

# Information technology in rural Hungary: plans and reality

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## Abstract

*Rural areas cover 87% of the territory and are inhabited by 45% of the population in Hungary. These areas have the same problem as most of the rural areas in Europe: migration of the active, well-trained labour force, depopulation, unfavourable age structure, high unemployment rate with critical labour market situation in the small settlements. Information and Communication Technology - if used properly - can serve as a solution to these problems, although there is much to be done in this field. The authors have started to examine the current situation of the basic ICT-indicators in Hungary, with a special focus on small settlements, and they have also given a historical overview on the past years' governmental strategies (especially the National Information Society Strategy), the new National Rural Development Strategy and civic efforts (ex. The telecottage movement) to boost the widespread usage of these technologies, as well as an evaluation of the impact of the aforementioned factors.*

## Keywords

Information technology, villages, information strategy, internet, broadband

## 1. Introduction - rural areas in Hungary

### Hungary - a rural country

87% of Hungary was qualified as rural area in 2003 including 96% of the country's settlements, and providing home for 47% of the total population. These rural areas have low population density, heavy reliance on land as a source of living, and a non-urbanized settlement structure. 36 percent of the population lives in villages. The number of the settlements possessing less than 1 000 inhabitants is over 1 700, and those with less than 500 people amount to about 1 040, in other words, every third Hungarian settlement has less than 500 citizens.

Demographically, the increase in population in these rural areas is low and the unfavourable age structure that is characteristic of them demonstrates the ageing of the population. The decreasing size of the younger generations has resulted in a situation where it becomes harder and harder for young people reaching employment age to produce the sufficient funds that can cover the pension of the older generations. The

imbalance between the genders also seems to become stable: while men dominate in the age group under 40-45, women take over in the older age groups (MARD, 2007).

So, Hungarian rural areas show the same picture that sociologists draw about the characteristics of the declining rural regions' underdevelopment: economic recession (which brings about organizational and institutional dissolutions), underdeveloped life circumstances (income, consumption, infrastructural supply and deficiencies) and the disadvantageous demographic trends, namely the rapid ageing and natural decrease in the number of the population resulting in the fast reduction in the number of the inhabitants of these settlements. Economic trends to date show that one of the unfortunate common characteristics of areas defined as regions manifests itself as increasing social inequality, the root problem being the widening gulf between wealth and poverty. This situation defies human tolerance and is an obstacle to all efforts by social welfare to improve standards of living. (Borsos J- Nábrádi A. 2005).

Information and Communication Technologies (ICT) can contribute to rural economic and social life through numerous applications and reduce the deficit caused mainly by the geographical isolation. By now it has become clear that the success of the information society is very much depending on whether small communities and small settlements can keep their population. With the help of ICT tools rural areas should be able to attract businesses and social and cultural activities, moreover, they should also be provided with the same (or even better) services as the urban population.

## **2. Information technology - a chance not taken**

### **Facts and figures - computers and internet in (rural) Hungary**

According to recent findings of the World Internet Project (WIP, a long-term longitudinal study of the social effects of Internet usage, and digital technology. Hungary joined the project in 2000. The first WIP survey was conducted in 2001. More than 4,000 people are interviewed per annum. The WIP study focuses on both the users and non-users of the Internet.), computer and internet access at home have produced significant growth within the last five years - 49% of the households has computer and 35% of the households is connected to the internet in Hungary (WIP, 2007).

These figures refer to a significant increase as compared to last years' survey: 11% in the percentage of computers and 14% in the percentage of internet connections. Despite this positive trend, the internet penetration in Hungary is still below the European average. In addition to this fact, serious disparities can be found between the settlements of different sizes (*Figures 1. and 2.*).

The difference between the number of households having a computer in the capital compared to the villages is more than 10 percent. The gap is wider if we take a look at internet connections. While in the capital four out of five households having computer also have internet connection, this proportion is only three out of five in case of villages. So not

only the number of computers, but also the proportion of networked computers is lower in the villages.

It seems that “traditional” inequalities are reflected in the penetration of internet - which shows that there is only a small chance to bridge the urban-rural divide with ICT in Hungary.

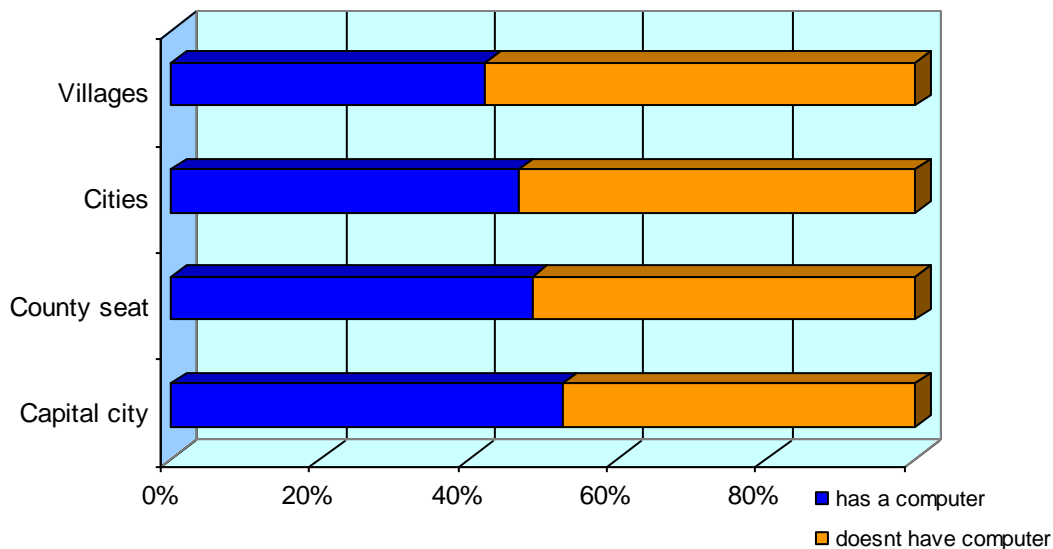


Figure 1. The percentage of households with and without computer in Hungary (source: WIP, 2007)

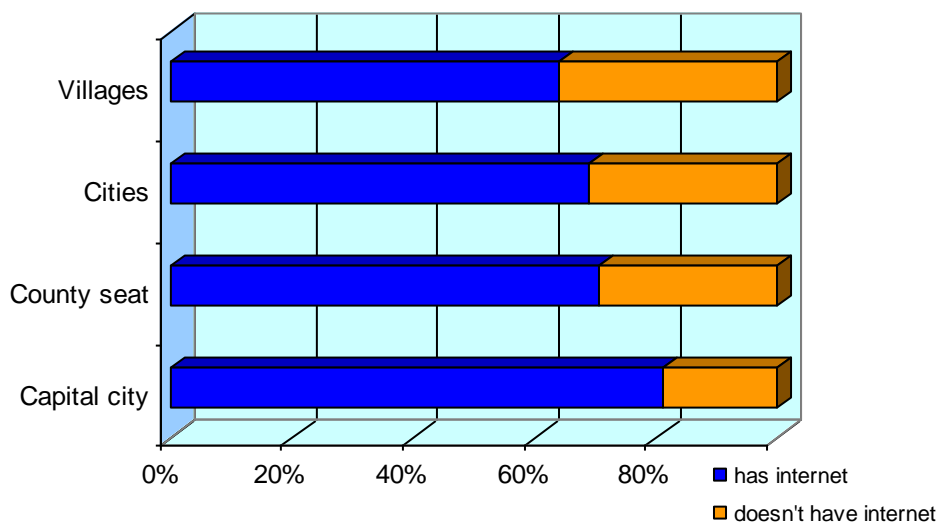
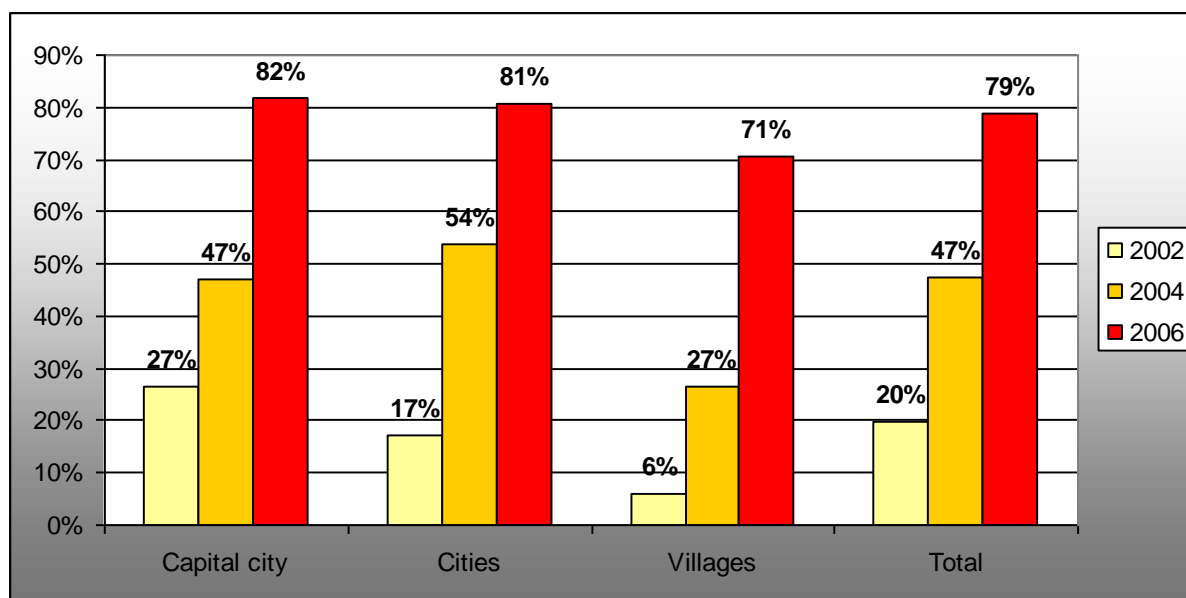


Figure 2. The percentage of households with and without internet connection in Hungary (source: WIP, 2007)

### Hot topic: the broadband as such

The number of broadband (fast, unlimited) subscriptions has been increasing rapidly worldwide in recent years. This is a crucial trend, because broadband Internet access is the basis of numerous applications (e-learning, e-government, telemedicine etc.) that can provide rural areas with the services they need.

Recent years have shown a significant growth in the number of internet connections, i.e. the inner structure has fundamentally changed. As compared to previous years, three quarters of the Hungarian households with internet connection have broadband access, the ratio of broadband access has grown especially in villages (*Figure 3.*). There is a Janus-faced situation: where the infrastructure is given, the predominant majority of the population using Internet has switched to solutions which can be regarded as modern in a domestic relation.



**Figure 3. The percentage of households with internet having broadband connection (source: WIP, 2002-2006)**

It can be said that the privileged group of rural society is becoming an internet user. A similar issue arises in connection with broadband access: as compared to the neighbouring countries, Hungary has a high proportion of broadband access, while the penetration per capita is still low.

It is important to emphasize that there are presently close to 1,000 settlements in Hungary (out of almost 3,200) in which broadband infrastructure is not available, since in these tiny "remote" places no return on investment can be realized so access is not provided. Five percent of the population, i.e. half million people, live in these areas.

### **Policies to make a difference**

There have been several governmental policies and actions to foster the spread of ICT in Hungary. In 2002, the late Ministry of Informatics and Communications has drafted the Hungarian Information Society Strategy (MITS), a national strategy which defined the tasks on visions, plans and actions through which the country can take the path of necessarily modernization (MIC, 2003).

The HISS was also a social programme, focusing on the participation of each member of the society. The strategy divided the fields of intervention the following way:

- Content and services,
- Infrastructure,
- Knowledge and skills
- Legal and social environment,

completed with two horizontal fields: research and development and equal opportunities. Unfortunately the strategy remained weightless and was soon forgotten when (following the 2006 elections) the Ministry of Informatics and Communications closed its doors and the majority of its task was taken over by the Ministry of Economy and Transport.

Since then, there has been no central information society strategy; however there are funds for rural development, mainly in the field of infrastructure. A priority (4.4) in this topic was included in the Economic Competitiveness Operational Programme (GVOP) of The National Development Plan (2004-2006). It devoted HUF 10.48 billion for the support of broadband infrastructure development in poorly developed regions (93 projects) (ITKht., 2007). It helped 527 settlements to get broadband access.

The Ministry will allocate resources for similar projects in the New Hungary Development Plan (2007-2013). The New Hungary Rural Development Plan contains a special programme for farmers (called GazdaNet), in the frame of which they would be provided with PCs as well as the related knowledge.

Involving private companies, the Ministry of Economy and Transport started an awareness raising program (“Netrekész”) in 2008. The market players and the Ministry donate the same amount of money for communication programmes and training. Older people living in rural communities are part of the target audience.

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