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Faculty of Agronomy
Department of Applied and Landscape Ecology

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NEGOTIATING RURALITY: FROM CONCEPT TO MEASUREMENT

Greer-Wootten Bryn[*]

Interrogating the concept of 'rurality' appears to have become as passé in the last ten years as ontological investigations into 'nature' itself. The 'social construction of nature' appears to be accepted by most social scientists, as much as the 'social construction of reality' has been accepted for more than forty years. The philosophical bases of such a distinction ['real' nature *versus* 'constructed' nature, or, perhaps, some indistinct set of relations between these two constructs themselves], however, deserve a more penetrating enquiry, especially when the arguments are located in the triadic relations between "ontology -> epistemology -> methodology", that are implicated in all research design processes.

Traditional research designs, largely positivist in nature, are oriented to 'real' nature [rural or otherwise] viewed as distinct from human natures: at a distance, relations can be evaluated in quantitative terms for the purposes of design. Qualitative research designs, in contrast, are rooted in 'constructed' nature [rural or otherwise]: the constructions must be phrased in human terms, such that the researcher is part of that which is subject to examination. Demands placed on researchers of 'rurality' are thus compromised: much depends on the positionality of the researcher, with respect to both the substantive nature of her enquiry and her intersection with a potential philosophical location with respect to enquiry *per se*.

Such an impasse has appeared to be insurmountable for many researchers. In the last five years or so, there has been a movement towards resolving this impasse: the so-called 'mixed-method' solution has occupied much attention. In this paper, I attempt to evaluate the strengths and weaknesses of this movement with respect to some substantive problems of rural studies, with particular attention to recent debates about 'multi-functionality'. It is asserted that while the movement from concept to measurement can be treated (methodologically) in design terms, ultimately it has a socio-political nature, with its true origins in a revision of traditional epistemology, incorporating the frameworks of ecological thinking found in the philosophy of Lorraine Code.

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SOCIAL PROBLEMS OF THE CZECH RURAL POPULATION

Majerová Věra[*]

Czech countries are defined by shattered settlement, it means with predominant share of small villages. Economic and social rural development is considered as an actual task at present. The settlement stability, which is the precondition of perspective thinking and strategies of economic and social capital, depend whereon. Transition of national economy after 1989 favoured more the cities development. Countryside battled with the high rate of unemployment, worsened communing conditions, difficulties of entrepreneurial environment creation, unsolved restitution demands, slower renewal of technical infrastructure, worsening of quality and accessibility of social services and other specific problems. All these factors were conducive to the efflux of young and qualified people, who cannot find the suitable living prospects in the villages. Human relations in small villages unwind in personal level and are formed by a long-term knowledge of families, dynasties and broad relations. A new impulsion for human capital progress was an entry of the Czech Republic into EU in the year 2004. There are two tendencies in Czech rural reality: there is persisting disbelief towards formalized structures from historical experience and on the other hand an inevitable need of mutual cooperation on all levels. Able and willing groups of inhabitants which would become cores of functional local initiatives are formed with difficulty, particularly in small villages. Contribution is based on the empirical data of Sociological Laboratory of Czech University of Life Sciences, Prague.

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RURAL MANAGEMENT WORKS AS AN INSTRUMENT OF LANDSCAPE PLANNING

Akińcza Małgorzata[*]

Polish rural landscape is one of the assets which Poland brought into the European Community. General trends in the spatial development of an area, rural as well, are defined in the commune development project. With reference to the landscape architecture, these are very vague guidelines and the plans themselves are not the tools of their implementation. Therefore, this paper, based on the literature and the information on the needs and the realization of the rural management works in Poland, is an attempt to address a question: can these works, the land consolidation in particular, be regarded as, in the actual legal status, an instrument of landscape architecture?

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THE COMPARISON BETWEEN FARM PROPRIETORS' CHARACTERISTICS REGARDING APPOINTED SUCCESSORS

Bohak Zarja and Borec Andreja[*]

Slovene agriculture with its family farms is the most significant parts of rural areas. To assure long term survival of family farms, well regulated farm succession is of great importance. Previous researches carried out on inheritance patterns in Slovenia (Dežman, 1988, Bohak, 2006, Barbič, 2005) have shown that characteristic of farm heads are of great importance for "smooth" succession process. The aim of the present study was to analyse the profile of the farmers with already appointed successors and their attitudes towards succession and to compare them with the characteristics and beliefs of the farmers without determined successors. The study area was limited to agriculturally well developed region of North-East Slovenia. The sample included two groups of farm proprietors: 24 with successor and 14 without successor. Different statistical tests (t-test, Chi-square test, Mann-Whitney U-test) were used for analysis the differences. The results show that differences between both groups of farm heads are significant and expected as regards other literature about farm succession.

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POLITICAL PARTIES IN THE CZECH RURAL MUNICIPALITIES

Čmejrek Jaroslav *

This paper was prepared with support of the Czech Science Foundation – project Citizens Participation in Rural Municipalities Public Life in the CR (No. 403/06/1308), and within the Strategic Management Information and Knowledge Support research project (No. MSM6046070904). The objective of this paper is to show the position of political parties in rural municipalities in two perspectives. The first, top-down perspective is based on the distribution of several tens of thousand mandates in local municipal councils between political parties. The opposite perspective provides the bottom-up point of view – from the level of individual municipalities, their party systems and party organisational structures.

The position of political parties on the municipal level of the political process can be shown on the basis of municipal elections. It stems from the analysis of the local election results in 2006 that all the parties present in the House of Deputies together got in all types of municipal councils approximately one third of mandates (34.34%). Independent candidates won the decisive majority of votes (59.88%). These figures, however, cover significant differences between cities and non-urban municipalities. In cities, candidates of parliamentary political parties received two thirds of the mandates (69.34%), i.e. more than the double of the nationwide average. In non-urban municipalities, the representation of candidates proposed by parliamentary political parties exceeded only marginally one fourth of the total of mandates (25.33%). Independent candidates in the non-urban municipalities won 70.48% of the total seat count.

These data are showing the gains of candidate lists or parties proposing the candidates. However, the real position of political parties in rural municipalities is greatly distorted by such data. We can get a much more precise idea about the strength of political parties by analysing the party affiliation of elected representatives. From this point of view we see that the position of parliamentary parties is much weaker. Members of parliamentary parties got in the 2006 municipal elections only 16.78% of mandates, i.e. less than half of the gain of their nominating parties. Candidates without political affiliation got 82.4% of mandates, having run as independent or on candidate lists of political parties. Here, too, we of course also observe significant differences between cities and non-urban municipalities.

The analysis of municipal council elections results reveals clearly that the role of political parties in local politics depends namely on the size of the given municipality. In this sense, the Czech Republic represents a very interesting example as it is characterised by a dense and heavily fragmented population settlement with a large number of small rural municipalities. In big cities, the role of political parties is the same as it is in the political process on the national level. Most of the mandates in the local councils are divided between parties represented in

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the House of Deputies. The political spectrum is then completed by non-parliamentary and regional political entities whose position is in most cases only marginal. A completely different distribution of powers has formed in smaller cities. The position of parliamentary parties in comparison to big cities is much weaker, independent and non-parliamentary political entities are more important. And even more different situation is to be observed in rural non-urban municipalities.

The category of non-urban municipalities is still too large. As far as parliamentary, nationwide parties are concerned, in municipalities up to 2,000 inhabitants we generally see an incomplete spectrum of political parties and in the smallest municipalities up to 1,000 inhabitants, there often are no political parties at all, we will only find there the independents and their associations. Observing incomplete parliamentary parties spectra on the local level, we must also consider the fact that those party organisations that exist in a given municipality have often little in common with their "own" parliamentary parties. Political parties in rural municipalities and smaller towns lack sufficient membership to be able to constitute a list of candidates formed uniquely of their members. We often encounter in rural municipalities lists of candidates made by majority, or sometimes exclusively, of the independents. Large representation of independent candidates and their associations is a characteristic feature on the political scene on the municipal level. In the smallest municipalities, the independent and their associations represent the main, sometimes the only way of forming political entities.

The political process is dependent on the distance between citizens and elected political bodies. On the parliamentary level, on the level of regions and in big cities, too, this distance is great and the democratic process would not work without ideological and party intermediation. On the other hand, there is a narrow social space in small cities and rural municipalities. Inside small communities, there is a close relationship of social networks and high personalization of political life. Ideological and party intermediation is superfluous; in fact, it is often seen as something harmful which divides rural communities. Small distance between the citizen and the elected body in a rural community significantly determines the form of local politics; it influences socialization as well as forms of political participation of citizens and namely their electoral behaviour.

ENVIRONMENTAL PROBLEMS RELATED TO INADEQUATE AGRICULTURAL PRACTICE IN SOUTHERN AREAS OF THE REPUBLIC OF MOLDOVA

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Intensification of agricultural manufacture, that occured in the Republic of Moldova within the previous years, has resulted in a range of negative environmental consequences in the countryside. A range of processes have appeared and amplified: salinization and soil erosion within the irrigation, erosive and landslip processes caused by excessive ground loading, loss of ground fertility because of infringement of agro-technical measures, to name the few. Besides the anthropogenous factor, a spontaneous hydrometeorological phenomena (downpours, hailstones, drought) rendered and render a destructive action on agricultural grounds. These phenomena have becomed considerably frequent within the last decades that is possible connected with the global climate change. The south of the Republic of Moldova is characterized by a droughty climate (The sum of annual atmospheric precipitation makes about 450 mm) and by small territory of forestation (7-8%). It is known, that droughty ecosystems are the most fragile and vulnerable territories. Under conditions mentioned above, the processes of ground degradation begin in droughty ecosystems, first of all. Among preventive measures for these processes and phenomena is neccesary to mention anti-erosion and anti-landslip measures and structures, as well as special agrotehnical measures.

However, the opportunities for environmental optimization on the account of tehnogenic means are rather limited. Therefore the adaptation for environmental changes becomes one of the basic tasks of modern agriculture. In many respects, we can reduce the effect of ground degradation by adaptation of our activity to the external environmental conditions.

For this purpose it is necessary to apply knowledge and experience of climate and weather factor influence (especially of their extreme meanings) on the intensity of ground degradation. This first of all concerns to agriculture. In this concern, it is necessary to take into account the natural potential of ground, which is expressed in natural efficiency of each site of grounds. We should know also about the limited opportunities of ground to carry ecological loading of high intensity, which can result in degradation of these grounds in general. Therefore the maximal account of ecological structure of grounds should become one of the additional factors of intensification of ground efficiency. According to this, the structure of fields and crop rotation on small territorial complexes (biotops) and the environmental conditions that define the level of agricultural cultures productivity should be defined. Hence, the agriculture should become environmetal friendly in sense of agricultural cultures accommodation and organization of fields севооборотов on an ecological basis.

The account the ecological structure of grounds assumes the use of already explored natural relations between the nature factors and productivity of agricultural cultures. With this purpose, the cultures requirements face to the basic natural factors, as to be the incline of district, orientation of slopes - the exposition in other words, the sea level height, grounds

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types, their mechanical structure and wash-out degree are studied on the one hand, and on the other hand, the inventory of natural conditions in the limits of biotops, determining a precise environmetal condition for cultivation of agricultural cultures is conducted.

It is known, that the success of all nature protection measures in many respects depends on awareness of the population and on the understanding of necessity of planned actions realization. Specialized trainings and capacity building programs on the methods of prevention and/or mitigation of these negative phenomena consequences have not the smaller importance in this concern.

AFFORESTATION PLAN OF ARABLE LAND AND ITS EFFECT ON RURAL LANDSCAPE

Dzikowska Teresa[*]

Ecological policy is a fixed component of social-economic balanced development of the country. One of the aims is augmentation of afforestation on the territory of Poland. Realization of this issue requires preparation of consistent long-term plans on various planning levels.

This work presents the rules for policy of augmentation of afforestation (included in National Program for the Augmentation of Afforestation - KPZL 2003) and issues concerning designating territories which could be excluded from agricultural production because of low productivity.

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ONE RURAL, TWO VISIONS - ENVIRONMENTAL ISSUES AND IMAGES ON RURAL AREAS IN PORTUGAL

Figueiredo Elisabete[*]

The peripheral rural areas of Europe suffer, for decades, of a continuous abandonment in terms of its populations and activities as well as of a persistent neglecting in terms of public policies and measures. At the same time these areas are increasingly seen as offering a better quality of life, representing an outstanding value in terms of environmental and natural quality. Although these attributes are not new in the social and political discourses about the rural and rurality, as for instance Woods (2003) demonstrates (On this subject one can also see the works of Macnaghten and Urry (1998); Cudworth (2003) and Figueiredo (2002, 2003, 2008a, 2008b), they gained some strength in recent years, following the increase of social concern and valorisation of the environment in contemporary societies.

Remote rural areas represent increasingly the paradigm of the reencounter of society with nature and they are, as well, progressively understood as "moral and cultural reserves" (Chamboredon, 1980). Consequently rurality is no longer represented as synonym of a concrete condition of opposition and marginalization vis-à-vis modernisation processes, but rather as a synonym of modernity (or post-modernity) expressed through the discovery and valorisation of the differences, of the authentic and genuine. Rural areas tend to acquire "in parallel with their condition of cultural symbols, an extremely environmental symbology (…). Such a function, as much material as symbolic is quite evident in the institutional proposals for the rural areas of most European countries" (Figueiredo, 2008a: 161-162).

The representation of rural space as pure nature, as scenery of distraction, rest and regeneration for urban populations originates the increasing frequency, demand and consumption of the rural by non local populations and creates the conditions to its commodification[1]. These processes can produce important effects in the social and economic rural contexts, namely conflicts among the various actors (and particularly between residents and visitors) in presence. The conflicts occur mainly due to the discrepancy of visions, desires and needs between the non local and the local populations. In addition, the exteriority of the rural environment's valorisation processes, above all expressed by the urban populations and materialised by the State in several programmes, measures and actions regarding the rural, is a central issue in the conflicting situations. This kind of double external vision towards the rural, frequently not incorporating the needs and aspirations of rural residents, is a central aspect in the formation of a new rural-urban dichotomy. This way of conceiving rural areas is relatively strange to rural inhabitants for whom the environment and natural elements are above all a resource. It is also a lived and daily used environment, then assuming to local populations a statute of vulgarity.

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[1] On the transformation of the rural space in a marketable and consumption object see Macnaghten and Urry (1998), Butler, Hall and Jenkins (1998) and Butler and Hall (1998).

In order to address the abovementioned central role of environmental issues in the social construction of the rural and rurality, as well as the emergence of a new rural-urban dichotomy, we carried out a study[2] in two Portuguese rural areas that can be characterized as remote and peripheral – the Natural Park of Montesinho (NPM) and Serra da Freita (SF). We applied 721 questionnaires to quota samples of inhabitants and visitors of both areas, as well as 35 structured interviews to the political and administrative entities.

In spite of geographically distant both areas share many social, economic and demographic features. Both areas are characterised by strong losses of population (more than 50% since 1960), by the existence of an aged population as well as by a small percentage of economically active individuals. The predominant economic activities are agriculture and cattle breeding, although often combined with other activities, such as industry and services. In spite of this situation of social and economic decline and in spite of the fact that there is an evident lack of services and infrastructures related with tourism activities, both areas receive a large number of visitors every year. However, while NPM is a legally protected area, Serra da Freita does not possess any legal status of protection. This constitutes an important difference between the two areas studied, since while NPM is institutionally (and socially) recognized as an extraordinary rural space and environment, SF is an ordinary rural area. However, this distinction is not significant in terms of different rurality and environment perceptions between residents and visitors

Regarding the characteristics of the residents and visitors we inquired on both areas, the first aspect to be pointed out is the existence of obvious and marked differences between the two categories in terms of age, literacy level, income and levels of materialism. Thus, visitors are younger, with higher levels of literacy, with higher levels of income and they also stand out for defending more post-materialistic values than the inhabitants in both areas. The theoretical discussion and the empiric evidence presented in the paper allow concluding that the rural environment has been increasingly produced as symbol by urban inhabitants and also by the State. In this sense, rural environment tends to be represented as natural and somewhat as extra-social, in which Men, machines, animals and activities seem not to intervene. From the characteristics of both visitors and residents of NPM and SF the abovementioned emergence of a new rural-urban dichotomy is quite clear. Visitors of both areas perceived them as natural spaces, emptied of economic and social activities. Inversely, residents valued the last features as fundamental aspects to the maintenance of their practices and ways of life. Underlying these distinct representations and images there are different perceptions and valorisations of the environment. Thus, while visitors value the environmental aspects from an aesthetical point of view, residents possess a much more utilitarian perspective of those same aspects.

Taking into account the contrasting visions of visitors and residents of NPM and SF both about environment and development, one can conclude that there is in fact a rural to live in and a rural to visit, shaped by diverse aspirations, desires and needs. As we argued before to these two visions one can add a third perspective - the one conveyed by the State through the measures and programmes for rural areas' development. This vision is, however, much more in accordance with the visitors' needs and aspirations than in conformity with the local populations' practices and requirements as well expressed, since more than a decade ago by recent national and European Union programmes and policies designed for rural development (e.g. Figueiredo, 2008a) in which the environmental and recreational aspects of rural areas are increasingly central.

[2] This research was conducted in the context of a PhD programme about the role of environmental issues in rural development policies and strategies in Portugal (Figueiredo, 2003a).

It is undeniable nowadays that rural areas possess significant environmental functions, mainly for the non rural residents, but, at the same time, it is important to recognize that those functions can act as vulnerabilities concerning local populations needs and desires as well as the future of rural areas as living and dynamic spaces (e.g. Figueiredo, 2008b). It seems therefore important to question the attractiveness of a rural deprived of its real characteristics and dynamics, since it can lead to an artificialization and museification of rural areas in order to fulfil the needs of their visitors in terms of rurality and environmental quality.

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AGING IN RURAL AREAS IN AUSTRIA – ON THE INTERRELATIONS OF SPATIAL ASPECTS AND THE QUALITY OF LIFE OF TODAY'S OLDER GENERATION

Fischer Tatjana[*]

The impacts of demographic change and the increasing polarization into structurally strong rural areas on the one hand and structurally weak rural areas on the other hand lead to new challenges for today's older generation in rural areas in Austria in terms of growing old in a self-determined way: The quality of activities of daily life is strongly affected by spatial aspects. Aside from factors related to the natural environment above all factors related to the spatial structure are of great importance, such as the supply of infrastructure.

Factors of natural environment cover climatic factors and lighting conditions (hours of sunshine, daylight) that are being blamed for cold diseases and seasonal affective depressions in inner-alpine regions. Topographic factors determine in various ways the quality of supply of infrastructure as well as social networks. Natural hazards, structural conditions as well as the exposition of residential areas cause long distances and "long ways" regarding daily activities. They also concern the daily work of employees in mobile services of (social) medical care of the elderly.

Spatial aspects relating to the structures of settlements like the size and administrative organisation of municipalities, the structure and development of settlements, the quality of public space, the quality of local facilities and utilities as well as the availability and quality of public transport influence the quality of life of today's older generation in many ways. But spatial relevant aspects manifest themselves to varying extents depending on the requirements and demands of the different groups of the elderly: While the quality of life of those people over 60 who are healthy, who have a driving-licence and a stable economic background is hardly affected by spatial aspects, deficiencies in the supply of services have an impact on the quality of life of those who e. g. are physically handicapped, not integrated into any social networks or who have little money. These deficiencies also affect those persons who are involved in securing the quality of life of today's older generation such as family members caring for the old and employees in mobile services of (social) medical care of the elderly. The availability and quality of social networks such as integration into family and village community, support from friends and neighbours, relevance of (political senior) associations) and the Church depend on e.g. the socio-demographic and socioeconomic situation of rural areas, the "common past" of today's older generation in their municipalities. Relating to social networks here are large differences not only between differently structured rural areas but also within a municipality itself.

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The size and structure of the dwellings (e. g. old farmhouses) and the residential environment (big gardens) as well as the technical equipment of the households (e. g. running hot-water and central heating have not come up to a standard yet in some inner-alpine regions) affect the quality of life particularly of those among the old who are physically handicapped and/or without any social networks.

All these aspects result in large differences in the quality of growing old in differently structured rural areas and the following conclusions:

- Aging in a self-determined way is a challenge for old people living in structurally weak rural areas.
- The relevance of spatial aspects for the quality of life of today's older generation differ from various types of rural areas and depends both on the awareness and the perception of the affected people.
- The perception of the interrelation of spatial aspects and deficiencies of supply (at the local level) strongly depends on the subjective awareness.
- The profile of today's older generation is very heterogeneous regarding their former employment (farmers, workers, employees, commuters), regarding their lifestyles, requirements and demands as well as their state of health and the wide range of age.
- The spatial radius of today's older generations depends on their (auto) mobility.
- The increasing of auto-mobility (also among today's older generation) endangers the quality of life of those who depend on spatial vicinity.
- Spatial aspects do not only cause spatial behaviour, they are often been affected by spatial behaviour (of today's older generation), too.
- The differences between rural areas regarding the quality of supply result from the interrelations of natural environment, socio-demographic and socioeconomic aspects (employment market, (daily) commuters), (selective) migration and brain drain, settlement structure and development, and the profile of today's older generation.
- Rural areas lag behind the requirements and demands of today's older generation.
- The analysis shows that in structurally weak rural areas people fear the decreasing of daily supply (goods and services) and (social) medical care at the local level. In strong rural areas a diversification of supply in all intents and purposes is welcome.
- Settlement sprawl leads to collective aging, the lengthening of distances.
- These aspects lead to a continuing differentiation of living conditions of different groups of old people (e. g. independent, automobile young seniors; old people who are in need of help; old people not integrated in any social networks).

Aging is being discussed broadly within science and politics. One of the results is that thinking about aging and its consequences for one's own life first often starts when problems arise. The background of the worsening of the quality of life often is related to spatial aspects. In turn spatial are being perceived very differently.

In order to be able to guarantee the quality of life of the elderly who live in rural areas at a high level it is necessary to create new solutions that take into consideration spatial aspects.

ALPINE PASTURING AND NATURE PROTECTION – CHALLENGES FOR THE NATURA-2000-MANAGEMENT ILLUSTRATED BY THE CHAVALATSCHALM IN THE NATIONAL PARK STILFSERJOCH, ITALY

Franz Annegret, Tröbinger Helga, Ruffini Flavio V., Moroder Mair Susy[*]

Natura-2000 is a cross-national ecological network of special protected areas in the European Union. These areas are defined according to the Habitats Directive (92/43/CEE) and the Birds Directive (79/409/CEE). Their aim is to promote the maintenance of biodiversity in Europe. In order to preserve natural habitats as well as wild fauna and flora, appropriate measures have to be taken. Art. 6 of the Habitats Directive recommends the elaboration of management plans. Each Member state is in charge of the procedure and the legal implementation.

In South Tyrol special guidelines for elaborating management plans based on a national directive are available. The guidelines ensure a minimum standard for the management plans and allow a comparison between them. They divide the planning process in three phases: preparation, elaboration and implementation. During the preparation phase the focal points in terms of content, methods, extent and kind of public participation with the responsible persons in the area will be defined. In particular, existing conflicts between Natura-2000 aims and land-utilisation in the respective area will be discussed. Those conflicts are subsequently to be elaborated in the management plan.

In South Tyrol there are 40 Natura-2000-sites (20.2% of the South Tyrolean area), one of them is the Chavalatschalm in the National Park Stilfserjoch. The ecological importance of the Chavalatschalm lies in its geographic location between the East and West Alps and subsequently in its biological function of intermediation. Its area (35 km^2) ranges from montane to high alpine levels. Apart from typical alpine natural habitats, extensively used alpine pastures, meadows and forests are found. They contain also habitats of the Habitats Directive like mat grass grasslands or grasslands including dwarfs shrubs (Code 6230*, 6150). The transition areas between pasture land and forest are areas of courtship for grouses (annexes I-III of the Birds Directive). Traditionally the alpine areas are pastured by dairy cows. Their number has decreased significantly during recent decades. At the same time, the weight of each cattle and their productivity has increased. These cows primarily graze on more even and well accessible areas, therefore mainly in the core area of the alpine pastures excessive exploitation and overfertilisation can be found. Another evidence for diminishing interest in alpine pasturing is the increasing growth of bush land on remote and little profitable pastures. Hence, in the Chavalatschalm the relationship between nature protection and alpine pasturing constitutes the central challenge for the Natura-2000-management.

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In order to protect the Natura-2000 habitats and species of the Chavalatschalm, adequate alpine pasturing is necessary. Against this background an empirical study was carried out. Based on social economic factors, this study illustrates the development chances of the Alms in the Chavalatsch area. Alm is a German term that includes the pasture as well as the farmhouses. For the review of the situation of alpine pastures an Alm-inventory (facilities, track development and economic capacity) was carried out. As alpine pasturing is part of the agricultural system in mountain regions, in a second step 102 farmers were interviewed by means of a partly standardised questionnaire. Topics addressed were for example the structure of the farm and the form of cultivation, advantages and disadvantages as well as the efficiency of alpine pasturing, plans for the coming years concerning alpine pasture. Thirdly, the results of the interviews were discussed with eleven local experts.

Nature protection requires alpine pasturing
In order to keep the Natura-2000-site Chavalatschalm in a good conservation status, an adequate alpine pasturing considering the ecological requirements is necessary. Special attention is to be paid to its land use intensity: woodlands or locations with difficult access should not be underused and very productive or well-located pastures should not be overused.

Alpine pasturing funds alone are not enough
In South Tyrol, certain funds for alpine pasturing are designated by nature protection, e.g. landscape conservation premiums (360 €/hectares for the mowing of speciose mountain meadows in Natura-2000-sites). Alpine pasturing funds guarantee a basic premium for a particular type of land-use, e.g. 25 €/hectares for a livestock of 0.4 LSU/hectares and an alpine pasturing duration of at least 60 days. But these funds are not sufficient to ensure future alpine pasturing: rather, comprehensive agro-structural measures for alpine pasturing and for agriculture in general are required.

Part-time farmers as partners in nature protection
According to our study, partners in nature protection in this area are in particular the part-time farmers. They have the greatest benefit from alpine pasturing: they can graze all their cows on the alpine pasture and consequently are able to take up another employment during the summer.

Agriculture in the region is built on a strong tradition
Alpine pasturing decisively depends on the farmers' interest to continue alpine pasturing. The results of the study show that about 80% of the farmers interviewed plan to continue alpine pasturing in the next 10 years. This underlines the high social acceptance of the agricultural population in South Tyrol.

Well-trained staff
Profitability of alpine pasturing is only possible with well-trained staff. In the 1990s, an initiative was started to guarantee constant training and education of alpine pasture staff by a regional dairy association. In this context, not only alpine pasturing and livestock training but also training in terms of nature protection measures is necessary.

Cooperation with other sectors
To enhance the efficiency of alpine pasturing, more alpine products should be sold directly. Especially niche-market should be targeted, e.g. alpine goats cheese. In addition cooperation with other sectors, e.g. tourism, culture and education should be extended (cheese tasting, festivals, work experience).

Establish priorities – Allow succession
The requirements in terms of alpine pasturing sometimes collide with the aims of nature protection, e.g. if big investments must be made (development of infrastructures). As a big

part of these investments is significantly supported by public authorities, it is necessary to investigate them individually, especially in a national park. It must be examined if such investments meet the interest of the farmers and guarantee the survival of an Alm. Priorities have to be established, to what extent investment should not be made and instead a succession to be considered.

CROSS-SECTORAL COOPERATION IN RURAL POLAND: EXPERIENCES FROM LEADER PILOT PROGRAMME

Furmankiewicz Marek[*]

The LEADER Pilot Programme, enhancing cross-sectoral cooperation in rural areas, was implemented in Poland in years 2004-2008. Partnership structures have been rapidly adopted due to the requirement to run the European Union LEADER type programme. Only about 20 partnerships existed before the programme implementation across the Poland. In result of the European Union support there were created approximately 167 Local Action Groups in the years 2004-2006 in frame of Scheeme I Leader Pilot programme, and 150 ones got grant for soft project realisation in years 2007-2008. The projects were typically focused on improving quality of life and development of natural and cultural resources. First local governments and secondly local voluntary organisations had the main role in local coalitions. The main aims of common works were: promotion and tourist infrastructure development, rural areas restructuring, and local product promotion. The Local Action Groups established in Poland in LEADER+ Pilot Programme may lay a sound foundation for the utilisation of structural funds from 2007-2013 Rural Development Plan, but they are not effective enough in enhancing local inhabitant´s participation and social capital building. So we should pay more attention to promote greater citizen involvement (both in business and voluntary organisations) in rural development in Poland.

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QUALITY OF LIFE IN RURAL AREA OF CROATIA - TO STAY OR TO LEAVE?

Grgić Ivo, Žimbrek Tito, Tratnik Miroslav[*]

The paper presents result of a research study on quality of life in the Croatian rural area. The study aim was to research into satisfaction of the rural population with quality of life in their community, and into the decisive factors in resolving a dilemma*:* "*to stay or leave?"*. The research study was carried out on 914 respondents from the Croatian rural area during 2007. The rural communities and respondents were selected on a random basis. The respondents were 24 to 45 years of age.

The study results indicate that the major hardships of the rural life are of economic nature, lack of jobs opportunities, inadequate choice of profession, and lower income compared to a city. One fifth of the respondents is not satisfied with conditions of rural life and intends to leave. This is a disturbing indicator, since it refers to population which, as a rule, finished education and started a family. Proportionally, the largest number of potential migrants comes from economically underdeveloped regions of Croatia. Number of unemployed persons among potential migrants is higher than the number of the employed. An account should also be taken of farmers, most frequently those with small production resources and low produce.

Further depopulation of the Croatian rural area would have dramatic effects, and the worst consequences would be excessive urbanization of large cities in particular, further uneven development of Croatia, and insufficient utilization of spatial, production and human resources. Since the strategic goal is for Croatia to become a member of the European Union, this would be a major obstacle to successful adapting to the European economic integration.

Exodus of rural population could only be prevented by increase in employment opportunities and income, and development of physical and social infrastructure in the rural area resulting in improvement in living conditions for the rural population. On average, rural area has no adequate capacities for intensification of its development and necessary closing of gap in quality of living between the rural and urban areas. Thus, this process needs a strong state support by introducing the regional development measures and offering diverse support measures to the local self-government.

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LANDSCAPE CHANGES RELATED TO RURAL DEVELOPMENT DURING THE TRANSITION PERIOD IN BUCHAREST METROPOLITAN AREA

Grigorescu Ines[*]

By its position within the Romanian Plain, Bucharest Metropolitan Area reflects the environmental peculiarities of this relief unit. The Romanian Plain has always been an agricultural rural space because of its favourable geographic, social and historic circumstances characteristic of the space situated between the Carpathian Mountains and the Danube River, agriculture being its main function.

According to the land use map, the agricultural land occupies most of the Metropolitan Area's territory and this explains its impact upon the environment as a result both of agricultural practices and policies that impose its differential management. Therefore one of the main directions of environmental impact in Bucharest Metropolitan Area is related to *agricultural development* (agricultural practices and agricultural management through lows and administrative measures).

The agricultural activities put great pressure upon the environmental components and there are obvious effects to be identified for the biotic regeneration potential level, biologic diversity, environmental balance, resources, air, soil, potential buildings, and potential of the entertainment resources. The changes in agricultural land ownership have had an essential role in the pressure of agricultural activities and their impact upon the natural land and, then, upon the anthropic environment.

The management of agricultural land during the transition period. With the fall of the communist regime in the year 1989, Romania experienced radical changes in all fields of activity. A first branch to be seriously affected by the restructuring process was agriculture, due primarily to a fundamental change of property over the land, creating new means of approaching rural development.

The major changes in land use during the transition period from a centralized economic system to the market economy (1989-2005), are related to ***decollectivisation*** and ***privatisation*** of agriculture through agricultural laws. These processes were accompanied by the destruction and the sales of the collective assets of the former Agricultural Production Cooperatives and State-owned Agricultural Farms and determined structural relocations of the different land use categories affecting rural development with direct impact on the quality of the environment. Under the application of these measures and laws, new types of agricultural exploitations have appeared: the small and poorly equipped (individual or family) *traditional peasant households* (env. 2-3 hectares on an average); *the agricultural businesses* or *trading companies* (former State-owned Agricultural Farms) and *the associative structures* (family associations and agricultural companies with a juridical status).

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At the same time, the increased urban sprawl which has been affecting the Romanian territory over the last period especially through the development of metropolitan areas has a great impact upon agricultural land use. Under these circumstances, the issue of rural development becomes increasingly important.

The paper also analyses the effects of rural development within Bucharest Metropolitan Area as well as the main environmental issues related to agricultural practices (*land abandonment, land market dynamics, land speculations, uncontrolled waste deposits within agricultural land, change of agricultural practices, deterioration and abandonment land betterment works especially the irrigation systems etc.*) with negative impact on metropolitan landscape. Under the new transition conditions *land use management* has affected *land fragmentation* leading to an inappropriate way of managing agricultural land increasing the *plots density* especially in the case of individual properties where agricultural land use no longer brought any profit. In some situations the small plots of land are sold or when they have an attractive location they receive several other destinations (residential or entertainment use) as in Snagov, Mogoşoaia or Corbeanca Communes. This situation is aggravated by both peasants' lack of interest in tilling the land and the age structure of some communities with a high percentage of old people. Other effects of the agricultural practices are related to deforestation, soil erosion and pollution through agricultural pollutants.

The landscape changes related to of the metropolitan rural development of Bucharest Municipality causes: ***spatial relocations*** through *land use changes, land fragmentation, land abandonment, etc.*; ***space consume* (*spatial expansion*)** with a great impact on agro-forestry ecosystems through different environmental changes (deforestations, drills, etc.) and the ratio population/habitat by: *residential sprawl* (circular - around the capital city and radial – along the main routes) and *new industrial areas (industrial or logistic parks)* by grouping banking, real-estate, ensuring companies*;* ***uncontrolled natural resources exploitation*; *environment pollution*** as a result of solid waste diversification, waste waters discharge in river bodies, lack of water supply system and gas supply system, industrial units which do not respond to European Union demands etc.; ***damaging the population health status*** by increasing the number of ill persons (cardiac, lung diseases, etc) and ***increasing the incidence of climatic extreme events*** (rainfall, storms, heat waves, etc).

VIEWS FROM THE FOREST EDGE: EXPERIENCES AND PERSPECTIVES OF NEW FOREST OWNERS IN ROMANIAN VILLAGES

Guran-Nica Liliana[*]*, Lawrence Anna*[**]*, Dragomir Marilena*[*]*, Andre Madalina*[*]

Since 1989, most of the former socialist countries in eastern and central Europe, and some of the former-Soviet states, have embarked on a process of land restitution, including the return of forest land to the descendants of former owners. To date, 34% of Romania's forests have been restituted, with the transfer of up to a further 40% expected under the 2005 legislation. This large-scale rearrangement of property has implications for rural communities' relationship with nature as manifested in forest. Furthermore, the changes take place in the context of political shifts at local and national level, and amongst the forestry administration. Hopes and concerns about the process and outcomes reflect the political and environmental perspectives of those with most power, including access to the media, and little attention has been paid to the experiences and perceptions of the rural population. Our paper redresses this balance by analysing results from four community case studies in two counties in the Romanian Carpathians. Using an approach informed by both political ecology and environmental psychology, we highlight the use of qualitative research methodology, relatively novel in the context of post-socialist geography, and the impact that it had on academic colleagues and policy makers.

Four themes are particularly significant: the diversity of context within one country; diversity of social and power relations within each community; constructions of nature and environmental benefit; and the significance of notions of property in this post-socialist context.

"Restitution" refers to restoration of forest ownership structure prevalent in 1945. Consequently it reflects historical processes and cultural diversity that underpinned that structure. Overlaid on this are diverse experiences of communism. Some regions experienced collectivisation, whereas others were remote from the reforming reach of the communist regime. Some were in areas that were heavily logged after the war, to pay reparations to the USSR. These different experiences affect people's sense of connection with their forest.

Not all community members have received forest. Even where due legal process is followed, restitution does not lead directly to social justice, in the same way that forest ownership was not equitable in 1945. Rural people expressed negative feelings about past experiences of

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difficulty, injustice or loss, in relation to the forest. These memories were particularly strong in connection with historical events: the nationalisation of forests in 1948; the heavy logging that took place after the Second World War to pay reparations to the USSR; and the bitter personal and legal arguments that often accompanied the restitution process. The role of memory in linking past to present circumstances is often highlighted in ethnographies of socialist societies and we relate these post-socialist findings to that literature.

Rural residents show strong and consistent appreciation of the forest's environmental value. For example almost every respondent mentioned the role of forest in keeping the air clean, preventing soil erosion, maintaining clear water sources. However we note a distinction between this general appreciation of ecosystem services, and more specific ecological relations within the forest. Many respondents said that forest should be 'clean', well maintained, and without undergrowth, reflecting their economic priorities, which would not benefit biodiversity.

The case studies demonstrated a strong cultural and historical link with the forest, illustrated by childhood memories, knowledge and skills passed on by parents, and religious or spiritual language about the forest. For most of the respondents, the forest is not an immediate source of income, but is seen consistently as 'my inheritance', one that they intend to bequeath to their children. Many people do not consider that they really 'own' the forest that has been allocated to them because it does not correspond to the actual forest that had belonged to their parents and grandparents, or because it consists of a share in communal forest.

We encountered wide geographic variation in levels of trust. Whilst not all good quality private forests are well managed, good governance is more prevalent where there are forests that are worth managing, and where the foresters (whether state or private) have longstanding relations with the local politicians and are known to the forest owners. Corruption was mentioned frequently, although indirectly. The most common form of corruption is benefit capture, where local politicians and / or foresters use their privileged access to information to obtain an unfair share of the benefits. While widespread, the worst cases are geographically isolated. It is not always a straightforward matter to understand what is going on, because the complexities of personal and political relations that underpin these interactions are part of the fabric of social life. Nevertheless it is clear that some communities and forest districts have had a much better experience than others, so there are opportunities for communities to learn from each other.

We conclude by analysing the effects of these changing relations on the rural communities, psychologically, culturally and institutionally, and the wider implications in the post-socialist context.

RURAL CZECH SETTLEMENTS FROM BANAT REGION

Iordache Costela[*]

The purpose of this study is to analyze the Czech's rural localities in South-East Banat, where these are grouped in compact communities, counting 7 villages. The birth of these villages is connected to the colonization made by the Habsburgs imperial authorities starting with the first part of the XIX century following economical and social motives. The colonization took place in the area of the Almaj and Locvei Mountain in three stages. The actual Czech localities are placed on three different cats of altitude. Concerning the *morph structural*, there are compact villages, being linear texture. Although the demographic potential is decreasing, the Czech villages in South-East Banat can refresh themselves, putting to a good use the huge national patrimony, represented by the ethno folklorist resources well preserved and by the natural frame that is highly special.

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COMMUNITY RESILIENCE AND SUB-REGIONAL INCENTIVES TO LOCAL FOOD PRODUCTION IN FINLAND

Järvelä Marja, Jokinen Pekka, Paloviita Ari and Puupponen Antti[*]

Local food has been introduced as means to endorse farm livelihood and rural sustainability (e.g. Marsden & Smith 2005). In high-consumption societies local food is also conceived to imply improved food security and decreasing ecological footprint of the food system. However, these arguments are heavily debated and historical context seems to make significant difference as to what can be concluded about the links between local food and rural sustainability. In order to deal with these issues in a way sensitive of the historical context we introduce an approach of critical ethnography focusing on community resilience and sub-regional incentives (c.f. Madison 2005).

During the last two decades food systems have been emphatically politicized in high consumption societies not only through differentiated consumers demand but also through regional initiatives to either secure local/regional food supply or else to produce quality food to the more demanding consumers (Renting, Marsden& Banks 2003). From the point of view of consumers good price is not necessary anymore the decisive enticement for selecting a particular food product. Instead, quality, freshness, recognition of origin, package etc. may play a more important role in triggering consumer's attention and choice. This trend of market dynamics makes room for the re- localization of food as an alternative line of food production (e.g. Goodman 2003; Sage 2003). However, in order to make success on the markets local food producers most often have to penetrate through a considerable thicket of societal preconditions that may vary from state to state and from region to region (Schmid & Sinabell 2007). Furthermore, natural circumstances make a great difference when considering what is feasible in terms of local agricultural production. In all, a signal of increased local food demand has been recognised. This signal has been recognised by food producers, even if there are many troubles and complexities in meeting this demand.

The aim of this paper is to shed light on the processes and eventualities of local food production in Northern circumstances, where consumer demand for local/regional food is increasingly in parallel with relatively rapid urbanisation and concentration of population to few urban centres. In these circumstances, local food is a difficult equation in terms of proximity and direct sales to customers. Nevertheless, sustainable rural development and sustainable livelihood in the country-side is encouraged by both local stakeholders and EU authorities (Kaljonen 2006). Therefore novel innovation of social organisation of food production and food system are needed.

In these circumstances individual producers in Finland fight against heavy odds and often their principal aim is to secure sustainable livelihood for their families. Simultaneously, they tend to feel that they are the main actors keeping guard on a particular local heritage not

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confining only to their private properties. During the years of rapid rural depopulation many farms may have gone through a period of relative isolation. However, counter-forces to the loss of community cohesion seem to emerge with new production initiatives including local food. Some of these initiatives are emphatically based on multi-functionality of the on-farm production. Another new feature is the emerging of effective networks that reorganize some community assets on the basis of reciprocity. We propose to analyse these trends as new indicators of social capital and community resilience (c.f. Adger 2000). It appears that the effectiveness of the initiatives for local food production depends to a great extent on the internal networking and joining forces of a variety of local actors meeting challenges of the globalising economy. Obviously, hardly any rural community hosting agricultural enterprises of working order is totally closed, i.e. lacking any influence from the external world. Therefore their capacities can be weighed through elements of community resilience and social capital. Importantly, the outside influence is not only bringing new risks and demands but also options for improved livelihood. Thus, community resilience is about balancing the internal and external driving forces in order to establish sustainability in local production and livelihood.

In a regional case study focused on Central Finland we have tested the applicability of the European conceptions and trajectories of local food systems.[3] Further, we ask what is at stake when communities are in search for an improved standard of community resilience through local food initiatives at their premises. In order to do this in a systemic way we follow an empirical research strategy of local inquiry including interviews with major stakeholders. We have identified as major stake-holders firstly the producers. Secondly, following the operative food chain we find as main actors the retailers and food industry. Finally, the consumers as end-users obviously perform an important impact on the whole food system. (In our study, however, the demand signals from consumers are – until now - expressed only through the interpretation performed by the retailers and food industry.)[4] Last but not least, we have interviewed several agents pertaining to the group of regional development experts, all of them actively contributing to the definition of local food concept and to practicable ideas of rural management.

Referring to the results of our research project - still in progress - we suggest with due reservations that in Central Finland community resilience is advancing with slow steps of adaptation to external challenges and by means of overcoming internal rigidities of social organisation and conventions of food market. Adopting new technologies in production and sales is an important part of the agenda. There are several peculiar traits and challenges to be considered in the Northern model of local food system. The local/regional stakeholders perceive these challenges to be related to the low density of population, difficult access to the market and to the lack of lucidity as concerns profitable specialisation and branding. It seems clear that improved communication and cooperation between stakeholders could clarify the local food concept and open the way to enhanced production, employment, sustainable livelihood, and consequently improve community resilience.

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CREATING NATURE: PERMACULTURE MANAGEMENT OF AGRICULTURE

Max Vittrup Jensen[*]

By understanding the interrelations of natural systems and implementing these principles within management of agriculture (and other systems), we are able to increase yield and nutrition, improve biodiversity, while generating more rural employment with an improved quality of life, without compromising the sustainability of future generations.

1.1. Introduction to concept of Permaculture

Permaculture was initially an abbreviation of "Permanent agriculture", a term coined by Australians Bill Mollison and David Holmgren in the late 1970s, describing a design system for creating human settlements that function in harmony with nature. Incorporating traditional knowledge, modern science, and the ecological patterns of the living world, permaculture design is applicable to farms, gardens, organizations, housing developments, towns and villages, or city neighbourhoods.

*"*Permaculture is a broad-scale design system that organizes concepts, principles, techniques, and strategies from many well-established fields into a pattern of mutually supportive relationships. If organic gardening, solar power, agroforestry, and other disciplines can be thought of as tools, then permaculture is a toolbox in which they can be organized for best use. Permaculture is a meta-discipline, operating at a higher level than that of technique. It has been used to design successful landscapes, houses, villages, businesses, farms, and developments. Permaculture is founded on the belief that if we identify and use the appropriate principles from natural systems, we can finally begin to develop a coherent science of design, something strangely lacking in a species that supposedly designs its environment (Hemenway, T. 2001)

During the past 10-15 years the term is more commonly an abbreviation of "permanent culture," as a fair amount of permaculture practitioners has taken the design step beyond simply the physical elements, as permaculture in reality is about permanence and durability of living systems and human culture, bearing in mind that this durability paradoxically depends a lot on flexibility and change.

As we enter a world of decreasing energy permaculture provides, I believe, the best available framework for redesigning the whole way we think, the way we act, and the way we design new strategies: *The thinking behind permaculture is really based on this idea of reducing that energy availability and how you work with that in a creative way. That requires a complete overturning of a lot of our inherited culture"*. (Holmgren, D. 2005)

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Howard T. Odum's embodied energy accounting, **"eMergy"** (Odum, H.T.1996) is a central design factor, whether detailed accounting is carried out or simply considered: A useful connection is viewed as one that maximizes power: that is, maximizes the rate of useful energy transformation..

..

1.2 The case model; Czech NGO PermaLot:

PermaLot is a civic organization founded in year 2000 as a local Agenda 21 initiative. PermaLot owns and manages a land trust comprised of a total of 17 certified organic hectares in cooperation with 5 independent organic farmers. This includes a large orchard with a summer campsite focused on educational activities, pastures for sheep and ponies, fields for bio-dynamic vegetables and crops such as technical hemp. 4 hectares of arable land will be managed in accordance with the no-till approach designed by Marc Bonfills, and all species/varieties chosen are of old Czech varieties. PermaLot actively protects the local environment through implementing an overall permaculture design, encouraging biodiversity and alternative environmental solutions.

The permaculture management is the core of PermaLot's work, as it seek to recreate the local sustainability of Bouzovsko by facilitating an alternative economic base for the area while providing a living example of sustainable living, natural building, alternative energy and waste management. This includes the recent establishment of a small kitchen incubator for production of final products, Czech Republic's first legal 'real' strawbale house as demonstration of natural building and renewable energy, as well as issues such as facilitation of alternative education, with an emphasis on the environment, language and low-impact eco-tourism.

PermaLot initially managed to gain a high degree of financial sustainability through rental of the camp facilities and management of the orchard along with producing final products. These activities will continue, however currently the focus is more on working within the micro-region, largely through public education by creation of successful examples.

1.3 Obstacles to multi-functional development.

The Czech Republic was dominated by the USSR between 1945 and 1989. It was a time span of more than a generation and naturally it left many marks. Not only the visible ones in the landscape, such as the uniform grey houses, the lack of hedgerows between the fields, or villages centred around large factories rather than employment within agriculture. Possibly one of the most fatal environmental scars is the fact that the époque managed to remove the age-old feeling of a peasant as a caretaker of the land, to ensure the possibility of crops for future generations. (Sapard plan, 2002)

Add to this the impact it had on the administrators, and the result is extremely prohibitive for anyone trying to carry out multi-functional farming within the framework of EU's Common Agriculture Policies, regional Development Programmes etc. In actuality the EU documents are in favour of such incentives, however all the mentioned sustainable principles, are missing in executive measures and its specific criteria. Civil servants in post communist countries principally don't look at the work from holistic/strategic/program (its aims) point of view. They are culturally adapted to only solve particular/ technical tasks and keep strictly within the written regulations. They are not educated to guide and help farmers, but to control and penalize them. *They don't understand the cause of the aims of the program, they control numbers and patterns.*

Rural development programs are a good idea, but their design is not based on real rural needs. Additionally they are based on conventional capitalistic philosophy (competitiveness,

free/price-oriented trade,...) and do not reflect diversification, erosion control, localization approach, self-sufficiency, conservations of species etc.

The full paper illustrates a positive solution to rural development in Europe in full respect with the principles of sustainability. It further more outlines the need for changes in the official support measures and the re-training of the post-communistic administrators.

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THE EXTENSION SERVICES IN THE CZECH COUNTRYSIDE (LOCAL ACTORS´ IDEAS)

*Kocmánková Lucie, Pavlíková Gabriela**

The main issue of this paper is problem of extension services for the Czech countryside and further on discussing the question, how and who should provide extension services (counselling or information) that is necessary for the development of rural areas. Based on this, the central question asked in this paper is: "*What is a role of extension services in the Czech countryside and how „prospective" participants of rural space development perceive a role of consultancy and advisory services?".*

A theoretical determination of this paper determines at first rural space – includes a country as a geographical space and further a country as a social space including agriculture as an activity connected with nature, that is just typical of this space in contrast to urban space, typical rather of its activities connected with industry. Than deals with an endogenous approach, which is possible to choose for a rural space development. The basic principle of exogenous models is seen in possible development outgoing from environs outside of the location, while possible potentials for development are especially searched for within the location at endogenous models, because they dispose of specific (natural, cultural, human) resources that need to be mobilized for development. At the end a theoretical determination connects to the rural space development (which must necessarily lead to interdisciplinary character of its insight) the one, which is essential for the rural space development according to principles of an endogenous approach. Besides above mentioned theoretical conceptualisation deals with local participants/actors that are active in a particular locality (it means an active participant for a development of this locality) and finally, the conceptualisation deals with consultancy as a professional providing of expert advice, precaution proposal formulated by one subject/participant in order to solve a problem of the other subject/participant. An information as knowing, gained among others also through the medium of extension services (counselling or information) belongs undoubtedly among „know-how" of such a rural/local actors/participant.

The paper is entirely focused on data gathering in terrain by qualitative Focus groups technique in two localities – Protivín (an area around Ceske Budejovice) and Třebenice (an area around Liberec). The basic requirements on data were a location of above mentioned areas (around Ceske Budejovice and Liberec) and it was necessary to choose respondents in such a way, so that they should represent local participants or so they would be the participants themselves acting in these localities. The respondents were chosen among mayors, association representatives of municipalities or MAS, entrepreneurs (sole traders, self-employed farmers), significant personalities of local life (a school director, a teacher, a priest).

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Results and conclusions of this paper bring a basic mapping out problems of extension services (consultancy and information in the Czech countryside), gained through the medium respondents´ opinions and seen by eyes of prospective participants of rural development. A central question asked in this paper was: "*What is a role of extension services in the Czech countryside and how „prospective" participants of rural space development perceive a role of consultancy and advisory services?"* An answer to this question was searched for in respondents´ testimonies, carried out in two group discussions in Protivin and Trebenice. Local participants confirm a non-simplicity of rural development in group discussions in terms of a difficult orientation in the problems of projects and possibilities to get grants for their localities both financed from the state budget and foreign resources (resources of EU). Local participants confirm easier navigation: if we already have some programmes „checked out" and if we at least partially know its functional mechanism and at the same time are there institutions created, that make their management easier and suggest „how to proceed" (for example local authorities, that are engaged in a net of service organisations, association of villages, MAS and so on.), than a management of how to get resources for a local localities development for now functions. Respondents confirm, that a creation of an informative or advisory system is almost an essential condition for creation of activities connected with the locality development and its role at data acquisition is crucial. In case of absence of an informative/advisory centre, extensive passivity and disinterest can happen. *How to create a functioning and effective informative/advisory net for needs of rural development?* It is a subject of further research.

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LANDSCAPE HERITAGE VALUES AND CHANGES IN SETTLEMENT INTENSITY IN THE CASE OF CZECHIA – INTRODUCTORY COMPARISON

Kučera Zdeněk[*]

Despite some recent developments it is still important to discuss the meaning and purpose of landscape heritage. The core of the paper is based on a few statements that are summed up in the following points: 1) landscape heritage can not be defined only in terms of cultural or natural heritage, because it combines both in one particular whole; 2) cultural values of this heritage are not less important than natural; 3) as of land as shaped by human action or space inhabited by particular community its character is more or less influenced by human settlement; 4) despite this fact there has been put little attention to the relationship between settlement development and its influence on the formation of our perception of landscape heritage; and 5) there has been put to much emphasis on the preservation of traditional landscapes, although these are often the least populated, with low population pressure in the long term.

Thus in the paper we focus on the analysis of the relationship between settlement intensity development as represented by changes in population density in Czechia since the mid-19th century and contemporary landscape values on national level as represented by designated protected areas.

Given its holistic and complex nature, landscape has many different values which may be defined from different points of view. Those values are being delimited especially on: 1) the level of individual experience and 2) the level of societal ideology.

The first group of values is based on the observation that our perception of landscape as image of the immediately lived environment is intern and personal. Next to these individual values there are also those which are believed to be corporate and are expressed through political decisions on national level in particular. These values are symbolically represented through designation of protected areas with the aim to save particular values for future generations, so called areal preservation. This we traditionally define as a more or less successful management of certain characteristics or elements in particular areas selected and delimited for its protection. Because these areas were delimited following the presupposed corporate preferences and values, they may be also used as an indicator for the delimitation of the most valuable landscapes.

At first the typology of Czechia based on the evaluation of the importance of areal preservation in the districts of municipalities was made. For the creation of the typology were used the data about the extent and number of protected areas of natural as well as cultural heritage in Czechia. Its main presumption is that landscape is most valuable there, where it is

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most intensively protected. Thus the bigger is the share of municipality area in protected areas of different categories and the bigger is the number of these areas, the more valuable landscape it is.

However, we should not treat the results of this typology as absolute ones, the protected areas are very heterogeneous in their actual meanings and purposes. Moreover, we are combining the preservation of natural and cultural heritage, in spite of the fact that the aims and goals of its protection may be very different. Thus we should treat the above mentioned typology rather as a mean than the result of our research.

In our typology the landscape of Czechia is divided into four main types, the areas where the importance of areal preservation is: 1) high, 2) medium, 3) low or 4) none.

The landscapes with high and medium importance (types 1 and 2 in our typology) are located either in the borderland where there is traditionally very strong position of the protection of natural heritage (near the state border all the four national parks in Czechia are situated and also the majority of the landscape protected areas) or in the areas with significant intersection of natural and cultural values. Specific in its importance is the area of the capital city Prague. Very few inhabitants live in the areas where, there is no protected area to be found. This is due to the fact, that for the construction of the typology we have also used the data about small-scale protected areas, which are very numerous in Czechia. Thus large parts of its territory are included in type 3.

The above mentioned results were compared with the typology of Czechia according to current settlement intensity and change since the mid-19th century. This typology was created on the level of municipalities and is based on the data about population density development between 1869 and 2001. Municipalities are divided into four main groups according to its population density as well as its change in the observed period. The areas with the lowest level of settlement intensity and its highest decrease are to be found particularly around major regional borders, so called inner peripheries, and in the parts of the borderland where there the share of Czech Germans in the population before 1945 was significant. Thus nowadays there are two types of areas with similarly low degree of settlement intensity to be found in Czechia, although this is the outcome of different historical processes. The areas with the highest level of settlement intensity and its highest increase are the districts of major towns and municipalities in its near surroundings.

At last the relationship between the overall importance of areal preservation and settlement intensity was examined with the use of contingency tables. Indirect dependence between the variables proved to be statistically significant, although important deformations in the observed trend occurred.

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RURAL BASIC SCHOOLS NETWORK, ITS SPATIAL PATTERN CHANGES AND IMPACT ON LOCAL COMMUNITIES

Kučerová Silvie[*]

The article deals with changes in space distribution of basic schools in the territory of Czechia during the second half of 20th century. These changes are mentioned in the context of wider societal process and changes in geographical organizataion of society occuring in this period. The ascertained results will be discussed in connection with the impact that the basic schools network changes can have on rural areas, rural population, running of rural communities, as we presume that the school, especially in rural areas, has a significance beyond its ostensible educational one. Closing of a basic school means that the municipality looses all the functions that the school provides to certain municipality and it can lead to functional marginalization of the area.

To understand the situation, it was at first necessary to examine the processes going on in the entire network of basic educational institutions and only then to look for differences in the development of urban and rural schools. In our research we decided to define rural basic school as an institution situated in a rural municipality which is a municipality with less than 3 000 inhabitants. In this conception we shall speak about schools in the countryside, in rural areas rather than about rural schools, because we cannot avoid that some of the so-called rural schools that we have defined will approach, by the character of the interaction between the school and the community, more to urban schools.

The development of space organization from the point of view of education accessibility in the years 1961–2004 were evaluated transversally by historical comparison of the character of the basic schools network in four time horizons: 1961, 1976, 1990 a 2004. Selection of these time horizons was primarily subordinated to the availability of relevant data. It must be added that the sources we used to find the data on the number of basic schools must be submitted to a critical assessment. The years we have selected enable us to characterize the basic schools network changes in relation to prevailing geographical processes and general social changes. The year 1961 records the state of the basic schools network at the beginning of the observed period, in the socialist Czechoslovakia. The space distribution of basic schools in 1976 reflects already the changes of the fundamental settlement and administrative reform as well as of the reform of basic education. The year 1990 is an important milestone for evaluation of the basic schools network shortly after the fall of the totalitarian regime on the territory of Czechia and it enables to evaluate the changes which occurred in the period of socialism and in that of renewal of democratic society and market economy, i.e. in the so-called transformation period. This time limit serves therefore also for analysing the initial state of the school network in the period of social transformation, including also the renewal of the self-governing function of municipalities as the most important founders of schools in Czechia.

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The year 2004 represents the "present" state after fifteen years of transformation of the Czech society.

We evaluated the intensity of closing of school institutions in individual municipalities and in larger areas during the monitored period, concentrating especially on diverse development of shool network in rural and urban areas. During the period, new school were opened mostly in district, or in general bigger towns and schools in district towns were in general not closed. On the contrary, rural areas manifest a significant decrease of schools; although it is the case of the schools with a lower number of forms. Especially in the inner peripheries of Czechia (e.g. Central Bohemia) and borderland, the accessibility of educational institutions is, according to the data on the decrease of the number of basic schools, insufficient.

We must however take into account that terms as "worse accessibility" or "insufficient service availability" are largely relative. Closing of educational institutions in small municipalities, in municipalities with bad geographical position and concentration of these institutions into larger settlements must be examined in a larger context of the societal development. To ensure effective education directly in the locality, it is necessary to have a certain minimal quantity of pupils and especially peripheral regions manifest the highest decrease of population. Closing of schools is the most probably the logical outfall of the absence of demand for this service. Therefore a territory characterized by a high intensity of closing of schools cannot be in general qualified as more disadvantaged than the one with a less intense closing of schools, if there are good transport facilities for pupils commuting to the appropriate educational institutions, if there are friendly relations among teachers, commuting pupils and their fellows in the school in the larger commuting centre and if there is also mutual respect and possibly experience from different backgrounds which is properly used during classes. Not each region, which seems from our perspective and after the criteria we have selected as disadvantaged, must necessarily be perceived as such by local inhabitants and by subjects operating in the given territory. And similarly closing of a single school can cause to inhabitants of a region, which seems to us as without problems, many difficulties that we cannot see.

Therefore it is necessary, when studying the development of the basic schools network, to combine the quantitative and the macroregional approach with methods of field observation in microregional case studies. Such kind of methods we are going to use in our future research on this issue.

FROM WORDS TO DEEDS – REGIONAL POLICY REACTIONS TO DEMOGRAPHIC CHANGE IN SPARSELY POPULATED, PERIPHERAL AREAS IN GERMANY

Küpper Patrick[*]

Sparsely populated, peripheral areas are particularly affected by demographic changes. Population decline and ageing have characterised these areas in Europe and Germany in the past and stronger changes than in other areas are predicted for the forthcoming decades. The effects of demographic changes include the closing-down of services of general interest, residential vacancy, urban decline, labour force shortage, changing economic demand and negative fiscal effects. Regional policy offers a financial and organisational framework for reacting to the resulting challenges.

The research question is how regional policy in sparsely populated, peripheral areas reacts to demographic change. This contribution aims to highlight the scope of possible activities reacting to demographic change on the regional level. Therefore, five dimensions of reaction are examined: the general approach, the spatial vision, the involved actors, the interaction mode and the model of planning. Every dimension consists of two opposing alternatives developeded from regional research about demographic change and based on theoretical reflections.

Concerning the general approach, the question arises, what the regional reaction to demographic change is aimed at. The strategy of adaptation accepts demographic changes as given and seeks to adapt spatial structures to a declining and ageing population. The opposing option of counteraction aims for influencing the demographic development and reversing the shrinking trend or at least stabilise the development. Scientific debates prefer adaptation because it is more realistic. But there are incentives and habits that make counteraction likely and hinder a change of strategy.

The second dimension concerns the spatial vision of regional policy. Scholars often recommend the concentration of the settlement structure as a reaction to demographic change, since it is seen notably sustainable and efficient. Decentralisation activities seem to predominate in practice because of institutional incentives, the wish of many voters for an area wide supply and cheap real estates and because these activities facilitate reaching a regional consensus.

The next dimension asks who developes, implements and finances regional policy in reaction to demographic change. Most scientists expect, on the one hand, a gain in importance of non-public actors as a reaction to demographic change. The participation of economic and civic actors has often been recommended to save costs and maintain the supply. On the other hand, the assumption of a dominance of public actors in regional policy can be established because

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these actors would avoid their loss of power and because the potential of non-public actors is limited. Empirical findings support this assumption.

The forth question is how these actors interact with each other. Scientific literature expects an increase in the necessity for regional co-operation and advices this particularly in sparsely populated, peripheral areas. Existing empirical findings and theoretical reflections indicate, however, the dominance of unilateral action to react to demographic change in practice. At last the concrete institutional context and the application of the shadow of hierarchy play a decisive role. This context can differ largely among the regions and the grant programmes.

The last dimension concerns the question what model of planning is applied to react to demographic change in regional policy. Strategic planning is often recommended as a reaction to demographic change. The management and learning process with SWOT-analysis, vision, clear goal orientation and evaluation is required to allocate declining ressources effectivly. An incremental model seems to be more realistic, because it has become persistent in regional policy practice and longterm strategies are not feasible in an unstable, complex regional context.

The discussion of the dichotomies in regional policy highlights the conflicts and uncertainties about regional reactions to demographic change. Arguments for both extremes could be identified. Overall, suggestions derived from research about demographic change include adaptation strategies, concentration of settlement structures, gain in influence of non-public actors, regional co-operation and application of strategic planning models. Assuming rational behaviour and a steady institutional context, empirical findings and theoretical reflections indicate opposite reactions. Apparently, the deeds of regional actors contradict the words of scientists. This difference results from the respective standpoint. An external rationality, that seeks to maximize well-being for the people living in a region, can result in totally different recommendations than the rationality of the actors involved in the institutional context and regional interest constellations.

Generally, research about demographic change should not only recommend desired actions and hope that the regional actors adhere to these. Rather, we should pay attention to what could be implemented in a given context and how to adjust this context. The need for modification can only be identified on the basis of a mapping of regional reactions. Hence, policy recommendations could be concretised towards desired and practicable reactions to move from words to deeds.

AGRICULTURAL DIVERSIFICATION AND GENDER-RELATED DIVISION OF LABOUR - A CASE STUDY ON A FARMSTEAD COOPERATION PROJECT IN KIRCHBERG/PIELACH (LOWER AUSTRIA)

Kurz Peter[*]

Projects on diversification in agriculture usually aim at several different goals: They should strengthen local and regional economies, help stabilizing local farm-households and preserve cultural landscapes. Beyond that they are intended to encourage and support women on the farmsteads to develop their own economical domains. However, whether multiple activities on farmsteads do produce more freedom of action especially for women or if they multiply their workload is an often discussed question. This crucially depends on the conception of a project.

The paper presents a case study on a farmstead cooperation project designed within a regional development programme in Lower Austria. The project is promoting the production and commercialisation of brandies and liqueurs made of local fruits by farmstead households. In our inquiry we analysed the organisation of labour on the participating farmsteads with a focus on gender-related patterns. On another level we put a focus on division of labour, representation and resources of women and men within the management of the project and elaborated relations between both levels. Finally we drew a detailed view on the processes of development of the project and ongoing changes within the project structures and its influences on participating farmsteads as well as on the division of labour. The inquiry offers as a result, that on all of the participating farmsteads division of labour follows "typical" gender-related patterns, where women take the parts of continuous, household-related labour. Although labour within the project can help loosen those patterns, it is remarkable that men take the key positions within the management of the project. They make general decisions and they are the driving forces in processes of modernising the project and make it more professional. Based on the results quality criteria that should proof equal opportunities for women and men at several stages of designing a project are figured out.

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PERCEPTION OF EUROPEAN UNION BY FARMERS IN LUBELSKIE VOIVODESHIP – QUESTIONNAIRES SURVEY RESULTS

Maj Hubert[*]

The paper presents the results of questionnaire surveys, which were conducted among farmers. Surveys were conducted from May to August 2007 in the eastern part of Poland, in lubelskie voivodeship. This is the voivodeship, where agriculture plays significant role in comparison with other regions of the country. Additionally, the lowest support to integration with European Union was noticed in the public referendum. However, according to the questionnaire surveys, the farmers gave bigger support for ratification the Treaty. The results of research answers the question how farmers in lubelskie voivodeship perceive the European Union 3 years after the access. In addition, we could indicate, which factors cause increase and which one cause decrease in the support for the European Union.

For the most of the respondents, the fact of Poland's access to the European Union is not correlate with changes in their own farms. An improvement of situation in the farm was noticed only by 1/3 of the farmers. There are strong correlations between participation in the referendum and declared support for the integration from one hand, and current assessment of changes after Poland's access to the U.E. from the other hand. Close correlation exists between general assessment of situation in polish agriculture and assessment of changes after the integration. Positive assessment of this changes depends also on farmers' age, their farms' area, the amount of production for the market, and significant changes which were made or are going to be made in the nearest future in the farms. Nowadays lower support for the European Union is noticed among farmers. Some of them express dissatisfaction and feel as if they were deceived by the E.U., because they obtain lower subsidies than farmers from the "old Union". The respondents indicate rather limits of polish participation to the European Union, than benefits of it.

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SOME ASPECTS CONCERNING THE LIFE QUALITY AND THE ENVIRONMENT QUALITY IN THE ROMANIAN RURAL RUDIMENTARY COMMUNITIES (CASE STUDY)

Manea Gabriela, Matei Elena, Tiscovschi Adrian[*]

In Romania rural area, which comprises habitats with a high degree of naturality, live 47% of the whole country inhabitants (Romania Census, 2002) and there are 44% from the households based mainly on farming. At the down of the third millennium, in Romania, a recent EU member, disparities of the environment quality and housing comfort between urban and rural settlements and also between rural villages themselves are quite evident. The causes are not always related to politics or family earnings, but they are also results of some inertia, tradition, cultural influences which belong to certain human communities.

This study tries to identify the reasons and the effects of the informal settlements developed in the last decades in the proximity of natural beauty landscapes nearby the very imposing historical villages on the environment, economy and population inside and outside area.

The case study takes into analyse two communities from the northern part of Arges County, south of Leaota Mountains, respectively Gura Pravat hamlet, closed to Namaiesti tourist village and the other in Cetateni Gorges Natural Reserve.

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SOCIOLOGICAL VIEW OF THE CZECH RURAL AREAS

Maříková Pavlína, Herová Irena[*]

The origin of the rural sociology as a branch of science can be dated to the end of the 19th century when some American universities started to offer this topic as a separate subject. Rural Sociology by J. M. Gillette, first published in 1922, is considered to be the basic work of rural sociology. A brief look at its index shows that it deals with a broad scale of issues and topics, from relations between towns and coutryside, to characteristics of rural inhabitants and economical problems of agriculture.

In Europe, the beginnings of rural sociology are tightly connected with the work of P. A. Sorokin and C. C. Zimmerman, Principles of Rural-Urban Sociology, published in 1929. It brought overviews of characteristics of European and Russian countryside.

Both above mentioned books have also greatly influenced the develpmnet of Czech rural sociology. Monographs of rural municipalities published in 1920's and 1930's are considered to be the first Czech works in rural sociology. As a branch of science was rural sociology institutionaly related with the Czechoslovak Academy of Agriculture and the most significant researchers of this time were E. Chalupný, T. Čep, J. B. Tauber.

The political and social development after WW2 was not favourable for Czech rural sociology. Some research places were closed, other greatly reduced. However, some steps important for the future of rural sociology were still done. Thanks to the efforts of J. Tauber, the Central Comittee for Social and Cultural Issues in Agriculture was established followed by the founding of the Cabinet for Social and Cultural Issues in Agriculture. The activities of J. Tauber were also essential for the start of another independent sociological workplace related to the Research Institute of Agricultural Economics in Prague, which in 1965 developed into the Institut of Rural Sociology and History of Agriculture.

Department of Rural Sociology and History of Agriculture was in 1965 founded at the Agricultural College in Prague and similar development could be seen at the Agricultural College in Brno, where the Section of Sociology of Agriculture was founded by F. Křenek and shortly afterwards gave rise to the Department of Agriculture and Village. Lectures on rural sociology had already been offered here in 1935 – 1938 by the first associate proffessor of rural sociology Dr. T. Čep. Classes continued even after the war but ended in 1948, when, as a consequence of the communistic reforms, the whole Department was closed.

After 1968, the period of normalization starts with renewed restrictions of freedom of speech. It is not desirable to inquire into people's oppinions and therefore is most of sociological workplaces including those focused on education closed. Rural sociology survives this period but in much reduced state.

Classes of rural sociology were renewed after the political changes in 1989. However, the focus of rural sociology has changed with the change of the regime. According to the

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Sociological Dictionary, rural sociology today focuses on the changes and development of the life style of all rural inhabitants caused by urbanization, and on the social and ecological changes of coutryside.

The definition of the words RURAL AREA and countryside changes as well. Generally, rural area is an inhabited area outside of town traditionally characterized by the focus on agriculture. There are, however, many other definitions of rural area defining it at regional as well as at local level. The most commonly used criteria defining rural areas are the number of inhabitants and population density. There are also other definitions, which have their advantages and disadvantages. In general, however, the existence of more definitions makes it difficult to correctly evaluate any statistics on rural areas.

Currently, there is no independent organization uniting rural sociologists. The Masaryks Czech Sociological Society has, however, the Section of Rural Sociology, which under the leadership of V. Majerová, carries out research on topics related with rural areas, agriculture and sustainable development.

Rural areas as a topic of research draw attention of various institutions. The focus today is not on description of individual rural municipalities or problems of selected groups of inhabitants but on the issues related with RURAL DEVELOPMENT, its potential and possibilities.

Sociological Laboratory at the Department of Humanities of Czech University of Life Sciences is one of the few workplaces that are from 1997 purely engaged in rural sociology. Several sociological studies of Czech (and Moravian) countryside have been carried out by the Sociological Laboratory in the past years.

As the sustainable development of rural areas has currently become an important goal of European governments, rural sociology has become a very significant research topic. To enable rural development, it is necessary to take the opinions of all groups of rural inhabitants into account. Each group of inhabitants can have a different view on what development means for them. For successful and sustainable development it is necessary to come to a common conclusion, to reach a compromise.

One of the current tasks of rural sociology is to identify and analyze views and opinions of rural inhabitants, to follow sociological changes related to restructuring of rural areas, to compare the state of rural society at international level and to show possible changes related to demographical and economical changes. Rural sociology also has a significant role in analysis of regional disparities (remote or suburbian areas) and of the role and status of individual social groups (women, seniors).

THE INFLUENCE OF THE ROMANIAN SMALL DEVELOPED TOWNS UPON THEIR RURAL SURROUNDINGS. CASE STUDY

Matei Elena[*]

Small towns which are confronted with economic marginalization given by the attractively of the big urban centers are designated to play an engine role for rural areas. But many of them suffered, as villages themselves, a decline of their economy, which has mainly been attributed to changes of political context.

The study tries to explain how rural economy is influenced by small towns, focusing upon the most developed ones in order to establish a model of urban-rural relation functioning, which could raise the life, environmental quality of villages.

The opened political opportunities after 1990 favored the emergence of developing in countryside in several areas and disfavored towns by the new framework lows. The conclusion highlights the limits of the alternative strategy of the urban-rural interrelationship. As a result, in the post-communist era the opportunities to claim for radical changes have been limited and many settlements are in laisser-faire scenario of development.

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SOCIAL VALUE OF SUBURBAN LANDSCAPE – SYNERGY OF RURALITY AND URBANITY

Okada Masaaki[*]

1. Suburb; where the Rurality meets Urbanity

Suburb is sometimes taken as ugly urban sprawl, but recently some artists or art creators began to discover significance of suburban space. Mr. Atsushi MIURA, Japanese marketing planner, describes the area around National Road Route-16, which circularly connects a ring of suburban cities around Tokyo Metropolis as "The hugest Cultural Range for youngsters in Japan"[1)]. The baby boom generation (people 60-70 yeas old now), who used to be called "NEW THIRTIES" moved to this area for cheaper land and life with greens in the 1980's, and the new generation of their kids (called, Route -16 Youngsters) may influence the marketing in the future, he says. Those suburban cities, such as Machida, Sagamihara, Hachioji or Kashiwa, had seldom been positively spotlighted so far, and his aspect seems quite new and fresh.

On the other hand, Mr. Tadashi KAWAMATA, one of the most well-known worldwide Japanese artists, describes the possibility of suburb as the subject of artistic expression[2)]. He says that we may define the CITY in the MIDDLE landscape, i.e. suburb, between town and nature or rurality. In his project held in 2000, titled, "House and Suburban Houses", he attempted to define the "urbanized" atmosphere where something new and old, urban and rural, convenience store and Japanese traditional grocery coexists altogether.

Mr. Doppo KUNIKIDA (1871-1908), Japanese novelist in the beginning of 20th century, is known as the first discoverer of value of suburban landscape. One of his masterpieces, titled "MUSASHINO (1898)" (the regional name of western suburb around Tokyo)) describes the attraction of suburb, where flies or cicadas flies about, horses in farms district and whistle of steam locomotives. Here, we can find the coexistence of 2 different neighs, and we can hear the sound of time signal gun at noon every day from central Tokyo icons that mean respectively suburban, and urban events.

2. Suburb; Where Linear Infrastructure pass through

As above, suburban landscape has been recognized since modern ages from various aesthetic aspects, and even in these days, it has been paid attention by modern artists. At the same time, suburbs are where the linear infrastructure passes through for the flood control or water utilization, industrial production or transportation. Till these days, those infrastructures have played the important roles for the suburban development after the war, and have formed distinctive landscape and space.

(1) Passing point of waterways and related facilities

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When we look at the map of Kanagawa Prefecture, which is highly developed region located in the south of Tokyo, we can find narrow and straight pathway for 44 km from Nogeyama Park in downtown Yokohama to the northwest. This line is seen as the prefectural road, or narrow trails, crossing under the highway, penetrating densely built residential areas, or even the American Military Residence. This is the Yokohama Waterway, first-built water facility in Japan designed by Mr. Henry Spencer Palmer, British Civil Engineer in 1887. Working waterpipes are buried under this pathway. In general, waterways are designed for the shortest distance between water source, purification plant and water supply facilities, and this linear land has been kept even during the residential or industrial development after the war, since they had to keep the space over the buried waterpipes vacant for the maintenance. As a result, successive linear road-space are formed, penetrating various land uses.

Fig.1: Yokohama Waterway (in Higashi-Rinkan and Asamizodai Area, densely-developed suburban residence)

Along the Yokohama Waterway, various kinds of characteristic facilities were constructed at that time, and most of them still exist as working or abolished civil engineering heritages, forming the unique Middle-Landscape in the suburban areas. For instance, the author discovered the successive milestones made of granite on every 1 km along the Yokohama Waterway, which has the letters "#km, Yokohama Water service bureau" with the old-style Chinese characters which used to be used before the war. They were discovered on the point of 12,13,14,16,18, and 26 km from the water source. These are not found in the developed areas, but less-developed suburb.

In addition, Asamizo decompression watertank is located in the suburban area along the waterway. This concrete-made facility was constructed in 1942 to reduce the water pressure in waterpipes. Around the World War II, concrete-made water pipes were used to save the iron for weapon, however, concrete pipe was not as tough as iron against inner pressure, and this facility was necessary to be built. Its existence may tell people not only the history of waterway but also the forgotten history of the wartime

Old Ohshima Junction Well is another characteristic facility along. It was built in 1934 as high-tech facility for water supply. Later it was abolished and now is reused as retirement club house. This reminiscence shows that this suburban area took the important role for the urban development of downtown Yokohama city.

Other than them, water purification plant with unique landscape design, such as Sue Purification Plant in Kanazawa (registered as national registered monument in 2008[4]) exists in the suburban area, which was once the rural or non-urban area when its foundation.

(2) Point of Flood Control to Protect the Downtown

Rivers are another examples of linear infrastructure. At the entrance of the city area, barrages or watergates are constructed to prevent the flood from coming into the city, and they form characteristic middle landscape. Man-made Arakawa bypass drain river (22 km long) was dig in 1930 to protect the downtown Tokyo area, and Iwabuchi-watergate was constructed in 1924

at the fork of original and man-made bypass river. It obtained nickname, "Aka-Suimon (red Watergate)" by the local people and has been cherished as local landmark. In 1982, new watergate was completed right next to the old one, and the latter was to be demolished. Local people appealed to preserve it and obtained the agreement.

Similar case is found in Nangou Weir in Shiga Prefecture constructed in 1905. They are functionally located in the boundary of urban and rural area.

(3) Point of Transportation of Industrial Materials

Limestone or quarry is exploited generally in mountainous lands, and railroads are constructed to transport the goods from there to the coastal industrial areas. They pass the middle area between rural and urban, and form the unique landscape. For instance, "Limestone Train" on JR Oume Line in Tokyo was working till 1998 to transport the limestone from quarry to the Kawasaki Industrial District, and local people once made the poem (Haiku) that "On Oume Line, Stones seem to be ranked higher than people". There were some public opinions to miss the freight train when its abolition[2)], and that proved that local people cherished even such industrial landscape.

3. Method of Enhancing the Public Awareness

Facilities mentioned above were constructed at the boundary point of urban and rural area, and formed characteristic landscape which could be even cherished by local people. Significance of this forgotten landscape are emphasized in various methods, such as discussion in symposium, media, or physical landscape design. Most of the boundary areas are already developed as residential suburb, and in some cases, existence of these facilities are not recognized even by local people. However, it is the fact that they have played significant role in the history of urban development and should deserve to obtain public awareness. Some projects attempt to enhance public awareness without transforming the existing landscape, such as Ishiyama Ryokuchi Park in Sapporo, Japan, where abolished quarry was redeveloped as art park.

Authors made experiment in 2006 at the event of national ministry in Shiga Prefecture to enhance the public awareness to the abolished weir, introducing artwork as instruments for enlightenment. We designed the work, named "Prism Box" (Fig-3) with SS40 Angle Pipes, with daily interiors inside, such as curtains, tables, Japanese cushions and slippers, and we intended to rediscover the historic significance of existence of the weir through the daily context. Visitors gave us the comments for the effect of this work, such as emphasis of existence of the weir, or encouragement of observation, or discussion.

In suburban areas, there are still a lot of "neglected" value which may generate characteristic landscape or even tells the history of development. Setting the artworks is proved to be one of the effective methods to make visitors aware of them.

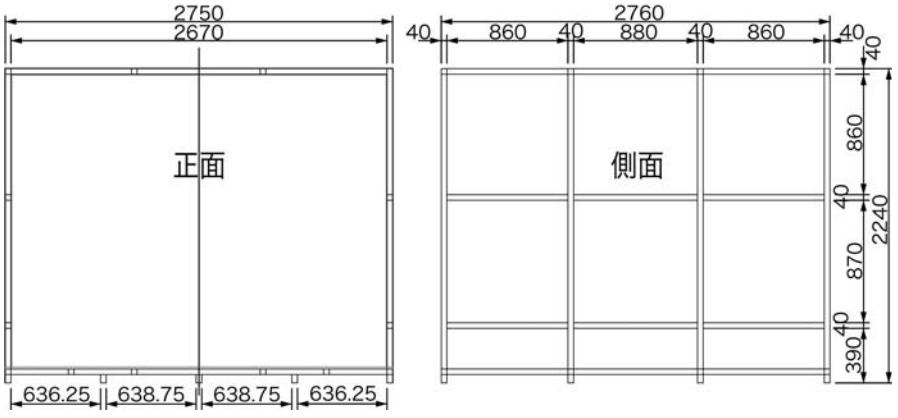

Fig-3:Prism-Box for enhancing the public awareness to the weir (Nov, 2006)
Nango Weir, Shiga Prefecture (By Naoto Kitaguchi and members of Kinki University, including the author)

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THE POTENTIAL AND THE CHANCES OF DEVELOPMENT OF COUNTRY AREAS IN THE POLISH – CZECH BORDERLAND

Oleszek Jerzy [*]

The area of research are country settlement units placed at mountainous massif which is known in Poland as Góry Złote and in Czech Republic - as Rychlebskė Hory. The motivation of this research is the case of actual potential of the countryside, with special attention to the features of form continuum. Results proof that there are sings of *genius loci*. The degree and the level of existing zeitgeist enables to asses the possibility of continuation of the specific features of the place. It is pointed out which elements are the markers of the place, and which only curiosities or tourist attractions. From the point of view of the function of the object, a strong expansion of holiday houses is seen. This process determines new, often hard to define, spatial structures of the unit. The issue appears: is the contemporary recreation settlement the final figure or rather a stage in process of transformation structure of function or space of the unit. It stays a rhetoric question: is there a form which could be the succession for country settlement rooted - contemporary recreation settlement. Important effects of decreasing the potential of borderland village are identified.

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CHANGES IN THE MANAGEMENT OF EUROPEAN UPLANDS: A CASE-STUDY FROM SW IRELAND

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European upland landscapes are of high natural and cultural value. In this paper we present a case study, set in the Irish uplands. We highlight the complex links between ecology, farming systems, the policy environment and the local socio-economic and cultural context. Given the current low economic returns from hill sheep farming, pluriactivity and multifunctionalism are increasingly necessary farm household coping strategies. We argue that the part-time farming model has land use management and ecological implications for the uplands. Overall we find that within the social-ecological system studied, farming households are adjusting to changing circumstances rather than exiting the sector en mass. We conclude that effective policies for the conservation and management of the uplands, requires a cross-sectoral approach that can take account not only of environmental criteria, but also land managers socio-economic objectives.

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DEMOGRAPHIC SITUATION OF RURAL POPULATION IN UKRAINE IN THE PERIOD OF INTENSIVE SOCIO-ECONOMIC TRANSFORMATION

Pantyley Victoria[*]

The political reforms, implemented for many years in Ukraine, have caused a number of significant changes noticeable especially in the economy and within the sphere of social relations. The processes are accompanied by a lot of negative social phenomena concerning mainly unemployment, continuing stratification of the society in terms of the level and quality of life, social pathologies, etc. The number of poor people living on the verge of poverty is growing. There arises spatial differences diversification in the course of the conducted reforms which are especially visible between the capital city region already largely benefiting from the changes and agricultural areas in particular. The above mentioned differences result mainly from poor effects of reforming socialist agricultural households.

It should be observed that the contemporary demographic crisis in the rural areas of Ukraine already showed in 1978, when for the first time in the post-war history the natural increase rate reached zero, which was the consequence of the proceeding ageing of the society, and the migratory outflow of the population. "The small demographic explosion" which took place in Ukraine at the end of the 19th and beginning of the 20th c. was disrupted by a series of demographic catastrophes caused by World War I and World War II. It was also hindered by the great famine of 1933-1934 as well as by the policy of the former Soviet Union in 1960-70s, directed at the multi-directional development of highly urbanised and industrial areas, which at the same time considerably discriminated rural areas. The great famine in 1933-34 aimed at biological, moral and psychological decimation of farmers in Ukraine brought losses of over 20% of the population at that time (*Zastavnyj 2003*). Those who survived had to work on collective farms and to radically change their style of life. World War II losses and post-war repressions prevented the Ukrainian village from being reborn in its traditional form by the development of destructive demographic tendencies directed at the decline in the total fertility rate of women and also by the exhaustion of the population's genetic potential. As a result, the number of rural population in the post-war period was growing very slowly. The years of 1960-70 were not favourable for the development of rural population: the increase in urbanization and industrialization was conducive to the outflow of rural population to cities and to the decrease in the female fertility rate and birth rate. Due to the constant outflow of rural population to cities and the accelerated rate of the population's ageing, the demographic potential of the rural population became exhausted at the beginning of the 70s. The years of 1970-80, known as the "stagnation" years, were quite favourable for the rural population as a result of the increase in its level and quality of life. The total fertility rate of rural women was then 2-3 children per 1 woman of reproductive age, i.e. it was clearly higher than that of women in cities. The transformations of the 90s with their typical drastic decline in living standards, rapid growth in unemployment, lack of social security, rising psycho-social tension

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caused by the lack of hope for the future – all these side effects undoubtedly worsened the demographic situation and the population's state of health in Ukraine, and especially in its rural areas. In the spatial depiction there were analysed the following elements of the demographic and socio-economic situation of rural population in Ukraine in 1990-2007: changes in population number, birth rate, mortality rate and structure, infant mortality rate, fertility rate, population's age and gender structure, natural increase and migration rate, employment level and structure, unemployment rate, level and structure of income and basic household expenditure, poverty rate, level of satisfaction with one's own material situation. It was found that Ukraine has seen a deep demographic crisis, connected with a deep and systematic decline in the birth rate, rapid growth in the death rate in total and due to circulatory system diseases and external causes, which concerns mainly people of productive age. It is also connected with increase in the infants' death rate, drop in the total fertility rate of women and rapidly progressing ageing processes. Except for historical and socio-economic factors, the demographic crisis is largely influenced by successive blocking and falsifying of agricultural reforms. Moreover, the reforms are used to illegally cumulate initial capital. It is done by former managers of cooperatives and other representatives of political party elites. Due to farmers' weakness and conservatism as well as the insufficiently developed sphere of farmers-agriculturists, the strategy of agricultural reforms is currently shaped by the interests of trade-financial capital.

Only in the case of immediate effective agricultural reforms and raising the living standards of rural population can it be expected that destructive demographic changes in Ukrainian rural areas will be impeded, at least to a small extent. Otherwise, as the UN predicts, over the last 50 years the population number of Ukraine will have decreased to c. 40%, mainly due to the depopulation of rural areas. It will be the highest depopulation rate in the world.

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THE BIODIESEL PRODUCED BY THE FARMERS ON A LOCAL SCALE: A NEW AGRICULTURAL GEOGRAPHY, FOR A NEW CONTRIBUTION OF THE FARMERS TO SUSTAINABLE AGRICULTURE AND DEVELOPMENT (WESTERN PART OF FRANCE)

Pierre Geneviève[*]

Presently, the role of agriculture is not only to produce human food, but it is also to contribute to the diversity of sources of energy, by producing biodiesel or biofuel. These new sources of energy can be produced on an industrial scale, or on a local and very small scale, for the own use of farmers, for a local economy. In the western part of France, some farmers have chosen to cultivate colza (which is not a traditional production in these spaces where the cattle breeding is very dominant) for their own use, to make the cattle cake for their livestock, and to use the oil ("pure vegetal oil") in their tractors, as fuel, or for heating their house.

This production, whose localisation is not linked to the production of raw material for agro industries, is part of a global reflection on energy consumption in the farms and in the system of production. This contributes to create a new geography for the production on colza, that depends on the will of the cattle breeding farmers to respect environmentally friendly ways of production, and good qualities of cattle and human food. So, as they adopt good ways of production, more extensive, with less quantity of inputs, they develop a new kind of energy. In fact, it's often a collective strategy in this part of France, because the production of pure vegetal oil depends on experimentation of new equipments (oil press) and it is a cooperative experimentation, although the production of oil cake and biodiesel is individual.

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ALPINE DAIRY FARMS: ENVIRONMENTAL CONSTRAINS, SURVIVAL STRATEGIES

Raschi A.[*], Lanini M.[*], Baronti S.[*], Ugolini F.[*], Stefani P.[**], Valentini R.[**]

In the last few decades, Alpine cow farming has seen a reduction both in the global farm surface and in the number of animals, in consequence of the reduced farmers income, of the changing social models, of the political choices. The traditional cow farming, based on grazing in high elevation seasonal farms ("malghe"), has been largely replaced by stables in the valley floors, where animal and milk production are organized accordingly to the principles of industrial agriculture. This, in turn, has been the basis for changes in soil use and in landscape. In the recent years, the higher temperatures and the reduced rainfall have put a more severe constraint on cow farming, obliging the surviving farms to relevant adaptive efforts. While, on one side, economic marginalization further erodes the potential for traditional cow farming survival, climate change decreases the productivity of pastures, and modifies their role in the global Greenhouse Gas (GHG) balance.

Our study has been performed in Tesino, a marginal area of Trento province (Italian Alps). Several topics were taken in account:

- PASTURE PRODUCTIVITY AND MANAGEMENT: The productivity of pastures was analysed throughout several years by monitoring the GHG exchanges by the eddy covariance method, evidencing the differences between dry and hot growth seasons, and more wet ones. The presence of long water stress periods, in the past unknown in the area, reduced the quality of grass and the productivity of pastures obliging the farmers to use other kinds of fodders. In the driest periods, respiration exceeded photosynthesis, so that the canopy resulted to be source, rather than a sink for GHG. At the same time, the movement of animals on dry soil lead to soil erosion, while the structure of soil was damaged. The work also pointed out the difficulties in evaluating the role of soil respiration in GHG balance, and how the presence of weeds, not eaten by animals, can bias the carbon sequestration measurements. On most of the farms, the number of grazing animals is low: this leads to the establishment of non palatable grasses of low nutritional value; this effect is further enhanced under water stress, when the productivity of good pasture species is reduced, while weeds tend to cope better with stress conditions. Heat stress severely reduces the performance of ruminants, having negative effects on reproduction, on growth and on milk production and quality.

- FARMERS' CONSCIOUSNESS ON ENVIRONMENTAL AND MANAGEMENT PROBLEMS: The problems faced by farmers in consequence of climate change were discussed in focus groups. The farmers are fully aware of global change problems, whose consequences are already evident, and of the investments needed to face them. The environmental problems of the lower valley (for instance those related to industrial pollution) are well known, as well as negative and positive impacts of climate change on agriculture.

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The polluting effects of farming are known in part, and there is strong effort against pollution, also supported by local government. At farm level, the economic limitations forbidding an efficient farm management are well known and discussed; in particular, the work in cow farms is scarcely attractive for the young generations, and a large presence of immigrants is needed, while old generations are said to be scarcely keen to accept technical innovations, and, on the other hand, seasonal farming is economically too faint for innovation.

- ANALYSIS OF POSSIBLE SOLUTIONS: There is general agreement about the fact that a proper management of the grasslands would require a more timely grazing (at the moment the activity is strictly planned, and lacks flexibility), undergrazing avoidance (the number of grazing animals is underdimensioned, with respect to the surface), cuttings to eliminate weeds and changes in management in order to avoid heat stress to the animals (for instance night grazing, availability of shelters, different planning of pregnancies). Yet, this happens only in part. Among the causes, the high age of farmers and the scarce interest in investing in what is mostly a part time activity.

- SOLUTIONS PROPOSED BY FARMERS: The farmers see tourism as a potential market for their products. They see also a scarce interest of hotels and restaurants for local productions as the main bottleneck. In fact, also typical dishes proposed in restaurants are limited to a few. Farmers show interest in direct selling. They are aware of the lack of marketing strategies. In fact, the only farms that seem able to compete for customers, are those running an agritouristic restaurant. And lowering prices is still seen as a good mean to compete for customers. Nevertheless, they invest in training (in particular in cheese making) to be more competitive from a technical point of view.

Yet, tourism does not seem to have strong perspectives in Tesino: the area suffers for the competition of more famous sites in the same region, and climate change is going to further limit the potentialities for winter tourism.

Better perspectives could be fostered by improved marketing strategies that could benefit from the strong role that associations have in the preservation of the social structure of this marginal area.

BIOMASS CULTIVATION FOR ENERGY AND INDUSTRY – ASSESSING THE IMPACTS ON SCENIC AND CULTURAL VALUES OF RURAL LANDSCAPES

Roth Michael[*]*, Kolbe Margret, Hennemann Bernhard*[**]

Biomass production is heavily promoted throughout Europe (EC 2005 and 2006) for two reasons: First, in view of limited fossil fuels, as a reaction to global climate change and thus in order to reduce CO_2 emissions by providing renewable energy and second, to provide "green" resources to industrial production processes. Bioenergy is supposed to provide 5-10% of gross energy consumption in Germany in 2050 (DOYLE et al. 2007). The German Renewable Energy Sources Act ensures that bio-electricity is subsidised with fixed tariffs for 20 years, exceeding the subsidies for wind power more than twice. Similar to wind power generation, the biomass production was and is still increasing rapidly due to these incentives. Although negative impacts of large scale biomass monocultures on scenic and cultural values of rural landscapes are obvious since more than a decade (BELL 1994), spatial and landscape planning have failed to guide biomass cultivation, and practicable assessment methods are lacking. So far, biomass cultivation is driven by economic factors (RODE 2005; PLIENINGER et al. 2006), ecological restrictions are sometimes taken into account (RANNEY & MANN 1994; CHRISTIAN et al. 1994; LEDIN 1998; VENEMA & CALAMAI 2003; FOERSTER et al. 2006; DOYLE et al. 2007), but socio-cultural functions of landscape and space are neglected in the majority of cases. ARTNER et al. (2006) illustrate how monotonous intensively used energy production landscapes could look in the year 2050.

Our paper presents a methodological approach to assess the effects of biomass cultivation on the scenic and cultural landscape at the regional level. Impacts of different energy and industry crops on the perceivable naturalness, visual landscape diversity and the perceivability of characteristic structures and elements of the countryside are analysed using a set of indicators like plant lifetime, stand height, exotic impression, plant colour, woodland character and land use intensity. Environmental risk analysis (BACHFISCHER 1978) is used to integrate the impact factors of different energy and industry plants and the sensitivity of different rural landscapes into the overall suitability of different energy crops for rural landscapes of distinct sensitivity to the specific impacts of biomass cultivation.
The method was tested in Northern Germany and proved to be sensitive to different landscapes and different energy crops. Negative and positive effects of biomass cultivation on scenic and cultural qualities of rural landscapes could be assessed. Planning measures to mitigate negative effects were derived in order to implement strategies of environmentally sustainable development of rural areas.

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PRESENT-DAY PROBLEMS OF NATURAL RESOURCES POTENTIAL EVALUATION IN UKRAINE

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The fundamental bases, laid by Ukrainian scientists, for constructive-geographical study of the natural resources potential (NRP) of Ukraine and the problems of nature utilization have been analyzed. As regards its subject and the essence of the analysis, the research has been carried out in components, branch and complex-territorial (or regional) aspects. The research peculiar features are as follows: 1) it suggests active search for the development of human-optimal development; 2) efforts are attempted to evaluate expediency of suggested nature transformations with consideration of all likely consequences; 3) beside evaluation of discovered natural resources, and, correspondingly, productive forces allocation, nature component feature changes are suggested, these aiming at raising of their productivity 4) natural productive forces monitoring system is suggested; 5) geographical problems of nature-society interactivity management are accentuated upon.

The formation of the concepts that possess a complex character and are related to general trends in the natural productive forces development, rational assimilation, protection and reproduction is generalized, namely: 1) the concept of the natural productive forces components' independence and equivalence, their genetic linkage with surrounding natural bodies and continuous temporal and spatial development; 2) the concept of admissible limits for changes that a human being intrudes upon the nature, the limits being predetermined by impossibility of neglecting of natural regularities; 3) the concept of nature-preserving assimilation of natural productive forces; 4) the concept of admissible limits within purposeful transformation of natural productive forces; 5) the concept of the Earth's natural productive forces as the manifestation of a unitary cosmic process and a regular indissolubility of human culture and nature vitality manifestations; 6) the concept of the formation of nature-preserving knowledge and awareness; 7) the concept of Ukrainian balanced development.

Active geographic scientific search and its realization in the practice of nature utilization in Ukraine have manifested themselves in interaction of NRP study basic stages, i.e., from complex study of natural productive forces separate components – verification of mutually substantiated links between them – towards disclosure, analysis and purposeful formation of their (forces components) geographical complexes (complexes of productive forces).

It is substantiated today that modern by-component and integral (complex) Ukrainian regions' NRP geographical studies base upon cognition of complex natural and social regularities in the development of the state's natural productive forces, the study of which appears to be an

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urgent task for specialists in the field of valuation resource knowledge. Among the problems that face Ukraine today, we point out the following:

1) formation of the methodology and the instruments for the complex ecological-economic evaluation of the integral natural resources potential and its separate components;
2) determination of the NRP ecological-economic evaluation role and place in information-cadastre system;
3) accumulation of practical experience and carrying out of NRP ecological-economic own evaluation on the Ukrainian scale in conditions of social development stabilization within the country.

HIERARCHICAL LANDSCAPE PLANNING IN THE CZECH REPUBLIC – HISTORICAL AND PRESENT SITUATION

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The European Landscape Convention defines landscape as an area that covers natural, rural, urban and peri-urban areas. It concerns landscapes that might be considered outstanding as well as everyday or degraded landscapes. Continuing development brings about many changes we are concerned about. Many of these changes have negative influence on landscapes and consequently, different problems occur on all levels – local, regional, national and even global. Such problems must be dealt with at relevant levels. Although the European Union, national, regional and local authorities provide a political framework to ensure proper maintenance of landscape, the holistic approach in landscape planning is still necessary (Palang, Mander, et al. 2000, Tress, Tress 2001). Herrmann, Osinski (1999) emphasise the importance of the following factors: 1) ecological, economic and social factors, 2) combining different spatial levels, 3) to adapt the definition of problems to the specific level, 4) to support the planning methods, that offer exact statements and decisions for each level.

Hierarchical planning could be an effective approach for landscape planning. Originally the hierarchical theory aims to organize the complex systems into organizational levels with the goal of studying functions between two or more levels (Ndubisi 2002). The result of such planning is simplifying complex planning problems, in this case spatial problems that have many different objectives, covering different scales (Boyland 2003). Using the theory of hierarchy in landscape planning can help to understand landscape due to emphasization of functioning its elements and processes on different spatial scales and time horizons (Ndubisi 2002).

When speaking about a hierarchical landscape planning, we distinguish 3 levels – strategic, tactical and operational, that define long-, middle-, and short-term aims and tasks of work with landscapes (Boucníková, Fanta, 2006). The advantage of such approach is reduction of large complexity of problem by separating it in several functional levels. Strategic level is long-term, large scale planning and has broad aims (Kesseler 2002). The aim is to create an idea that will enable us to make necessary decisions about future in such a way that the set visions will be reached in efficient and effective way.

Tactical level is planning for middle-scale and time horizons. It implements the strategic goals and objectives and it schedules how and when objectives will be met (Boyland 2003, Reada, Lenderking 2004). Its important goal is interconnecting the strategic and operational level.

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Operational level is short-term planning on the lowest level. It solves how the short-term goals will be concretely realised and it tends to reach the strategic and tactical aims.

Hierarchical planning is a typical example of so-called “top-down” approach that is more political and directive. On the other hand there is also so-called “bottom-up” approach that is based on the needs of local people. Van Staveren (1980) points out the risk of perceiving these approaches as alternatives rather than approaches that are complementing. This paper discusses only one of these approaches - "top-down" approach - as this one provide political framework of "bottom-up“ approach. The aim of this paper is to compare hierarchical planning in the Czech Republic during three periods that we see as very important for landscape planning.

The first period lasted until 1989 and was strongly influenced by the communistic regime. Planning in those times was very well developed on several hierarchical levels – national, regional and local. Nature and landscape conservation resulted from former national management plan, which was applied into space by land use planning. But as Kubicek (1983) wrote, land use planning was understood mainly as a procedure to facilitate investment projects in landscapes. Nature and landscape conservation step aside, falling into the shade of economic development. And so, there was no landscape planning to speak of.

The second period lasted from the end of Communism (1989) until 2004 when the Czech Republic joined the European Union. This period is characterised by a disappearance of central planning and economic management (Maier 2000). Former hierarchical structure was destructed. The national level is completely missing in land use planning. Again, landscape planning is understood as a part of land use planning that is to a large extent influenced by free market economy. Although there were many voices that called for the necessity for landscape planning there was no support for that in political sphere.

The third period represents the present when the planning of landscapes is considerably influenced by the membership of the Czech Republic in the European Union and its legislation. The hierarchical structure of planning is recovered again. New national strategies are set up and they give the framework of landscape management. The Czech Republic ratified the European Landscape Convention and is bound to implement landscapes into all policies. Landscape planning is becoming alive again after many years as a part of implementation of this Convention. But there is still a question. Will the evolving hierarchical planning become a functioning organism?

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TOURISM AS A DEVELOPMENT TOOL FOR THE COUNTRYSIDE: A COMPARISON BETWEEN THE FRISIAN REGION WITTMUND (GERMANY) AND THE GALICIAN REGION A CORUÑA (SPAIN)

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From its early beginnings rural tourism was seen as a means of development for local and regional economies, as well as a development strategy that offered an economic alternative to farming and agricultural activity and a way of improving relations between rural and urban inhabitants. This paper considers rural tourism not only as an economic activity, but also as having direct connections with rural development. EU rural tourism programmes should have both social (the participation of women, etc.) and economic implications. This clearly differentiates it from other types of tourism such as the traditional sun and sand or winter sports models, which, despite their potentially social function, are essentially a source of economic activity.

The principal aims of this analysis focus on the following aspects: to determine whether rural tourism is an activity integrated within the space and which has an impact on the place, thereby allowing for the active involvement of local inhabitants, or whether these ideas are merely theoretical and fail to be put into practice; to analyse the influence of the location of rural tourism houses in various geographical spaces (coast/interior) on the success of this type of tourism; and from a gender perspective, to examine the role played by women in rural tourism.

A comparison has been made between rural tourism in the province of A Coruña, Galicia, Spain, and agro tourism in *Landkreis* Wittmund, East Frisia, Germany. Qualitative exploratory techniques have been used, including in-depth interviews with those persons responsible for running rural tourism houses in the province of A Coruña and agro tourism farms in *Landkreis* Wittmund, in addition to standard format interviews held with guests staying at these establishments.

In the province of A Coruña the level of integration of rural tourism in the rural space is extremely low, thereby failing to uphold the theoretical hypotheses. This indicates the lack of a direct link between tourist establishments and the rural space, which acts instead as a mere background element, as well as the lack of a tourist system for this type of tourism. A certain sense of confusion appears to surround the concept of rural tourism as it tends to be identified exclusively with a certain type of accommodation. Furthermore, tourists take advantage of the offers existing in other tourist systems and visit conventional destinations. In A Coruña rural tourism is a relatively isolated activity as there is an evident lack of synergy between rural tourism houses, associations and public organisations. Nor is rural tourism marketed as a destination-linked product. To date, no specific tourist regions have emerged and no tourist profile has been defined. Consequently, rural tourism fails to act as a driving force for rural spaces.

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In contrast, agro tourism in *Landkreis* Wittmund is considerably better integrated into the rural space, despite the fact that there is still room for improvement. This is due to the fact that there is a direct link between tourist activity and one of the productive activities of the rural space, namely farming. In addition, the demand for agro tourism in Frisia actively seeks contact with the farming sector and tourists spend much of their time on the actual farms, making use either directly or indirectly of the range of activities associated with the countryside. However, the image of farming these tourists perceive is often removed from reality as it is based on farming stereotypes associated with the past. Although agro tourism in Wittmund appears to be more integrated, tourists also make use of the coastal tourist systems as a means of complementing the agro tourism offer. Therefore, agro tourism in Wittmund would also appear to have been designed as an alternative to conventional types of accommodation. In both areas, rural tourism reinforces women's domestic role, and the division of roles complies with traditional stereotypes. Due to the overlapping that occurs in their various functions, women do not perceive rural tourism as a type of employment.

SUSTAINABILITY OF RURAL SETTLEMENTS AT THE AREA OF POST-MINING ACTIVITIES IN TUZLA CANTON IN BOSNIA AND HERZEGOVINA

Sufi-Mićić Đurić Slavka[*]*, Đurić Neđo*[**]

At Tuzla canton area, in norts-east part of B&H, there is intensive exploitation of dark and wood coal going on for the last 120 years. In that period there were continious changings going on in the terrain, depending on exploitation needs, direct influence, environmental activities and interaction consequences of all ecological factors. Before mainly woody and not much populously agrar area, went through the pit exploitation fase, processe of spontaneous settlements nearby the factories until the area became rural settlements which exist in the last 60-70 years. In the same time there was going on the degradation process and destruction of all environmental segments: terrain, biodiversity, water resource etc. Sustainability of this kind of rural settlements after mining activities, represents the great chalenge for expert team of multidisciplinary and intradisciplinary profile that would offer the solution for future, acceptable, purpose of this area and development within new conditions.

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THE FUTURE OF THE ROMANIAN VILLAGE AFTER THE EUROPEAN INTEGRATION

Surd Vasile[*]

In Romania, there are 13,098 villages that are grouped in 2,846 administrative rural units (communes). For each commune, there is an average of 5 villages, one of them being an administrative centre (seat of the commune). Of the 21,680,974 inhabitants (in Romania), 10,245,894 (47.25%) live in the rural areas. About 90% of the Romanian territory (214,880 sq km) is represented by rural areas, from the administrative and economic point of view. The medium size of a commune is of 3,600 inhabitants and of 80 sq. km which means 720 inhabitants and 16 sq. km /village, respectively. There are significant differences between the villages in Romania in what the number of population is concerned, ranging from 1-3 inhabitants to more than 10 000 inhabitants. The majority of the Romanian villages (6700) are small sized, having under 500 inhabitants (51.1% of the total number of Romanian villages).

Romania is one of the few countries in which the number of the rural population increased once the communist regime was over (it grew from 45%, in 1989, to 47.5%, nowadays). At the same time, the process of ageing of the rural population has generalized, being accompanied by a drastic decrease of pupils (10-30 times).After 1989, the agricultural land was divided in more then 50,000,000 plots to about 6,000,000 landowners. The average surface of agricultural exploitation is about 2.5 hectares which are spread in 10-15 allotments, which makes harder, or even excludes, the possibility of mechanization and the usage of modern agriculture techniques. Using the hand power of people and animals, especially horses, is a common practice in the Romanian villages. Romanian agriculture became in short time, autarchic and traditionalist. About 50% of agricultural land is not systematically used. Invasion of market with foreign food products is generalized. The farmers produce mainly wheat and corn for their needs. The majority of orchards and vineyards were destroyed and the irrigation systems, as well. New modern farms appeared here and there, but international competition and the lack of support from the state makes them inefficient. In the last years, 60 new towns were declared. The majority of them do not have an appropriate urban infrastructure. They were declared on political grounds. In the near future, about 25% of Romanian villages will be dismantled. Land speculation and lawsuits are very frequent. About 25 years will be necessary to reach a balance in the Romanian rural world and head towards modernization.

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SUPPLY WITH PUBLIC SERVICES IN RURAL AREAS IN AUSTRIA – POSTAL SUPPLY AFTER RESTRUCTURING BETWEEN 2002 AND 2005

Tamme Oliver[*]

Postal services are part of public services (public transport, local grocer´s, childcare, local elementary school etc.) which are vital for rural and mountainous regions. Access to full postal services is essential to many small and remote Austrian municipalities and their inhabitants in rural and mountainous regions. Content of this paper is an empirical evaluation of the effects of the restructuring of post offices in rural, mountainous areas in Austria by the Österreichische Post AG (Austrian Post) from 2002 to 2005[5] and an assessment of the legal framework. Firstly, the legal framework set up by the Federal Postal Law 1997 and the Postal Universal Service Ordinance (USO) 2002, which regulates the density of postal network and alternative solutions, has been clarified. Secondly, the alternative solutions for the closing of post-offices such as franchised counters (post partner offices), service points and mobile offices and their regional distribution have been examined. Are they an effective substitution of the closed post offices? Finally the criteria which regulate the density of access points in other European countries have been analysed and assessed. To sum up the outcome of the survey, altogether from 2002 to 2005 951 post-offices in rural areas were closed. The number of postal outlets decreased nationwide from 2,286 to 1,335. This means 42 percent of all national post offices were shut. Simultaneously the accessibility to postal services for the local population has been shrunk. After the restructuring they are forced to overcome long distances mostly by car in order to reach the next public outlet.

Due to the fact that the Austrian Universal Service Obligation 2002 doesn't specify a certain number of postal outlets (e.g. in contrary to the situation in Germany) or conclusive criteria, which define the regional distribution, the closing of rural post offices was in compliance with the requirements of the provision.

As a compensation, the Austrian Post AG has set up alternative solutions consisting of franchised counters, service points and mobile offices: 191 (franchised) post partner offices, 343 service points and 2 mobile post offices (= vans). However, only one outlet out of two was replaced by stationary alternatives and the spatial retreat was most distinctive in rural areas.

From an economical point of view, the closure of many of the rural post offices might have been justified. But even having in mind the bad profitability of these outlets there would have been other solutions in order to preserve the location and find alternatives, which were proposed by some of the rural municipalities (e.g. multi service shops). Moreover, the loss of rural post offices must be seen in context with public services in general. Combined with the thinning out of other parts of public services (local grocer´s, local elementary school etc.) this

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[5] The statistical data were offered by the post AG management.

means a further weakening of the viability and consequently the cohesion of rural areas. Therefore the implementation of policy criteria by the federal government (like the british rural service standard) in order to guarantee a basic supply with basic services should be discussed. Likewise the EU rural development program could be used as an instrument to stabilize basic public services.

VILLAGE SCHOOLS: WRINKLES FOR MAYORS?

Trnková Kateřina[*]

Every municipality in the Czech Republic is required to provide accessibility of elementary school education to children of the age of compulsory education. The municipalities therefore usually establish an elementary school and they are required to secure funds for its routine and capital costs. For rural municipalities the existence of a local school may present a great economic load but nonetheless, plays a key role in the view of community development.

The results of a representative questionnaire survey among mayors and head teachers of small schools with composite classes in small rural municipalities in the Czech Republic are presented in this text. The results serve as a background for analysis of the basic stereotypes connected with rural schools. These include the reasons for establishing a school and the financial demands which a rural school represents for the community. In addition, I also study the ways a school building and the activities of its employees are used for the benefit of the community development. I attempt to present an imaginary statement of costs and gains (which a local school represents for the municipality).

The outcomes show that the key reasons for establishing schools with composite classes are not only to continue a tradition and to save small children from commuting but also to provide education for parents and to support cultural life in the community. The respondents were not given a set of answers to choose from but formulated their own replies. Opposite to the common belief, the tradition of having a local school came out to be the strongest reason compared to, for example, the increase of a migration potential. The services which can be provided by school in favour of both, children and their parents, are also regarded very highly.

However, it is not quite clear how much of the rural municipalities budget in the Czech Republic is spent on the operation and development of schools. According to our respondents, on average 14% of the community budget went to schools (standard deviation 14,5). This corresponds with data available from other sources. Interestingly, some municipalities view this amount as small whereas others as too big. About two thirds of respondents stated that the school buildings were used for various regular or irregular activities undertaken by citizens and in half of the cases there is no fee collected by the school or the community. Generally, this potential financial gain remains unused.

A school may bring other than financial benefits to a community as well, particularly through the employees who are often active outside their working hours and outside classrooms. They often organise numerous clubs and occasional events for children (fancy balls, theatre outings ...) as well as various matters for adults – organizing social events, leisure time activities, distributing lunches outside schools – and the community (PR/outside presentation).

None of the rural municipalities concerned is facing the problem of a lack of pupils, although more than a half of them have discussed the possibility of closing the local school down at

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some point in the past. The population of most of the municipalities has become stabilized and consequently it seems beneficial to keep and support their own schools.

In my opinion, the decision-making process concerning the existence of a local school is not based solely of the economic criteria as it may seem in the discussions among mayors. The municipal council seems to be aware of the fact that on the one side there are the financial costs and on the other side there are the social, demographic and often only the possible financial gains of schools. Naturally, the result may not be unambiguous and often is also emotionally grounded. Nonetheless, rural schools find themselves in a period of stabilization rather than insecurity and threats.

SMALL TOWNS AS CENTERS OF RURAL MICRO-REGIONS

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In central European conditions, the rural space is formed by micro-regions which usually consist of a micro-regional centre (a small town as a rule) and surrounding villages. Small towns ensure services on the basic urban level, jobs, social contacts, occasions of traveling outside of the micro-region, services of the state administration and sometimes also an identity of the micro-region. Mass commuting from villages to small towns is usual for Czechia for a long time. Additionally, small towns are the most industrial part of the Czech settlement system.

Investigation of small towns was omitted in the past. At the present time, when agriculture starts to be replaced with multifunctional countryside, the geographers pay more attention to the small town problems. About 29% of the Czech population lives in the communes with 2 – 20 thousand inhabitants. Our research was focused on small towns with less than 15,000 people in historical Moravia. There are 109 municipalities like these in Moravia with the population of 600,000.

It is possible to define more categories among Moravian small towns: small towns in hinterland of big cities, specialized small towns in well accessible lowlands and small towns as centers of rural hinterlands often in mountain and/or border positions. The third category is of our interest. The peripheral character of these towns is given by the remoteness and bad accessibility from regional centers, their marginality is characterized by lack of investments, problems in human capital etc. Abolitions of industrial plants in small towns threatens social situation in rural seats more than decrease of agricultural jobs. Nevertheless, the peripheral small towns remain to be the definite centers of their (usually poor) hinterlands because of lack of competition in a majority of cases.

Following hypothetical processes should be taken into account speaking about the future of the Moravian rural space and the role of small towns in its development: The second demographic transitions leads to ageing of rural population. Sub-urbanization and counter-urbanization impacts on the population shift from big and medium cities to the countryside. In the process of globalization, the countryside including small towns plays a role of bearer of regional identity and sustainability of the traditional way of life. Continuation of transfer the jobs from productive to non-productive ones endangers the countryside by loosing jobs in industry which is worse than decrease of jobs in agriculture. Increasing value of leisure, environment, space, security etc. offers new chances for small towns. Decreasing importance

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of the state border as a barrier of development puts up a question of a possibility to overpass the peripheral character from the national viewpoint by means of cross-border collaboration.

It has hardly any sense to study rural space not taking into account central small towns. It is true also vice versa. Rural hinterlands play a role of micro-regional markets of small towns. The Czech administrative structure is typical with a big number of small and very small communes. The situation is solved in the state administration field with delegation of functions to selected bigger communes (small towns as a rule), in the self-government field with voluntary creation of association with small towns as centers as a rule. Following aspects seem to be important for the research of the small town sector: position with regard to regional centers, natural conditions from the viewpoint of agriculture, raw materials, tourism, hazards etc., quality of human capital, existing economic and non-economic activities, the image of the place among others.

The international aspect of the research is also a matter of interest taking into account finalizing the process of the transition from the central planned to the market economy.

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WAITING FOR THE SUN - MINING AND LOCAL DEVELOPMENT IN RURAL AREAS

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Mining activity is frequently located in rural areas and it has been often considered as a driving force for local development (Menezes, 1988; Barroqueiro, 2005). However, it is also visible the huge dependency generated by this activity, restricting development initiatives and leading to several socio-economic impacts (Valente, 2008). Associated to mining, there are also environmental and health impacts, which can be aggravated by mining decline. In this context, Newbold (2003:86) emphasizes that *«... the most valuable legacy the mining companies could leave is a region ready to attract other industries and investors»,* but this did not happened most of the times, especially in *remote* rural areas without almost any other factors of attractiveness.

In spite of that, mining sites are commonly viewed and valued (either by local residents or by visitors and public agencies) as places with a strong social and cultural identity and heritage. Though, mining areas can be an important reserve to tourism attraction.

In Portugal the majority of the mining sites are located in rural areas and this activity represented a key-factor to the economic and demographic growth in those areas (Pereira, 1982; Menezes, 1988). But the presence of mining also originates some specific economic, social and environmental problems, especially after the closure or slowdown of the activity. In fact, following the closure most of the mining sites face economic depression, loss on social dynamics as well as diverse environmental problems (Matos *et al.*, 2002; Barroqueiro, 2005).

The main aim of this communication is to discuss the relationship between mining activity and local development in rural areas, based on empirical evidence from Panaqueira Mine, taking into account the local social perceptions of the mining activity and its consequences in terms of environmental risk, economic benefits and social dynamics. Panasqueira is one of the most important mines of Central Portugal, located between Açor and Gradunha mountains. Mining were, and sometimes still are, the main source of employment in the neighbourhood areas of Panasqueira. Nevertheless the 15,000 people that already lived in, Panasqueira is nowadays a declining area, with an ageing population, low literacy and where great part of the men had worked or works in the mine, being many times the only source of familiar income.

Data were obtained using three complementary tools: i) questionnaires; ii) interviews; and iii) a life story. The questionnaire was applied to 2,5% of the inhabitants of the study area with age above 14 (N=84). As we used the quota sample procedures, the socio-economic characteristics of the respondents reflect the main features of the inhabitants of Panasqueira. The interviews were applied to each responsible for the parishes and to the Director-General

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from Beralt Tin & Wolfram (mining company of Panasqueira) (N=6). Finally, a life story was also collected from an ex-miner that worked in Panasqueira for more than 40 years.

The mining industry is not one of the most important economic activities in the world or in Portugal, although this activity was fundamental to the economic growth of some *remote* areas, providing a life improvement in local communities (Menezes, 1988; Seymoar, 2000; Azapagic, 2004; Barroqueiro, 2005; Valente, 2008), through the creation of employment, but also services, equipments and infrastructures, social and cultural dynamics, among other issues. In Panasqueira almost all the respondents referred that their community still depends economically from mining exploitation, nevertheless this dependence was far stronger in the past.

MacMahon and Remy (2001) recognize mining exploitations as an economic activity with profound impacts on local communities. The social perception study in Panasqueira highlighted the employment as the major positive effect of mining. The role of mining activity in the income increase, in population settlement, in the area visibility and in the attraction of visitants were also considered as important impacts of mining activity in Panasqueira.

In terms of negative impacts, mining generates *«…potentially hazardous work conditions and situations which may impact the health and safety of miners»* (Grayson, 1999:83). The survey showed that almost all respondents identified as a major impact deaths and diseases caused by mining. The environmental effects have been progressively considered by the mining companies, however Clark (2000) referred that few attention has been given to the impacts after mine closure.

Despite the social recognition of the mining negative impacts on environment and natural resources, it is clear a subalternization of these effects comparing with the contribution of mining to local economy. Some studies developed in Portuguese mining areas (Barroqueiro, 2005; Coelho *et al.*, 2007) revealed an anthropocentric vision of local inhabitants about mining impacts. It was observed that in areas where mining had an important role on employment, the population tends to cope with the environmental impacts caused by mining exploitation. This is the particular case of rural communities where mining exploitation is usually well accepted, since it represents an important mean to improve the quality of life (Veiga *et al.*, 2001).

Mining areas located in rural areas can be considered as areas that had suffered a sped up process of industrialization and economic growth, because of its geological characteristics. However, since this economic growth is mainly based on one single activity, it almost never turned into a real development process, being most of the times far from the local socio-economic reality (e.g. Nyamekye, 2000). The mining exploitation created most of the times small isolated spaces, but without conditions to maintain in case of mining decline. This is particularly evident in the discourse of an interviewed entity, concerning the role of mining activity in local development: *«I can not consider that was fundamental to the development, because the only thing that Beralt gave was a higher income. But that is not fundamental to the development. Crucial to the development is to exploit the deposits, which are ours after all, and leave something here, is not it? For our development! But they never gave us nothing!»*

It is evident that mining communities are deeply marked by this activity, but usually environmental impacts are devalued comparing to socioeconomic impacts in the views of the local population and entities. The research also underlines that, although mining exploitation contribution to economic growth, the context of great dependency limited the area development.

Despite mining activity decline, Panasqueira future is associated with mining tradition, even after mine closure, where the preservation of mining heritage and memories are definitely important. Under this framework, the definition of a local development strategy should consider the mining exploitation, which remains active, and focus on actions to economic diversification, through the definition of a tourism project that, using all the current initiatives, may value the brand of Panasqueira Mines.

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THE ROLE OF NON-PROFIT ORGANIZATIONS IN HUNGARIAN RURAL DEVELOPMENT - THE EXAMPLE OF THE SOUTH TRANSDANUBIAN REGION FROM A LEADER+ PERSPECTIVE

Varga Eszter[*]

There have been several trends and models dealing with key problems of European rural areas. In Hungary, where rural areas account for 95% of the country's settlements, 87% of its territory, and 45% of its population (NHRDP, 2007, p. 12), rurality can be equated with backwardness, a relative dominance of agriculture and depopulation over the national average (Csatári et al, 2007, p. 307).

Within the framework of a Europe-wide rural development programme: the LEADER, a new opportunity for easing these problems has been created.

According to the LEADER approach, Local Action Groups (LAGs) are partnerships of the local municipalities, entrepreneurs and non-profit organizations. These latter occupy a very important position. On a national level, out of the all supported LEADER+ projects 25% were implemented by non-profit organizations. It means 21% o the total sum of the financial assistance.

In the paper, non-profit organizations of the South Transdanubian Region are studied, especially those taking part in the LEADER+ Programme.

To be able to do it, a database of participating organizations is needed. But since there was no such a database available, first it had to be created by using different sources.

After grouping the results according to organizational types, project locations and other relevant variables, the analysis could be executed.

For typifying project activities Lukesch's method was used (Lukesch, 2007, pp. 20-22). He differentiates three types of innovative actions (animating, structuring and consolidating) which mean three types of implemented projects.

In the South Transdanubian Region, project implementations were dominated by municipal presence. 37% of the supported entities were municipalities or connected institutions, accounting for 43% of the supported projects. In the case of non-profit organizations, these rates were 24% and 25% respectively. So as in the national level, non-profits represent around one quarter of both organizations and supported projects. But if we add individuals and churches to non-profit organizations, and calling them "civils", this ratio increases up to 51% and 46% respectively.

Around 7% of non-profit organizations existing in the territories of LAGs in the Region participated in the LEADER+ Programme with projects. And on an average each participating

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non-profit organization implemented 1.5 projects. It means that usually there is a group of active nonprofits in the LAG areas whose members have sometimes two or more supported projects, while the rest of the non-profit organizations (93%) have no direct access to LEADER+ funds.

As far as leading organizations are concerned in the case of the 10 selected LAGs in the Region, it can be said that they are generally municipalities (excepting one that is public foundation).

In the case of gestor organizations when administrative capacity is the most required feature, a more mixed picture can be observed. Only 4 municipalities (out of which one is their association) were chosen for this position. The majority (60%) of gestors belongs to the group of non-profit organizations in the Region.

Representation of non-profit organization in the decision-making body of the Local Action Groups varies from LAG to LAG. In the case of the South Transdanubian Region it ranges between 13% and 37%. In the former case, entrepreneurs and individuals must fill the gap, and complement their number up to 50%.

Compared to other organizations, non-profits implemented the most animation projects. This is the case both in absolute and in relative sense.

If Lukesch's model is accepted and Local Action Groups of the South Transdanubian Region should be positioned somewhere, the following notes can be made. Since the level of complexity of the LAGs' socio-economic environment in the studied Region can not be said very high, and taking into consideration the type of projects prevailing, the LAGs in question might be positioned somewhere in the middle of Lukesch's model. So space for evolution that is climbing the eight-step ladder still exists. (According to Lukesch, if a LAG has successfully accomplished an innovation cycle which ended up in a consolidating phase, it may restructure itself, embark on new endeavours, starts to work on new themes, in a thoroughly animating style.)

Empirical research justifies (e.g. Mascherini et al, 2007, p. 39) that non-profit organizations can be essential players in civil participation, both as suppliers of information and as platforms for social interactions, that is as animating agents. In the analysis part of this paper there were results referring to this role, showing that non-profit organizations accounted for the highest share in implementing animation projects.

In the future however, this ratio should be still increased, since a significant proportion of the rural population still needs to be mobilized.

THE ECONOMICAL STRUCTURE OF THE RURAL POPULATION FROM ROMANIA

Vert Constantin[*]

The demographic system is not an isolated one, separated from the other systems (social, economic, political, natural etc.), but is tightly connected with these. The analysis of the relation between the demographic system and the other systems highlights complex connections, which result in a diversity of aspects with profound implications in their dynamics.

It could be appreciated that a certain evolution of the population has direct repercussions on the other systems, as well as their evolution influences, directly, the entire range of demographic phenomena and processes.

In relation to the economic system, the population appears in a double state, that of *consumer* of the goods produced in the economy and that of *producer* of the respective goods. The whole population is a consumer but only a part of it is also a producer. As a result, the degree and way of participation of the population to the economic activity are different, being able to distinguish between various types of population: active, inactive, employed, unemployed etc.

That is why the study of the economic structure of the population is very important for the evaluation of the labor resources of a human community, the analysis being made both at a global level (total population) and on categories of population (urban, rural, male, female, age groups etc.).

The analysis at a global level of the economic structure of the population offers a general view on the potential and labor resources of a human community, allowing correlations between the components of the system while the analysis on categories of population and on territorial profile allows an inside view of the mechanisms of formation and evolution of the processes and phenomena inside the system.

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THE REGIONAL DIFFERENTIATION OF THE USAGE OF PRODUCTION FACTORS IN POLISH AGRICULTURE

Wasilewski Mirosław[*]*, Madra Magdalena*[**]

The differentiation of the agricultural farms activity in Poland, in respect to both of natural conditions, as well as economic, was one of the reason for the division of four macro-regions according to the Polish FADN system. The competitive ability of the agricultural farms depends on the specialization and the concentration of the production, as well as on a process of the restructuring in aspect of the farming section, with regard to the regionalization of the farms location. Agricultural holdings conduct their activity in demanding conditions of the market, which require to determine the effectiveness of the production factors, especially these limited resources, eg. the land.

The aim of this study is to determine the differentiation effectiveness's of the production factors usage in agriculture farms in divided regions according to the Polish FADN system. The elaboration also deals with the financial liquidity and indebtedness. The period of investigated farms covers the years 2004-2006. As a criterion of the classification in investigated farms accepted the types of the agricultural production. In the research choose three agricultural types, which characterized the unidirectional production, this are: AB field crops, F – milk cows, H – granivores.

It is northwardly to mark that the comparatively large differentiation of agricultural farms was ascertained between regions specially in respect of the cropland area, the economic power and the level of the current financial liquidity. The debts share in capital structure of farms was low and relatively similar in all divided regions. The assets, land and equity usage in agricultural farms was effective. The greatest differentiation between regions referred to the effectiveness of the return on equity. Farms which production was directed to the „granivores" agricultural type, especially this situated in the Pomorze and Mazury region, characterized with the highest effectiveness of the productive factors usage and economic size. The lowest effectiveness of these factors referred to farms with the "field crops„ type. In the elaboration also ascertained the regional differentiation in the scope of effectiveness of the production factors usage in agricultural farms. This state should be taken into account in formation of the farming policy.

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DEGRADATION OF DRAINED LANDSCAPES AND SOILS OF BELARUS AS A FACTOR OF INSTABILITY OF AGRICULTURAL PRODUCTION

Zajko Sciapan, Vashkevich Leonid, Bachila Svetlana *

In Belarus drained landscapes and soils are the most degradable and they cover the area of 3.4 million hectares, which totals in more than 30% of lands in agricultural use. A deep draining was conducted of landscapes and soils for use in crop rotation with crops of various demands as to the water regime: grain cops, inter-tilled crops, perennial grasses. A drastic decrease of the water table level has determined their instability—evolution and degradation towards non-marshy landscapes and soils. The study is based on a monitoring research that was conducted for many years, beginning in 1971, on more than 50 permanent sites established on the drained landscapes and soils in the different provinces of Belarus.

Indicators of condition, evolution, transformation and degrading of the drained landscapes and soils were analyzed. They included profile and morphology of soils, their hydro-physical properties—moisture capacity, storage of productive moisture; contents and composition of the organic matter, change in chemical composition of soils, of subsoil and surface waters. The leading factor in change and degradation of the natural territorial systems is the hydrological factor that determines change of soils after melioration of landscapes and soils. Peat soils and landscapes change most, and according to a forecast after 15-100 years the peat will be completely lost and anthropogenic mineral soils would emerge instead. Fertility of such soils is decreased by 50% or even several times. A classification of the anthropogenic mineral (post-peat) soils that emerge in place of the peat soils is worked out. Models of evolution of the three groups of drained soils are compiled: I—including mineral soils; II—including combination of mineral and peat soils, III—including peat soils. The models show change, transformation into the new, relatively stable landscapes, that that were predominantly sandy on the last stage of evolution. Indicators are selected and special tables are compiled to determine stability and extent of degradation of the drained landscapes and soils. The following indicators are established to define stability of landscapes: 1) draining degree (water table level); 2) relief; 3) type of soils; 4) granulometric contents, organogenic capability of soils; 5) character of use. The extent of degradation of drained landscapes compared to their condition immediately after the draining and development is defined according to the following indicators: 1) decrease in depth of peat (peat loss), decrease in humus; 2) change and deterioration of soil genesis; 3) deterioration of territorial soil productivity degree; 4) deterioration of the median quality of soils; 5) increase of relative heights as a result of peat loss. The indicators are arranged in points according to the extent of stability and degradation.

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As a result of loss of the peat soils the relief of the drained landscapes changes and takes the relief of the mineral bed under the disappeared peat. The classification of the drained landscapes is compiled for their mapping on the basis of territorial structure of the soil cover and relief. Recommendations are developed for the use of the drained landscapes, mostly for meadow grasslands. Degradation of the drained landscapes upsets stability of the agricultural production and causes considerable material losses.

ABSTRACTS OF POSTERS

OLD MAPS USAGE FOR RECULTIVATION AND REMEDIAL PROJECTIONS IN LANDSCAPE

Drobilová Linda[*]

Historic maps are increasingly used today as sources of information about the development of horizontal structure and dynamics of the landscape or its parts. The data are subsequently used in geography, landscape ecology and in a range of practical applications (land use and regional planning, recultivation and revitalization projections, regeneration of forest stands etc.), in which they represent an irreplaceable systematic groundwork reporting about the hitherto form of landscape structures and their quantitative and qualitative development over time.

The paper focuses on the area of Doly Bílina in the Most district, on the landscape that has been long severely affected by extraction of mineral resources and represents in terms of natural conditions one of the most damaged regions where any return to original condition does not come into consideration. By using appropriate remedial and recultivation measures, however, we can create sort of an "alternative" natural environment, which should be able to fulfil after a certain time a greater part of all wood-producing and beneficial forest functions, as did the original landscape system.

The historic development of landuse in the surroundings of Doly Bílina was studied within the framework of a pilot project dealing with the differentiation of strategy for the development of recultivated landscape as a tool to achieve an optimum target condition.

Applied methodology is based on the digital analysis of five sets of cartographic documents available for the period 1836-2005. Map sheets were edited in the ArcGIS (ArcView) environment and subsequently analyzed with the use of the same software. Partial outputs are landuse maps for the studied periods, from which two resulting synthetic maps are constructed of identical scales to evaluate the number of changes in 1836-2005. During the last methodological step, the resulting data were converted into diagrams to illustrate the developmental dynamics of individual land surface categories in the chosen model area.

In methodology consecution were compared cartographic data from 2nd military mapping (2MP), from the period 1950, 1970, 1990 (czechoslovak topographic maps) and 2005 (base maps of the Czech Republic). Resulting analyses for monitored periods inform about the number of whole-area landuse changes in the model area on two planes. The first plane features broader territorial relations and it is therefore designated as "*The outer environment of Doly Bílina*" (area of 32,823.10 ha). The second plane focuses the area of Doly Bílina in a greater detail and is named "*The locality of Doly Bílina*" (area 7,441.59 ha).

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THE ROLE OF ALL-SOCIETY FOREST FUNCTION'S EVALUATION IN THE LANDSCAPE PLANNING

Fialová Jitka, Vyskot Ilja[*]

The condition of the natural and living environment affecting a further social and economic development is the common cardinal problem of EU as well as of the admitted Czech Republic. Forests are one of the dominant components of the natural environment with basic influence on the quality of the environment of a human population. The new modern conception of integrated multifunctional management accepts a philosophy of the equivalent importance of all functions of the forest including wood production for the life of a human population through the idea of "all-society functions of forest". There is new landscape planning legal regulation in the Czech Republic with legal force from 1.1.2007. The sustainable development gets higher significance according to new world and european documents. The aim of landscape planning is to create prerequisites for building and for sustainable development in the area, based on balanced conditions relation for convenient environment, for economic development and for cohesion of residents in the area and which moderates needs of present-day generation, with no negative impact on live conditions of future generations.

In the new law new instruments were defined. The instruments are statutory planning materials (such as area analytical materials and area study), development policy, planning documentation (such as development principles, local plan and regulatory plan) and planning permission. For right decision making and for landscape planning we have to know the state of the landscape and also the state of forests. The ecosystem method of quantification and evaluation of forest function (Vyskot et al., 2003) is based on the quantification and evaluation of elements and parameters of forest ecosystems determining their functional effects. There are six groups of forest functions which are evaluated: bioproduction, ecological-stabilization, hydric-watermanagement, edaphic-soill conservation, social-recreation and sanitary-hygienic. There are real potentials of forest functions (quantified functional potential of forest under optimum ecosystem condition) and real topical effects of forest functions (topical quantified functional effect of forest under topical ecosystem conditions) evaluated. The quantification and evaluation of forest functions is necessary for working out the recommended optimized system of multifunctional forest management. The evaluation of forest function has its place in the instruments of municipal level (local plan, regulatory plan). Here on this level is it important to know the state of forests and to suggest how to manage in the area. After knowing results of evaluation of forest functions could we wisely and non-subjective manage measures.

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LANDSCAPE CHARACTER OF THE HUSTOPEČE CADASTRAL AREA (SOUTH MORAVIA, CZECH REPUBLIC)

Flekalová Markéta[*]

Landscape character is one of inseparable attributes of any landscape. In Czech Republic landscape character protection got the legislation support in the environmental Act no. 114/1992 Coll. whose § 12 defines the "landscape character as natural, cultural and historic characteristics of a particular place or area" and protects it "from all actions deteriorating its aesthetic and natural value". Preservation of landscape character and identity is doubtlessly a necessary and integral part of the modern concept of nature and landscape protection in advanced society and it is common in most EU countries. Often it is not only the aesthetic quality of landscape scenery what is concerned, but also its spiritual value (genius loci), putting local people together by means of mental connection with the concrete space and time, which makes it specific or even unique.

The change of needs for functions of landscape is a nowadays trend. The post-agrarian relation to landscape requires different perception of landscape than looking at landscape through agriculture as the basic landscape modeling activity.

The speed and direction of such changes mean often a simplification of land mosaic. Landscape becomes monotonous and this process leads towards loss of meanings that had been found in landscape before and towards emotional disaffection of inhabitants. All the time landscape have reflected human needs, but kept the variety, arising from different types of natural landscapes, which enabled only specific types of utilization. Today the unification of landscape can be seen, because, if I would simplify the problem, an identical wind power plant or storage area can be places elsewhere.

The whole issue of European landscape character, not the wilderness but the picture arisen by human management, is summarized by Cílek (2006). According to his opinion landscape character changes in altered socio-economical conditions and usually not much can be done against it in the scale of the whole landscape. We can only protect at least some particular spots to save landscape memory.

This topic is concerned in author's PhD. thesis; its results are the basis for this contribution and a poster. On the example of particular south Moravian landscape variability of landscape types is observed, characteristic attributes of these types, their expression and significance and possibilities of preserving identity of landscape through these attributes.

The study area, Hustopeče cadastral area, has the advantage of concentration of different south Moravian landscape types on a quite small spot. Regarding these types, different in basic characteristics (topography, scale, structure, land use, spatial and visual relations,

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historical development, dominants and disturbing elements), characteristic landscape units with different landscape character and attributes has been defined in the study area, according to methodology published by Bukáček (2006) and Bukáček and Matějka (1999).

The result of the whole assessment is a description of valuable attributes, which have to be concerned in landscape utilization, management and changes, if the landscape character and memory should be kept. Also significant places with valuable landscape character have been set in, where the attributes are well-kept and concentrated and therefore act as nervous nodes of landscape memory and identity. For example places with still kept small-sized plots of land, which link to historical maintenance of the area and with their variety and small scale enrich both biodiversity and aesthetics of the landscape, or steppe and forest-steppe formations on hillsides, which represent natural characteristics of the area and its connection with Pannonian landscapes.

Besides these places visual horizons play a big role in landscape perception. Thanks to a placement on the boundary-line of land and sky are extremely visible, dominant and therefore important for subconscious dealing with landscape, identifying with it. Visual horizons have been divided into main and secondary ones, notably according to how often they project into views when moving across the landscape, how preserved they are, and whether they reflect attributes typical for the Hustopeče area landscape. Interventions into main horizons should be made very sensitively.

The next direction for the PhD. thesis is given by the focus exactly on the places with valuable landscape character and visual horizons, which mediate landscape character perception through apparent lines, and on the role, which plays vegetation in them. The result should be to find out, how big part vegetation creates in landscape character and if there are any patterns of vegetation to be found in different types of landscape.

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FLOOD - PROTECTION OF RURAL RESIDENCES IN THE CZECH REPUBLIC

Hubačíková Věra, Synková Jana[*]

Floods belongs to extreme events in the landscape, which appeared in the past, at present and they will come also in the future, not only in the Czech Republic, but in the whole world. It is not possible to say, that its occurrence increases, but thanks to the media we get more information about them. There are much more destructions and looses of the life's as the landscape is urbanized and houses are built exactly in flooding zones. Floods cost big problems as we could see it in 1997 and 2002 in the global scale and 1996 in a local scale in the Czech Republic. Such situations are solved by anti-flooding protection. Bigger cities are observed more often then villages and rural residences.

At small villages are underestimated financial projects dealing with flood protection despite most of them are located in such conditions, which may assist an initiation of floods.

Flood protections in a watershed are influenced by delimitation of the culture. Nowadays, farmers are attracted by the wide-rows crops as maize, which does not support flood protection. Then villages should focus on the realization of biotechnical flood protection arrangement. However, reality is that they mainly invest in technical flood protection arrangement which makes a landscape more technical. Such interference has to go together with right delimitation of the culture in the landscape, which influences drainage, retention and retardation.

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RURAL LANDSCAPE AND ITS MANAGEMENT

Izakovičová Zita[*]

The Slovak country in the recent period faced many substantial socio-economic changes, which are also reflected in environmental area. In the Slovak republic came to change from central socialistic planning to a market-driven economy. These structural changes had also negative impact in social and environmental area and are causing new line of modern problems. In social area e.g. releasing of workforce oriented only on a specific industrial production or agricultural production, the rise of unemployment, problems to find new jobs for redundant – mostly low-skilled – workforce, worsening the socio-economic and psychosocial conditions due to these processes. Migration of population – partly migration of country population to urban are for more work opportunities, contrariwise the immigration of urban population into country preferring better life environment. These processes are reflected in change of demographic structure of population in country area, in change of its lifestyle and also in change of the landscape itself and they change also the view about it.

In environmental area some major newly-shown problems can be registered. As negative impact of leaving the agricultural fields on the landscape biodiversity, desertion of land, increase of synantropic species etc. The conflicts of development of the new particular socioeconomic activities with soil protection and protection of other natural resources, collisions between agricultural land resources and the development of Natura 2000 (growth of demand on natural resources in consequence with implementation of environmental measurements) etc. The changes in landscape structure and substantial antropisation of the area are the major cause of climatic change, which beside of the changes in biodiversity are consecutively causing more intensive demonstration of natural risks and hazards as floods, droughts etc.

The particular problems are often mutually connected – for example the change in land utilization influences in a considerable extent the biodiversity and landscape stability, the pollution of the separate parts of the environment requires investments into disposal of these effects and into implementation of new technologies, closing of industrial operations having negative impact on environment is often connected with increasing of social problems – growth of unemployment, growth of negative psychosocial issues etc.

Based on the above information can be seen that the usage and management of landscape and its resources needs to be dealt comprehensively and the integrated approach needs to be applied. The model is based on an integrated landscape research in its three basic dimensions, environmental, social and economic, analysing the connections and dependencies between particular dimensions with the target to define such landscape management, which would align social landscape development with its natural, socio-economical, cultural and historical potential. It is based on matching the offer, which is represented by the resources in the region, and demand which is represented by the community needs of growth and development. The dissonance between offer and demand /not respecting the landscape resources/ is the determining factor of formation not only environmental but also socio-economical

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problem. The model is focused on solving of the problems stated – elimination of current and prevention of formation of new environmental and socio-economic problems and from long-term perspective secures sustainable landscape development.

The poster will present an example of the integrated landscape management of the rural landscape - Trnava region.

MARGINALIZATION OF MUNICIPALITIES AND REGIONS IN THE CONTEXT OF BASIC SCHOOLS NETWORK REDUCTION IN CZECHIA SINCE A MID 20th CENTURY. INTRODUCTION OF A RESEARCH PROJECT

Kučerová Silvie, Kučera Zdeněk, Chromý Pavel *

The aim of the poster is to introduce our new research project focusing on phenomenon of basic school network reduction in Czechia and its relationship to general space polarization process.

The aim of the project is to analyze development and changes in network of basic schools in Czechia from the mid 20th century and their impact on the stability and functioning of local/regional communities. The stress will be on phenomenon of basic school network reduction, which is inevitable process of human activities concentration as a part of wider societal development, nevertheless it is also shaped by unique historical circumstances in Czechia during era of socialistic establishment and subsequent stage of societal transformation after the break year 1989. We proceed from the assumption that function of a school institution is not only educative, it has many other functions such as a service equipment, a community and common consciousness maker, a regional identity builder etc. With closing down elementary school municipality loses these functions that could lead to its marginalization and peripheralization and even to marginalization of the whole region characterized by high concentration of closed schools.

In our project the typology of Czechia according to the intensity and development of basic schools closures will be created. This typology will be used to delimit several case study areas in which the relationships between the closure of basic school and its impact on the stability of local/regional community, degree and manifestation of local/regional identity and areal development potential will be specified.

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AREAL PRESERVATION AND POTENTIAL LANDSCAPE CHANGE IN CZECHIA

Kučerová Silvie, Kučera Zdeněk, Chromý Pavel, Tomáš Matějček[*]

The aim of this poster is to present a partial result of our research project on areal preservation in Czechia. The typology of landscape according to its potential future changes is introduced.

The aim of our analysis was to delimitate the types of areas according to the character of potential changes of its landscape as well as to describe the types of landscape these changes will be associated with most probably. We have tried to describe especially those changes that are anticipated in current legislative documents or by the observed long term trends. The whole analysis was conducted on the level of districts of municipalities with extended competencies. Wide range of indicators was used, e.g. data about population development, land use, physical geographical characteristics or protected areas.

Our work resulted in the creation of one synthesizing typology of Czech landscape according to its potential changes, the potential pressure on its redesign in the near future. Originally we have searched for four main types of landscape: 1) those with both high degree of preservation and high potential change, 2) with high degree of preservation and low potential change, 3) with low degree of preservation and high potential change and 4) with both low degree of preservation and low potential change. However, our effort resulted in more types of landscape than the above mentioned four, although some of them showed to be very significant. This typology was further used to delimit case study areas where future research will be conducted.

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ECOLOGICAL STABILITY AND BIODIVERSITY IN RURAL LANDSCAPE

Moyzeová Milena[*]

The rural landscape is often connected with development of agricultural production. Agricultural production went through many changes, which were dependent from overall economic situation in Slovakia. The most changes were registered in the 50s in the last century during the period of collectivization. In this time period a character of rural landscape has mostly changed by ploughing up the balks and removing the non-forest woody vegetation. From small blocks of arable land has been created monofunctionally utilized large-scale arable land. Diverse rural landscape has been replaced by monotonous landscape with large fields characteristic by insufficient abundance of vegetation. Not only an aesthetic aspect of rural landscape was changed, but also biodiversity and ecological stability of the territory of the whole cadastre area was disturbed.

In present time the face of rural landscape is changing thanks to performed land arrangements. One of the reasons for realization of land arrangements in rural landscape was the need to improve overall character of agricultural landscape, farming on the land and restoring and improving the functions of ecological stability in territorial system. Land arrangements according to Act No. 330 of 1991 about Organization of land ownerships, land offices, land fund and land communities, defines the land arrangements as:

- redintegration, division, land arrangement and organization on the base of ownerships and users relationships
- performing field, communication, water management, reclaiming and land improving measures
- built-in ecological measures for the purpose of rationalization of agricultural services conditions, and ensuring stability and aesthetical appearance of agricultural landscape

In the frame of initial basic projects of land arrangement the principles of functional organization of the territory in the area of land modifications are elaborating, including also requirements on creation the territorial system of ecological stability (TSES), requirements about nature protection, individual natural resources and maintenance of historical monuments.

The paper is an example of proposal of the framework of ecological stability on the local level elaborated for the needs of landscape arrangements on three model areas of the cadastres of Slopná, Klasov and Šalov villages. The aim of this local system of ecological stability (LÚSES) was to create functional ecological networks in intensively utilized agricultural landscape defined by the borders of its cadastre area through the following measures:

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- revitalizations of present natural habitats
- creation of new habitats with proposals of their protection and management
- determining of general management of the territory

These proposals will contribute to increase of ecological stability and biodiversity in evaluated areas.

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THE DYNAMICAL REORGANIZATION OF THE RURAL AREAS IN TERRITORIES DEEPLY DISADVANTAGED. CASE STUDY: THE SOUTH-WESTERN REGION

Peptenatu Daniel, Stoica Ilinca-Valentina, Iancu Florentina Cristina[*]

The regional development represents one of the most important purposes of improvement policies regarding the areas with important economic unbalances. With a view to accentuate the regional disparities, there are used two basic concepts in technical literature: improved region and disadvantaged region. Regarding the later one, a subclass can be distinguished, namely that of the regions deeply disadvantaged with many disfunctions.

In Romania there are numberless disadvantaged areas, because of the economic decrease of polarization centres which provided important revenues for near rural areas. Some disadvantaged areas have important unbalances, being regarded as deeply disadvantaged and which need certain territorial management strategies.

The dynamical restructuring analysis of the rural areas deeply disadvantaged has been realized throughout economic analysis, on the basis of four indices: the economic interaction, unemployment rate regarding labour force, working population rate regarding labour force and physiological density.

After this analysis one can notice that in the south-western region the economic disfunctions of deeply disadvantaged areas are determined by the characteristics of yield production system, of a very weak sustenance and the ebb or industrial activity disappearance. Development strategy of these deeply disadvantaged areas is based on a sustained social economy, on an advanced agriculture and on a development of industrial parks in old polarization centres, as well as the identification of some adjective coordination nuclei which should sustain an incorporated development of rural areas weakly polarized.

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THE MANAGEMENT OF AREAS WEAKLY POLARIZED THROUGHOUT INNOVATIONS AND GOOD USAGE. CASE STUDY: GORJ COUNTY (ROMANIA)

Peptenatu Daniel, Braghina Cristian, Iancu Florentina Cristina, Stoica Ilinca-Valentina[*]

Weak polarized areas were singularized by using more criteria, including important incorporated indices for identifying territorial disfunctions. The management of these areas signifies a major step of attenuation of the existent disparities at the territorial level, representing an important component of regional development. In technical literature, the most important aspects are knowledge and science regarding area development, which, being exposed at the same transfiguration pressure, have different capacities of innovation and reactions. It has been noticed a direct rapport between high capacity of reaction and high degree of innovation of an area. In order to understand the complex processes of transfiguration within territorial system, the response capacity should be established by some advanced methodologies.

Consequently, territorial management regarding these areas weakly polarized needs an efficient institutional system which should provide diffusion of innovations within polarization centres on very clear directions defined by decision makers, from national level to regional and local one. At the same time, at the regional development level an efficient policy of identifying local extension alignments should be identified and act like some diffusion repeaters regarding innovations and good usage, a priority being the entrepreneurial initiative. These alignments can be regarded as settlements which have many advantages towards subsidiary locations and which, throughout the implementation of some activities corresponding to available potential, determine disparities attenuation and areas weakly polarized integration.

Such types of areas weakly polarized are in Gorj County; these areas have a lot of economic disfunctions. In order to solve these problems, some helpful policies should be found, so as to induce a balanced territorial development. For their activation there are two important aspects: the diffusion of innovations and a good practice throughout local extension alignments.

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LAND USE CHANGES AS A REFLECTION OF ENVIRONMENTAL AND SOCIO-ECONOMIC FACTORS

Skokanová Hana, Stránská Tereza[*]

To understand today's processes in the landscape it is necessary to look into the past and learn how the landscape was cultivated by our ancestors and which driving forces shaped it. This paper analyses land use changes that occurred at the area of Rosice-Oslavany region in the period 1840 – 2006 and how these changes were influenced by natural and socio-economic driving forces. The Rosice-Oslavany region is situated in South Moravia, the Czech Republic, west of Brno city. The total area is 193 km^2. The study area is a unique example of interactions between natural conditions (especially the Oslava R. valley which is a part of supraregional ecological network) and socio-economic factors (coal mining, power station, hinterland of Brno city).

Old topographical maps used for the analysis of land use changes in Rosice-Oslavany region landscape were following: maps from 2nd Austrian military survey in the scale 1:28 800 from the period 1836-1852, maps from 3rd Austrian military survey in the scale 1:25 000 (1876-1880), Czechoslovak military topographic maps in the scale 1:25 000 from 1950s and 1990s and Czech topographic base maps in the scale 1:10 000 from the period 2002-2006. On the basis of map legends from above mentioned map, nine land use categories were distinguished (methodology of VÚKOZ, v.v.i., unpublished): 1 – arable land, 2 – permanent grassland, 3 – orchard, 4 – vineyard and hop-field, 5 – forest, 6 – water area, 7 – built-up area, 8 – recreational area, and 0 – other.

On the basis of analyses that were made, we can say that the area is exploited in a constant way, the 75% of the area has not changed during the period of time. The prevailing land use categories are forest and arable land. Their area oscillated around 8500-8700 ha during the researched period, with the area of forests slightly bigger than the area of arable land. The area of forests has gradually increased since 1840 but the increase was very little (for 23.6 ha, i.e. 0.1%, between 1840 and 2006). The main forested areas were south-east of Rosice town (corresponding with Bobrava nature park), east of Ostrovačice village (corresponding with Podkomorské lesy nature park), west of Zbýšov village and in two north-south strips - west of Říčany village and Zastávka village and east of Přibyslavice village and west of Zbraslav village. These forest complexes can be considered as stable areas from the perspective of land use. Arable land reached its peak at the end of the 19th century, which corresponds with intensification in agriculture resulting from agricultural revolution. The area has decreased since then for about 1295 ha (6.7%). It was mainly in favour of built-up area. Although the decline in the area of arable land has been recorded since 1950s, the landscape structure has significantly changed after 1948 as a result of collectivization in agriculture meaning creation

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of vast fields as is mentioned in the section dealing with socio-economic driving forces. Intensification in agriculture and collectivization had main impact on the area of permanent grassland – it decreased from 1861 ha (9.6%) in 1840 to 417.6 ha (2.2%) in 1990, i.e. for more than 1443 ha (7.5%). Slight increase in 2006 for about 1% can be caused by decreased pressure in less favourable areas. However, it can also be a result of different scales of maps (maps from 1990s are in the scale 1:25 000 while maps from 2000s are in a bigger scale of 1:10 000). Increase in built-up area was mainly a consequence of mining expansion after WWII and especially in the 1960s-1980s. With the termination of the mining in the 1990s, this category shows more or less stagnation. Mining is also associated with other area, which are primarily mine wastes. This category started to occur in larger proportion in the 1950s and the biggest area is typical for the 1990s. A very dynamic category is represented by orchards. Their biggest area was in the 1840, the smallest in the 1990. Orchards were concentrated around Oslavany town and Zbýšov village during the whole researched period. In the 1950s, high concentration was documented north of Zbraslav and around Litostrov and Rudka villages. In 2006, Veverské Knínice village and a locality between Domašov and Říčky show numerous occurrence of this category. Increase recorded in the 1950s reflects the fact that the first half of the 20th Century is considered to be a boom in fruit growing. The rapid decrease in the 1990s was caused partly by orchard ploughing, and partly by their integration into municipalities. The dynamics of the category between 1990 and 2006 can be a result of the different scales of these maps, similarly with the changes in the category of permanent grassland. Since the 1950s a new phenomenon occurred – recreational area. This category includes garden colonies, weekend houses, camps and also Masaryk (Brno) circuit, which is situated in the east of the study area. The rapid development of the category has been noted for the 1990s with the development of weekend houses; meanwhile the increase in the area in 2006 was caused by further development of Masaryk (Brno circuit) and establishment of new camp site near this locality.

We can divide driving forces into two groups: environmental and socio-economic. Landscape changes are unambiguously limited by natural conditions. The main natural driving forces are considered: georelief as a translator of movement of material and energy, soil cover, hydrological conditions and meso-climate. The most significant socio-economic driving force is black coal mining. The coal started to be mined at the end of the 18th Century. The second main driving force conditioning land use changes in the Rosice-Oslavany region is close presence of Brno city. The region can be considered as a part of Brno hinterland. The third main driving force that influenced land use changes in the study area was intensification in agriculture, which was a result of agricultural revolution in the 19th Century.

NEW INTERACTIVE TOOL FOR EDUCATIONAL AND TRAINING PROVISION IN SIA

Šťastná Milada, Dufková Jana *

European landscapes are facing rapid changes in land use, where understanding and management of this process is essential. Sustainability has become a widely acknowledged dimension of human actions, but still little stress is put on education in sustainability. This paper identifies focus of education, gives suggestions for improvements and presents a new tool for education and training in sustainable land use – "Route Planner". As results, it provides all users with new interesting facts on sustainability in the European Union and additional materials related to sustainable land use and Sustainability Impact Assessments (SIA). Users got the access to updated information regarding approximately 3000 courses on offer in this topic area throughout the European Union as well as case studies to compare sustainability practices in these countries in comparison to other parts of the world. Furthermore the end result of the information chain also leads the user to a collection of links such as interesting websites and further reading in the topic area.

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WATER INFILTRATION IN LANDSCAPE INVESTIGATED ON SELECTED AREAS AT ŽABČICE

Vičanová Martina, Mašíček Tomáš, Toman František[*]

This article focuses on the process, during which water from the surface enters the soil, especially, measurement of the amount of infiltrated water per measured time.

Purpose of currently running research work is to map a progression of water infiltration on selected areas at Zabcice locality and to specify possibilities of a water accumulation and a retention influence in a landscape.

Field measurement has begun in April 2008 at Zabcice locality and proceeded at three different plots, where cereals were planted. Speed of infiltration is measured until the stabilization point, with the help of infiltration barrels pack. That is the reason, why the measurement does not take always the same time.

To get statistically conclusive results measurement runs in three repetitions and data are subsequently averaged. Extreme measured data are not included in the average. Differences can occur due to e.g. mole's tunnels or too harden soil after mechanization, etc. Measurement takes a place on a soil surface, actually at initiative profile, which is on soil surface level. Capability of infiltration is monitored for the whole soil profile.

Selected area, which is bordered by two homocentric metal cylinders, is filled by water. The time needed for the infiltration to the soil is measured. For data evaluation and further analysis must be known the soil moisture, precipitation and soil physical characteristics.

Results will be presented graphically and will be used for determining retentive capability of catchment area and for suggesting suitable soil protection from the erosion.

Results of these infiltration experiments will be part of research project „Biological and technological aspect of tenability controlled ecosystems and its adaptation for climate changes“ (no. MSM 6215648905) with the title „Climatic conditions of erosion evolution and infiltration attributes of soils“.

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SMALL TOWNS INHABITANTS AND THEIR CONCERN ABOUT ENVIRONMENT

Ždímal Václav[*]

Environment is today under the great influence of human population, mainly individual man's incidence. Singular persons treat it differently, in accordance with their own relation to it. For this study secondary data analysis The International Social Survey Programme (ISSP) – Environment of the years 1993 and 2000 was chosen. Selective collections were obtained by probability selection from fundamental collection of inhabitants of the Czech Republic who were older than 18 and their quantity is 1,005 /in 1993/ and 1,244 /in 2000/ respondents. The aim is to find out inhabitants concern about environment and its protection and to compare it between the years 1993 and 2000 and to find some factors that affect people's willingness to ´make sacrifices´ for protecting environment. The questions were associated into four factors characterizing concern about environment.

The first factor is ***Technological optimism*** resulting from the questions „Modern science will figure out our problems without great changes in our way of life."

The second factor is ***Willingness to pay some financial contribution for environment improvement*** resulting from the question „How much are you yourself willing for environment protection improvement"

a. *To pay much higher prices.*
b. *To pay much higher taxes.*
c. *To accept lowering of your living standard.*

The third factor is ***Limiting of environmental burden***, resulting from the questions „How often do you take /great/ trouble over waste sorting – glass, metals, plastics, paper etc. for salvage of assorted waste?" and „How often, of your own accord, do you limit your driving a car, just only for environment protection?"

The fourth factor is ***Making an activity for environment protection*** resulting from the questions „*In recent five years have you:*

a. *Signed a petition concerning living environment in any way?*
b. *Given some money to support some group, movement that occupies with environment protection?*
c. *Participated in a protest or demonstration in support of environment?*

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Results:

The factor ***Technological optimism***: There is not vast difference between a small town and a village. In 2000, in comparison with 1993, eminently grew the answer ´rather agrees than disagrees´. We may say that *optimism* had grown.

The factor ***Willingness to pay some financial contribution for environment improvement***: The willingness to share environment protection financially is not just great and we cannot say that it has been increasing.

The factor ***Limiting of environmental burden***: here, between years 1993 and 2000, decreased the number of answers ´not possible´. It resulted both in willingness to sort waste and in limiting driving a car.

The factor ***Making an activity for environment protection***: we cannot watch changes neither in time nor among towns of different sizes.

Conclusions:

From 1993 to 2000 we can watch slight increasing of ***Technological optimism*** at small towns and villages inhabitants´ and slight increasing of ***Limiting of environmental burden*** by increasing of the number respondents who sort waste and limit their drives by car.

Acknowledgment:

For this study was used the data The International Social Survey Programme (ISSP) – Environment of the years 1993 and 2000 (The Sociological Data Archive (SDA) at the Institute of Sociology of the Academy of Sciences of the Czech Republic, STEM, SC&C).

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