

**MFS REPORT****Name****Year and term for exchange**

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**Country for the project**

Fiji

**Degree programme**

Energy and Environmental Engineering

## Potential for offshore wind power in Fiji, a site suitability analysis

### Before departure

My friend and BCs thesis colleague Felix asked me in June last year if I was interested in applying to do a Minor Field Study as our thesis together. When he came with the proposal to do it in Fiji I was hesitant at first since I had never even traveled outside of Europe before. Once we started researching Fiji and our BCs thesis idea I got more and more into it and decided to apply for it. The reason for choosing Fiji to do our MFS in was both that we got a really good impression of Fiji when talking to two KTH students who did a MFS there last year and that Fiji is a small island nation vulnerable to climate change. Therefore we thought it would be very interesting to go and do our MFS there with hopes our work could be of use in their future renewable energy system development.

Before departure I got the recommended vaccines against Hepatitis A and B as well as \_\_\_\_\_. When researching Fiji we found out that you don't need a visa to stay for less than 4 months, you would get a 4 months tourist visa at arrival. However, our contact person in Fiji advised us to apply for a research permit since he thought we would need one. It was a great hassle getting all the paperwork done to be able to apply for the research permit and Felix and I were not able to get it before departure. As it turns out, we did not need a research permit to undertake our studies and were able to get temporary visas for our stay here after much stress.

### Upon arrival

We arrived in Fiji at the end of March but due to the uncertainties about whether or not we could start our studies before we got our research permit we didn't start our field study until a couple of weeks after arrival. We used that down time to continue our literature study and to get to know Fiji as tourists.

When we arrived in Fiji we had the most amazing reception by our host family. Throughout our stay they looked after us, helped us and showed us around the island. We also went quite early in our stay to meet our contact person at the University of Fiji to talk about our study. We made sure to bring gifts from Sweden to our host family and our contact person at the University which they all gladly received.

### Financials

We were a bit surprised about the cost of living in Fiji as we had expected it to be much lower than in Sweden. Most local foods and goods were generally slightly cheaper than in Sweden but overall the cost of living we experienced was almost the same. Some stuff like cheese for example is a staple food for us here in Sweden but it was too expensive to regularly buy in Fiji. My tips for anyone wanting to save money during field studies in Fiji is to save money on the food. Make sure to buy all fruits, vegetables and grains at the local markets instead of in grocery stores as you get way better prices at the markets. Additionally, the flight tickets was very expensive so make sure to book them as early as possible.

## **Accommodation**

We found our accommodation from posting in a local Fiji Facebook group. We started by looking at places through airbnb etc but quickly realized that those listings were way too expensive. The apartment we were able to get cost us per person similar to what we pay in Stockholm (circa 4000 SEK/month) so it was great, especially since we got wonderful service from our host.

## **Project**

The purpose of our study was to investigate the potential for offshore wind power in Fiji by first creating a map of the areas with technical possibility for offshore wind power and then conducting a site suitability analysis to find the most suitable site. To provide additional context and give the study more depth we also performed a feasibility analysis on the identified site, which included energy -and economical computations.

Our field study was divided into two parts. The first consisted of data collection through a literature study and by interviewing local stakeholders and Fijian government personnel. A typical day during our interview visit to Suva was us taking taxis all through town to have meetings in big office buildings and at night taking in the Fijian culture downtown. The second part of the study which was about data management and building our model consisted of us doing work on our computers and consulting our contact person at the university in the early morning and after dark. In between we took advantage of Fiji's beautiful weather and wonderful nature.

## **Country**

I loved our stay in Fiji for the most part. The people are super friendly and Nadi (the town we stayed in) had a lot to offer during our free time. We also rented a car and went on an amazing trip around the main island where we stayed three nights at an island house and two nights at a backpackers beach club. It was not all good though as could have been expected. After the first week or so I really started to miss home and was longing for the days to pass, but once I got over the initial homesickness I started to feel at peace in Fiji and could fully enjoy our stay there.

## **Leisure and social activities**

After a few weeks in Nadi we joined the Nadi Sport & Social Club, a members club that had a gym, swimming pool and a good restaurant and bar. During our one month membership a lot of our leisure time was spent there and I thoroughly enjoyed that place. Other than that we did some of the tourist activities such as hiking to a waterfall in the mountains and doing mud baths. We also made friends with the sons of our host family who took us out with their boat a few times to visit the nearby famous Fijian island resorts.

## **Sustainability**

Write here! Could you travel in a sustainable way during the field studies? How did you manage to live sustainably in your everyday life? Can you describe how your project was connected to the Global Sustainable Development Goals? Feel free to insert pictures into the text.

Apart from sustainability I hope our project can lead to in regards to the future of Fiji's energy system we were limited in how sustainable we could live in our everyday life. The city we stayed in had no developed recycling system except for a truck that came everyday to pick up glass bottles. Nadi is also spread thin along the bay with the airport in between where we stayed and Nadi downtown which limited our daily travels to taxis. However, one big positive change for me was that I ate more sustainably in Fiji since I ate more local fruits and vegetables and less meat.

If a real implementation of offshore wind power would be supported by our study, our minor field study has been directly connected to multiple Global Sustainable Development Goals including but not limited to #7 Affordable and Clean Energy and #9 Industry, Innovation and Infrastructure.

## **Other recommendations and observations**

By biggest recommendation and tip for anyone looking to do their field study in Fiji is to save up as much as you can before you go and to budget well so that you don't feel restricted as there is so much

to do here. I would also recommend that it is better to call whenever you want to get in contact with anybody in government since they don't use email as much as we do here in Sweden.