## **Spring Quarter Report Progress Report**

Our project with COBI serves as the thesis for our master's degree. We have a several academic deliverables to complete our thesis. This quarter, we have focused on completing our work plan. For the work plan, we performed a literature review, created a data management plan, outlined our technical approach for the project, created a timeline to organize our work schedule (Gantt chart), and created a group management plan to set expectations and to ensure good communication. Next spring, we will have a final report, project brief, and project poster due. We will be having an academic defense in March and a public presentation in April. We invite our external advisors to attend both of these events.

This quarter we have created an outline of the guidebook. It will include sections on selecting indicators based on the objectives of each reserve, data collection, data formatting, analysis, interpretation of results and recommendations for improvement. Additionally, we have created a draft list of indicators. The list of indicators has almost been finalized. We revised the list with COBI's comments and are currently revising the list further with the suggestions from our external advisors.

The focus of the review meeting on the June 1<sup>st</sup> with our external advisors was how to improve our analysis of indicators and the selection of controls, as well as how to provide meaningful interpretation of results and recommendations for improvement for COBI.

At the review meeting on June 7<sup>th</sup>, we discussed the Shiny app with Alvin. We emphasized that the guidebook is our priority and that we will create the Shiny app only if we have time. The Shiny app is an interactive webpage application that has a user-friendly interface. The Shiny app would automate the analysis section of the guidebook. COBI's staff would then see a qualitative interpretation of results (e.g. red, yellow, and green scores) in addition to the detailed report of results. We created a prototype of the Shiny app and showed it to Alvin. He liked the idea of the Shiny app.

We are currently finalizing a survey with comments from our external advisors that we will conduct this summer in order to fill in socioeconomic and governance data gaps. During the summer, each of us will be working full time at different internships. However, we will continue to perform our literature review, format the data COBI gave us, conduct the survey, and work on the guidebook. The first week of fall we will run all the sample analyses together.