

### ***Priority socioeconomic information needs for American Samoa:***

#### **1. Effectiveness of education and outreach programs**

*“Are our education and outreach messages getting out and how well are they understood?”*

Topics:

- General understanding of education and outreach messages
- Awareness and understanding of MPA programs and fishery regulations
- Effectiveness of different media outlets for conveying education and outreach messages (e.g. advertising, public meetings)
- Understanding of the ecological importance of (marine, wetland, etc.)
- Do people perceive certain resources to be threatened?
- Awareness of litter laws
- Awareness of existing watershed programs
- Understanding of the environmental impact of people’s actions
- Managers understanding of their education and outreach messages
- How do messages from multiple agencies overlap?

#### **2. Compliance with existing rules and regulations**

*“Are people following the laws that are currently in place?”*

Topics:

- Compliance with village regulations (ie. VMPA, MPA, wetland)
- Compliance with territorial regulations (ie. plastic bag ban, piggery regulations, big fish regulations)
- How well are regulations enforced?
- Are people aware of existing regulations and why they are needed?
- Under what circumstances to people seem to comply better with regulations; what changes would encourage better regulatory compliance?
- Why are rules enforced in some cases and not in others? What motivates the agency / individual to enforce things or not? (*overlap with “behavior drivers” objective*)

#### **3. Support for management actions**

*“To what extent does the public support (or not support) agency management activities?”*

Topics:

- Do people think existing penalties are too lenient or too strict?
- How much do community members support proposed management actions?
- How much do community members support current management activities?
- Would people support greater enforcement of laws?

- What kind of changes would result in better compliance with laws (ie. increased fines)?
- What benefits do communities have from proposed and existing management activities / actions?
- What are favored management types (e.g. seasonal, spatial, species, gear)?
- Community perceptions of management agencies
- Community perceptions of federal mandates
- Identify areas where MPAs would be likely to be supported

#### **4. Understanding behavioral drivers / stakeholder perceptions**

*“Why do people behave the way they do?”*

Topics:

- Are people aware of existing rules and regulations?
- Why do people comply (or not) with rules and regulations? What would be necessary to get people to comply?
- What are people’s perceptions of current (and proposed) regulations?
- How do people perceive environmental problems?
- What are religious perceptions of different management issues?
- What are migration trends in American Samoa?
- Where do people get their information; what information sources do they trust?
- How well to people understand ridge to reef principles?
- Why do people prefer certain methods?
- What are effective ways to motivate people to change their behavior?
- How do people perceive agencies? What motivates people to participate / collaborate with agencies? Do they trust them or not?
- Why are rules enforced in some cases and not in others? What motivates the agency / individual to enforce things or not?
- What are the business community’s attitudes towards including environment in their economic development plans?

#### **5. Program impacts**

*“What are the outcomes (human and environmental) of management programs?”*

Topics:

- How are communities affected by the implementation of MPAs?
- What agency initiatives are most effective?
- Which agency initiatives are better received?
- How do program policies affect communities (positive and negative)?
- Impacts of changes in economic activity?
- Short and long term impact of program activities (broadly)?
- How to maintain collaboration between agencies and communities?
- Staffing impacts on program activities (short and long time): ie: What effects staff moral (positively and negatively); Impact of staff turnover on program activities?
- What are the needs of the community (e.g. infrastructure, boats etc.)?
- To what extent has the community taken ownership of the process?

- What is the participatory role of the community? To what extent is the community and other stakeholders actively participating in the process? Are community activities largely top-down or bottom-up?

## **6. How people use/rely on resources**

*“What resources are important to local people and how are these resources being used?”*

Topics:

- How are environmental resources used (coral reef, wetland, watershed)?
- Who are the primary marine resource users? How do different groups use the resources e.g. local vs outsiders
- Where do people obtain their fish from?
- What are potential impacts of current resource use (ie. environmental, climate, litter, other)?
- What species are caught? What gear are used?
- What are high value species that people would like to protect?
- What species are declining or caught less frequently?
- How much do people rely on their local marine resources? How do they use them e.g. sell / eat etc.
- Where is resource use concentrated?
- What are the available alternatives to current resource use?
- In what ways do people value their resources (e.g. environmental services, economic, food /subsistence, traditions / culture)?

## **7. Local capacity for actions**

*“What is the community’s capacity to take action or implement changes?”*

Topics:

- What is the community’s ability to enforce local regulations?
- What is the management capacity for island agencies?
- What is the community’s capacity to implement adaptation projects?
- What is the local community’s ability to initiate and implement management actions? Who are the key contacts in the community?
- Are there local constraints on compliance with laws?
- What additional resources are needed by communities?
- What would be the appropriate traditional management practice?
- What is the local impact of federal mandates? What are the local avenues to challenge of alter mandates?

## **SUMMARY OF LESSONS LEARNED FROM PREVIOUS SURVEYS IN THE TERRITORY**

The following section outlines lessons learned from previous socioeconomic surveys conducted in American Samoa, as discussed during the 2012 workshop:

### *Lessons learned for future surveys:*

**Target Audience** - Identify and understand the target audience depending on your objectives. Which groups should be targeted. How best to make initial approach.

**Survey methods** - Utilize a mixture of different methods – depending on the different groups

- **Household survey** - If want a wide perception (e.g. is there an MPA here). Noted that it was better to stay with the interviewee rather than leave the questionnaire.
- **Key informant interviews** – specific people from council / matai / master fisherman
- **Focus groups** – to target different groups (e.g. aumaga, women's group, youth, elders)

**Methods - Use of a recorder** – useful for focus groups and key informant interviews, but not for household surveys.

**Survey design - Structured survey questions** – with tick boxes or options for the interviewer or interviewee to make the data analysis easier, also a well-designed survey will be better received by the interviewee and easier to implement in the field by the interviewer.

**Survey design** - Length of survey – make sure it isn't too long, and adapt to the situation (e.g. more time is needed with elders to gather important traditional knowledge. Most people agreed that 10 mins should be the average. Initial approach to the individual is the most important and is worth timing right (e.g. not just before church).

**Translation** needs to be accurate. Test and re-test from Samoan to English.

**Pre-testing of the survey** – very important

**Training** – for all the surveyors. To ensure that interviewers understand the questions and the follow-up questions, so there is consistency between surveyors, how to approach people

**Approach** - ask people for their time, approach with respect, explain why you are doing what you are doing, ask if mind talking to you, more likely to give you the time. The way you dress is very important. You want to give a good impression of your program to the village. Work with someone from the village – to introduce you and provide useful information.

**Survey team** - a mixed team is the best option – female and male, Samoan and English. Some interviewees have prefer to speak to certain people.