March 24th, 2020

Sahay Solar Initiative

In February 2020, 19 students from different study programs left for Ethiopia to spend an exciting block week as part of the Sahay Solar Initiative. The week is rewarded with European Credits towards their respective study program.

The Lucerne University of Applied Sciences and Arts (HSLU) offered for the first time an Advanced Solar Training Course at the University of Arba Minch to students in partly or fully English taught programs. Nineteen highly motivated male and female students took part. They spent two weeks in Ethiopia and were enthusiastic about their new experiences in Africa.

Read the detailed report here. Link !!

HSLU has a close cooperation with the association "Sahay Solar", who won the 27. Schweizer Solarpreis in 2017. Text unter dem Link ist Deutsch – eventuell so belassen

First day at Arba Minch University

Diary of the trip to South Ethiopia with the "Advanced Solar Training" February 3rd - 14th , 2020

Sunday and Monday, February 2nd and 3rd 2020

Our meeting point was "Badischer Bahnhof" in Basel. We had a smooth trip, even the heavy, red inverter passed all weight and customs controls and ended up safe, together with all of us in Arba Minch. After moving to the hotel, we went through safety in the health sector and gathered first impressions. Nineteen lively students and one lecturer are thrilled about the 2 weeks ahead.

Tuesday, February 4th

The training started. There were 15 students from the University of Arba Minch with their two Ethiopian lecturers Sodessa Soma and Zelalem Girma as well as 19 Swiss students with their lecturer Roger Buser from Switzerland. The head of the Technical University of Arba Minch, Dr. Alemayehu Chufamo, did not miss the opportunity to greet everyone personally. Under guidance of the unified teachers the day passed in no time with interesting, well-illustrated lectures. The spirit was great and discussions vivid.

Wednesday, February 5th

During this day an electro engineer specialized in PV technology taught the economic part of photovoltaic energy production. The participants were fully involved, the atmosphere was excellent.

Thursday, February 6th

Training continued at the university while a team of 3 people from Switzerland drove to the village of Fegada next to Sodo to inspect a potential solar water project that might be realized during future visits. It was an hour's drive away, a small village in a wonderful green landscape with a small mission school that is in need of drinking water. 240 meters further down on the slope there is a spring that gushes freely. It was gathered 30 years ago but can only partially be used. The school needs clean water for 400 children. A project will be proposed that students could build. The school is to be expanded to a high school and in the town of Sodo there are questions regarding solar power and further development.

The old source (Bildunterschrift)

In the future, the spring water will be available at the school in this 10,000 liter barrel (Bildunterschrift)

Friday, February 7th

The Swiss team drove a 4x4 south to the Omo river, approx. 280 km = 6 hours driving time. Different peoples live there totally in harmony with nature. The regional government wants the University of

Arba Minch and us to use solar energy to guide water from the Omo River to the villages and fields. We explored the situation. The trip was very tiring, bumpy and very hot.

Over time

In the evening we arrived in Turmi, which we knew from previous trips. The goal was to look at 3 projects to clarify possibilities.

Saturday, Feburary 8th
Early in the morning we experienced a fantastic sunrise over an endless landscape. Roosters around us greeted the morning. We drove with a government officer from the South Omo Zone to the Omo river to the people of Karo. The government wants to start a water project here. We wanted to look at the situation. After an hour's drive into the no man's land we reached the mighty Omo river, which flows slowly in a brownish colour.

Here the people of Karo lives in three villages, Korcho, Duss and Labuk. We were in Korcho, about 50 meters above the river. The bank is very steep. Until three years ago, Turkish people ran a cotton plantation in the vast plain and pumped water from the river for irrigation. Everything is falling apart, huge steel pipes are rusting in the undergrowth. The project is too big for our purposes. When climbing up to the village, approximately half way, there were 4 white cisterns, mounted on racks, with a total capacity of 18,000 liters. Italians assembled and left these a few years ago.

1 Korcho village

2 Available empty cisterns

3 View from Korcho over the Omo river

Then we looked at a government project: There is a truck diesel engine on the riverbank that needs too much diesel (which few locals can currently afford) and should be replaced by a solar system.

Truck Diesel engine
25 meters of altitude have to be overcome, there are already structures for irrigating the small fields of the village population. A solar station could be built and water obtained for the village as well. We believe this could be a project for the Sahay Solar Initiative, including the available Italian cisterns as a reservoir.

Sunday, February 9th
It takes a whole day to drive back from the Omo river to Arba Minch.

Monday, Feburary 10th
We visited a hospital project, Danbile Ottora, which we installed 6 years ago. Danbile got public electricity 6 months ago and the infirmary is also connected but most of the time solar energy is being used as the public grid fails several times a day.

What was striking for us was the further positive development of the infirmary. The laboratory had expanded with a centrifuge for blood samples, new microscopes were available and very well-made educational brochures about family planning, menstruation, contraception (these different options are explained in detail and given or implanted free of charge to girls and women) as well as hygiene.

Tuesday 11 th and Wednesday 12 th
A new patronage member had his first trip with Sahay Solar. He reported: “Although I have already travelled to four other African countries before Ethiopia, the time spent in this wonderful country was a new experience for me. Arba Minch and the villages we visited are located in an unexpectedly green landscape and in a hilly to mountainous altitude of 1,000-1,800 meters above sea level. The temperatures are still African, but mostly between 25-35 ° C, so quite pleasant. I was able to experience the Ethiopians as interested, curious and with a positive reticence. They are delicate people with beautifully cut faces that remind me very much of people living around the Mediterranean Sea. A country full of legends and myths, full of contrasts but still one of the poorest countries in the world. Eighty percent of the 105 million inhabitants live from agriculture in the countryside. During our visit I could see simple life up close. A house made of wood and clay, simple furniture, no electricity or running water, people are barefoot, in traditional clothing or with shorts and T-shirts. There are no toys for children, certainly no luxury, at most a cell phone every now and then.”

The Advanced Solar Training at the University of Arba Minch, with 19 participants from the Lucerne University of Applied Sciences and 26 local participants was successful with intensive cultural

exchange; It was very impressive how motivated the students were throughout the day and how the group grew together in a professional and human way.

During the installation of the solar system, women from the village started cooking dinner on the fire together with us, which we could enjoy at sunset. The night outside under the mosquito net will remain in everybody's memory forever. The following day the system was commissioned. We could see the joy of the "mechanics" and especially of the villagers. Finally having electricity for basic medical care and for running water - wonderful.

Thursday, February 13th
The echo was very positive from all sides. The corrected exams were distributed and next year's project discussed. Certificates, T-Shirts and Swiss Army Knives were handed over.

Friday, February 14th
The long way home started.