



MFS Report

Name

Year and term for exchange

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VT-2023

Country for the project

Botswana

Degree programme

Industrial Engineering and Management

Electrification in Botswana; a sunny success story?

Before departure

During spring 2020, my friend asked me if I had heard of MFS, which I hadn't. She told me about the scholarship and asked me if I wanted to do that with her. I said yes. Initially, we planned to do the MFS for our bachelor's thesis, but covid-19 prevented us from doing so. Instead, we started to plan for an MFS for our master's thesis.

During spring 2021, which was very early since we would write our master's thesis in spring 2023, we contacted KTH Global Development Hub. We told them of our interest in electrification and SDG-7, and they proposed that we should go to their partner university Botho University in Gaborone, Botswana.

After that, we started to prepare for the project. We were in contact with staff at Botho University, we wrote an MFS application and a project proposal, and we got vaccinated. I got vaccinated against Hepatitis A and B, took pills against Typhoid fever, and drank some disgusting brew to not get cholera. Additionally, I took malaria pills during the stay in Botswana. We did not have to apply in advance for a visa. This could be fixed at the airport since we were in the country for less than 90 days.

Other than that, we met some students from KTH who had been at Botho University. Also, we met some students from Botho University on an exchange at KTH. This was the perfect opportunity to find out how other KTH students had experienced Botswana, and to start to get to know people in Botswana before travelling there. Before going to Botswana, I had great hopes to get to experience a culture very much unlike the Swedish one, which I eventually also did.

Upon arrival

When we landed at the airport in Gaborone, a Botho University representative was there to pick us up. He drove us from the airport to our accommodation, helped us get the Wi-Fi working, and showed us where we could shop groceries. It was very kind of him to make sure we were safe!

During the first two days, we got to know our surroundings. After that, we started to work on our project. The project really came off to a flying start since our supervisor (Dr. Samuel Chingoiro) made sure that we had people to interview. Without Samuel, our project would not be the same! We are so grateful of his efforts.

Financials

The cost of living in Botswana is lower than in Sweden, but it is not too cheap. I would say that the MFS scholarship of 27,000 SEK covered our expenses. The prices in the grocery shop were maybe 30 percent lower than in Sweden, and eating at restaurants was also cheaper. We spent quite some money to get around by cab, since we did not use the public transport system (the combis). However, one cab ride only costed around 40–50 Pula (1 Pula was 0.8 SEK when we were in Botswana), which made the total amount of money spent on transport reasonable.

Accommodation

We were staying in an apartment at campus, which the Botho University staff arranged for us. It felt very safe, and it was quite cheap as well. The two of us lived in a two-bedroom apartment with our own kitchen and a balcony. It was very convenient to have access to a kitchen. In total, we paid 5,000 Pula to stay in the apartment for two months. The apartment was quite nice, but rather sparsely furnished. If you share bedroom, you can get away with a living cost of 1,250 Pula per month.



The kitchen and one of the bedrooms in the apartment.

Project

Our master's project was on rural electrification. Firstly, we investigated the impact of Botswana's two on-grid electrification programs called the Rural Electrification Program and the National Electricity Standard Connection Cost program. Secondly, we investigated the preconditions for residential rooftop solar PV in villages across Botswana. We noticed that even though a village is connected to the grid, it doesn't necessarily mean that everyone in the village has access to electricity. Furthermore, it became apparent that there is a political resistance towards solar power implementations in Botswana. The research was a qualitative study based on interviews and literature reviews.

During our time in Botswana, we collected data through interviews. We learnt that the culture differs a lot from the Swedish one when it comes to scheduling appointments. In Sweden, one would send an email to schedule an appointment. Meanwhile, in Botswana, it is common to knock on someone's office to ask for an appointment right away or possibly tomorrow. As previously mentioned, our local supervisor, Samuel, helped us a lot. He assisted us in identifying relevant people to interview, he drove us to the interviews, and he introduced us to the interviewees.

We interviewed both representatives from solar PV companies and authorities, as well as experts. Additionally, we went for site-visits to interview village chiefs (called Kgosi in the local language Setswana) and village inhabitants.

Country

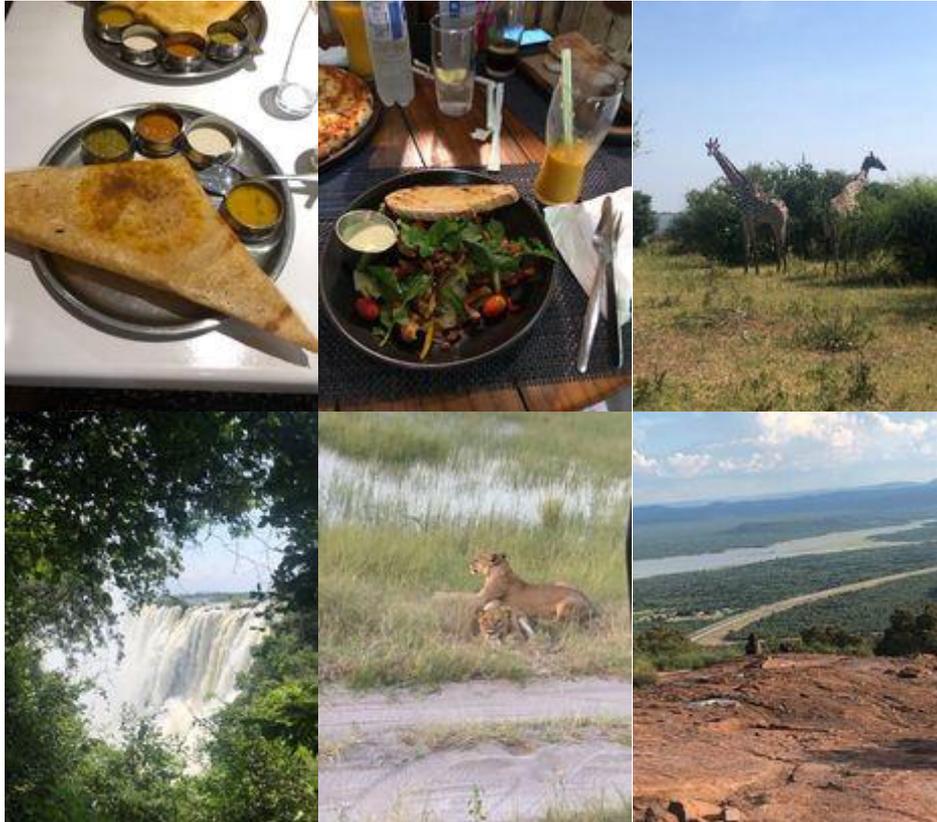
Botswana spans over a large area, but it has a small population size. Also, the capital city, Gaborone, is rather small. The city is full of shopping malls, so this is where you go to try out restaurants. Everyone we encountered in Botswana was very friendly and helpful. It is common to greet everyone you meet. To greet in the local language, Setswana, you say "Dumela Mma" to greet a woman and "Dumela Rra" to greet a man.

Leisure and social activities

With regards to tourism, Botswana is mainly known for its safari. Consequently, we went for a safari whilst being there. We went to the Northern parts of Botswana, to be specific to Kasane. We went on safari in Chobe National Park and spent a night in tenting in the game reserve. It was a fantastic experience to see all the wild animals.

While being in Kasane, we also visited the Victoria Falls. I personally enjoyed the falls even more than the safari. We watched the falls from both the Zambian and Zimbabwean side. It was a truly amazing (and wet!) experience.

In Gaborone, we kept busy trying out different Indian restaurants. My favorite was to try the dish Dosa on the restaurant Chutney. We also climbed Kgale Hill, a mountain located close to campus. However, I must admit that I found the baboons on the mountain rather scary. Another must-do is to visit Sanitas Tea Garden, a garden with a cozy restaurant owned by the Swedish consul Kent.



Some pictures from our adventures.

Sustainability

Unfortunately, it was quite challenging to have a sustainable lifestyle in Botswana. Firstly, there was not any waste sorting; everything was thrown in the same bin. Secondly, one always went by car everywhere. It was quite complicated to get around with public transport, and it didn't feel too safe since there were no seat belts. Additionally, it was not too comfortable walking around since there was a bit too much male attention and cat calling as a female pedestrian. Thirdly, the power mix was exclusively based on fossil fuels. Consequently, one felt bad turning on the lights or the water geyser. However, our project aimed to increase the amount of solar power in the power mix, so hopefully it can lead to a more sustainable lifestyle in Botswana.

Other recommendations and observations

During the time spent in Botswana, I have really gotten a cultural exchange. I would recommend every KTH student to seize a similar opportunity if possible. It has been a healthy experience to challenge my own Swedish perspective. If your exchange studies will be in Botswana, I have some practical recommendations:

- Use the InDrive app to book cabs. It is much like Uber, but you negotiate the price through the app.
- Be prepared to knock on someone's office to get an appointment since emails usually don't work.
- Be prepared that plans change; you can plan for that things won't go as planned!

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