ARE RURAL AREAS ABLE TO IMPLEMENT THE ACHIEVEMENT OF THE INFORMATION & COMMUNICATION TECHNOLOGIE (ICT) IN THEIR EVERYDAY LIFE?

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ABSTRACT

This paper focuses on the nature of the "Information Society," its relevance for rural development and models of intervention regarding policies, strategies and approaches for brining people living in rural areas into the Information Society.

The Information Society is having a significant effect on all aspects of economic and social development. It has become increasingly importance as a key economic sector and as a driver for the development of the New Economy. At a regional level, the Information Society is becoming an important element of regional and sub-regional development policy across the European Union.
But it's not only important to understand what rural development is, it's even more important to understand how it works: the process of achieving sustainable rural development.

KEY WORDS

Sustainable Rural Development, Information Society, rural-urban digital divide, Telecottages, Infrastructure, Capacity building

INTRODUCTION

In addressing this issue, we attempt to compliment the theoretical questions with observations in practice. In the first part of the study we define the relevant concepts, briefly trace the changes of the economy and discuss the growth of the function of information. Next, we explain how the ICT has developed in underdeveloped areas. We present, as an example, in detail the special problems of a specific country area based on our own functional observations—specifically the case of a Greek rural area within the confines of the Summer Academy. The topic of the Summer Academy was *Information Society and Sustainable Rural Development.* At the Summer Academy, the attendees took part in study tours to get to know the local idiosyncrasies of the rural area being studied, including to learn about the major income sources in both the primary and secondary sectors, and to learn about the predominant economic activities in the area (agriculture, animal production and fish production).
As participants, we were required to work out an overall plan for the area, identifying the governmental interventions that would be necessary to promote local development in different sectors. We were able to collect primary information on location, during meetings with some individuals in the area. After this we developed a SWOT analysis, and defined a vision and objectives for the development.

MATERIAL AND METHODS

Information has always been a central component of economic transactions. Two developments have contributed to information's increasing importance in economic development: the first is the dramatic increase in the amount of economic activity that is directly related to the creation, processing, storage and dissemination of information. This is shown both in the growth of the services sector, where information is of ten the dominant component of the service being provided, and in the increasingly pivotal role of information in production and business processes in all economic sectors.

The second development is the increasing importance of innovation and technological change in economic development and the emergence of knowledge as the basis for growth.

ICT and rural development

What is ICT? *Information and Communication Technology* plays a vital role in the performance and growth of global economies. Moreover, ICT helps to overcome the geographic, social or personal disadvantages faced by people in rural areas.

The role of the Information Society and its impact on economic activity and social life is felt, and is expected to be felt more strongly in the future in all types of geographical areas--urban as well as rural. But its role and impact differ significantly between urban and rural areas (as well as between different social groups). The basic source of the difference comes from the geographical remoteness of rural areas, with the differences being often more noticeable the more remote a rural area is from urban centres.

Policies are being developed at supranational, national, regional and even sub-regional or local levels, depending on where the powers and resources lie in each country. The Information Society is among the key fields of European Union development policies. This is reflected in a succession of Union policy decisions and initiatives regarding the Information Society. At a national level, most developed countries put the Information Society at the forefront of their development policies and put substantial public funds into actions designed to exploit the opportunities offered by the Information Society and to contain any dangers posed by it.

Policies and interventions at each level "require" the support of policies and interventions at higher or lower levels in order to be successful. In most countries, the scope of intervention in the Information Society at regional and local levels depends greatly on national policies and funding. There is also a need for "horizontal" coordination of policies, e.g. between regulatory policies and funding policies within each level. Thus:

- Regulatory policies for the telecommunications industry at supranational and national levels will establish the environment for the crucial provision of ICT infrastructure and services at the regional or local levels in rural areas.
- Regulations concerning formal aspects of the Information Society, such as the introduction of the electronic signature and the legal validity of electronic documents, may greatly affect the of the ability to exploit ICT for delivering public administrative services to rural regions.

Policies and interventions cover urban as well as rural areas, but the context and the approach are different. Urban areas can exploit the opportunities offered by ICT and enjoy the benefits of participation in the Information Society to a large extent through the market process. The high concentration of population and business users establishes a demand base that attracts ICT infrastructure and services.

By contrast, in rural areas there is a much grater need for proactive policies and interventions that can substitute for the role of the market process.

There are no single best strategies and approaches for promoting the Information Society in rural areas. Optional strategies should reflect the form of the link that is desired between the rural (or peripheral) regions and their related urban (or core) region. This link may be:

- Exogenous. Originating in the core region, and thus outside the rural regions. This model places the emphasis on the propensity of enterprises and service providers in core regions to use advanced communications networks to gain access to assets in peripheral regions, such as labour supply or customers.
- Endogenous: originating in the rural regions. In contrast, this model places the emphasis on the way in which enterprises or households in peripheral regions can use advanced communications to get access to markets or services in core regions.

Digital divide

The social and economic vitality of rural communities has been affected over the centuries by two key characteristics: *distance and sparsity* of populations. Distance has blunted the ability of rural populations to gain easy access to urban services that serve urban markets and to maintain contact with metropolitan cultures. Sparsity of population has affected the quality of services that are easily available to the rural populations. Both in the public and private sectors have seen a progressive withdrawal of many services from the rural areas into towns and cities. This withdrawal has reduced the quality of life in many rural areas and has encouraged people – particularly young people – to move away from these areas.

Geographic distance form urban centres, and sparsity of population, tend to be associated with cultural conservatism and resistance to innovation, limited access to information and lower levels of awareness regarding technological innovations and ICT in particular. Moreover rural areas, unlike urban areas with a concentrated and sizeable industrial and economic activity, may not be able to muster the level of demand for ICT that could attract investment in advanced telecommunications infrastructure that is necessary to exploit ICT at a reasonable, afford-able cost. This is what is known as the "digital divide" between rural and urban areas.

RESULTS

Special problems of rural areas

Problems in rural areas are being recognized all over the European Union and not only in the newly joining countries. The digital divide appears in the same way in Great-Britain and Sweden as in Greece or in the Central-East European countries.

We would like to present the typical problems of the rural areas with the example of a very poor Greek area, Preveza.

Preveza is mostly rural. The area has a GDP of less than 70 % of the national average. The significant economic activities of the area is agriculture and tourism including with agriculture activities taking place in the fertile plain close to the town, accompanied by fish cultivation, and tourism in the scenic costal zone where the service sectors are quite developed.

Approximately 26 % of the Prefecture lives in Preveza. According to the 1991 statistics 91 % of the inhabitants of the Prefecture live in Preveza or its neighbouring settings, the remaining 9 % in remote areas. The statistics show that 3 % of men and 1.6 % of women have studied at degree level (e.g. college, university), and that 32.4% of men and 27.1% of women have attained a basic education. A troubling statistic shows that 11.2 % of women have no education and can neither read nor write. This level drops to 1.5 % in men.

The unemployment rate in the Prefecture of Preveza is 9.31 %, however it has proved impossible to gain access to the figures of unemployment for the town of Preveza itself. In the region of Preveza itself, available figures report that 332 families have no form of earned income.

Special problems of Preveza:
- Unreliable basic infrastructure (water, electricity, telephone, ICT network)
- Low ICT skills
- Traditional style of thinking (mentality)
- Economy is based on agriculture and processing agricultural products
- Majority of employees engaged in primary sector
- Emigration of young people
- High rate of unemployment
- Sustaining of status quo, not improving
- Centralized structure of management/decision making
- Digital divide, digital exclusion

Traditional way of thinking
The main problem is the mentality of people living in rural areas. Generally these people don't have ICT-skills because their life revolves primarily around agriculture. With the usual rate of unemployment as high as it is, the younger generation moves to urban areas. After university or collage they don't return because they can't find their right place back in the "rural society". On the other hand the older people don't become acquainted with computers.

Law institutional background
To have a well-developed Information Society we need to have properly operating institutions. Those people who cannot afford to have an own computer and internet connection at home, they can use institutions like telecottages to reach the World Wide Web and to exploit the new possibilities given by the information age. But these institutions are not ready for it.

As a general rule we can declare that the common institutions in rural areas are ill-equipped and have many financial problems. The target audience of these establishments is the young generation.

We often hear the term of "e-government", but we know that many important conditions are missing, especially in rural regions. The principal barrier is the lack of institutional and infrastructural background, the traditional approach and the failure of appropriate qualification.

ICT to improve rural areas
Telecenters or telecottages: Telecottages have helped to promote the penetration of ICT in many local communities across Europe and to decrease the digital divide that has appeared in the central European countries because of the low level of investment in even basic telephone services in these areas during the socialist period.

Most telecottages were established as civil institutions and provide information about economic, cultural, educational and public utility activities of the closed area.

Telecenters are very effective when they offer training programmes where people can become ECDL certified in operating computers. It contributes to reduce the rate of unemployment,

creates opportunity for those who take part in the training to get back to work, and makes them able to do telework.

The civil organisations can also give a hand in educating and helping the people to make ICT a part of their everyday life. These organisations are close and can connect them to ICT.

Nowadays the terms of *e-agricultural and e-agrobusiness* are very strange in the most of rural areas. To clarify this expressions, *e-agricultural and e-agrobusiness* mean using information systems in the agricultural field. For example, with the help of on-line systems farmers can get special information to simplify their agricultural activities, like the central database for animals, or price information for farm products, on-line feed ordering or selling farm products.

In average the use of the above-mentioned opportunities is low because the farmers don't have computer and internet-location at home, and also wouldn't trust on-line selling because they believe in traditional commercial relationships.

Nowadays all these tools seem to be only distant, future applications, because ICT isn't a generally prevailing achievement. But if the people don't learn to use ICT now, they will become increasingly more separated from urban centres.

DISCUSSION

What should we do to implement ICT into everyday life?

The government and policy-makers have a very important role in giving people the necessary support. They are to create the right conditions for education and teaching and help people understand how important ICT is for their own success and future.

To promote this cause, there is a need to create the appropriate support systems wherein people can learn to use computers and the internet, and thereby, learn to find the right way to prosper their life.

There is a need to develop an innovative local government system that emphasizes innovation and networking.

Civil organisations play an important role in development of above-mentioned support-system. These organisations operate close to the people and know their personal problems. So the NGOs are able to provide face-to-face learning and support the bottom-up initiatives.

But the telecommunications operators also have a challenge to consider and service rural areas. These actors first service urban areas, concentrating on the largest centre of economic activity and potential customers because of high investment costs. So rural area's servicing requires specific policies.

It will be, of course, a long process for the "new wave of thinking and behaviour" to evolve.

CONCLUTIONS

The role of the Information Society has become increasingly important and is expected to become more so in the future in all types of geographical areas – urban as well as rural. But the difference between urban and rural areas is significant (as well as between different social groups).

The Information Society is having a significant effect on all aspects of economic and social development. It has increasing importance as a key economic sector and as a driver for the development of the New Economy.

The benefits which may flow from the Information Society are increasingly recognised, but so are the dangers and risks, including digital exclusion, the risk of alienation, and threats to privacy. All this has led to the emergence of the Information Society as a central policy field.

Information is a significant resource, nowadays and the possession of information is not only a benefit, but also an existence question, especially in rural areas.

Unfortunately there are very few people who are using ICT, even in less rural areas. But if we want under-developed areas to fall in line with the urban areas, we must work out a development strategy and a suitable supporting system.

The government must subsidize the agricultural population with specialised implements and motivate people to use the approaches of ICT.

To bring ICT to its appropriate role, there is a need to create several developing, supporting and educational programs, and of course a special marketing-activity. Most of the agricultural people can't use the opportunities of ICT, so these ICT achievements need to get access to them.

People need to understand how important a role ICT could play in their everyday life. Although this is a "new way of living", it doesn't mean that they have to give up their traditions and specific value-system (in which at the top of the list is the family, not the economical advance). But if the people keep aloof from these new advances the distance between rural and urban will only expand.

With suitable supporting policies, like education or financing aid, the development policies need to support bottom-up initiatives because with them, the capacity of rural areas could be extraordinarily raised. So we mustn't forget the "people-power" of rural areas.

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