

*SE Studying Local Rural Systems, SS 2012*

## **Sustainability in a local context**

Case study in Klikov, Czech Republic

Submitted to Dr. Simron Jit Singh and Dipl.-Ing. Willi Haas



Hana Fluksová ; Nina Fuchs (0705558); Marie Kouklevsky(1100664);

Viola Ternenyova(0846362); Michael Zipperer (1161083).

## **Introduction**

The seminar “Studying Local Rural Systems” brought together a group of 25 students to Klikov, a small village near Třeboň in South Bohemia, Czech Republic.

The Třeboň Region (Třeboňsko) is one of the most popular tourist destinations in the Czech Republic. The name of the region comes from its natural centre, the town of Třeboň. Geographically, the flat landscape complete with many fishponds, woods and peat bogs, is called the Třeboň Basin. The Třeboň Region is situated between the South Bohemian towns Ceske Budejovice and Jindřichuv Hradec. The scenic landscape of the Třeboň Region (Třeboňsko) with its sophisticated system of fishponds and artificial channels is the result of sensitive human intervention into the original natural conditions. In this way, the region is connected to a long tradition of freshwater fish farming; this relies on the large number of fishponds that were built over the centuries. The first colonists came to the region in the 12th century. At that time, they began to reshape the original hostile marshy landscape. (cf. <http://www.trebon-info.com/>)

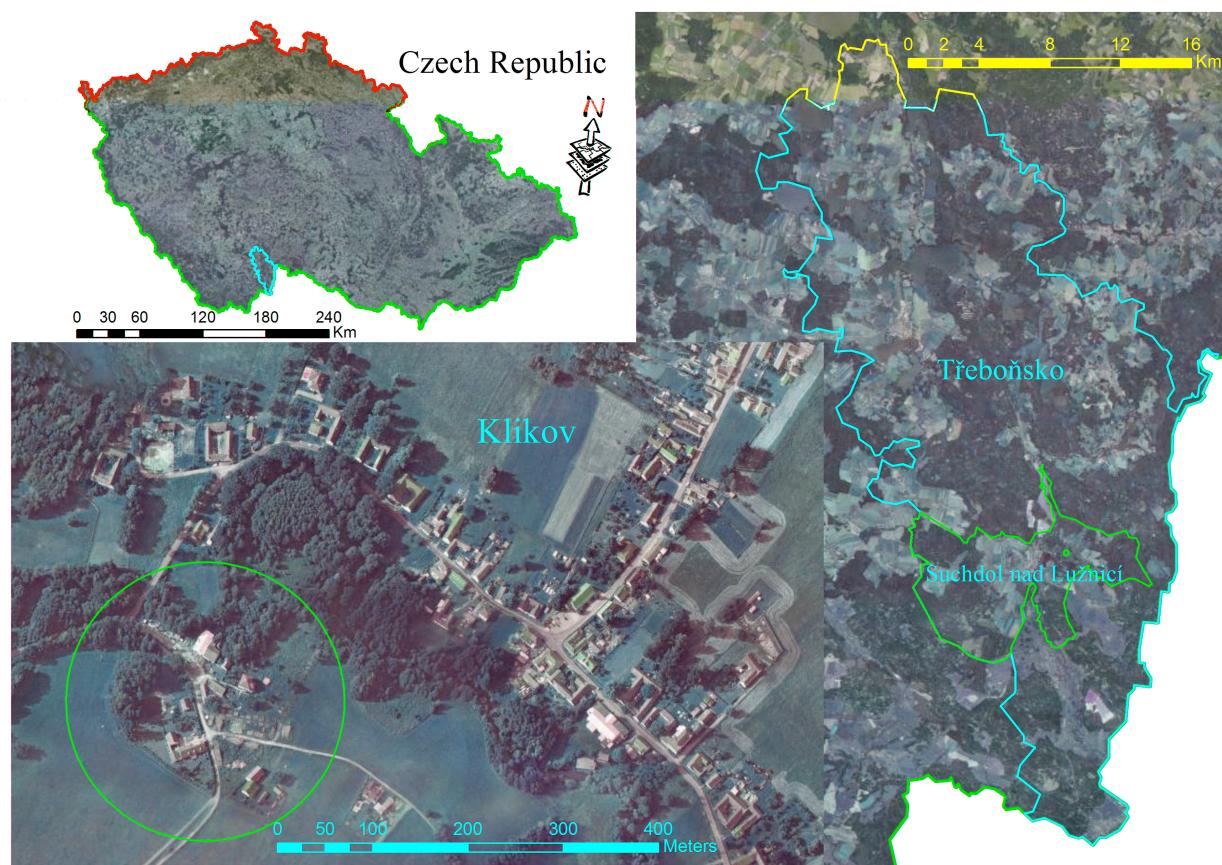
Despite the fact that the landscape of the Třeboň Region has been cultivated by man for many centuries, the unique natural values have been preserved. The Třeboň Region has been declared a UNESCO biosphere reserve and a protected landscape area (CHKO Třeboňsko). The most valuable biotopes in the Třeboň Region are the marshlands.

Klikov is attached to the small city of Suchdol nad Lužnicí, in the district of Jindřichův Hradec. The village was founded on the Czech-Austrian border at the end of the 16th century. Nowadays, Klikov looks more as a dormitory village since the majority of the inhabitants have to commute to work. Also, Klikov attracts more and more “tourists” –second-house owner or not; this is related to the proximity with ponds, beautiful forests and the appreciated flat terrain for cycling. For better orientation, we attach a small map of Třeboňsko and Klikov (see “picture nr. 2”).

As said in the course description, “the course is designed to provide insights and give experience to students in studying local communities using both anthropological and social ecological field methods within the framework of sustainability science and development studies”. Indeed, we had to deal with the village of Klikov through the lens of local rural systems and socio-ecological systems. Practically, we followed the following “method”: besides the interactions with Dr. Jan Ševček, the cycling tour and the « lecture » part of the course, we had the chance to interview a local per group. Thus, our questioning, analysis and results are based on these elements.

We ended with the following hypothesis: the newcomers are enabling a new sustainable development in Klikov. This development will be more and more based on tourism.

In order to verify this hypothesis, the first part of the paper will be dedicated to the theoretical framework, the second part to the interview; then we will deal with the analysis, and finally try to open the reflexion.



(picture nr. 2)

### **I- Theoretical framework (MFA, biosphere reserve article, class discussion)**

As a preparation for our resident in the Czech Republic we have to read different articles concerning sociometabolic transitions, local studies and agriculture. Especially the case study by Kusova et al. about biosphere reserves as learning sites of sustainable development was very helpful to analyse the local rural system of Klikov and the Třeboňsko region. Through this paper we got a basic orientation that biosphere reserves are intended to be model regions for a well-

balanced relation between nature protection on the one hand and an adequate development of the local economy on the other hand. The functions of a biosphere reserves are:

- conservation of local biodiversity
- ecological education
- research
- promotion of sustainable forms of socioeconomic activities

It combines the aspects of quality of life with the issue of social acceptance of nature protection measures.

On the first day we got an introduction to the region Třeboňsko, the village Klikov and its people by Dr. Miroslav Hatle and Prof. Jan Tešitel.

The next days we discussed and defined what a local rural system is and its meaning in the context of sustainability. The questions we answered were:

**a) *What is a local rural system?***

A local rural system is a set of interrelations between stakeholders in a given territory in a certain environment, using the different resources from inside and outside to reproduce itself. It provides material, cultural and social values.

**b) *Which are these functions to wider society?***

A local rural system provides several functions to wider society. Its capabilities are the providing of material values on the one hand and cultural on the other. In our case material resources for example can be wood, fish or clay and recreation as a cultural value.

**c) *Which variables and processes do make a local rural system sustainable or not?***

The sustainability of a local rural system depends on its metabolic regime, its treatment of stocks, the demographic trends and the share and conservation of the local knowledge. But also the legal framework and the energy return on investment (EROI) are not least important.

Then we were introduced into the field of Material & Energy Flow Analysis (MEFA), which is an analytical method of quantifying flows and stocks of materials or substances in a well-defined (local rural) system. After that we also got some basic information in the field of time-use studies.



The method we applied to get more detailed information about the interdependences between the biosphere reserve of Třeboňsko and the life of the inhabitants as well as the linkages towards a local sustainable development of the region were guideline- based interviews with five local people living in Klikov.

## **II – Interview**

The interview partner of our group was the 64-years-old owner of the saw mill, Jan Bušta. In comparison to the majority of the interview partners he has quite close ties to Klikov, as his grandfather as well as his father already processed wood there and lived from the saw mill. Nonetheless he is, like all the other interview partners, kind of a “newcomer” or “outsider”, because he moved to the village after his academic career in Budweis 30 years ago.

We structured the interview according to the topics we were interested in and which we thought are linked to the issue of sustainable local development within larger national and global processes:

- (1) Economy / Business and personal background
- (2) Biosphere reserve
- (3) Social aspects
- (4) Consumption patterns and
- (5) Energy

### (1) Economy and personal background

Our Interview partner joined the parental business when he “moved back to his roots”, to Klikov. Already at this time big changes affected the business of the saw mill. From the beginning, between the first and the Second World War, there were certain declines in the quantity of the processed wood as well as the employees which worked to run the saw mill.

In this context he told us that nowadays he has 3 employees whereas in former times up to 60 workers could be employed from the saw mill.

The activities of the saw mill include clearing forests (after a storm for instance), processing wood for private clients who bring the raw material and produce “items” for other businesses. Indeed, the saw mill works sometimes for the village carpenter. But, mostly, the saw mill

cooperates with a few industries in Suchdol for who they produce 10 different items such as pallets.

Also the size of the economic area, the distances of imports and exports experienced big changes according to Mr. Bušta. Whereas between the first and the Second World War the partners of trade were also in Berlin, Prague and Paris nowadays the distances of imported wood as well as exported products are shorter. The products are bought and sold mainly within the region (around 20 km from Klikov) and to the inhabitants of Klikov itself.

## (2) Biosphere reserve

One of the next topics was the perception of the nature reserve of Třeboňsko and the ways local people are affected. The owner of the saw mill does not feel affected, neither in a positive nor in a negative sense by the protected landscape area. He often mentioned the uniqueness of the landscape of Třeboňsko with its various lakes and fish ponds and focused on the aesthetic values of the natural landscape. Like many tourists also the people of the region do appreciate this and enjoy the nature. But as he said, who benefits from the existence of biosphere reserve are mainly the scientists.

Despite the status of a biosphere reserve he as a hunter observed changes in the ecosystem, for example the declining number of deer and other animals like fasans and rabbits. As he assumed the increasing “spread of civilization” can be a reason for this changes.

## (3) Social aspects

As regards as the social inputs we got from the interviewee, it seems that relationships between inhabitants within the village are cordial. Nevertheless, because of the Communist past, people do not trust truly their neighbors; there is still mistrust. The situation continually improves though. But this takes some time. Also, the main social “hot spots” are the pub and the local football club. “Unfortunately” the pub is not run by a local. One should note that Jan Bušta is a big fan of Klikov football team and that he never misses a game. This brought us to consider the social network of women in Klikov: there exist no event, club or place such as they could socially connect themselves. It seems also significant to deal with the integration of the second house owners; there is actually no problem of integration. These “outsiders” are well accepted. Their strong integration depends on their will and effort, i.e. if they really want to be integrated.

As part of the social trends, the young have been emigrating out of Klikov for thirty years: they usually leave to study and/or work without coming back to live here.

#### (4) Consumption patterns

The nutrition of the owner and his wife and a number of dogs they have is partly derived through natural local sources from the river and the surrounding forests, but the majority of food as well as other products is bought in the nearby cities of Suchdol, Třeboň or Gmünd. Especially in the hunting season (from May until September) the proportion of meat derived from the hunting activities is estimated from the interview partner about 30 % of consumption. Additionally he is catching fish from the part of the river belonging to his ground.

Asking about the home garden and the possibility to supplement the diet with own grown food was answered with the statement that the fertility of the local soil is too bad to provide enough food. There are only some fruit trees, which partially cover the owners demand for fruits.

#### (5) Energy

The household from our interview partner is heated completely with his own cut wood from the surrounding forests. According to his estimation, the majority, about 60 % of the villagers, are heating as well with wood taken from their own parcels.

Regarding the saw mill, in former times the turbines were running with hydropower as the only energy source. But as they are now broken and it is not profitable to invest in the repairing costs, nowadays electricity from the central net is replacing the water energy as a self-sufficient form of energy supply.

Regarding the future of energy supply, our interviewee emphasized the importance of the solar field as an alternative energy source.

### **III – Analysis & Conclusion**

During the last two decades the region of Třeboň experienced large socio-economical turbulences, which had an impact on the global as well as local scales. These turbulences caused in the best case just stagnation, in worst case a degradation within the local rural system.

However the village Klikov seems to be again on a way upwards, with new initiatives, that open unexpected possibilities for a further development of the local systems.

As we have seen and heard during the field trips, the beauties of the landscape, that reflect a non-violent interaction between man and nature, can be counted for one of the biggest economic potentials of the village. As there exist efforts to promote and take advantage of this economic sector, we can suppose, that there will develop more and more private businesses making profit of and supporting this change.

However, tourism is not the only potential that this village offers. As we have observed, there are three potteries, nowadays specialized on products that have besides the practical value an artistic one as well. These potteries, owned by newcomers to the village, are bringing fresh wind into the sleepy reality of the past 20 years of the village. The potteries are profiting from tourism but they are able to export their products to more distant customers as well. Although we have been told, that the potters are not very well incorporated into the local community, their contribution to the improvement of village is of considerable importance. The economy is making a shift from primary sector, that means resource extraction (wood cutting and processing, sandpits and fishery), to the tertiary sector of services (tourism, pottery workshops). This fact however means bad news for the future of the only saw mill in Klikov, which is nowadays still working. The saw mill owner Jan Bušta sees new possibilities for himself in fishing in a private stream and using the hydropower in addition to solar energy. Solar energy and a central powerplant are the solution for a more sustainable and subsistent energy source for the village.

And last but not least, we have to take into account also the shifts at a larger scale; this means the new migrational trends to move from cities to the countryside. This trend can be also found in Klikov, where a number of second house owners play a role in the local system. Although not all-the-time present, their interests in the further development of Klikov are also important triggers of change, for example when setting up a business in touristic or agricultural activities. The newcomers as well as second-house-owner are supposed to be a group of people of similar age, and this can lead to a better social cohesion within the community, which had been marked by the communist period.

So to sum up we can state that “alternative” ways of life and new spheres for interactions between people are good indices for positive developments in future. We could observe that most of the initiatives that we would identify as sustainable - like local consumption patterns, non- monetary trade of materials and labour - are entering Klikov especially through the so called new-comers. This fact, when combined with traditional techniques (such as heating with



self-cut-wood), new business initiatives and with a sensitive approach towards the natural environment of Klikov, seems to have a huge potential for positive changes.

And finally, we hope that further education of people as well as our personal interest, that we have developed during the course, will also be only of positive influence on the local system of Klikov.

#### **IV - Reflection**

The course offered us an introduction to the subject of local field studies. Mutual interactions and correlations between nature and society are of specific interest within this type of studies.

Concerning the work-flow, the theoretical inputs provided basic knowledge in order to undertake a research work. The complexity and the long-term run of these activities were emphasised as well as the necessity of sensitive and self-reflected data-taking. We learned that it is a very important first step to define what you are going to observe and how you will measure it. If necessary, you also have to be flexible in your research, depending on what the subject provides or allows. The case study which included direct contact to local people (cycling tour as well as interview), having free space to discuss with them the topics of interest, was for all members of our group the most impressive part of the whole course.

And of course, international exchanges among students are always enrichment. So the course was for us a very nice “global get-together” in a local rural system.