

NATURAL, SOCIAL AND ECONOMIC EXAMINATIONS OF ECOVILLAGES FOCUSING ON A CERTAIN EXAMPLE

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ABSTRACT

Nowadays mankind has to cope with the fact that we will sooner or later run out of our resources. As a possible farming and living alternative the concept of forming ecovillages may arise as establishing a smaller community being sustainable from social, natural and economic aspects, where the population has similar social, ecological and spiritual views. In our study we wish to introduce the situation and characteristics of an already existing ecovillage reflecting an alternative developing example to communities of similar situations. The ecological-environmental, social and economic conditions of Gömörszőlős, the major blocking factors in operation and possible developing tendencies of ecovillages will be detailed. Local products of good quality, relaxed, natural environment may motivate someone to become an inhabitant of an ecovillage. The most important motivating factor, however, is the environmental friendly way of thinking. The biggest problems include strict legal regulation and lack of local jobs, difficulties to get financial subsidies, aging population of decreasing number. The most important objective in an ecovillage and in other communities is the fact that the inhabitants should have the willingness of environmental consciousness in every-day life, of using ecological equipment as these constitute the essence of ecovillages.

Keywords: ecovillage, Gömörszőlős, sustainability

INTRODUCTION

Nowadays terms of economic crises, sustainability, eco-products, arrangement to self-consuming arise more often in every-day life. Thank to mainly the media these terms and concepts have greater and greater significance as well as the identification with alternative life forms, just like moving to ecovillages. The existence of ecovillages may not be considered as a new phenomenon either in Hungary or abroad.

The eco word comes from the Greek "oikos" word, which means house, household narrowly, and completeness, wholeness, the house of the creator father in a wider meaning. If something is linked to the eco word, it means that this thing strives to affect the environment to the smallest degree, to avoid causing damages, as well as to harmonize with the cycle of the nature in order not to bother its balance (11).

There are several definitions of ecovillages, but the essence is the same. They are smaller communities being sustainable from social, natural and economic aspects, where the population has similar social, ecological and spiritual views. One of these factors plays an important role in their foundation. In general when founding ecovillages it is true that only one of the factors had been focused on and the other factors were considered later by spreading the interests.

The Global Ecovillage Network introduces the concept of ecovillages through the metaphor of three-legged stool (11). The seat means sustainability, while the legs reflect spiritual, social and ecological motivations. The sustainability of a community is maintained if every leg is strong and harmonized with each other (CAKE-DALY, 2009).

Firstly Robert Gilman, who was an editor of a magazine, defined the definition of ecovillages in 1991, which definition has been to become a standard. An ecovillage is a "human-scale full-featured settlement in which human activities are harmlessly integrated into the natural

world in a way that is supportive of healthy human development, and can be successfully continued into the indefinite future.” (I2). Human-scale means personal acquaintance that is the dwellers know each other, which determines the number of population in a few hundred (HÁRI, 2008). Later Gilman added the fact to his ecovillage definition in 1999 that an ecovillage must have multiple centers of initiative.

Béla Boros as one of the founders of the Hungarian ecovillage movement has also created a definition for ecovillages. On this basis an ecovillage is a community which utilizes technological, social, community organizing and economic methods, which makes the development of a sustainable human community possible where the resources of the environment are used in the most efficient way (I3).

There are several success stories relating to foreign ecovillages, such as Findhorn in Scotland, Andelssamfundet in Denmark, or Sieben Linden in Deutschland. In a number of European countries, just like in Norway, sustainability and the concept of ecovillages is linked to tourism thus ensuring the spread of environmental consciousness in a wider sphere (HORVÁTH, 2009).

Previously in our research the practical realization of sustainable development altogether with rural tourism were investigated in seven communities located in the Zemplén area (SZABÓ, 2010). The investigated area is located in northeast part of Borsod Abaúj Zemplén county in the Northern Hungarian region. Though these communities belong to the most disadvantageous settlements, this area has rich natural, cultural and historical values, which may help the development of rural tourism.

Our conclusion included the facts that rural tourism may have a relevant role in founding sustainable farming and development and in spreading environmental consciousness, mainly if the activity is situated in an ecovillage. Regarding the willingness of the population and rural host for co-operation as well as the opinion of the mayors, there is a real chance for realizing the concept of ecovillages, which altogether with rural tourism may contribute to strengthening the global view and the practical realization of sustainable development in this area.

In order to make concrete suggestions and conclusions for other communities to become an ecovillage, we aim at revealing the situations of already operating ecovillages in Hungary to investigate the conditions of energy saving and environmental consciousness life and farming as well as the operating conditions of ecovillages. On these bases the conditions of establishing environmental consciousness life form may be defined to other communities in the Zemplén.

Presently there are eight ecovillages in Hungary. The basic functions of the operation of ecovillages are the same, but the aim of the creation may be different, thus they cannot be classified into one model. Among the domestic ecovillages Gömörzölös is similar to the investigated communities, in this way this ecovillage of the others is chosen for the examination in this study.

MATERIAL AND METHOD

Our research method contained personal visit and critical interview. During our personal visit, critical interview was made with the mayor, the education center, which will be later detailed, as well as several local farmers were visited. Our aim was to reveal the condition of self-sufficiency, which may be adapted to other communities having similar conditions and problems in order to become successful ecovillages, as by the fact that Gömörzölös has developed into an ecovillage, it tries to stop depopulation and decrease unemployment (SZÜCS, 2005).

RESULTS

In this chapter the location and natural conditions, the social characteristics and the economic background of self-sufficiency of Gömörzölös are detailed.

Location and Natural Conditions of Gömörzölös

Regarding already operating initiatives, there are different solutions for founding ecovillages in Hungary. There are villages created from nothing, such as in case of Galgahévíz, which is located in Pest County and it was developed from the prairie (SZABÓ-LÁSZLÓ, 2011). The most typical foundation form is the solution in which ecovillages are established in already existing villages being often dead-end settlements. In several opinions, this is an unfavourable feature as it hinders further development of the community; on the other hand, it may be advantageous as well, because it may help in saving natural values. In case of Gömörzölös this is the initiative which exists, that is the ecovillage was developed in a dead-end settlement (NAGY, 2011).

Gömörzölös is situated in the northwest part of Borsod-Abaúj-Zemplén County in the northeast part of Hungary, at the Hungarian and Slovak border. Its natural conditions are unique. The route of the National Blue Trail crosses over the settlement to Aggtelek. It is far from the main transport roads, it may be reached by passing the route Putnok-Aggtelek. A 2-kilometer-long road from Kelemér leads to Gömörzölös. It is characterized by peace, silence and tide environment. The settlement is first mentioned in the 18th century. Almost its whole population got by agriculture, mainly from animal keeping, and carried out farming for self-consumption. The development of heavy industry of the surrounding settlements attracted many young people from the village, which contributed to the decrease and aging of the population. In order to stop this tendency, the local group of the Ecological Institute of Miskolc (The Ecological Institute, Foundation for Sustainable Development) undertook a village developing program altogether with the local government aiming at making the village sustainable. Within this program several buildings were renovated, maintaining, saving and introducing the traditional rural life form is stimulated. Their long-term aim is to affect the view of city-dwellers and tourists, and to introduce and spread the conditions of sustainable development and life. An education center was established, where programs are organized for groups reflecting sustainability and self-sufficiency. Tourism supplements well spreading these traditions, thus accommodations, sights, supplies and authentic examples of the traditional peasant way of life are available in the village (I5).

It is obvious that environmental consciousness goes together with nature conservation. In Gömörzölös there is the possibility for even little children to get acquainted with the relevance of environmental conservation and to study saving and respect the nature. People strive to farm without chemicals and to use environmental friendly detergents, to collect waste selectively, as well as to maintain their direct surroundings clean and organized.

Social Conditions

In general the upper limit of the population is about 200 to 300 people in case of ecovillages, as above this limit the settlement would lose its village feature, the personal acquaintance as well as the intimacy feeling would weaken. Gömörzölös has a population of 93. The self-government does not limit the number of the population but the present aim is to maintain this number as there is not any newly born child and near half of the population is pensioner-aged. There is not any extra condition for those who wish to move in. In other ecovillages, for example in Gyűrűfű, a multi-stepped process waits for the outsiders in order to become local.

The age structure of the population and the educational level depends on the motivations of those moving to or founding the ecovillage. A common feature of ecovillages is that the educational level is higher than the average as the population undertakes a higher leveled obligation in order to save the environment. In Gömörszőlős the age structure is the following: 33% of the population is above 60, the ratio of people between 41 and 60 is 27%, while the ratio of the young below 18 is 15%. The village struggles with aging, but the ecological way of thinking, the self-sufficiency attracted several young people and intellectual families, which may help in stop this unfavourable process. There are similarly adverse processes in other part of Hungary, for example in Hódmezővásárhely subregion, where the vitality tendency is also unfavorable and the population is decreasing and aging (HORVÁTH – BODNÁR, 2009).

In ecovillages the community life is the most important motivating power, by which the everyday life of local people becomes dynamic. This is the most appropriate place for exchanges personal experiences, creativity and self-education. The healthy community life is based on the common trust and common interests get into forward instead of ego-centered thinking. People take care of each other and respect mutually each other, and their common aim is to develop a common future. Meetings are held regularly where the actual problems and suggestions are discussed. The weekdays, holidays spent together and work contribute to developing intimacy feeling and holding together in locals. By this it is easier to handle potential problems and conflicts as the common aim is the development of the community. The Village Day in Gömörszőlős is held in August in every year, which strengthens the relationships among the population. Last year this holiday was supplemented by a National Bio Day. The mayor and two member representations are responsible for making decisions regarding the community and population is involved in cases when the issue concerns the population as well.

The intellectual life and saving and respecting traditions are more remarkable in a small village. Gömörszőlős focuses on saving the traditional rural life form. There is a cultural association formed 50 years ago, which held several performances and concerts. Today its activity is not typical as this generation is aging. In the building and the garden of the former primary school an ethnographic collection and a small gallery were established, where seasonal exhibitions are held as the village is home of the art summer camp of the Creators' Folk High School. The ethnographic collection introduces the assets of farming and forestry as well as those of the households. Children learn how to folk dance. There are several programs organized to introduce the cultural value of the ecovillage. The education center of the Ecological Institute undertakes organizing programs such as walking in the moonlight, games relating to nature or sustainability. There is a chance to take a walk in the village altogether with a qualified guide and to take part in performances and lectures.

In an ecovillage regarding education it is an important factor that student could get to know the relevance of environmental conservation even in their childhood, and learn the limits, which should not be exceeded with our consumption. Unfortunately, there has not been any educational institute in Gömörszőlős since 1967. Due to the low number of children it was not worth maintaining it. The children go to kindergarten and primary schools of the surrounding settlements, such as Serényfalva, Kelemér, Putnok. Three young people go to university in Miskolc, Eger and Debrecen. Technical practice is organized for university students and volunteers by the Ecological Institute to introduce the conditions of sustainable living and farming. Locals call it "peasant wellness".

Economic Conditions

Private, family and small-scale enterprises in ecovillages supplement each others' activity. Local enterprises satisfy local demands in a better way, as they realizes the actual needs of the

community more efficiently. Products and services do not require advertisements, because local production meets local consumption by saving money. On the other hand advertisements do not highlight our real needs and this view is far from the thinking of ecovillages. Plant production, animal breeding and handicraft are typical to ecovillages. The activity of the inhabitants reflects diversification.

In ecovillages small amount of products are produced, but their common feature is that they are unique and of good quality. In Gömörzölös the different economic activities were already given as the village had existed before; however, the intensity of the activities and the production volume has decreased.

Unfortunately small ratio of the inhabitants work in Gömörzölös, as there is hardly any working possibilities in the village. Only a few persons are employed by the local public work program and two people work for the Ecological Institute. The research results of OLÁH (2012) prove the fact that public work programs do not mean a permanent solution for handling unemployment; it is just a temporary asset. The manager of the institute comes over the neighboring settlement and the shop assistant is not a local inhabitant either. Six persons commute to work to other settlements, as workmen, engineers or mayor in Kelemér. There is a retailer entrepreneur in the village dealing with transporting artificial tubes and drains, and even a handicraft family live in the village.

Animal breeding is characterized by sheep breeding, 5 families keep pigs and few families keep goats. The meat is sold inside the village. The major part of the population purchase meat from the local grocery. Regarding processing there is a wool processing firm thank to the Foundation for Sustainable Development. By the help of the machines of more than one hundred years it produces wool and thread. A traditional wool dyeing and sewing small factory belong to the firm. The products may be visited and purchased; moreover, one can join a felting course by prior arrangement. There is a carding firm operating in the village where the carded wool is sold. Three families have grasslands, hired and own ones. In case of vegetable and fruit production the village is self-sufficient. Cauliflower, carrot, cucumber, pumpkin are typical vegetables in the village. Plum palinka and jam made from local plum are popular. A family deals with making homemade noodles and plans to produce goat cheese in the future. Regarding services, such as haircut, renovation, woodwork, barter is typical among the inhabitants. This system operates well in the village as people know each other personally. The purchase market of bio-products is not appropriate in Borsod-Abaúj-Zemplén County; the qualification is expensive and the demand is insufficient. In this way there is not any trading quantity produced in the village. Though a biogarden is cultivated in Gömörzölös, products are used for self-consumption.

Though the community is partly self-sufficient, relating to meat production or other different every-day used objects, the village strives to become a self-sufficient community similarly to other ecovillages in Hungary.

The aim of the Education Center of the Ecological Institute is to form the view of the young generation, to develop the ecological culture and to spread knowledge relating to sustainability. It organizes courses and programs for domestic and foreign children, for junior and senior groups. The Education Center consists of a lecture room and provides accommodation, which introduce the environmental friendly heating and sewage management solutions as well as the opportunities of composting, using solar collector and utilizing rain-water. The real advantage of this program is not the profit from the economic aspect but primarily the development of the local society and saving the environment. The Center tries to involve more and more people without focusing on profit.

Ecovillages are visited by tourists who prefer the closeness of nature. Every ecovillage has accommodations for the visitors, but often without technical achievement and luxury. The main attractive powers contain environmental consciousness, nature and community feeling.

The Education Center in Gömörzölös is suitable for hosting 20 to 25 visitors with prior arrangement. The number of visitors in a year is near 2000 tourists. Besides the accommodation served by the Education Center, there is also a rural host, who can accommodate 10 persons in the house comfortably. The family earlier dealt with farming for self-consumption and has saved the buildings and assets for those who are interested in. The touristic potential is appropriate in Gömörzölös, the available accommodation are comfortable serving the basis for the development of the tourism in the ecovillage.

Regarding infrastructure, the village has a dead-end, as it was previously mentioned. The houses are traditionally built; the road is concrete along the village. People strive to minimize their energy consumption, to produce less waste and try to be independent from other settlements. Alternative solutions come forward in the every-day comfort. Every ecovillage uses renewable energy sources, utilizes solar energy gained by solar collector, and uses biomass and wood chops for heating. The solar collector is located at the top of the building of the Ecological Institute. It is used for produce warm water. 80 to 90% of the utilized energy in the village may be considered as renewable. In Gömörzölös water pipe and sewage system are developed and there is a local ecological cleaning power in the village. Only few families joined the gas pipe system. Telephone net system has been operating, while regarding internet, only wifi is available. The Education Center has a wood gazing furnace. The electricity is provided by the North Hungarian Electricity Service Company.

Water is gained from own wells in most of the yards. In the main square of the village there is a well house, out of order, which was renovated for fountain. There were clear creeks in the grasslands, and the Ecological Institute plans to clean these sources. Water in the wells and the collected rain-water is used for irrigation. As the sewage pipe system is developed in the village, the homemade willow sewage cleaning system was ceased. It had operated for 20 years in the village. It was cheaper and more reliable, and it was a natural and environmental friendly way of managing sewage. However, this method is not subsidized by the state.

The inhabitants collect wastes selectively. They strive to reutilize the collected wastes. For example earlier old rags were used for making blankets.

When building houses, traditional building materials and techniques are used in ecovillages. Local wood, clay, stone are used thus transportation cost does not arise. Houses made from natural materials are healthier, insulate well, keep the moisture content of the air in an appropriate state and do not emit harmful radiation. Such well maintained houses may be lived for several hundred years. There is not any newly built house in Gömörzölös. When the presently existing houses were built, the village had not been qualified as an ecovillage yet. The settlement has almost 50 buildings, which are traditionally built peasant houses from wood, adobe and brick. All in all, houses in ecovillages may be maintained by lower maintenance costs.

CONCLUSIONS

Our conclusions may be divided into two parts. Firstly, strengths, weaknesses, opportunities, threats, major blocking problems and most important objectives for possible developing tendencies are detailed relating to the examined ecovillage. All these may reflect the necessary natural, social and economic conditions for similar settlements wishing to become ecovillages, which constitutes the second part of the conclusions.

Strengths, Weaknesses, Opportunities, Threats, Problems and Objectives

The strengths make Gömörzölös and other ecovillages attractive for people. Local products of good quality, relaxed, natural environment contribute to stress-free life. These are the

factors that may motivate someone to become an inhabitant of an ecovillage. The most important motivating factor, however, is the environmental friendly way of thinking.

Weaknesses include few working opportunities in the village. There is hardly any new incoming entrepreneur. Isolation and the difficult approach are rather disadvantageous factors, which should be considered when moving in. Comparing to other ecovillages, the houses are old but in a good state. The purchase price of environmental friendly technologies is high, thus it is not typical to households to use them. Mainly buildings of the local government have such technologies.

It is favourable for the future that ecological thinking and sustainability is getting to spread and all these may be motivating factors for people. The demand for bio products of good quality is increasing, and ecovillages just like Gömörszőlős may be potential markets for biofarming.

The aging population, the lack of young generation and the less population are threatening the future of the ecovillage.

On this basis the biggest problem which hinders the development of Gömörszőlős is the strict legal regulation for ecovillages. The development of ecovillages may be realized from financial sources from applications, though the administration makes this process slower. Little information for inhabitants of ecovillages forms another problem, which comes from mainly the isolation. Other basic problem is the small-rate or lack of environmental consciousness in every-day people. There is hardly any information on ecovillages, many people do not know even about their existence, which generates the small number of visitors and the unused touristic potential. Tourism is present in Gömörszőlős but its efficiency should be improved by making the village and the ecological way of life more popular.

The deficiencies of the infrastructure are also a major problem. The houses are old, there is not any entrepreneur moving in improving the economic life of the village. The number of local working opportunities is small, which causes commuting or emigration. The population is aging and decreasing.

Though Gömörszőlős strives to use renewable energy sources and environmental friendly technologies, their purchase prices are high. The solvent demand is low even in this settlement.

After detailing the problems, the major objectives may be determined which help the sustainability and more efficient operation of Gömörszőlős.

The most important objective in an ecovillage and in other communities is the fact that the inhabitants should have the willingness of environmental consciousness in every-day life and using ecological equipment as these constitute the essence of faith in ecovillages. This needs to apply for financial subsidies because of the high purchase prices and which could cover the expenses of improving even the infrastructure aiming at easing the isolation and making the approach more favourable.

Regarding bio-products of good quality, a local farmers' market may be a good solution contributing to the increased number of visitors. The development of tourism is a complex objective helping it by establishing and improving the relating facilities. These facilities would ease not only the life of local population and serve working opportunities, but may make the village attractive even for tourists. Stimulating enterprises for moving in the village is expected, which would increase local jobs for the inhabitants as creation and maintenance of local jobs are complex objectives.

Necessary Natural, Social and Economic Factors

It is obvious that several natural, social and economic factors are necessary for a village to become an ecovillage or for an ecovillage to operate efficiently.

The most important natural factors are the closeness of nature, clean and organized environment, which may contribute to evolving an inner intent in people to respect, love and save the natural values and furthermore to helping in spreading environmental consciousness. Social factors include a strong community life, saving traditions, culture and rural life form and environmental consciousness, which should be strengthened even in the early childhood through education.

From the economic aspect subsidies may help in using renewable energy sources and environmental friendly technologies to a greater extent. Bio-farming utilizing native animal and plant species, processing local bio-products, maintaining local farmers' market help in creating local jobs, decreasing unemployment and commuting and developing the intention of inhabitants for self-sufficiency. In a long run the aim is to become independent from the aspects of mainly food and energy production. Infrastructural elements such as natural way of managing sewage, collecting waste in a selective way are important factors even from the ecological aspect, just like using natural materials when building houses. Developing tourism may cause positive effects in the future both for the community and for tourists. The increase of the number of visitors, however, is problematic, as intensive tourism contradicts to saving environmental values.

All these may improve the ecological, social and economic functions of rural areas and contribute to recovering from crisis and developing of settlements of similar conditions.

In our opinions the population does not have to live in an ecovillage by all means in order to focus on our consumption and to produce fewer wastes. The issue of saving our environment is not just a social or an economic consideration; it calls for the level of the individuals. If our values and contribution are appropriate, the basics of sustainability will be kept and mankind will strive to create a more sustainable life form independently from the fact whether we live in a big city or in an ecovillage.

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