

The World's Largest Open Access Agricultural & Applied Economics Digital Library

# This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<a href="http://ageconsearch.umn.edu">http://ageconsearch.umn.edu</a>
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

### Vladimír Székely, Daniel Michniak

Institute of Geography, Slovak Academy of Sciences, Štefánikova 49, 814 73 Bratislava, Slovak Republic szekely@savba.sk, geogmich@savba.sk

# Existence and quality of Slovak rural municipalities' websites – the differentiating factor of rural competitiveness

Abstract: In the era of the information society, the existence and quality of the rural municipality's own website is an important factor of its competitiveness. Therefore, the state or regional governments sometimes support the construction of municipality websites. This process is just starting and the utilization of these websites for competitive aims is rather problematic. On the other hand, there are many rural municipality's own websites that are typical products of the enthusiasm of local people and represent the "bottom-up" approach. These websites are very often oriented on improving of the municipality image and competitiveness by the description of the municipality's strengths.

The main aim of this paper is identification of existing websites of rural municipalities in Slovakia. We study the spatial distribution of rural municipalities with their own website and formulate the explanation of registered spatial differentiation by the settlement structure and regional economic performance. The next step is the content analysis of websites with special regard to the elements, which increase the competitiveness of rural municipality for three groups of their potential actors: immigrants, investors (entrepreneurs) and tourists.

**Key words:** rural municipalities, websites, content analysis, competitiveness, Slovakia

#### Introduction

With the increasing facility of travelling, mobility of information and material, ever greater attention is given to the questions of spatial competitiveness from the global, national, regional and local points of view. There are places in all countries that are attractive for tourists, places that entrepreneurs successfully use for generation of profit and places where people like to move in search of a quality dwelling. Towns and regions do compete for mobile investment, population, tourism, public funds and hallmark events such as the Olympic Games. They compete by, for example, assembling skilled and educated labour force, efficient modern infrastructure, a responsive system of local governance, a flexi-

ble land and property market, high environmental standards and a high quality of life (Lever, Turok 1999). But is it possible to talk about competition of rural municipalities and their competitiveness? Can small rural municipalities compete with towns or can rural municipalities compete between themselves?

Situation of rural municipalities compared to that of towns is worse. This fact is reflected in behaviour of their inhabitants, who move out (selective out-migration of young and educated people), but also of investors, who concentrate their economic activities in places with agglomeration benefits. This is the main reason why rural municipalities lose their human capital, and their chances of revitalisation and future socio-economic development are markedly smaller. In spite of this, it is obvious that rural space is not homogeneous in terms of chances of future development (e.g. Varelidis 2003). The most recent statistics about migration or spatial dispersion of economic activities in Slovakia suggest that selected parts of rural space can comparatively successfully compete with towns. It seems that the determinant of the success of a rural municipality is above all its relative geographic position. Increases of rural population and of business activities in rural areas are observed in the proximity of the biggest population centres. Peripheral rural municipalities remain, in spite of their often very attractive landscape potential, markedly handicapped.

However, there are some rural municipalities with unfavourable geographical position, whose strongest feature is their human capital, manifested through the ability of people to make use of the limited local sources and to change drawbacks into advantages. The primary condition for achieving social and economic development is the visualisation of municipality through media. Information about the municipality, its achievements and non-traditional forms of local development must be prepared in an interesting way and distributed either among the selected target group or to a wide circle of interested people. At present, the promotion of relevant information through Internet becomes one of the most efficient. "The website of a city or region is an important means to form initial impressions – positive or negative – based in part on how informative and easy to navigate the site is. Websites are important as a constantly available source of information. They may reduce but not entirely put an end to the disadvantages faced by small or poor regions and the information asymmetries created by smaller staff size and smaller advertising budgets that favour large, rich regions. However, there is little hard evidence on this to date. To compete, all places – large and small – must make the effort to prepare reports and other material to put on their websites, this is a relatively larger burden for small places." (Malecki 2004, 1113). Differences in richness and size exist not only between towns and regions but also between rural municipalities. They can be partially eliminated by the extent and comprehensiveness of information on their websites. It requires, though, not only more intensive efforts but also creativity and innovative thinking of the representatives (mayor) and inhabitants of disadvantaged municipalities which have found themselves (as result of historical evolution) outside the main developmental axes and centres.

#### Aims and methods

The principal aim of this study can be expressed in two points: 1. Identification of own functional websites of rural municipalities in Slovakia and their comparison with the size categories of municipalities, 2. Content analysis of municipalities' websites focusing predominantly on elements that help to promote the municipality in a competitive environment.

Websites' evaluation of various administrative units is not at all rare in the literature. Urban (2002) in his outstanding paper compares twenty official city websites from quantitative point of view (number of webpages) and also analyses their content. The study of Owsiński and Pielak (2004) is another example. They evaluate the existence, contents and functionality of 42 websites of Polish counties (*poviats*) in the Masovia province. It is evident that evaluated geographical units in both studies are not comparable with rural municipalities in Slovakia from the size point of view (according to the last 2001 census, the size of rural municipalities in Slovakia is between 7 and 7,847 inhabitants).

According to the knowledge of the present authors, who contacted several organizations (among them also "Združenie miest a obci Slovenska – The Association of the Slovak municipalities", which supported the ISOMI Project focused on informatization and internetization of the Slovak self-governments), there does not exist any central source that would contain all the existing websites of municipalities in Slovakia. It is the reason why the direct analysis of municipal websites and their content is not possible. The primary and necessary task is the establishment of the database about municipalities that have their own functional website. It meant to find out which of 2,753 rural municipalities of Slovakia has or has not an own functional website.

Primarily, several servers, which offer websites of some rural municipalities, were examined: (http://www.zoznam.sk/katalog/Institucie/Samosprava/, http://www.isomi.sk/ and http://www.obce.info/). In this manner we obtained the reduced list of municipalities with their own websites. Then the search engine of http://www.google.sk/ was used in order to acquire a complete picture about situation. Each municipality was used as an entry and the site presenting an own municipality website were selected. In order to have the municipality registered in the list of municipalities with an own website it also had to be functional. It means that access to its domain had to be available, or it had to have some content. Only independent websites of municipalities were included into the assessment process. It means that also sites that were parts of regional or microregional ones were excluded (for instance: http://www.orawa.sk/, http://www.mkregion.sk/, http://www.panskydiel.sk/, http://www.gemer.org/, http://www.region.novabana.sk/, or http://www.regiontekov.sk/index.php and the like).

As the production of a website is of a dynamic nature, their structure and content change, it was necessary to set a time limit. The resulting database of municipal-

ities with their own website is dated March 2006. All changes made after this deadline were not included into the final analyses.

The following step was to subject the website to content analysis, i.e. examination of the presence or absence of various website elements. Special attention was given to elements that potentially attract in-migrants, investors or tourists. We used the same procedure as Urban (2002), who analysed and compared official websites of twenty cities. It means that data were gathered through access to individual websites page-by-page, starting with the homepage and clicking through the different levels.

#### Results

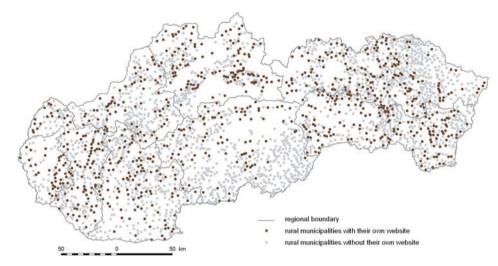
#### Spatial distribution of rural municipalities with their own website

The penetration of Internet into households is very poor in Slovakia, due to insufficient infrastructure (access to broadband Internet) but also the cost both of installation and use. According to the last 2001 census, it is known that inhabitants of only 3.26% of total dwellings declared to possess access to Internet (in spite of the fact that this share increased in the course of the following years, Slovakia still lags behind the advanced European countries). Availability of Internet was higher in towns. Only 1.53% dwellings in rural municipalities have Internet connection.

Spatial distribution analysis of dwellings with Internet connection showed great dependence on the size of municipality and economic performance of the particular region. The bigger the municipality, the bigger the need and demand for the necessary infrastructure which allows operation of Internet. Simultaneously, in case of bigger population concentrations, the share of Internet users is bigger and the economic return of investments into the infrastructure is prompter (economies of scale). On the other hand, not only information literacy but also the purchasing power of the population increases with the economic performance of the region (Grimmes 2000). Consequently, installation and operation of Internet becomes financially more accessible to population living in advanced parts of the country. This knowledge gained in preceding research (Székely 2006) led to formulation of a definite hypothesis. It was namely supposed that even the mere existence of the rural municipality websites will show not only dependence on the size of the municipality (the bigger the rural municipality, the more probable existence of its own website), but also dependence between the existence of the rural municipality websites and regional economic performance (the higher the regional economic performance, the more probable occurrence of rural municipalities with their own website).

The chosen method was used in the analysis of own functional websites of 844 rural municipalities with different content and quality. This represents 30.7% of total 2,753 rural municipalities in Slovakia. As no results for other parts of Europe are known that might make it possible to compare with the Slovak rural

area, the definite conclusion whether this share is big or small is not possible. On the other hand, taking into account the present efforts and support from the Government of the Slovak Republic for creation of own municipal websites, it must be said that this process is far from being finished. Fig. 1 brings a comparison of spatial distribution of all rural municipalities in Slovakia against rural municipalities with their own website.



**Fig. 1.** The comparison of spatial distribution of all rural municipalities in Slovakia against rural municipalities with their own website

Distribution of rural municipalities with their own websites is not even in Slovakia. With considerable generalization, analogy can be sought with distribution of job opportunities in the country. It seems that spatial differences in existence of rural municipality websites copied those related to creation of job opportunities. Comparatively extensive compact territories with rural municipalities exist which do not present their own website on Internet. It is the territory of the north-eastern Slovakia and the central part of southern Slovakia. Both territories can be characterized by below-the-average size of rural municipalities and a very unfavourable transport accessibility, which makes them typical peripheral regions with high unemployment rates. The biggest concentration of rural municipalities with their own website is located near two metropolises of Slovakia – Bratislava and Košice.

A slightly different view of spatial distribution concerning rural municipalities with their own website emerges when the relative indicator – share of rural municipalities with their own website of the total rural municipalities in individual districts of Slovakia – is taken into account (Fig.2).

With the exception of urban districts of Bratislava and Košice (see BA, KE), which could not be included into the analysis for their urban character, the lowest representation of rural municipalities with own website was found not only in the areas of the north-eastern Slovakia (district Medzilaborce – ML) and the

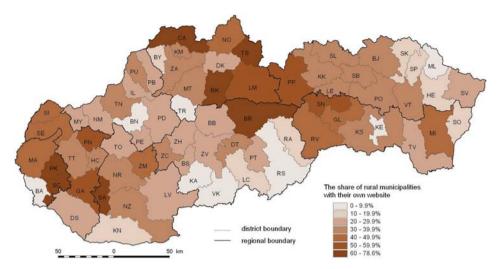


Fig. 2. The share of rural municipalities with their own websites on territories of districts

southern part of central Slovakia (Krupina – KA, Veľký Krtíš – VK and Rimavská Sobota – RS), but also small districts of central Slovakia (Bánovce nad Bebravou – BN and Turčianske Teplice – TR). The latter districts are among the newly formed ones in the new territorial and administrative division of Slovakia of 1996 and as separated peripheral parts of the former internally integrated bigger districts they in fact represent lower hierarchical units with a less important centre. The share of rural municipalities with their own website doest not exceed 10% what in absolute figures represents 1–5 rural municipalities with their own website in the territory of the quoted districts. None of 104 rural municipalities in district Rimavska Sobota, for instance, had its own website in the period of study. These are highly unfavourable results, which are reflected not only in the internal isolation and disadvantage for people living in these municipalities but also in isolation of such municipalities from the rest of the world. In the world characterized by the deepening globalisation, the presence/absence of own website (which can also serve as information source and promotion means of tourism) can (does not have to necessarily) have negative impact on the competitiveness of particular rural municipality which, in turn, will affect its potential of development.

But there are areas where rural municipal representatives do realize the significance of own website as a kind of "window to the world". It is the case of municipalities situated in the vicinity of economic, cultural and innovative centres of the country. Their representatives flexibly adopt new progressive ideas coming from the innovation centres (e.g. ideas about eGovernment), adapt them in a creative manner and apply them to their aims. They cooperate, exchange information and influence each other directly and indirectly. It is generally accepted that the quality of local population (or municipal leader) is always decisive for the establishment and operation of the municipal website. In a certain moment an initiator-innovator must be present (if such person does not exist

in the municipality it is a considerable handicap) who is able to convince his/her immediate neighbours about the beneficial nature of a municipal website. Examples seen in the hinterland of Bratislava, but also other regions of Slovakia, prove that existence of rural municipal websites is in many cases an example of neighbourhood effect in spatial diffusion of innovation.

Districts neighbouring upon the most important centre of Slovakia, Bratislava, represent the first category of districts with high representation of municipalities with their own website. High relative values were found in districts Pezinok – PK and Senec – SC. Rural municipalities in these districts are very closely linked to the Capital. Under the effect of the trend when people search a higher quality of environment to live in, their territory becomes more attractive for construction of family houses and moving-in of the wealthier inhabitants of Bratislava. The in-migrants (new settlers) usually commute to Bratislava and spend little time in their new domicile. This is the reason why they often press on generation of increased quality and amount of information about the municipality and application of progressive methods of management of the municipal assembly. Existence of the municipal website with abundant information has become the standard of the rural municipalities situated near Bratislava.

The second category of districts with higher representation of rural municipalities with own website includes the districts with attractive landscapes and favourable conditions for the promotion of tourism. The share of rural municipalities wit their own website exceeds 60% in some territorial units, usually the villages neighbouring upon the district town. Such districts are situated in the mountainous northern part of the country. The districts with the highest share of villages with their own website are Čadca – CA, Ružomberok – RK, Brezno – BR and Tvrdošín – TS. Rural municipalities in these districts associate their development chances above all with the development of tourism. Representatives of these municipalities, as well as the local business community realize that Internet offers huge opportunities for promotion of their municipalities and activities (Heilig 2003). Even the short-term results show that making the municipality more visible can but also does not have to project into an increased visiting rate of municipality and real income or stabilization of the local population. Attractiveness of the natural environment is the necessary but not sufficient prerequisite for increasing of the visiting rate of the particular municipality. Its inhabitants have to build up an adequate infrastructure that will offer visitors the possibility to spend some time in the municipality (accommodation, catering and cultural offer). On the other hand, some authors (e.g. Malecki 2003) emphasize that installation and operation of the municipal website should not lead to unsubstantiated expectations concerning achievement of the rural economic development.

The relationship between the size category of a municipality and the share of rural municipalities with their own websites

The primary identification of rural municipalities with their own website was important for generation of the necessary database. Apart from analysis of the spatial distribution of such rural municipalities, attention can be also paid to verification of the hypothesis proposing that the size categories of municipalities should correspond to adequate shares of rural municipalities with their own websites, i.e. small municipalities with small shares, bigger municipality with bigger shares, and the biggest municipalities with biggest shares. In other words, it was presumed that the more populated municipality is connected with the higher probability of the municipal website existence. Higher concentration of people can also create the higher pressure on the establishment and operation of the municipal website. Well-educated municipal representatives can (at least) prepare the ground for the realization of this idea. It was also presumed that the effect of distinct regional differentiation of Slovakia will manifest in production of websites. It was presumed that the share of rural municipalities with their own websites will decrease in the direction from the south-west to the north-east depending on economic performance of administrative units of Slovakia. The results that could verify the above hypotheses are presented figs. 3 and 4.

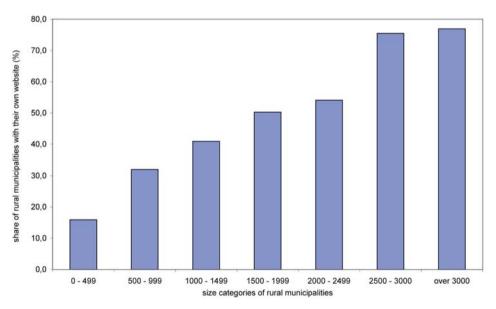
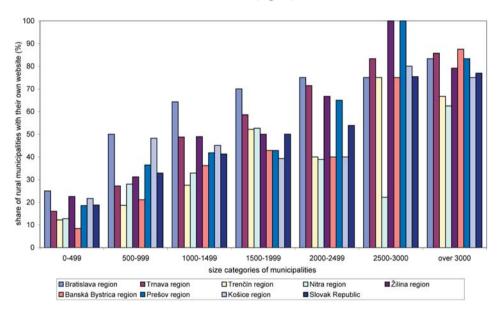


Fig. 3. Size of the rural municipalities in the relation to the share of rural municipalities with their own website

Dependence between size of municipality and existence of the municipal websites has been confirmed. Small municipalities with population not exceeding 500 dominate in the settlement structure of Slovakia and they account for as much as 42.7% of all rural municipalities. At the moment of the last census (2001) only 13.7% of rural population lived in them. These smallest municipali-

ties have mostly no website. It is the consequence of absenting infrastructure and distinctly limited human and financial sources. The older population that dominates in these municipalities resists innovations and moreover, the local self-government assembly has not enough financial sources for establishment and running of the municipal website. Only 187 municipalities had their own websites, what represented only 15.9% of all rural municipalities of the delimited smallest size category.

As fig. 3 demonstrates, the share of rural municipalities with their own websites increases with the increasing size of the municipality. The higher the size category, the biggest the share of municipalities with their own websites: 78.4% of municipalities of the category of the biggest rural municipalities with population over 3000 (91 municipalities) which account only for 3.3% of total rural municipalities of Slovakia (but the share of rural population of Slovakia living in these municipalities is 15.0%) had their own websites. The results have univocally proved the dependence of the existence of municipal websites on the size of the municipality and confirmed our hypothesis. But the search for equal regularities in case of rural municipalities in individual administrative regions of Slovakia would not lead to the same conclusions (fig. 4).



**Fig. 4.** Size of the rural municipalities in the relation to the share of rural municipalities with their own website – regional differentiation

The general rule of the share of rural municipalities with a website increasing with the increasing size category was not observed in several regions, while the greatest deviations appeared in case of medium sized municipalities in the administrative region of Nitra. It must be noted that the presumed spatial dichotomy between the south-western and north-eastern parts of Slovakia in representation of rural municipalities with their own websites that was intuitively

expected was not confirmed for individual size categories. Rural municipalities in administrative regions of Banská Bystrica, Prešov and Košice (east of Slovakia) have a larger share of municipalities with their own websites in comparison to western regions (Bratislava, Trnava, Trenčín, Nitra, and Žilina). The information system ISOMI of the Slovak Republic (Information System of Villages and Towns on Internet – http://www.isomi.sk/) supported by the Slovak government greatly contributes to such situation. This system is oriented to informatization and internetization of Slovak self-governments. Websites of the municipalities that participate in this project were created by the top-down approach in difference from the local activities and the bottom-up initiatives and eventually they helped to reduce interregional differences in the mere existence of municipal websites. On the other hand, it is expected that the municipal representatives will fill the websites with appropriate and useful information. Unfortunately, rural municipalities not always have the available human potential able to use the offered opportunity to present the strengths of their municipality on website. This also is the reason leading to the conclusion that website creation without local initiatives and participation is rather an artificial process that is also reflected not only by the qualitative heterogeneity of websites introduced by the top-down approach, but above all in their reduced content quality.

## Content analysis of rural municipalities' websites

It is not only the mere existence of websites that contribute to increased competitiveness of municipalities but above all their content. Municipalities can offer and create their image and run their proper marketing. However, do the municipal websites offer such information that makes them attractive for potential inhabitants, potential investors or potential visitors? Is this information comprehensible only for Slovak speaking visitors of website or do versions in foreign languages also exist? These questions are basic from the competitiveness point of view of rural municipalities because they practically concern not only the use of Internet for the promotion of qualities possessed by the particular municipality with the aim to strengthen its developmental possibilities, but also for defining the target group they want to address.

The identified websites of rural municipalities were subject to content analysis with the aim to establish their scope and representation of information suitably aggregated into thematic blocks. It was presumed that the number of municipalities, which would want to use their websites as a marketing tool, would be relatively small. It was expected that individual municipal website would provide a general overview about the municipality and the main target group would be the local people.

The information concerning varied themes was classified into 11 blocks. The blocks were analysed for occurrence on individual websites. Let us present the individual blocks:

The first block of information with name Geographical information contains relevant information about the geographical position of the municipality, its population and natural conditions. Almost every municipal website contents this type information accompanied by photographs and/or a map which depicts the arrangement of houses and/or the relative position of the municipality. The block *History* contains information concerning important historical events. which influenced life and formation of municipality. This block also contains information about important and famous persons that were born or lived in the municipality. Information of the third block Self-government is important for the local inhabitants as it provides the link to the municipal office (also quoting its opening hours) and the representatives of the municipality. Existence of important documents associated with the rural municipality (e.g. Spatial development plan of municipality) and its people is the theme of the block Documents concerning the self-government. A very extensive block, which deals with the services offered in municipality is that bearing the title Internal services. It comprises information about shopping, catering and other typical services (post office, bank, hairdresser, etc.), just like information about schools, health care, cultural/religious, and sports facilities. Information about organization of various cultural and sport events, about civil associations and the existence of the municipal newspaper are included in the block called *Life in municipality*. Classification of the municipal websites into the block Language mutation – was simple as it was made according to the existence of at least one other than Slovak version of the municipal website. The information block called Offers for potential immigrants expresses the possibility of in-migration by purchase of dwelling (the most frequently a family house). Information block named Offers for potential investors comprises relevant information for potential entrepreneurs and investors prepared by municipal representatives with the aim to attract their activities and to solve the local (or regional) unemployment problem. Potential visitors of the municipality could feel invited by the information contained in the information block *Tourism*, which consists of description of natural beauty and historical or cultural monuments. The last block with title Accommodation possibilities contains concrete accommodation possibilities offered by the given municipality. It is the very important information from the point of view of longer stay of visitors in the municipality.

The content of individual municipal websites is varied both from the point of view of representation of individual information blocks and from the point of view of their scope and quality. Occurrence of defined information blocks is not even on municipal websites. Some are more frequent, while some appear only sporadically. Fig. 5 brings the representation of individual information blocks on the websites of rural municipalities.

It is obvious at the first glance that there are big differences in representation of individual information blocks. Websites of rural municipalities most often present general information about their history and geographical features. In spite of the fact that in some cases also very specific information appears that gives

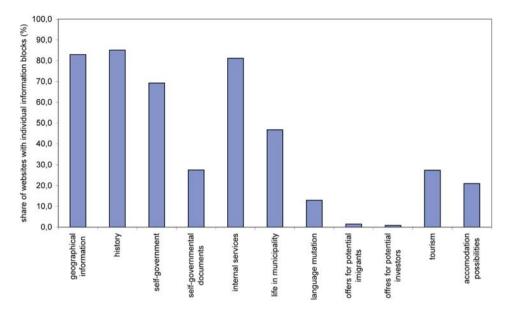


Fig. 5. Share of rural municipality websites with individual information blocks

a detailed image of, for instance, climate (important for winter sports or tourism), nature of these blocks is rather universal and rather oriented to homeland study. They are a kind of introduction into the deeper cognition of the municipality. More than 80% of rural municipalities with their own website contain at least a hint to one or both of these information blocks. In our opinion this value should be even higher and information of geographical character above all should be included in the virtual picture of the municipality.

A high share of rural municipalities with their own website (more than 81%) also dedicate attention to internal services, which are useful for the local inhabitants and visitors. Unfortunately, the widely defined information block contains only partial information about some present services. The complete presentation of all available services as the proof of a systemic approach is rather rare.

Creation of municipal websites in Slovakia is aimed at support of informatization and internetization of self-government and the practical implementation of the e-Government which should enable communication between citizens and civil servants through Internet. This also is the reason why there is a relatively high share of municipalities (almost 70%), that present information about self-administration on their websites. The above-mentioned project of ISOMI oriented at creation of a uniform information database about self-governments and for self-governments emphasizes precisely this type of information. Its authors also declare an ambitious objective: to create "an efficient marketing tool from the websites of rural municipalities".

Publishing of documents concerning the self-government on Internet is an important contribution to communication between citizens and civil servants. Such practice is still not a normal routine in Slovakia. We found attached docu-

ments only in 232 cases, meaning 28% of the rural municipalities with their own website. The cause of such a low value is often connected with the identity of the author of the website: if he/she is not involved in the municipal office and its activities, the self-governmental problems of the particular municipality may be irrelevant for him/her.

From the point of view of social life of the rural municipality, publishing of information classified into the block *Life in municipality* is very important. Population of almost 48% of municipalities with their own website are informed not only about various events in municipalities but they can also discuss and exchange opinion on subjects. The receivers of such information and active participants of discussions are as a rule younger people. According to sociological research the form of communication through Internet is a significant cultural "shock" for older population who normally do not accept it. Such selection of receivers can lead to exclusivity in use of Internet for information of population in the rural area. Therefore, this modern form of communication should accompany traditional information channels (municipal radio) or interpersonal contacts that help to prevent human alienation.

Foreign language versions of municipal websites existed for 109 (12.9%) of rural municipalities. English and Hungarian versions prevailed. English version (61 municipalities) serves for promotion abroad, Hungarian version (58 municipalities) is often chosen in order to inform the local population. Use of the Hungarian language is not primarily intended to attract new investors and visitors from Hungary, but it fulfils the function of providing information in some municipalities for the majority of population – mostly in the south of the country where the Hungarian ethnicity prevails. Other foreign language versions, among which the German one stands out (28 rural municipalities = 3.3%), are scarce. The numbers of other versions oscillate between 1 and 13 (Polish) and it represents less than 2% of the identified 844 websites of rural municipalities.

Even in spite of the spreading suburbanization process, only 12 rural municipalities (1.4% of those with their own website) offer information concerning construction of new houses and flats. Fig. 6 brings the geographic position of these municipalities – the majority of them concentrate around Bratislava (Borinka, Rovinka, Veľký Biel), or in western Slovakia where moving of part of urban inhabitants to countryside is most popular.

Although suburbanization also proceeds in other Slovak towns (Košice, Prešov, Žilina), the neighbouring municipalities do not make use of their websites for promotion of their territory for potential in-migrants. Rural municipalities do not enter the real estate market and do not fully use the chances of revitalisation. Representatives of municipalities perhaps do not fully realize the potential of their websites in attraction of the young and well-educated population for permanent stay. It is believed that the content of the information block *Offers for potential immigrants* will be subject to substantial changes in the immediate future. This will be associated with the new work forms (*telework*) and new

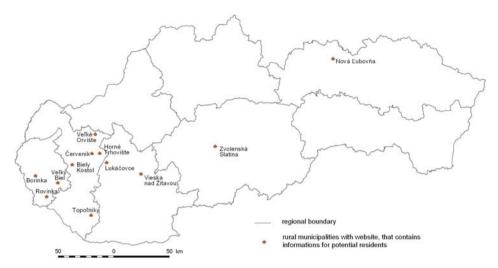


Fig. 6. Rural municipalities with a website that contains information for potential residents

preferences in terms of the living place. Attractiveness of the rural areas with undisturbed environment will increase and the newly created work conditions will facilitate the longer stay even in remote peripheral areas. Promotion of possibilities to move to the rural municipalities through the web will be more relevant in the future.

Relevant information for potential investors, who might create jobs in a municipality (in spite of the distinct decrease of unemployment level to the present about 12%, the importance to create jobs is the most important element of investment purposes) amounted to a minimum on the websites of rural municipalities. Practically only 7 municipalities (not even one percent of total municipalities with their own website) try to attract investors with their business plans within the municipal territories (fig. 7). Mostly, they are invited to industrial parks (Obid, Tomášovce, Smižany, Kechnec), sometimes the possibility to use the existing production facilities is offered – so called brown field investments (Rabča), construction of golf ground (Klenov), or purchase and use of an aqualand park (Vyhne).

Among industrial parks built in the territories of rural municipalities, the one in Kechnec (www.kechnec.sk) is well-known. It is presented in media as a "winner" of the regional competition. Its public relations, including creation and running of the municipal website, have been entrusted to foreign experts. Branch plants of foreign firms exist in the industrial park, which has become almost a synonym of the municipality. The managements of these firms chose Slovakia on the basis of a macro-location decision because of low flat tax (19%) and various forms of direct and indirect support from the Government. The micro-location decision of foreign firms was influenced by the interest of the municipality, whose representatives, the mayor above all, were able to prepare the territory for industrial park with grand enthusiasm (the technical and transport infrastructure,

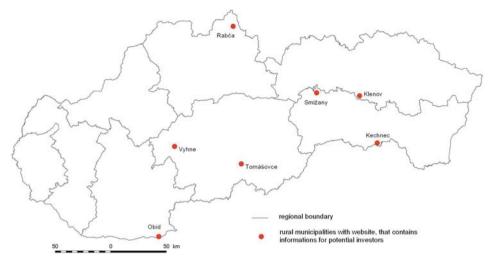


Fig. 7. Rural municipalities with a website that contains information for potential investors

the legal arrangements concerning the ownership of land). Proximity of Košice and cheap labour in the eastern Slovakian region have also played important role. Kechnec is the typical example of what is referred to as the "low-road competitiveness" (Malecki 2004). It means that its developmental possibilities are limited. The greatest danger involved for the future of the municipality lies in spatial flexibility of foreign firms' branch plants. Their relocation to regions with higher state support and lower wages can stop its growth and economic prosperity.

The long period of stressing rural tourism development as *panacea* for solution of problems in the rural area has also manifested itself in the contents of the municipal websites. It was found that tourism as an economic activity provokes perhaps the greatest expectations as regards the future development of rural municipalities. Results have shown that as many as 231 (27.4%) websites out of the total of 844 identified ones contained information concerning tourism (although information about accommodation, which is closely related to tourism, was found only on 177 websites). Regarding the geographical heterogeneity of Slovakia, where not all municipalities have potential for development of tourism, this share is relatively high. Spatial distribution of rural municipalities, whose websites contain the information block *Tourism*, is shown in fig. 8. It is obvious that it covers the main tourist regions of Slovakia.

The contents of websites of these rural municipalities are very different. Some municipalities (above all those where infrastructure for tourism is missing) present only a series of photographs depicting their natural and cultural/historic features of local or micro regional importance. Ambition of such websites, which contribute to the image of the municipality, is to attract tourists at least for the short-term stay in municipality. It often depends on the author of websites (his/her creativity) whether he applies innovative or routine methods, what

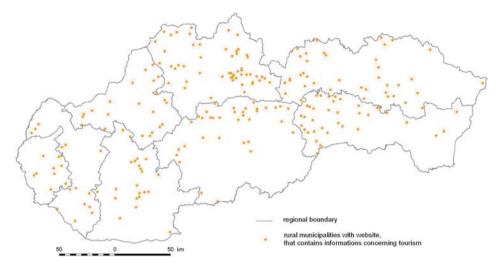


Fig. 8. Rural municipalities with a website that contains information concerning tourism

information is there available for visitors of such websites. Managements of rural municipalities are often passive actors in the process of establishing the website.

There are websites where the tourist information does not dominate; it is immanent. On the other side, there are many municipal websites, which want to attract interest through originality and varied contents of their tourist information block, and also add details about the municipality itself or its environs. One of such municipalities is Dobrohošť (www.dobrohost.sk), situated close to the Gabčíkovo dam. Its information block about tourism includes activities like horse riding, rafting, water sports, fishing, cycling and hiking, but also options to visit the gallery. Various offers of hiring the sport equipment accompanied by prices are also displayed. Regional competitiveness of Dobrohošť is primarily built by its geographic position. It is near the Capital Bratislava, meaning that it enjoys a large clientele desiring to pursue active leisure, what in turn stimulates development of other activities connected with tourism.

The municipality of Ždiar, situated in the sub Tatra region, possesses an extra good quality website, geared to successfully attract tourists. In fact the website and its foreign language versions (English, German, Polish, and Hungarian which is prepared) directly invites (www.zdiar.sk) them. All the monitored information blocks are present and they offer a comprehensive picture of the municipality. The clientele, which corresponds to the languages used in the website, includes also the tourists from the Czech Republic. Regarding accommodation, the facilities for the middle class clientele dominate. Visitors pay a small daily fee, which contributes to the account of the municipality: Part of this money is used for future tourist development of municipality. In case of Ždiar it is possible to talk about the international competitiveness in the context of Central and Eastern Europe countries. Unfortunately, the observed competi-

tiveness is another example of the "low-road competitiveness" (lower prices for offered services than in the surrounding countries decisively help to use the accommodation and holiday facilities).

#### Conclusion

The chosen methodological approach allowed for identification of the existing websites of rural municipalities, being the smallest territorial units with self--government. The identified websites were subjected to content analysis with the aim to find out how are the municipalities prepared to exist and function in the competing environment. Special attention was given to information blocks that should make rural municipalities more attractive for potential immigrants, investors (entrepreneurs) and visitors. We have arrived at the conclusion that above all the presented possibilities for settling in the municipality and starting business activities were neglected by the authors of the websites, or in other words, municipalities did not put sufficient stress on these issues. A considerably higher emphasis was put on increase of their visiting rate but a creative approach to websites promoting the tourism and its facilities in the particular administrative territory of municipalities along with their landscape and cultural/historical potentials is far from being adequate. The image of municipalities on the web is very differentiated and contributes to their differentiated competitiveness. It depends not only on the involvement, enthusiasm, invention and professional skills of authors of such websites, but also finances that the municipal representatives are willing to provide for this purpose. However, the connections between the virtual and real competitiveness of rural municipalities is not still clear. Some research has been done but there are still issues to be examined and the relationship between the existence and quality of municipal virtual presentation and its real regional competitiveness is one of them.

On the basis of our results it is possible only to construct the hypothetical assumption that: "the presence, contents, and quality of the web-based services offered by the local authorities become an important element and indicator of the potential effectiveness and efficiency of such services for the local rural development" (Owsiński, Pielak 2004, 124). Verification, respectively falsification of this statement will have to be demonstrated by further research.

# Acknowledgement

This article was prepared as part of the Project No. 2/6038/26 "Economic performance and competitiveness of localities and regions", funded by the Slovak VEGA Grant Agency. The authors thank the Slovak VEGA Grant Agency for its financial support.

#### References

- Grimes S., 2000, Rural areas in the information society: diminishing distance or increasing learning capacity?, Journal of Rural Studies, 16, 13–21.
- Heiling G.K., 2003, *Information society and countryside: can internet-based systems bring income alternatives to rural areas?* In: Bański J., Owsiński J. (eds.), *Alternatives for European Rural Areas*, European Rural Development Network, 1, 65–79.
- Lever W.F., Turok I., 1999, *Competitive cities: introduction to the review*, Urban Studies, 36, 791–793.
- Malecki E.J., 2003, *Digital development in rural areas: potentials and pitfalls*, Journal of Rural Studies, 19, 201–214.
- Malecki E.J., 2004, Jockeying for position: What it means and why it matters to regional development policy when places compete, Regional Studies, 38, 1101–1120.
- Owsiński J.W., Pielak A.M., 2004, Web-based functionality of Polish self-governmental units and its effectiveness in promoting the development of rural areas. In: Bański J. (ed.). Changing functions of rural areas in the Baltic Sea Region, European Rural Development Network, 2, 119–132.
- Székely V., 2006, *Urban municipalities versus rural municipalities: selected aspects of quality of life in Slovakia*, Europa XXI, 15, IGSO PAS, Warsaw.
- Urban F., 2002, *Small town, big website? Cities and their representation on the Internet*, Cities, 19, 49–59.
- Varelidis N., 2003, *Information society and sustainable rural development*, Euracademy thematic guide series Thematic guide two, Athens, PRISMA Centre for Development Studies.