

**Roman Kulikowski**

**AGRICULTURAL PROBLEM AREAS IN POLAND, 2002**

Analysis of data from the Polish Agricultural Census of 2002 resulted in the delimitation of agricultural problem areas. This process comprised assessments of natural conditions, as well as the social, organisational, technical, production-related and structural characteristics of agriculture, which were the basis for selecting 11 negative indicators. In 803 units of analysis (gminas and towns in urban-rural types of gminas), none of the 11 indicators were recorded. In 1.202 units, where 1-2 negative features appeared, the level of agriculture was good, but with some visible problems. For a further 591 units, however, agriculture was defined as problematic: 3 to 5 diagnostic features were apparent. In a final group of 451 units of analysis, 6 or more negative features were recorded for the most problematic areas. All of these areas are characterised by level and are shown on map no 1. In concluding this paper, the author discusses the main changes in Polish agriculture in the period of transformation.

**Jan Munzar, Libor Elleder, Mathias Deutsch**

**THE CATASTROPHIC FLOOD IN FEBRUARY/MARCH 1784 – A NATURAL DISASTER OF EUROPEAN SCOPE**

The flood in the late winter of 1783/84 is one of the most important extreme examples of its kind, not only for the territory of the Czech Republic, but also in a number of European countries. Spanning over a vast expanse, this natural disaster has earned a privileged position in the history of European floods. Not only did it hit the Vltava (Moldau) and Labe (Elbe) river basins, but also the Rhine, Danube and part of the Oder (Lusatian Nisa) river basins. In western Europe, at the same time, the waters of the rivers Seine, Loire and Maas rose high above their banks.

The winter preceding this catastrophic flood was extremely snowy, severe and long. Around 23 February 1784, there was a sudden outbreak of warm air in western Europe, which caused rapid thawing of the snow and later also of the ice. The heavy rainfall that followed the thaw was a crucial factor in the onset of the floods. On 27 and 28 February, the ice cover on most of the rivers broke, almost simultaneously for both the main and secondary rivers. In most cases, the high-flood-water wave was the highest on 28 and 29 February or 1 March 1784 (Tab. 1). Apart from the vast territory that was flooded, the "flood phenomenon of 1784" was due to its extraordinary dynamics and record-high culminations. For instance, the water level of the river Vltava in Prague rose by ca 4 m within a mere 12 hours. This record was not broken even during the rain flood of August 2002, which shifted the long-term record-high culmination flow rate of the winter 1784 flood to a second place rank. For the Mosela R. in Trier and the Rhine in Cologne a/R., however, the 1784 flood has remained at the top of the list up to the present.

The extent of the damage, including casualties, shows the great danger of the extraordinary dynamics of mixed-type floods, including the 1784 flood. On that score, studies of similar extreme situations are of crucial importance for advance warning systems and for flood protection in general.

**Eva Kallabová, Bohumil Frantál**

**USE OF TELECOMMUNICATION AND INFORMATION TECHNOLOGIES BY INHABITANTS OF SMALL MORAVIAN TOWNS**

The issue of both the availability and possibilities of using the new telecommunication and information technologies is one of the key questions regarding the problem of regional development in contemporary "information society". Mobile 'phones, facsimile machines, computers, internet and other technologies, their currency, method and scope of use, as well as the related knowledge and skills, represent some of the basic elements which should make it possible for the Czech Republic to become an integral part of the modern information world as a dynamic, educated and competitive society. The major problem relating to availability of telecommunication technologies and to existing differences in possibilities of profiting from their use, is defined more as a question concerning social and regional differentiation, rather than one of general technological development. The authors, concentrating on data gathered from their own research, focus on use of telecommunication and information technologies specifically in relation to the inhabitants of small Moravian towns.

**Anton Michálek**

**REGIONS WITH THE LOW-INCOME POPULATION IN SLOVAKIA**

Slovakia was an egalitarian society until 1989. In the last fifteen years, however, important changes have led to what is referred to as the 'opening of the population's income scissors'. An increase in

income and other inequalities present in the population, accompanied by various factors that lead to social stratification, is observed. Statistical data and public enquiries reveal that only part of the population has benefitted in the transition period, while a larger proportion has been negatively affected in terms of income. Income inequalities of individuals and households are also spatially differentiated, which indicates that levels of income are contingent upon geography, as well as conditioned by geography to some extent. Given such increasing income disparities and their spatial covariations, this research concentrates on the monitoring of household income levels and the spatial differentiation of income, with an emphasis on the identification of regions and districts with the highest concentrations of the low-income populations. The results concerning the level of income inequalities and the location of low-income populations are not only important for research purposes, but could also be applied to social, regional and communal policies, for the creation of social programmes, and as a baseline framework for policies oriented to objectives for the social inclusion of the low-income and poor populations.

**Pavel Klapka, Gabriela Křemenová, Stanislav Martinát**

**SELECTED SOCIOECONOMIC FACTORS AFFECTING LANDSCAPE STRUCTURE IN THE VRCHLABÍ AND VIMPERK REGIONS: ANALYSIS, CONSEQUENCES, SUSTAINABILITY**

Changes in landscape structure are assessed on the basis of an analysis of selected socioeconomic factors in two model regions: Vrchlabí and Vimperk. The resulting land use changes are discussed from the point of view of a sustainability concept. An attempt is also made to find relations between changes in socioeconomic factors and land use changes.