

# CHARACTERISTIC OF THE CZECH COUNTRYSIDE DEVELOPMENT BASED ON LOCAL POPULATION ACTIVITIES AND ATTITUDES

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### ABSTRACT

Our paper tested the role of local population in development of rural municipalities. We focused especially on attitudes and general characteristics of people and tried to answer the question to which extent is the success of village development connected with the kind of people living there. In other words, determining the role of cultural and social capital in rural development. Presented results are based on work carried out by a research team within the three-year project entitled "Countryside as a Space for Living or just a Space for Surviving", supported by the Czech Ministry of Agriculture<sup>1</sup>. We analyzed statistical data from a fifteen-year period (1995-2009). From the rural area with more than 6,000 villages that fit to OECD definition, villages from sub-urban zones were excluded, leaving an area with approximately 4,500 villages. We decided that demographic development would serve as a main indicator of village prosperity - the increasing number of population during our analyzed period. Four thousand villages were statistically divided into five groups in terms of growing or decreasing number of population due to a different level of combination of two factors - rate of population growth (crude rate of natural increase) and rate of migration (crude rate of net migration). One thousand respondents, from one hundred villages selected at random, were asked about their life conditions in their village. The results we gained partly confirm our hypothesis that the role of cultural capital is not negligible for determining the type of development.

Key words: Rural development, local population, cultural and social capital, rural area, villages, municipality

## INTRODUCTION

The period 2007-2013 is characterized by stressing the common strategy for rural development for the whole EU. The main goals of this new common EU strategy are imported into national states policy through national strategic plans. In spite of common political documents for Europe and its rural development, there still exists a free space for municipalities and rural regions in terms of their own way of development.

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There is often a situation where the municipalities with the same conditions in terms of external factors, such as accessibility, infrastructure and financial resources, achieve quite different results in terms of municipality development.

Our research attempts to answer the question; to what extent the successfulness or ineffectiveness of the municipality is influenced by the people living there. The analysis is based on the assumption that it is mainly cultural and social capital which decides how the municipalities' resources are used.

### A typology of rural areas - cultural and social capital

In the literature, there can be found different approaches to defining rural areas and their typology, using a variety of quantitative methods - from simple applications based on a few characteristics of rural areas, to complex models where the rural typology is based on a large number of different characteristics. Each of the approaches used has certain limitations, at least in relation to the purpose for which this definition was processed.

The classification of rural areas cannot be made without the awareness of the dichotomy city – rural areas, which is perceived by many authors rather as a kind of continuum (see e.g. Cloke, 1977). Some authors have studied the influence of large urban areas on their history . In this context, the term "urban shadow" was used (e.g. Green, 1971; Healey, Ilbery, 1985; Huigen, Völkers, 1991) to express the various ways in which the effect of urbanization spread further beyond the built-up areas, which represents the important dimension of any typological classification of rural space.

Most of the published typologies have used the multivariate statistical methods which usually process the data from the addition. A well-known example is the Cloke index of rural areas, formulated using the method of principal components which, in England, led to distinguishing four connected zones - from the problematic remote areas on the one hand, to rural areas suffering from the extreme urban pressure .

OECD distinguishes three types of regions according to the proportion of population living in rural municipalities (OECD, 1994):

• **predominantly rural areas** with a share of more than 50% of the population living in rural municipalities

• **significantly rural areas** – where 15% - 50% of the population lives in rural settlements

• **significantly urban areas** – less than 15% of the population living in rural settlements.

The corresponding attitude of the EU (Eurostat) is based on defining the degree of urbanization, according to which EU regions are classified into three groups:

• **densely populated areas** – groups of neighbouring municipalities, whose population density exceeds 500 inhabitants per 1 km<sup>2</sup>, and total population of this area is at least 50 000 inhabitants

• **middle areas** – groups of municipalities, each with a population density below 100 inhabitants per 1 km<sup>2</sup> and they are not the part of the densely populated areas. Another condition is that the total population of the area must be less than 50,000 inhabitants, or must be contiguous with the densely populated areas

• **sparsely populated areas** – groups of municipalities that are classified neither as densely populated or as middle areas (Rural Development, 1997).

In the Rural Development Programme of the Czech Republic for the period 2007 - 2013, the methodology of the OECD has been used for the classification of rural areas. In the Programme, the rural areas are divided as follows:

• **suburban areas** – rural municipalities in the urban areas or narrowly defined urbanized areas (with more than 50,000 inhabitants)

• **remote rural areas** – including particularly the peripheral areas, i.e. the areas with unfavourable socio-economic characteristics of population and settlement

• intermediate areas include the rest of the Czech Republic.

In 2008, the Czech Statistical Office (Variations, 2008) defined eight possible approaches to the definition of rural areas in the context of the available data bases, that can be useful for monitoring the changes in rural development.

Another typology was created by Radim Perlín (1998) based on a specific historical development and current socio-economic indicators.

The author himself (Perlín *et al.*, 2010), however, mentions the problematic nature of such created typology, caused by the limited data set. We should not, therefore, ignore the currently created typology entitled the Regional differentiation of rural municipalities in the Czech Republic: disparities and development opportunities. Eight types of rural areas in the Czech Republic were identified based on the development potential.

For our research it was very important to identify cultural and social capital. Iravani (2010) states that social capital currently plays a more important role than physical and human capital, and networks of collective relationships are supported by people and organizations. In absence of social capital, other capitals lose their effectiveness and without social capital, running paths of development result in difficult and uneven cultural and economical evolution.

According to Coffé and Geys (2006) social capital has a supporting effect on various social phenomena such as economic and institutional performance. Their results show that, after controlling various socioeconomic characteristics of the municipality, income inequality is not significantly correlated with the municipality's level of social capital. They do find a significant negative relation between social capital and the number of nationalities within a municipality.

Despite these positives, it remains slightly sceptical about Portes (1998), because "there is little ground to believe that social capital will provide an instant remedy for major social problems, as promised by its bolder proponents".

The majority of texts examine cultural capital in relation to the role of cultural capital in class formation, from a historical perspective in relation to family, embodiment and education – for example the more recent Karadag (2009), Seoyong and Hyesun (2009), Werfhorst (2010) and more. A partially different view of the capital is offered by Xu and Song (2011), who note that culture of entrepreneurs is also a sort of capital and is the most important non-economic element for economic growth of enterprises, with a function that can't be ignored in economic running.

### HYPOTHESES

Our research team tested a hypothesis that local population (cultural capital) and its activities play a crucial role in the success of rural development.

# METHODOLOGY

## Specification of rural areas

Rural municipalities of the Czech Republic were defined according to the commonly used OECD criteria (population density below 150 inhabitants/ km2, population less than 2000 between) in a period 1995- 2009.

• From the group of all municipalities there were excluded communities in suburbanized zones

• The group of rural municipalities were included these categories:

"stable rural areas" – municipalities meeting the modified criteria of OECD both in 1995 and in 2009

"emerging rural areas" – municipalities that fit within the criteria of OECD only in 2009. Such a set is formed by 3701 municipalities in the CR see Figure 1.

# Fig. 1: The definition of rural areas



Source: (own processing in ArcGIS program)

# A typology of rural municipalities - based on population development (1995 – 2009)

Basic characteristics of population development (chronological means of crude rate of natural increase and crude rate of net migration) were used to divide the whole set of rural municipalities into clusters with similar demographical characteristics. Application of the demographical criterion mentioned above formed 5 different groups of municipalities in terms of population development in the period 1995 - 2009. These groups were selected by using a cluster analysis based on the chronological means of crude rate of natural increase and crude rate of net migration. These groups were tentatively named as follows:

- 1- "municipalities gaining from migration"
- 2- "municipalities losing to migration"
- 3- "municipalities naturally shrinking"
- 4- "municipalities significantly gaining from migration"
- 5- "unstable municipalities"

| Cluster | Number of<br>municipalities | Area   | chpPP95-09 | chpMS95-09 |
|---------|-----------------------------|--------|------------|------------|
| C1      | 1,369                       | 16,343 | -1.75      | 5.31       |
| C2      | 843                         | 9,946  | -0.67      | -6.39      |
| C3      | 815                         | 8,261  | -7.24      | 0.58       |
| C4      | 628                         | 5,990  | -1.91      | 16.56      |
| C5      | 26                          | 308    | -40.43     | 39.54      |

Table 1: The clusters of municipalities' description

(source: own research data)

**Cluster 1** – tentatively named as "**municipalities gaining from migration**" – represents 1,369 municipalities with small, natural decreases and small migration gains in the long-term (within a few per mile).

Cluster 2 - tentatively named as "municipalities losing to migration" - consists of

843 municipalities, showing negative values of both chronological averages
 Cluster 3 - tentatively named as "municipalities naturally shrinking" – consists of
 815 municipalities showing a long-term natural decrease and low migration gains.

Cluster 4 - tentatively named as "municipalities significantly gaining from migration"- consists of 628 municipalities, showing the trend of natural decreases and significant migration gains.

Cluster 5 - tentatively named as "unstable municipalities"- represents the smallest group of 26 municipalities. This group has an extreme value of natural population decrease, as well as extreme migration gains. As to the insignificant number of municipalities, we excluded this cluster from our further analyses.

In a set of rural municipalities, in which the questionnaire survey was carried out, small municipalities of 200 inhabitants dominate; with 32% of these municipalities in the set. Subsequently, there are relatively equally represented municipalities from 201-500, 501– 1,000, 1,001–1,500, with 19%, 23% and 21%, respectively. The large municipalities (1.501–2.000) represent the smallest group of municipalities, accounting for only 5% of the whole set.

A high frequency of small municipalities in our set is connected both with the tradition of the Czech countryside, and also with the institutional changes of the administrative organization of the state that occurred after the year 2000. These changes enabled the formation of small municipalities. Small municipalities started to separate from the departmental municipalities that were created over 70 years, often by artificial administrative consolidation. The high percentage of small municipalities is demanding in terms of management and administration of state, and often it complicates their access to subsidies. Recently, we have therefore witnessed the integration tendencies, voluntary combining of municipalities into municipalities associations or LAG (Local Action Groups) to allow them easier access to finance.

Figure 2 shows the geographical location of these clusters. It is visible that there does not exist strict division in terms of our clusters location. All types of clusters are more or less spread throughout the whole area of the Czech Republic. This fact supports our assumption that the location need not be the main factor influencing the way in which villages develop.





Source: (own processing in ArcGIS program)

### METHODOLOGY

The chosen methodology is based on characteristics of demographical trends, and analyses of cultural and social capital is a simplification of reality. We do not deny the fact that the prosperity of the municipality is affected by more factors than just the cultural capital and its quality. However, in our analysis we more or less abstract away from other factors. The influence of external factors (hard, objective data) such as municipality infrastructure, services and transport services, are being considered vicariously through the attitudes of the population.

We are aware that it cannot provide a comprehensive answer to all questions, in terms of good or bad development of the municipality. However, the analysis of social capital answers the question of the relation between the development of the municipality and the people who live there.

#### Statistical methods

Given the fact that the vast majority of data was obtained by the questionnaire survey and the structured interviews of the categorical character, appropriate methods for the statistical evaluation were chosen. A statistical analysis of the results was carried out by SPSS program. In the first phase of the evaluation the analysis of relationships in the Pivot Tables was primarily carried out. The dependence/association observed for two variables can be either symmetrical (mutual) or asymmetric (unilateral). The basic test used to detect the interdependence of two categorical characters is the chi-square test of independence.

During the test we follow the subsequent assumption; If two characters are independent, then the distribution of frequencies in the Pivot Table is proportional to the line and column marginal frequencies ni+ or n+j. We test the congruence of the observed and expected frequencies. For monitoring the intensity (power) of dependence various coefficients are used, which usually take the values from the interval (0,1) or (-1,1) when the value of 0

means independence. In other tests the coefficients are zero. If we cannot use the chí-square test in the contingency table, then we used the so called exact tests. For example, Fisher's exact test (see Everitt, G., 2001).

### Sociological methodology

To gain more information about the development within our clusters of villages, we required an indicator of *chronologic means of crude rate of natural increase and crude rate of net migration*. We completed our research with a questionnaire survey, targeted at the rural population.

The questionnaire survey was conducted by Agency FOCUS in autumn 2010. The four clusters of villages mentioned above were used as a basic template for survey. The total number of randomly selected villages was 100, with 10 respondents in each village. One thousand respondents from one hundred randomly selected villages were asked about their life conditions in their village in a broad sense (see Figure 3). The data gained from the questionnaire survey was used as a source for analyses of different aspects of social and human capital, among our four defined clusters of villages.

## Fig. 3: A map of addressed villages



Source: (own processing in ArcGIS program)

Our questionnaire consists of two main groups of questions – The first part is focused on the main characteristics of local population, their personal relationship to the village in which they live, and their activities in the municipality (it contains the types of questions dealing with engagement to societal life of the village, willingness to help their village and interest in activities and finances/resources of the municipality). The second part of questionnaire considers valuation of the village, attitudes and perceptions of inhabitants as regards the quality of life within their village.

# RESULTS

# **Characteristics of rural population**

Age: The municipalities' citizens aged over 15 years participated in the questionnaire survey. The residents were divided into three basic groups of the following age structure: 0-14 years, 15-64 years and over 65 years. The whole data set consists of a group of respondents aged 15-64 years, which represents 83.8% of the total number of respondents.

**Education:** The educational composition of our sample is typical for rural areas, where there is the low number of university graduates and more people with secondary education and secondary education with school-leaving exam (A-levels).

|   | Cluster |      |      |      | All            |
|---|---------|------|------|------|----------------|
| The highest level of reached education  | 1       | 2    | 3    | 4    | municipalities |
| Primary education                       | 13.1    | 16.7 | 14.1 | 12.4 | 13.8           |
| Secondary education without school-     |         |      |      |      |                |
| leaving exam (apprenticeship)           | 59.0    | 53.3 | 54.8 | 52.9 | 55.9           |
| Secondary education with school-leaving |         |      |      |      |                |
| exam                                    | 25.4    | 26.7 | 25.2 | 27.1 | 25.8           |
| University degree                       | 2.6     | 3.3  | 5.9  | 7.6  | 4.5            |

### Table 2: Education of respondents in the clusters (%)

(source: own research data)

**Type of economic activity:** Another indicator, which could be considered as important in terms of the municipality development potential, is the type of economic activity within the population. It can be assumed that people who develop independent business activities could act as the developing potential for the municipality, which creates jobs and contributes to economic development.

From Table 3 it is clear that only 9 % of people run their own business. Most people are employees (45%), another large group are retired people (23%). The proportion of unemployed, which is about 9%, exceeds the national average, which in 2010 was 7.3% (CSO). Housewives and students form the minority groups; both groups account for 7% of the total number of respondents.

| Table 3: Type of economic activity (% within the cluster) |
|---|
|---|

|              |      | All  |      |      |                |
|--------------|------|------|------|------|----------------|
|              | 1    | 2    | 3    | 4    | municipalities |
| Entrepreneur | 11,0 | 4,7  | 9,0  | 10,6 | 9,4            |
| Employee     | 43,1 | 48,0 | 42,4 | 50,0 | 44,8           |
| Unemployed   | 7,4  | 6,7  | 10,3 | 10,0 | 8,6            |
| Retired      | 22,3 | 28,7 | 26,9 | 18,2 | 23,9           |
| Housewife    | 7,9  | 5,3  | 5,5  | 6,5  | 6,6            |
| Student      | 8,2  | 6,7  | 5,9  | 4,7  | 6,7            |

(source: own research data)

A higher than average percentage of entrepreneurs is present in clusters 1 and 4, which contain approximately 11% of entrepreneurs. The representation of entrepreneurs corresponds with our inclusion of these clusters as the clusters gaining from migration, thus are potentially progressive. As for employees, the situation is different; only cluster 4 has the largest percentage of people in employment.

#### Membership in associations, societies, clubs, companies

The question of membership in clubs/associations was included in the questionnaire to provide an indication of the intensity of community life and neighbourly relations in the municipality. Although "club" activities themselves are not related to the economic community activity, they create good preconditions for its development. People, who actively participate in social life as amateur actors, fire fighters or in football clubs, are considered well-functioning members of society, which can be reached and addressed if there is a need to decide on something important within the municipality.

The structure of the clubs and associations in individual clusters is given in Table 4. It shows that in all clusters there is the highest membership in the fire brigade

The second and third place is divided between huntsmen (with 72%) and sportsmen with 62%.

|                                    | Cluster |      |      |      |
|------------------------------------|---------|------|------|------|
| Club/association/company           | 1       | 2    | 3    | 4    |
| Huntsmen                           | 93.3    | 62.7 | 57.9 | 58.2 |
| Fire brigade                       | 100.0   | 93.3 | 94.1 | 83.5 |
| Women's union                      | 25.9    | 15.3 | 6.6  | 23.5 |
| Patriots (baráčníci)               | 4.9     | 5.3  | 3.1  | 2.4  |
| Beekeepers                         | 33.8    | 13.3 | 24.1 | 20.6 |
| Sportsmen                          | 86.7    | 52.7 | 31.7 | 70.6 |
| Small breeders                     | 20.0    | 15.0 | 10.0 | 6.1  |
| Other clubs/associations/companies | 28.8    | 57.7 | 36.4 | 32.0 |

 Table 4: The activities of the clubs/associations/companies in clusters (%)

(source: own research data)

The value of Pearson chi-square statistics is 136,165 which is by the 21 degrees of freedom larger than the critical value of 32,67. Using a chi-square test of association on the significance level of  $\alpha = 0.05$  we identified significant differences among clusters in the activities of the clubs/associations/companies.

### Interest in community activities

Another set of questions represents respondents' interest in municipality's activities. Respondents were asked whether they were members of the local board, whether they are familiar with the results of the meetings, if ever they have attended these meetings and whether or in which way they are informed about the municipal budget, or commented on it.

All of these questions relate to the interests of community in municipality leadership, plans and implementation of its development, including funds and their utilization. We can

see relatively little activity of citizens in all clusters. It is a contrasting situation in comparison with the question dealing with voluntary club activity. Either people are active in their club membership there, or are more reluctant to participate in official regional authority.

**Membership in the local board**: The structure of the answers to the question whether respondents have ever been a member of the local board, for the whole sample, is shown in Figure 4. Eighty-two percent of all respondents from all municipalities have never been a member of the local board and have never stood in municipal election. The only exception are small municipalities, where people take turns in their membership in the local board (See Table 5).

**Monitoring and participation in local board meetings:** The respondents' answers show little interest in public activities of the municipality. Only 19.7 % of all respondents regularly monitor the local board meetings, 40.5% occasionally and 39.80 % never.



Fig. 4: Membership in the local boards - selection (%)

This low interest in local board meeting or even a membership in local authority is the same for all clusters; only clusters 3 (naturally shrinking municipalities) and 2 (municipalities losing in migration) are slightly different. There are small municipalities, where people take turns in their membership in the local board (See Table 5).

<sup>(</sup>source: own research data)

|  | Cluster |      |      |      | All            |
|--|---------|------|------|------|----------------|
| Answer                                       | 1       | 2    | 3    | 4    | municipalities |
| I am a member                                | 4.6     | 4.7  | 12.4 | 7.1  | 7.3            |
| I was a member                               | 4.9     | 12.7 | 9.7  | 10.0 | 8.3            |
| I have not been a member and I am not a      |         |      |      |      |                |
| member, I have stood in the election         | 3.6     | 4.7  | 5.9  | 3.5  | 4.4            |
| I am not a member, I have not been a         |         |      |      |      |                |
| member, and I have not stood in the election | 87.2    | 80.7 | 73.4 | 80.6 | 81.1           |
| 11.)   |         |      |      |      |                |

 Table 5: Membership in the local boards in individual clusters (%)

(source: own research data)

The value of Pearson chi-square statistics is 394,63 which is by the 9 degrees of freedom larger than the critical value of 16,92. Using a chi-square test of association on the significance level of  $\alpha = 0.05$  we identified significant differences among clusters in the opinions related to membership in the local boards.

### Citizens' relationship with the municipality

Respondents expressed their personal relationship with the municipality, in which they live, by means of responses to three questions: reasons why they live in the village, and whether they are willing to help the municipality.

To the question "You live in the municipality because..." almost half of the respondents answered that they were born in the village (most of them in cluster one, municipalities gaining from migration - 53.3%). Less than one-third of respondents in all clusters stated, as the second most common reason, that they came there with their wife or husband and were married into the municipality. The structure of answers to this question can be seen in Table 6.

|   | cluster |      |      |      | All            |
|---|---------|------|------|------|----------------|
| Answer  | 1       | 2    | 3    | 4    | municipalities |
| I was born here   | 53.3    | 44.7 | 48.3 | 46.5 | 49.4           |
| I was married into the municipality                         | 26.7    | 32.0 | 29.0 | 25.9 | 28.0           |
| I chose the municipality as a place<br>where I want to live | 18.2    | 23.3 | 15.9 | 21.8 | 18.9           |
| I have no other choice                                      | 4.4     | 8    | 4.5  | 6.5  | 5.3            |
| Other reasons   | 3.1     | 5.3  | 3.8  | 2.4  | 3,5            |

 Table 6: Reasons for living in the municipality (%)

(source: own research data)

The value of Pearson chi-square statistics is 409.80, which is by 12 degrees of freedom larger than the critical value of 21.03. Using a chi-square test of association on the significance level of  $\alpha = 0.05$  we found out significant differences among clusters in the reasons for living in the municipality.

**Helping the municipality:** The structure of the respondents' opinions to the question of whether they are willing to help the municipality in which they live, can be seen in Figure 5 (answers of all respondents) and Table 7 (answers in individual clusters)

Figure 5 describes the overall situation of willingness to help the municipality. Respondents were offered several options to help the community: The findings again confirmed that respondents are not interested in working for the local board. Almost 70% of all respondents said that their help to the municipality is not associated with the work for the local board. An almost equally high percentage of negative responses can be seen with financial aid for local clubs and community events. There is a much better relationship with the direct help through temporary jobs - 25% of respondents are already active and 50% are willing to engage in this activity. People prefer direct assistance to financial support.



Fig. 5: Willingness to help the municipality – selection (%)

(source: own research data)

Overall willingness of respondents to help the municipality, without distinguishing the forms of assistance in each cluster, is shown in Table 7. The Table shows that the unwillingness to help is very high in all clusters and the percentage is not too different. Respondents in cluster 2 (municipalities losing to migration) are the least willing to help (61%). The most respondents willing to help (35%) can be found in cluster one (municipalities gaining from migration) The most important, however, is the number of people who have already been helping; the least number of residents already helping can be found in clusters 1 and 2, where they account for <10 percent. The most active people are in clusters 3 and 4. These are completely different clusters, so the willingness and the form of assistance will probably be different in the way of assistance and in motivation.

|                             | Cluster |      |      |      |
|-----------------------------|---------|------|------|------|
| Answer                      | 1       | 2    | 3    | 4    |
| I have been already helping | 9.8     | 9.6  | 12.1 | 15.7 |
| I am willing to help        | 34.6    | 28.6 | 31.6 | 25.3 |
| I am not willing to help    | 55.6    | 61.8 | 56.3 | 59.0 |
| 1)                          |         |      |      |      |

 Table 7: Willingness to help the municipality in individual clusters

(source: own research)

The value of Pearson chi-square statistics is 44.56 which is by 6 degrees of freedom larger than the critical value of 12.59. Using a chi-square test of association on the significance level of  $\alpha = 0.05$  we identified significant differences among clusters in the willingness to help the municipality.

### Assessment of the municipality by respondents

If the rural area/country is to be the place for living, its residents must be satisfied with living there. Determinants of satisfaction may be, apart from other things, such factors as infrastructure, accessibility, interpersonal relationships, and others. The respondents had to assess the priorities of the country life. They were offered some statements about the municipality and they should express the level of their agreement/disagreement with these statements. For easier interpretation, the various factors affecting the attractiveness of rural settlements were divided into two groups of soft and hard factors. Soft factors mostly include the social, cultural, and institutional factors (Bryden, al. 2001):

- personal people's network
- perceptions of the quality of life
- the community of the municipality
- perceptions of the available institutional environment
- how the market works

From the set of offered answers, the following possibilities were included to the "soft" factors: safety, people are able to speak together, promotion of traditions – carnival/ Shrovetide etc., closeness of countryside, there is better water than in the city, the air is healthy, encouraging tourism, there is a healthy environment, there are good neighbourly relations, the forest is close. The degree of respondents' identification with soft factors in individual clusters is illustrated in Figure 6.



Fig. 6: Assessment of the municipality by respondents - soft factors (%)

(source: own research data)

The value of Pearson chi-square statistics is 92.49, which is by 6 degrees of freedom larger than the critical value of 12.59. Using a chi-square test of association on the significance level of  $\alpha = 0.05$ , we identified significant differences in respondents' assessment of soft factors of municipality development.

Hard factors represent material factors and natural resources, population, investment, infrastructure, and economic structure (Maříková, Majerová, 2005):

- Civic amenities/public facilities (school, post office, etc.)
- Cultural, recreational, sports facilities (cinema, swimming pool, gym, playground)
- Technical infrastructure (water supply, sewerage, gas, sewage)
- Accessibility of transport (bus stop or train),
- Shop and services (shops, snack bars, kiosks, restaurants).

Within the set of offered answers to the "hard" factors, the following options were included: You can use the public library and the Internet; there is opportunity for sports; there are good conditions for young people to start in life; there is some opportunity for those who want to do business; there is affordable housing; there are good services; there is a good connection with the city; there is good medical care available; there is the possibility to build a house; there is a possibility to buy goods for daily use; I can find a job there; there is a possibility to spend spare time actively. The degree of identification of respondents with hard factors in the clusters is shown in Figure 7.



Fig. 7: Assessment of the municipalities by respondents – hard factors (%)

(source: own research data)

The value of Pearson chi-square statistics is 644.32, which is by 6 degrees of freedom larger than the critical value of 12.59. Using a chi-square test of association on the significance level of  $\alpha = 0.05$ , we determined significant differences in respondents' assessment of hard factors of municipality development.

The individual clusters differ in the evaluation of "hard factors". In clusters 2 and 3 (municipalities losing to migration and municipalities naturally shrinking) there is a satisfaction rate of 30% and 40%, respectively, while in clusters 1 and 4 the level of satisfaction is around 50%.

In comparison to Figure 6 and Figure 7 we can see that the higher degree of agreement with the level and quality of "soft factors" (social contact, safety, traditions) predominates in all clusters over the assessment of hard factors representing infrastructure etc.

#### DISCUSSION

#### **Employment characteristics**

Employment distribution in the individual clusters corresponds to their characteristic with regard to age, education and demographic trends, expressed by gross measures of migration balance and natural population growth. In the clusters gaining from migration and significantly gaining from migration, which also have a tendency to grow in terms of overall development, there we can find more managers and bigger companies.

### The willingness to help the municipality

Residents' willingness to help the municipality, financially or through direct assistance such as the construction of kindergarten or cultivation of the village etc., is one of the key indicators of identity of people with the place and community in which they live. Voluntary activity of people undoubtedly plays a positive role and helps to develop the municipality. In this case the most important result is the preference of direct support in comparison to monetary gifts. It seems to be a good characteristic of rural community and their relationship with money. Based on the experience from our previous research, elderly farmers in particular did not like to take out loans or mortgages (Lapka, Gottlieb, 2000).

### Level of voluntary activity versus low interest in political and communitarian life

A high level of voluntary activity is a general factor of a rural communitarian way of life; one particular position is that of the fire brigade, as almost every municipality has its own one. Fire fighters are sometimes referred to as the mayor's right hand by the mayors themselves. It is a well-organized unit that can be used in the municipality for many practical activities.

A high level of voluntary activity in clubs and associations differs strongly from the passivity as regards the help to municipal management as a member of local authority. In general the low interest in political and communitarian life, in terms of participation in local authority function, decision making processes as well as the municipality budget, could be interpreted in several ways. The fact that most people do not even attempt to be on the local board shows a certain passivity or laziness of citizens and their unwillingness to take responsibility.

Two reasons appear to be the most probable: either people are willing to trust the local board, or they are apathetic and not interested in the representatives' decision-making. From our own experience from dialogues with mayors of villages, it seems to be the second alternative that could be signed as the main reason of relative political non-activity. Our assumption is confirmed also in terms of the different situation in cluster 3 (municipalities naturally shrinking). This cluster represents small municipalities with older populations and higher frequency of participation in the local board meetings. There are fewer people in the municipality so the participation in municipality authority could be seen as a kind of neighbourly cooperation and a free time voluntary activity, rather than formal sociopolitical function.

### Relation to the place of birth

In all clusters the rural area/ the country is described as an area where people are more tied to the place where they were born. This indicates maintaining traditions and a way of life that has been passed from generation to generation and for newcomers it is difficult to learn. Cluster 4 – municipalities significantly gaining from migration – contains the highest percentage of natives of all residents. This situation is confirmed by the continuity of traditions.

### The role of "soft and hard factors"

In the whole sample the "soft factors" are significantly higher evaluated than "hard factors".

It seems that the level of "soft factors" - culture, traditions and neighbourhood assistance, etc. – does not depend on the economic prosperity of the municipality or on technical infrastructure. It is a phenomenon that is probably a general feature of the rural

life. It refers more to the role of tradition, culture and a different lifestyle in the country, which is most appreciated by people.

As for "hard factors" the link between the prosperity of the municipality and respondents assessment of technical facilities and services is more interconnected. Prosperous municipalities, with the migration gain, which belong to clusters 1 and 4, evaluate the level of technical services and infrastructure significantly higher than the municipalities in clusters 2 and 3, representing small municipalities with dwindling populations.

# CONCLUSIONS

The aim of the research team's work was to test the degree of interdependence of the municipality's viability, expressed as a positive demographic trend, with population characteristics. In other words, to what extent the prosperity of the municipality is related to cultural and social capital. The paper did not address the impact of external parameters such as geographic size and location of the municipality; it just tested the link between community development and internal factors.

It is hard to say that our research totally proved the hypothesis about the significant role of social capital. Some of the basic characteristics like a role of traditionally strong involvement within the rural community, high level of voluntary activities, the preference of direct help instead of financial support, are common features through the whole sample of tested villages. It could be seen as characteristics of the Czech countryside.

But we have found also some characteristics of population which differ between our clusters of municipalities. The main differences include education and jobs. In clusters 1 and 4 representing the municipality gaining from migration and municipality, significantly gaining from migration is a prevalence of higher education and also a higher number of small businessmen. Both of these characteristics were supposed to create a good potential for effective development of the village. People in these clusters are also more satisfied with the quality of technical infrastructure. These villages are prosperous ones, so we could conclude that there exists some kind of correlation between quality of people and the rural development of municipalities. In other words, that the society could play a positive role in terms of development.

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