Name: Cameron Ka'ilikea Shayler and Erin Zanre
Jurisdiction: Hawai'i
Travel Report for (Dates): September 10-22, 2016

Destination: Koror, Palau

Social Data Analysis Workshop w/ Micronesian Challenge (MC) Socioeconomic Monitoring Core Team -
By Micronesia Islands Nature Alliance (MINA), Micronesia Conservation Trust (MCT), and Pacific Islands Marine Protected Areas Community (PIMPAC) through a NOAA Coral Reef Conservation Program (CRCP) grant.

Purpose:

The purpose of this trip was to provide Hawaii DAR staff with hands on training in building a socioeconomic monitoring database as well as performing social data analysis using SPSS software. Knowledge gained from this training will be used to develop a socioeconomic monitoring database for DAR's CBSFA Expert Fisher Survey that will be used to help inform CBSFA designation and evaluation. This training will also help prepare the HI Coral Fellow to train relevant DAR Island Staff and communities to conduct the CBSFA Expert Fisher Survey and enter it into a pre-developed database for data exploration and analysis.

Objective(s):

1) Gain insight and first-hand experience in building a socioeconomic monitoring database for long-term monitoring.
2) Understand the types of descriptive and inferential analysis that can be performed on social data.
3) Work with MC Socioeconomic Monitoring Team and NOAA Instructors to refine CBSFA Expert Fisher Survey for piloting.

Preparation:

Prior to attending the training, the HI Coral fellow was trained in SEM-Pasifika socioeconomic monitoring basics and techniques.

Participants:

PIMPAC, MINA, PICRC, MCT, NOAA NOS/PIFSC/CRCP, and DAR HI.

Background:

Over the past year, the DAR CBSFA team has been developing post designation procedures, CBSFA monitoring and evaluation protocol, and best monitoring method recommendations for CBSFAs. One of the monitoring and evaluation methods being considered for recommendation by the CBSFA team is an "Expert Fisher Survey". The purpose of this expert fisher survey is to capture valuable expert practitioner and kama'aina knowledge that is place specific and can provide a valuable look at the expert perception of resource health, perception of site specific resource/management threats, and most importantly the needs of subsistence Hawaiian communities. This expert fisher survey will be used to help evaluate and help inform CBSFA adaptive management decisions that are relevant and prudent for each CBSFA site. The CBSFA team plans on piloting the Expert Fisher Survey with 1 community and training relevant DAR Island Staff to conduct survey and support communities wishing to participate in the CBSFA Expert Fisher Survey.

Trip Synopsis:

[Monday, 9/12/2016] Training Day 1: Introductions and database creation (8:30am-5:00pm) - Talked about the various SEM projects each of the participants was working on and the types of data being collected, and management questions being asked. Talked about the types of social data that can be collected based on management questions asking. Introduction to building a

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social database and coding data responses for seamless data entry, analysis, and management. Practiced data cleaning and entry into pre-developed database.

[Tuesday, 9/13/2016] Training Day 2: Descriptive statistics for quantitative and qualitative data (8:30am-5:00pm) - Talked about the use of both quantitative and qualitative data in SEM context (when and why to use). Discussed best practice and methods for coding and exploring/analyzing qualitative data. Introduced to descriptive statistics of quantitative and qualitative data and practiced hands-on analysis using SPSS (central tendency, normal distributions, frequencies, summary stats, data exploration and visualization).

[Wednesday, 9/14/2016] Training Day 3: Inferential statistics for quantitative & qualitative data (8:30am-5:00pm) - Discussed the use of inferential statistics and hypothesis testing (confidence intervals, p-values, t-tests, etc.). In depth hands on practice of variable and data transformations (dummies, index creations, normalization, log, inverse log, treating "not sure", etc.). Discussed proposing statistics questions and hypothesis based on management questions trying to answer. In depth hands on practice performing inferential statistics using SPSS.

[Thursday, 9/15/2016] Training Day 4: In depth practice of parametric/non-parametric inferential statistics using MC social data and SPSS (8:30am-5:30pm) - In depth hands on practice of inferential parametric statistics (Chi-square, T-test, ANOVA, etc.) and non-parametric statistics (Wilcoxon, Mann-Whitney, Kruskal-Wallis, Friedmans, etc.) using SPSS.

[Friday, 9/16/2016] Training Day 5: Continue in depth practice of inferential statistics using MC social data and SPSS (8:30am-5:30pm) - In depth hands on practice of inferential statistics (Correlation, regression, multiple regression, multiple response, model validity, etc.) using SPSS. In depth hands on practice creating data visualizations for inferential stats and explaining results.

[Saturday, 9/17/2016] Training Day 6: Data management & Q/A (8:30am-4:30pm) - Discussed best practices and ethics of data analysis and data management. Co-developed draft data management plan for socioeconomic data in Micronesia with MC Socioeconomic monitoring team. Question and answers with trainers for specific Hawai'i based management questions.

[Sunday, 9/18/2016] – Catch up, Day Off

[Monday 9/19/2016 – Thursday 9/22/2016] – Vacation

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Potential Actions:

HI Coral Fellow will develop social data database for CBSFA's and train 1 community to conduct the expert fisher survey as well as build capacity of relevant DAR island staff to support communities wishing to participate in the CBSFA management.

Reference Materials:

N/A