



European Rural Development Network

## Knowledge as a factor of rural development

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### Rural areas and development – vol. 10

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#### Introduction to the volume

This volume of Rural Areas and Development ERDN series has a special character while proving sustainability of European Rural Development Network idea. We are proud of this 10th volume that documents decade of international cooperation in the field of rural development particularly in Central-Eastern Europe. The effort of network members in investigation of rural processes across Europe provides extensive knowledge needed to understand what is the meaning of agricultural development. The originally agriculture sector orientation is strongly moving towards rural space policies. Thanks to broad multinational and multidisciplinary approach ERDN manages to capture main streams and regionally specific processes related to changing paradigms of rural development and provides solid base for policy and strategic planning formulation.

The tenth volume of the series "Rural areas and development" consists of 12 chapters proposed and discussed during the ERDN conference hosted by Poznań University of Life Sciences in Zielonka, October 2012. The current EU development strategy, "Europe 2020 - A strategy for smart, sustainable and inclusive growth" underlines the role of knowledge in stimulation of economic growth and in increasing employment. Namely the smart, sustainable and supporting social inclusion growth was added to the three main priorities of the economic growth of Europe. The concept of smart development includes the continuation of the need for strengthening sectors of economy based on knowledge and for promoting the innovation. On the other hand the sustainable-development priority has underlined the need to transform the economy towards technologies more friendly to the natural environment indicating direction of agricultural sector development.

Priorities in the area of social development would stress the need for economic development towards high employment, and secure social and territorial cohesion that is directly linked with the rural and urban disparities. In the strategy the process of the transformation of the European economy through the implementation of energy- and material-efficient technologies works as an engine for economic growth. However the differences between stage of development between rural areas indicate different need for knowledge and its transfer. The ERDN community possesses extensive knowledge of rural processes that would support effectiveness of knowledge transfer to food sector **6** and rural areas. Different scientific backgrounds and cross national origin of ERDN experts provide complex and interdisciplinary quality solutions. Submitted papers related with the process of knowledge transfer to food sector and rural areas provide us evidence that we have interesting research in this field.

The monograph begins with a chapter by Adam Wasilewski, Zbigniew Floriańczyk and Marek Wigier, investigating the ICT potential in the process of improvement in competitiveness of rural areas. On the basis of the case study conducted in Poland, the authors claim that the low level of incomes of local population and administration burdens constrain as the main obstacles in internet diffusion to rural areas. According to the researchers, the internet development policy on different regional levels should take into account the differences of functional types of rural communes. Since peripheral communes are at a disadvantage regarding internet diffusion, the internet technology in this type of communes is unlikely to become leading development factor in short time perspective.

In the second chapter Andrew Fieldsend and Erika Székely assess the nature of knowledge flows through the agricultural knowledge and innovation system (AKIS) in Hungary. According to the authors, to encourage innovation more effectively the functioning of the AKIS must be improved, i.e. future planning should be based on a state-of-the-art understanding of AKIS as multi-actor networks, it is also recommended that new models should be developed and tested on the basis of experience from other EU Member States.

The following chapter by Konrad Czapiewski, Roman Kulikowski, Jerzy Bański, Maria Bednarek-Szczepańska, Marcin Mazur, Mariola Ferenc and Michał Konopski, aims in the diagnosis and evaluation of ICT use in farming. The research carried out among farmers in Mazovia showed that most of farmers in question use a computer and the Internet (if the household is equipped with them) in a passive way - not requiring user interaction - primarily to obtain information. The researchers also prove that education is a very strong factor in differentiating the level and the form of ICT use by farmers.

The next chapter was written by Vladimír Székely and investigates the developmental potential of rural areas in the surroundings of Bratislava. The study, based on the results of newspaper monitoring about "two tier" rural society and face-to-face interviews with rural inhabitants, shows positive and negative impact of immigrants and their knowledge transfer into rural environment.

The authors of the fifth chapter, Monica Mihaela Tudor, Violeta Florian and Mihai Alexandru Chitea, investigate the organisation and functioning of the Agricultural Knowledge System in Romania. The researchers examined the set of public and private organisations dedicated to research, education and extension, and their interaction with knowledge users (traditional farmers).

According to the authors, the processes related to innovation production and knowledge transfer to agriculture and rural areas are still tributary to the traditional model based on a strong confidence in scientific progress and in the role of the State as a driver of modernization.

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In the following chapter, Marie Trantinová and Marie Štolbová discuss future of the LEADER programme in the new Czech Rural Development Plan 2014-2020. The authors point out that it is vitally necessary to increase employment in rural areas by strengthening rural economy and social capital. It is very important to exchange experience among European countries during the preparation, implementation, delivery and evaluation of the RDP.

The aim of the research of Arkadiusz Sadowski, Agnieszka Baer-Nawrocka and Wawrzyniec Czubak was to determine the scientific community representatives' opinion on the role of science and its particular fields in the implementation of sustainable development of agriculture and rural areas. The survey conducted using a structured interview with 128 representatives of socio-economic and life sciences have shown that at the current stage of sustainable development implementation, the most important factors include scientific research and transfer of new technologies (in addition to political decisions). The authors claim that in the future the role of sociology and rural sociology in implementing concepts will increase most significantly, which may indicate that a better understanding of social order will be required.

The next chapter considers the issue of organic farming. The study's author, Marcin Żekało argues that restricted legislation in organic farming regulates in detail the manner of production, impacting directly on production character and also economic results achieved in organic farms. Therefore theoretical and practical knowledge of farmers are needed to meet these formal requirements. But the study on the economics of organic production indicates lower than in conventional farms direct costs of production, as well as good income performance from particular production activities.

The chapter by Klaus Wagner characterises the experience of the TECH. FOOD project aimed at setting up a transnational network for building links among enterprises and research bodies of a wide area. The research shows that large enterprises often use their own innovation structures and networks for national and international interactions. Small and medium enterprises (SMEs) often struggle with a lack of time and human resources to concentrate on innovation processes and therefore a short term success is very important to give the financial base for economic survival and to motivate SMEs to invest in innovation.

The following chapter by Krzysztof Hryszko, provides a revision of evolution of views on GMO, current legal state in the European Union and Poland, as well as proposed changes in this regard. The author argues that the political **8** decisions on possible prohibition of marketing of GMO products, especially including protein feed components, may have negative impact on farmers involved in commodity animal production (poultry and pig livestock, to a lesser extent bovine animals) in Poland.

The eleventh chapter presents The Farmers' Calendar as a source of knowledge about agriculture addressed to farmers. According to the analyses by Marcin Wójcik, the calendar is not only source of useful information, but should be also considered as an important expression of the cultural transmission and the way of thinking of a large group of people engaged in farming in Poland. The author also argues that the traditional vision of agriculture as a special profession, enclosed in the religious justification and interpretation, has been significantly disintegrating.

The book closes with the study of Cornelia Alboiu and Filon Toderoiu which purpose is to assess the role of collective organization forms in farmers' participation in the Romanian supply chains, more exactly the possibility of farmers to adapt to the dynamic retail chains using new institutional economic theories. The results of the research signal out a small degree of farmers' participation in collective forms of organizations. Also, they reveal a certain degree of uncertainty among stakeholders in terms of institutional arrangements and participation in collective action.

We hope that the publication we pass onto your hands will give you a picture of different approaches to the issues of knowledge diffusion and knowledge transfer in rural development.

The Editors and Zbigniew Floriańczyk