



Solar mini-grids, island time and exploring the Pacific – A field study in Fiji

Before departure

We applied to KTH Field Studies travel grant after hearing inspiring stories from older students about their amazing experiences with the program. It felt like a unique opportunity to write our bachelor thesis in a foreign country with the support from KTH. We wanted to challenge ourselves, experience new cultures and learn more about the world.

Finding a field study project wasn't easy. We reached out to a lot of companies, embassies and organisations in different parts of the world. We knew early on that we wanted to focus on renewable energy, and came across several projects mentioning solar PV. One of our early meetings was with an Energy Officer from Fiji working in international development. Talking with him led us to our final project idea: exploring sustainable business models for solar mini-grids in rural areas in Fiji.

There was quite a bit to prepare before departure. Vaccines for Hepatitis A and B were required, as well as one for typhoid. Furthermore, to write your thesis in Fiji a research permit is needed and this process can be very frustrating. We started preparing for our permit in November since it involves obtaining support letters from various government agencies. Luckily, no language course was needed as English is an official language in Fiji, since the country was a British colony until 1970.

Upon arrival

We arrived in Fiji end of March. The first weeks of our stay were largely dedicated to completing assignments for our ongoing KTH courses, which were running in parallel with our field study, and reviewing literature for our thesis. During this time, we also began reaching out to relevant stakeholders for our field study. We also met with our local contact person at the university, who helped us source additional literature and facilitate contact details with potential interviewees. The field study itself was conducted during the following two weeks and involved interviews with organisations, ministries and companies related to our research topic.

Financials

Living in Fiji was generally less expensive than in Sweden, although overall price levels were relatively comparable. Public transport, like buses and taxis, was much cheaper in Fiji, and getting a local SIM-card with data was very affordable. When taking a taxi, it's important to ask if they use a taximeter - otherwise there is a good chance they will try to overcharge you.

When shopping your groceries in Fiji we recommend buying necessities in the grocery store, but getting locally grown fruits and vegetables at the local market. The selection of produce is fantastic and much cheaper than in the grocery store. Do not be afraid to haggle at the market and research general prices beforehand as locals try to charge tourists overprice. However, some items like, dairy products, pasta and other imported goods are noticeably more expensive than in Sweden. Prices for eating out are quite comparable to Sweden. Some places are a bit cheaper, especially local restaurants, but prices can vary depending on the restaurant.

Travelling on vacation in Fiji can be quite expensive, as the tourism is well developed and there are many luxury resorts. There are, of course, more affordable options, but if you plan to travel around during your free time, it is important to factor this into your budget.



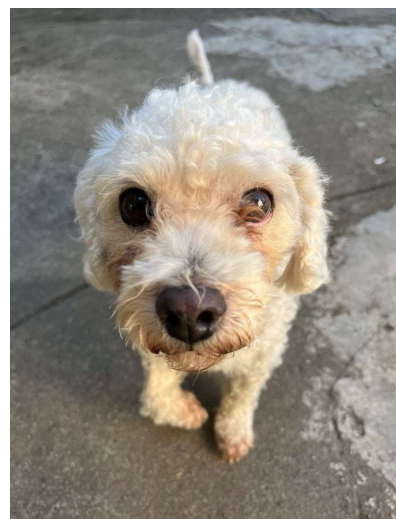
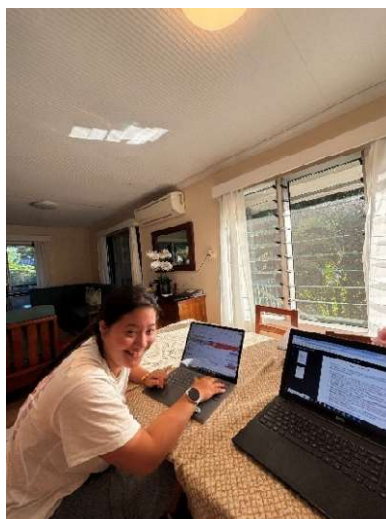
Accommodation

Our accommodation in Fiji came about in a rather unexpected but fortunate way. While chatting about our upcoming trip in the KTH library, a former student who had done field studies in Fiji two years earlier overheard us and walked over to share his experience. Not only did he give some helpful tips, but he also recommended the apartment he had stayed in – which ended up being perfect!

Although our local contact person kindly offered to help us find a place, this was not necessary since we had already secured our apartment through our chance encounter.

The apartment was a three-bedroom flat located in a safe community in Nadi. Each bedroom was equipped with air conditioning, which was especially appreciated during the earlier weeks when we hadn't gotten accustomed to the heat. The flat also featured wifi, a well-equipped kitchen with a gas stove and dishwasher, two bedrooms, a washing machine, and a wraparound balcony. One of the most unexpected perks was the weekly visit from a housekeeper, who not only cleaned the apartment, but also did our laundry.

The rent for two people was 2500 FJD, approximately 11 250 SEK. As a bonus, our wonderful landlord lived just across the street, and her sons lived in the apartments below us, along with their two friendly dogs – all of which contributed to a very warm and homey feeling.



Project

Our project idea was inspired by a conversation in the autumn with one of our Fijian stakeholders about the challenges facing rural mini-grids. Further discussions with our supervisor, Anders Malmquist, and our local contact, Dr. Ramendra Prasad at the University of Fiji, helped shape the direction of the study. We focused on evaluating business models for solar mini-grids in Fiji, developing a framework based on literature and interviews. To gather local insights, we spoke with different stakeholders from both the private and the public sector. Most of our work was done from home or local cafés, with occasional visits to the university for meetings and discussions, and visits to Suva for stakeholder interviews.



Country

Fiji is a lovely country with stunning lush nature, beautiful beaches and friendly people! We found Fijians very helping, generous and welcoming – a contrast to the more individualistic culture we are used to in Sweden. Fiji offers a surprising mix of cultures, with strong influences from iTaukei (indigenous Fijians), Indian and Chinese traditions that both shape the country's social and culinary landscape.

However, it's important to note that there is still some tension between the Indo-Fijian and iTaukei communities. Most Indo-Fijians are descendants from labourers brought to Fiji by the British colonial government to work on the sugar-cane plantations in the 1880s. Their relationships have historically been shaped by colonial history, land ownership issues and ethnic-base politics, leading to division between the people. While there are efforts to foster a shared national identity, this tension is still evident when talking to locals in Fiji, and it's important to be respectful and thoughtful when discussing the topic with locals.

The climate in Fiji is very warm and humid, with temperatures around 30 degrees every day. It took some time to adjust to the heat, but eventually you learn to embrace the heat and accept that you'll be sweating most of the time. In Fiji, there is also a concept called "island time", which is a relaxed approach to time and punctuality, where things often happen at a slower pace than in Sweden. We experienced this during meetings, at social events and when emailing stakeholders. This can be frustrating at times, but it's something one has to adjust to since it's a big part of Fijian culture.

Leisure and social activities

Outside of our fieldwork, we made the most of our time by exploring Fiji and soaking up the local culture!

Among the highlights were visits to the Yasawa Islands – a remote chain of islands with crystal clear water and excellent snorkelling. Another longer trip took us to Samoa, one of Fiji's neighbouring island nations, where we looked at stunning waterfalls and experienced the rich Polynesian culture. We also spent a weekend on the Coral Coast, surfing and hanging out with backpackers, and explored Suva, Fiji's capital. For shorter day trips we visited places like Natadola Beach – one of the most beautiful beaches in Fiji – and the Garden of the Sleeping Giant, where we also tried the famous Fijian mud baths.

A big part of local life in Fiji is rugby, so naturally we went to a few games – an unforgettable experience – filled with community spirit. We also became close with our landlord's family. We spent a lot of our spare time with their sons and friends, playing endless nights of cards, going on boat trips to nearby islands, attending trivia nights together, and even joining their family dinners!



Sustainability

During our stay in Fiji we tried to live sustainably in our everyday life. For example, we ate pescetarian food, always bought local products in the market and purchased newly captured fish from our taxi driver. Generally, we tried to avoid imported food, both to support the local economy, and to reduce our environmental footprint. Moreover, we travelled by bus instead of flying every time we had the opportunity, to reduce environmental impact.

Our project was connected to the SDGs in many ways, but mainly to SDG 7 (Affordable and Clean Energy) and SDG 9 (Industry, Innovation and Infrastructure). The transition from diesel generators to solar mini-grids directly supports SDG 7 by working on providing cleaner, more sustainable energy access to rural communities in Fiji. SDG 9 is reflected in the promotion of solar mini-grids as a more stable and innovative energy solution in Fiji. By replacing expensive and volatile diesel generators, the solar mini-grid support the development of a resilient energy system.

Other recommendations and observations

During our stay, there was a dengue outbreak, so if time allows, you should consider getting the dengue vaccine. In any case, bring a lot of mosquito repellent and some long-sleeved and breathable clothes, not only against the mosquitos, but also the hot and humid climate.

While most people are friendly, tourists can sometimes be overcharged, so it helps to act local, look up prices in advance, and don't be afraid to haggle. Locals may also seem a bit forward at first, but most are just curious and kind – making the effort to connect is well worth it. We also found that calling is much more effective than emailing local contacts as responses are much quicker.

Lastly, going to Fiji is truly a once-in-a-lifetime experience, so take the opportunity to travel if you can - it will add so much to your stay!