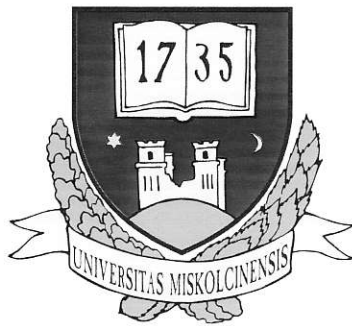


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## **ANTHROPOLOGICAL ANALYSIS ON THE SOCIOCULTURAL CONDITIONS OF A TECHNICAL INNOVATION MODEL: THE CSERNELY BIOMASS PROJECT CASE**

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The paper analyses a large scale interdisciplinary research that is carried out at Miskolc University. In its applied anthropological approach the analyses takes into consideration the social scientific background of a basically technical innovation model. On the basis of research results so far the multicultural local society in Csernely (Borsod County, North Hungary) treats the project with ambivalence. It is clear if the aversion of the sub-communities towards the realization of the project continues to exist the development plan will suffer.

**Keywords:** applied anthropology, Roma minority, social conflict analysis, local community, biomass-based community energy system.

### **1. The conception of an interdisciplinary social-scientific research**

A large scale interdisciplinary research is carried out within the TAMOP research project at the University of Miskolc that is rather unusual to national practices.

The basic idea is that Csernely, an isolated and economically disadvantaged peripheral community is subject to a complex set of tasks through an experiment of development with the introduction of the biomass-based heating system in the region. The preparation and analysis of conditions is more than just an analysis of technical, environmental economical and legal aspects. Contrary to Hungarian practices an unusual aspect is also taken into consideration: the Applied Anthropological and Sociological background of the project<sup>1</sup> [1].

It is unusual because while in the majority of developed societies a successful innovation is always considered to be a result of an overall analysis of conditions, in Eastern Central European practices a detailed research of social consequences is not part of the innovation. All over the World is a typical phenomenon, fields of knowledge, which contribute to the realization of the goals of the political and economic élites by “producing” social-science knowledge of practical value, are highly appreciated.

The project entitled “The Development of a Biomass-Based Community Energy System” is carried out at Csernely, South of Ózd, surrounded by hills and basins, covered by large forests. The history of the settlement goes back to the 13th century. In the late 20th century the majority of the inhabitants were agricultural or forestry workers or worked in the industrial plants of Ózd. Following the political changes of the 1990s, with the closing down of industry in the region, there was a dramatic increase in the number of unemployed

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<sup>1</sup> The so called applied anthropology is an important subfield of modern sociocultural anthropology. Applied anthropology refers to the practical application of socio-scientific information. Foster, George M. (1968) 38-55.

workforce resulting in the migration of younger generations and the impoverishment of the population.

The population of Csernely is a little over 800 today constituting around 400 households. The majority of the inhabitants are old people living alone. This requires the sustenance of a pensioner care network, and also serves as a last tie of the emigrated to their place of origin.

Another important sociocultural element of the region is the increasing Roma minority population consisting of large families of different generations, contrary to the Hungarian majority. The Romas, however, do not constitute a homogeneous ethnical community, there is an opposition between those having lived there for generations and recently settled families. If we want to understand the sociocultural complexity of Csernely we should grasp it as a multicultural community. The cultural conception of multiculturalism<sup>2</sup> [2] is basically pluralistic<sup>3</sup> [3]. According to this, in a community several cultural scales of values, religious and moral beliefs can be valid simultaneously, and their acceptance is necessary. Plural communities' basic experience is that the self-assertion of different groups is reconcilable with the local identity. Therefore in a plural community the support and maintenance of multiplicity is a clearly evident goal. The interdependence and equality of groups – which are different from each other but live together – is considered to be an essential part of local democracy. The main characteristic of multicultural communities is that power is owned not only by the majority, but is shared with the other groups as well.

The present survey aims at presenting the different attitudes towards plans for the development of the biomass-based heating center within different segments of the Csernely society. Since all technological innovation developments are realized within a given socio-cultural environment a very important element of success the acceptance of the project by the local communities. Different segments of this community have different "acceptance" strategies towards the project, reasons of which need to be examined. The analysis will provide us with sociological information serving as a basis for a communication strategy helping us increase the acceptance of the project.

## 2. Elements of the Csernely Society

"The Development of a Biomass-Based Community Energy System" project initiated a questionnaire-based research within the households of the settlement. Besides basic questions concerning ways of disposing of litter, and means of heating in the household as well as whether the inhabitants had any information on biomass-based heating other aspects were brought to light. As it turns out the community consists of sub-communities existing next to, and partially overlapping each other. These sub-communities have an ambivalent, often opposing attitude towards each other. This ambivalence is characteristic of their attitude towards the biomass project as well; acceptance is very much in coherence with the sympathy or opposition of the sub-communities towards each other.

<sup>2</sup> The notion of multiculturalism is generally used to describe and characterize complex societies, which are either connected with contemporary global processes – that is, as the result of the migration which accompanies globalization they cause permanent relations between cultures and the individuals and groups representing them –, or they reflect a historically formed cultural situation of co-existence as a stable characteristic.

<sup>3</sup> Pluralism is a concept that acknowledges the multiplicity of interests, ideologies, values and views.

A very interesting situation prompted us to examine this aspect; we asked for directions from a middle-aged man in the village once time. Since the lists of households were already divided among the questioners the man was informed during the conversation that he will also be given the questions at a later occasion. The middle aged man was very helpful and promised to support the research if it proves to serve the modernization of the community and provides possibilities for opening jobs in the region. To the surprise of the questioners the same man later refused to provide any information at all. Later research showed the opposition between the sub-communities to be the reason for this first helpful and later refusing attitude towards the question.

### **2.1. Elderly inhabitants**

A major sub-community of the settlement consists of inactive old pensioners. On the basis of the questionnaires we can see that these people feel responsible for their environment but their existential vulnerability and their fear of impoverishment as a result of the loss of the value of money makes them unstable. They feel they have no say in the community's life anymore. They definitely believe the future of their community is predestined by the increasing number of Roma settlers. Their attitude towards the biomass project is largely influenced by their everyday experiences of physical threat. Most of these people support the project but the main obstacle of development in their view is the Roma population's lack of interest, passivity and criminalized life. This standpoint is created on the base of physical experiences and long-standing stereotypes. Theories on social relations between groups defy the notion of stereotypical functionality. This means that each stereotype bears practical significance in expressing its attitude "towards the other"<sup>4</sup> [4]. In most cases stereotypes help maintain the ethnic and cultural dividing lines; furthermore, they justify the behaviour towards the given group. There are two types of stereotypes depending on the direction of social classification: auto- and hetero stereotypes.

Auto stereotypes are images referring to one's "own" group. Generally they are simplifications marking positive characteristics, and their goals are to strengthen the group's inner cohesion and mobilize common active power<sup>5</sup> [5]. Hetero stereotypes are categories used to name and characterize "strange" groups and their members. Their content is more often negative; they serve to create a hierarchy between groups and to draw the symbolic line between them<sup>6</sup> [6]. The system of mutual stereotypes in Csernely is functioning as a complex system.

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<sup>4</sup> The phrase stereotype first was used by Walter Lippmann in 1922. By this phrase he understands simplified, one-sided and schematic images ("prejudices"), which show each social group as a homogeneous, organic formation based on some typical characteristic features. Stereotypes are the sum of impressions and images, with the help of which experience referring to the social environment can be classified and ranked.

<sup>5</sup> Auto stereotypes may have inner or outer sources. The Hungarians typical inner auto stereotypes referring to themselves are hospitality and resourcefulness (the number of Nobel prize winners). Good examples of auto stereotypes originating from outer sources are that Hungarians have a good temperament, are pessimistic, prone to complain and cunning.

<sup>6</sup> Hetero stereotypes are used to identify and rank "other" socio-cultural communities. In the opinion of the Hungarians the German are hard working, disciplined, precise and "without personality".

## 2.2. Roma minority inhabitants

The second important sub-community is the Roma minority inhabitants consisting of two opposition groups. We have to make difference between the Roma families having lived in Cserney for generations and those having moved out of Ózd because of unemployment problems. The relationship of the Hungarians and the old Roma families was characterized by mutual recognition and respect in the past decades, but this changed with the appearance of the new settlers, the stigma of crimes attributed to them casting a shadow on the Hungarian-Roma relationship. Our research and the qualitative analyzes of data shows that both Roma communities and the Hungarians consider the main reason for the tensions to be unemployment.

30% of the total population is of active age and 40% of this is unemployed. In the case of the Roma population that constituted 10% of the total population of 802 in 2010, the unemployment rate is 80%.

## 2.3. Employees

A third group of the Cserney population consists of those employed at local institutions or small businesses (tailoring company, local store). These families of at least one member having a regular income are of a better financial situation and have a more varied attitude towards the project. They seem to be interested in a more economical family energy utilization practice but only consider the possible employment opportunities to be an option if it comes with a better income than their present jobs.

## 3. The Biomass Project a Possible Means of Sociopolitical Adaptation and its Communication

It is often said that technological innovation and the resulting employment projects have an advantageous influence on the whole of the society. The research also deals with the attitude of the Cserney inhabitants towards the question of potential employment possibilities as a result of the development project. Most of the answers were characteristic of the general attitude of the given group while reflecting the general evaluation of the whole community. The pensioners for example expressed their positive expectations towards the developments, their interest being, as a result of their age reasons, in the bettering of living conditions rather than in the possibility of new employment. At the same time the general view is that the infrastructure employed in the new technology would not last long because of thefts and damages made, these opinions expressing explicit generalizations of experiences with the Roma population.

The positive attitude of the local municipality towards the project is exemplary.

The potential sociopolitical advantages in coherence with the general development plan of the village are clear for everyone concerned: improving living conditions, employment opportunities and a fight against impoverishment.

At the same time we have to see that the opinion of the local municipality towards the project has a positive influence on the opinion of one group and a negative influence on the attitude of another. The older population for example has a positive view of the project as a result of the municipality's support. Some segments of the Roma population on the con-

trary, the lifestyle of which had been strongly criticized by the municipality, are prompted to reject the developments as something automatically connected to the work of the local authorities.

The biomass project is intended to be a complex development plan influencing not only economical-energetical and employment aspects of the local society but also their existing relationship with each other. Thus one future aspect of the project will be the analysis of its influences to the life of the Cserney population from emic viewpoint<sup>7</sup> [7]. Also, on the other way around, a precondition for the project's successful realization is its acceptance by the local population and a positive attitude towards its preparation and development.

On the basis of results so far the Cserney society treats the project with ambivalence, as a result of a number of clearly outlined reasons:

- a) The majority population of the village is aging and in their case the potential aims and advantages of the biomass project are irrelevant. Single people households with lonely old people have no interest and neutrally accept the plan.
- b) People in opposition with the local municipalities reject all attempts connected to the authorities.
- c) The increase of the Roma population generates an ethnic confrontation between the majority and minority groups of the population. A visible obstacle of the plan being accepted by the Romas is that the initiative is connected to the majority population.
- d) The division of the Roma population into those having lived in the village for generations and the new settlers increase their ambivalent view towards any kind of development.

The above four aspects are generally hindering the realization of the project. A possible solution may be an effective and well aimed communication strategy towards the groups affected. If the aversion of the sub-communities towards the realization of the project continues to exist the authenticity of the development plan will suffer.

## **Acknowledgement**

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<sup>7</sup> The emic account is an attempt at understanding from the point of view of the "natives", which has been worked out in detail by modern cultural anthropology as the frame condition for genuine cognition both in the methodological and the theoretical sense. (Seymour-Smith, Charlotte 92.)



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