GLEN Final report

"Developing alternative energy systems to preserve the wild coffee forests of Ethiopia"



GLEN - participant: Barbora Chmelová Home organization: INEX-SDA Period: September – December 2012 Place: Bonga, SNNPR, Ethiopia Host organisation: Nature and Biodiversity Conservation Union (NABU)







Summary

GLEN internship project **"Developing alternative energy systems to preserve the wild coffee forests of Ethiopia"** was performed between September and December 2012 as a part of the NABU project "Climate Protection and Preservation of Primary Forests – A Management Model using the Wild Coffee Forests in Ethiopia as an Example" in the Kafa Biosphere Reserve, southwest Ethiopia. GLEN team consisted of three participants from three different countries: Czech Republic (Barbora Chmelová), Germany (Katrin Lammers) and Poland (Karol Skałowski).

The **aim of the project** in the Kafa Biosphere Reserve is **to protect the remaining montane cloud forests in the area**, the vast majority of 3 % of forest cover remaining in the whole Ethiopia. There are many drivers which causes forest degradation and deforestation. One of this is for example the use of forest wood as a fuel for lightening and cooking. That is why there is **an attempt to implement renewable energies** on a long term scale in this area.

During our stay, the study was performed to create an overview about the Kafa Biosphere Reserve and its potentials regarding to renewable energy technologies in the context of local community and nature protection.

Introduction

Kafa Biosphere Reserve is located in highland region of Southwest Ethiopia, approximately 460 km SW of capital Addis Ababa. Administratively its area belongs to Southern Nations, Nationalities, and People's Regional State, specifically to Kafa Zone. In the area there live about one million people representing wide range of ethnic groups, such as Kafecho, Amhara, Bench, Oromo and others. Main source of livelihood is agriculture (cultivating crops, livestock rearing), and collection of NTFP (non-timber forest products), such as spices, honey, beeswax, medicinal plants etc. Density of population within the biosphere reserve is relatively low, characterized by isolated settlements with fewer inhabitants with relatively long distances between households. This fact represents the most serious obstacle for electrifying this remote areas making people highly dependent on traditional energetic resources. Kafa UNESCO Biosphere Reserve was established in 2010 to ensure the protection and conservation of unique afromontane cloud forests which represents one of the world's biodiversity hotspots. Wild coffee forests growing in the area are considered to be the cradle of Arabica coffee (*Coffea arabica*). More than 5,000 varieties of coffee - invaluable genetic resource- can be found there growing wild in the forest. Except of coffee these forests are harboring many plant and animal endemic species, it means they can be found particularly here and nowhere else on the planet.

Unfortunately these unique localities are threatened by deforestation and overall degradation. One of the most serious reasons is meeting energy needs of inhabitants in this area. These are almost exclusively covered by traditional fuels, especially firewood and charcoal. This fact combined with fast population growth creates a great pressure on the environment. To meet the requirements for energy needs and change the prevailing attitude in using traditional sources of energy, provision of alternative, sustainable solution is needed.

Internship process

The aim of the project was to conduct the broad research on renewable energy possibilities in the Kafa Zone . Our task was to collect necessary data in Kafa and all possible information related to the topic of renewable energy in Ethiopia. This work mainly consisted of communicating and consulting with local expert organizations that work in renewable energy sector, discussing with local government organizations and last but not least with the local people. Our objective, after gathering all the information, was to propose the most suitable renewable energy technology for the Kafa Zone according to the needs of the community and possible environmental resources of the region.

Our work started already after our arrival to the capital, Addis Ababa. Here we attended the NABU's Ethiopian headquarters and started our "networking" part of the project. National Project Coordinator, Bekele Haile and his colleagues supported us significantly in meeting the organizations like GIZ, Horn of Africa Regional

Environmental Centre/Network or Stiftung Solarenergie – Solar Energy Foundation, who represented an invaluable source of information for us. In the course of our internship we met several times to discuss the issue of renewables and the problems which we were confronted with.

The local office of NABU was situated in Bonga town, capital of Kafa zone. We didn't have to attend the office every day, we worked independently in the field. Our Local Project Coordinator, Mesfin Tekle and his co-workers were a great support for us especially in terms of initial introducing us to local representatives, stakeholders and overall situation.

Our work was an everyday process: searching for information, meeting people, discussing, continuous summarizing and of course learning. Our organization gave us quite an unrestricted possibility to develop our ideas. We were free in creating our plans, detailed schedules, contacting people and organizations. But in case of need, local organization was always helpful with anything we needed. They gave us the feeling of a strong and safe background.

During our stay, Svane Bender-Kaphengst, the Project Leader from Germany and her colleagues visited Bonga. This gave us the opportunity to discuss their needs, comments and observations according to our project work. Immediate feedback helped us to improve our work significantly.

Problems, challenges, solutions

Our project was based on our proactive approach. Start to work since the very first day of our stay. Without this attitude would have been impossible to reach any significant results. We had to create own position within local community, patiently search for the "right" contacts and important persons. It was important to maintain these contacts regularly. Keep on demanding our meetings, information, schedules, try to be kind of strict. Finally we were able to cooperate with Kafa Zone Govermental Departments and other NGO's and institutions that work in the field of renewable energy on national and international level with very good results.

According to our teamwork, we didn't have any significant problems. In my opinion, work in trinom was very beneficial. Little bit questionable for me was the fact that we were two women and one man. It happened very often that the man played the role of the 'speaker' of the group, but mainly it's the matter of local culture. On the other hand, in man's company we weren't approached by men so often and we felt quite safe.

In terms of general safety there were any problems neither. We became a part of local community very quickly. We felt we are observed but also protected.

Conclusion

During our internship we succeed in gathering all the possible data related to the field of alternative sources of energy in Kafa Biosphere Reserve. We learned the existing problems and needs of community, but also its potential and capability. During our stay we realized and determined the obstacles of implementing alternatives in particular area. Our team also started cooperation with several institutions. Together we developed the ideas for most suitable solutions which might be possible. According to NABU, our final report will serve as a platform for the projects on implementing alternative sources of energy in Kafa Biosphere Reserve.

I really appreciated the approach of NABU both in Germany and Ethiopia: "Main objective of your internship is to learn, to get know the work in foreign country, in different culture and mentality, to enjoy your work and stay in general". Their supportive and friendly approach motivated us to do our best. I was really glad when NABU offered us further cooperation in the future.

Not only the internship but the whole cycle of GLEN was an unforgettable experience for me. Enriching, inspiring, sometimes hard but definitely precious. It changed my perspectives and my life. It formed my personality, broadened my skills and abilities, it gave me an invaluable opportunity to meet amazing people. I would definitely recommend to anyone to join GLEN!