

Fieldwork and Study Abroad Experience in La Paz, Bolivia

Before arrival

Since the beginning of our studies at KTH, we had heard about the opportunity to conduct thesis projects abroad. We were inspired by students in higher years who had shared their exciting and educational experiences. It seemed like a unique chance to contribute to something meaningful and to gain a more practical perspective on our studies so far.

We got in touch with a professor who was involved in research on more sustainable lithium extraction in Chile. A key focus of the project was to better understand the hydrogeochemical conditions in areas with high lithium concentrations, which requires a lot of data from different regions. Since Bolivia has the world's largest lithium reserves and is close to Chile, we saw an opportunity to contribute by conducting a similar study there. With help from our supervisor's contacts, we designed a minor field study adapted to the Bolivian context.

Preparations included vaccinations and quite a bit of planning. Since our stay was slightly under 90 days, we could enter the country on a tourist visa. As English is not widely spoken in Bolivia, having some basic Spanish skills was essential. We did our best to refresh our old school Spanish using Duolingo before the trip.

Upon arrival

We arrived in La Paz, Bolivia, at the end of March and were warmly welcomed – both by our Bolivian supervisor and the family we rented our accommodation from. A Swedish contact had connected us with his relatives in La Paz, who happened to rent out an apartment. Thanks to this connection, we felt at home from the very start.

We arrived a couple of weeks before our field trip was initiated. Due to various delays, the trip was postponed and ended up taking place toward the end of our stay. This meant we spent more time in La Paz than expected. During this period, we reviewed background literature and previous research related to our study area. In addition, we carried out both laboratory work and logistical preparations at the university. Of course, we also took the opportunity to explore the city of La Paz.



The field study was planned at a salt flat area called *Pastos Grandes*, located in the southwestern part of Bolivia. We travelled there by car with our supervisor and a master's student from the university's chemistry department. The trip was scheduled for five days: one day to drive there, three days in the field, and one day for return to La Paz.

Financials

Compared to Sweden, the general cost of living in Bolivia is significantly lower. However, the current economic situation in the country is quite tough, with ongoing challenges such as currency instability and inflation. This affects prices, especially for imported goods and fuel. Still, everyday expenses like food, transport and accommodation were quite affordable for us.

The best way to save money in Bolivia when you're a foreigner, is to bring US dollars or Euros and exchange them for local currency at an exchange office. We were advised to do so before departure as the local exchange rate is currently more than twice as favourable as the official one. Exchanging money this way gave us significantly more value.

We also quickly realised that "Cash is King" in Bolivia – Swedish debit or credit cards were almost never accepted, even in larger cities. We had to adapt to using only cash for everything, which made planning and safe handling of money especially important.

Accommodation

As mentioned earlier, we were lucky to find a great apartment owned by relatives to a Swedish contact of ours. We were so happy with the place that we ended up staying there for nearly 10 weeks. During that time, we also spent some time with the host family and became close friends. They showed us around La Paz, shared stories about life in Bolivia and invited us to their home for dinner. We are truly grateful for the connection we built with them and everything they helped us experience and understand about the country.

During our time in La Paz, we also made some travels around the country and stayed for shorter periods in quite simple accommodations which often lacked internet, electricity and hot water. Even though the conditions were modest it was a great experience. Many of the places we stayed at were family homes, that had been turned into small guesthouses. They were often run by older women who also prepared meals for us, and their warm hospitality made us feel very welcome. These stays were also very affordable which made it possible for us to keep renting our apartment in La Paz while traveling.



Project

The scope of our project was to investigate water quality in a salt flat area in Bolivia. Specifically, we aimed to analyse lithium concentrations, trace elements and basic field parameters in different aquifers to gain a better understanding of hydrogeochemical conditions in these environments. Our study was mainly conducted within the salt flat area of *Pastos Grandes*, as well as a few nearby locations. This area has not yet been developed for lithium extraction, making it especially relevant for baseline data collection. The aim was to contribute water quality data from this under-researched region and provide results that can enhance the understanding of hydrogeochemical processes related to lithium concentrations. We collected 23 water samples from the area, which were sent to a laboratory in Chile for analysis. At the time of writing this, we are still waiting for the results of the laboratory analyses. The final work will be completed during the summer once we have received and processed the data.



Country

Bolivia is a country deeply shaped by its cultural heritage. A large majority of the population identifies as indigenous communities, and this is reflected in everything from language, clothing, food, traditions and social values. We found Bolivia to be unlike any place we had experienced before.

Many aspects of daily life functioned quite differently compared to Sweden. Due to ongoing economic and political instability – combined with it being an election year – there were frequent protests during our stay. This was something we had to adapt to, as it sometimes affected transportation, access to services and general planning. Things often took more time than expected, plans changed at short notice, and we quickly learned that flexibility was key.

Since we stayed in Bolivia for almost 12 weeks, we gradually gained a deeper understanding of the country's cultural heritage and the diverse histories of the people living there. It has truly been a unique and valuable experience to learn so much about a different country and another way of life. Something we're very grateful for.

Leisure and social activities

We managed to do and experience a lot during our time in Bolivia, especially since we extended our stay almost a month beyond the recommended eight weeks. Apart from a short trip to Peru, we spent the entire period in Bolivia, which gave us the opportunity to explore the country more fully. Already from the beginning of our stay, we took the chance to go on weekend trips to nearby destinations – and throughout the trip, we made the most of discovering Bolivia's incredible and diverse nature. We explored different places in the highlands but also spent some time in the jungle and Amazon region.



We connected with local people in many ways — through students at the university, our host family, neighbours, and others we met around La Paz. While traveling through Bolivia, we also met many locals as well as other travellers from around the world. Along the way, we became friends with two Swedes working at the Swedish Embassy in La Paz. Through them, we were invited to a Swedish National Day celebration hosted by the Embassy — a memorable and meaningful way to wrap up our time in Bolivia.

Sustainability

Sustainability was, of course, a central theme for our project in Bolivia. Our research connects to several of the United Nations' Sustainable Development Goals, for example SDG 7: *Affordable and Clean Energy*, as lithium is essential for enabling renewable energy. At the same time, conventional lithium extraction methods negatively impact other goals. For instance, it poses risks to SDG 6: *Clean Water and Sanitation* due to high water usage and potential contamination in already water-scarce areas. Beyond the question of lithium, our mapping of water quality also contributes directly to SDG 6, as local communities often lack access of information about the quality and safety of their water resources.

When it comes to everyday life, sustainability in Bolivia looks a bit different. Many people live simply out of necessity — on a small scale, using local resources, and consuming very little. In that way, some parts of daily life end up being sustainable, not by intention, but simply because of how life is structured. On the other hand — since sustainability is not really addressed, either in daily routines or at a political level, we often noticed habits and decisions that have negative impact on the environment and natural resources. While in Bolivia, we did our best to live as sustainable as possible, by using public transportation, limiting waste and making thoughtful choices during our travels.

Other recommendations and observations

If you're considering doing a thesis and field study abroad, we highly recommend looking into the MFS (Minor Field Studies)/ KTH FS scholarship, it is a great opportunity to experience a new culture and gain insights into how sustainable solutions can be implemented in very different environments and societies. This journey has been such an amazing experience that we will always carry with us. We can also warmly recommend Bolivia as your host country.

Make sure to plan your trip well in advance but leave room for flexibility. La Paz is a fantastic yet sometimes a chaotic city with a lot of contrasts. If you have any questions, feel free to reach out to us at:

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¡Hasta luego!