**Draft Work Plan for TURFeffect Group Project (Weeks 3 and 4)**

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The TURFeffect Group Project is required to submit to the faculty advisor, by the end of each week, a draft work plan containing different sections of the final document.

In this document the group compiled the requirements for weeks 3 and 4, containing project objectives, significance, deliverables, and budget and justification, respectively related to sections C, D, H and K of the work plan.

**Project Objectives**

Objective 1

Determine a set of biophysical, socioeconomic and governance indicators that can be used in evaluating the success of no-take reserves in Mexico.

Objective 2

Use the selected indicators to propose a framework for evaluating the effectiveness of no-take reserves in Mexico.

Objective 3

Develop an English/Spanish guidebook with the selected indicators that walks the user through the steps towards implementing our framework.

**Significance**

Overfishing and unsustainable fishing practices are some of the major threats to the conservation of marine ecosystems around the world. Implementation of no-take zones (i.e. areas where the capture of one or more species is prohibited) is frequently proposed to help fish stocks rebound and to enhance nearby fishing areas. Though biophysical aspects are important to reserve success, the effectiveness of reserves also depends on the socioeconomic status and governance system of the local fishing community.

Comunidad y Biodiversidad (COBI) is an NGO which aims to promote marine conservation by facilitating the participation of fishermen in the design and management of community-based marine reserves in Mexico. COBI has been involved in the establishment of both government-owned and fishermen-owned marine reserves. These marine reserves can be no-take (fishing is off-limits), partially protected (extraction of specific species is not allowed), temporarily protected (only for a period of time) or a combination between temporal and partial protections. If fishermen want to, they can submit a document to the government, and ask for the legal recognition of their private reserves.

Before starting the decision-making process, COBI visits the interested fishing community, records some basic social and economic data, and performs underwater ecological surveys that provide a baseline of the overall resources and their marine habitat. Fishers then design their reserve based on their local knowledge, as well as the guidance provided by COBI. During the process of implementation of the reserves, COBI trains fishermen to collect biophysical data (underwater ecological surveys and oceanographic monitoring).

After many years of collaboration with fishermen, COBI has been involved in the creation of 29 community-based no-take marine reserves (21,106 hectares) distributed among 13 different communities in the Gulf of California, Pacific coast of Baja Peninsula, and the Caribbean. They also collaborate with government agencies to design and monitor 10 Marine Protected Areas (617,703 hectares) that have no-take marine reserves (58,348 hectares) within their perimeters (i.e. core zones). While these numbers represent a major advance in terms of marine conservation and community involvement, the extent to which these reserves have met their objectives is unclear. There are major differences in culture, natural resources, vulnerabilities, and governance structures between communities. This hinders the use of conventional frameworks that evaluate the effectiveness of marine reserves, and calls for the development of an appropriate tool capable of measuring effectiveness under the current scenario.

Currently, only a few frameworks exist that provide indicators of effectiveness of MPAs (IUCN) and fisheries (Basurto and Nenadovic, 2012; Ostrom, 2007, 2009). The IUCN framework provides a comprehensive list of biophysical, socioeconomic, and governance indicators of success and how these indicators may be measured. However, the framework is general and has not been tailored for evaluating the success of marine reserves in Mexico. Basurto and Nenadovic (2012) suggest creating a classification system that would include the characteristics of commercially-important species, demographic information about fishers, and the local governance system to evaluate the success of small-scale fisheries. This framework would help highlight the differences between successful and unsuccessful fisheries. Though useful, this framework is still in development and it is unclear which indicators will be helpful in evaluating the success of marine reserves in Mexico.

We will provide COBI with a guidebook to aid in the management of government-owned and fishermen-owned marine reserves that COBI has helped implement. The guidebook shall include a list of biophysical, socioeconomic, and governance indicators and provide real-world examples of how these indicators can be used to evaluate reserve success. The guidebook will be written in Spanish/English and will be geared toward a non-academic audience to ensure that it is easily understandable and usable by fishers.

**Deliverables**

Client deliverables

* Quarterly progress reports to COBI.
* Guidebook in Spanish designed for fishers that explains which biophysical, economic, and governance indicators are useful in evaluating the success of no-take reserves and TURF-reserves.
* Submitted peer-reviewed paper of project findings

Academic deliverables

* Work Plan
* Project Website
* Final Report
* Academic Defense Presentation
* Project Brief
* Project Poster
* Final Presentation

**Budget and Justification**

The TURFeffect Group Project does not expect to exceed the standard stipend provide by Bren School ($ 1,300.00) on the basic operations of the project.

The expected expenses for the project are specified in Table 1, and the justification for the expenses are provided below.

**Table 1:** Budget expenses for the TURFeffect Group Project.

|  |  |  |
| --- | --- | --- |
| **Expense Details** | **Cost** | **Balance** |
| *Opening Budget* |  | 1300 |
| Conference Calls | 30 | 1270 |
| Meeting Refreshments | 30 | 1240 |
| Project Briefs | 250 | 990 |
| Poster Production and Lamination | 250 | 740 |
| Conference Attendance Fee | 400 | 340 |
| Administrative Supplies | 20 | 320 |
| Business Cards | 60 | 260 |
| UCSB Vehicle Rental (3 days) | 150 | 110 |
| Remaining Budget |  | 110 |
|  |  |  |
| *Printing budget* |  | 200 |
| Printing | 200 | 0 |

Conference Calls:

Communication with the client is essential for the group. With the client being in a different country, sometimes with internet limitation, conference calls might be necessary. With a cost of $0.05/min per line calling in, the group the group suggested a budget of $30.

Refreshments:

Refreshments will be provided in eventual meetings with clients and external advisors at the Bren School. The suggested budget by the finance team is $30.

Project Briefs and Final Poster:

A total of $500 was suggested to cover the costs of these two required deliverables for the Bren School.

Conference attendance:

The group would like to present the project and its findings in conference(s), where it could be criticized and commented by experts. Though some of the members might have external funding related to this topic, other members do not. The suggested budget ($400) refers to one attendance fee to the American Fisheries Society Meeting, but might be used to other conference and divided by group members.

Administrative Supplies:

Administrative supplies include pens, paper, folders, binders, dry-erase markers, etc. that will be used to help us keep organized and communicate our ideas for the project. The suggested budget by the finance team is $20.

Business Cards:

The group will be networking with professionals at conferences, our site visit to Mexico, summer internships and through Bren events. Business cards will be important to establish and maintain these connections and build cooperation to the project. The suggested budget by the finance team is $60.

Travel:

Our group will be visiting one of our client’s sites in Baja Mexico. We are planning to visit El Rosario, which is a 460-mile, 9-hour drive from campus. As none of us own a car, we plan to rent a UCSB vehicle for the trip. The cost would be $50 a day. I allowed for 3 days of rental in the budget.

*The remaining $110 will help us cover any price changes or additional expenses we do not foresee.*

Printing:

We are allotted an additional $200 by Bren for printing (not to be used for project briefs or poster)