# DEVELOPING AND EVALUATING A RESIDENTIAL ZONING SYSTEM FOR RURAL AREAS IN THE CZECH REPUBLIC\*

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Landscape habitability is currently a relevant and important topic in discussions of rational utilisation and planning of rural areas. This layer of landscape planning is one of the essential tools for sustainability, improvement of rural life, and conservation of rural landscapes. This paper defines the basic principles and opportunities for residential use of rural country and proposes a method enabling application in territorial development strategies as well as specific landscape designs. First of all, means of residential experience – preconditions for dwelling – are defined. The most significant indicators, or characteristics, of habitability include water elements, forest, natural environment, economic activity in the rural country, anthropogenic elements, and the road network. A model set of background data was compiled, in order to evaluate landscape habitability. Research in a chosen model area was supplemented with a sociological survey which enabled the mapping of preferential attitudes of both rural and urban dwellers. The dwelling potential – the specific dwelling supply of the area – was then determined in a GIS environment. The resulting tool for planning landscape habitability is a residential zoning layer. This layer translates dwelling potential into a specific design using four basic component layers. It is a system for an approach to planning and developing the dwelling values of rural country. A test of the methodology was conducted by zoning a model area at three levels of working detail. A comprehensive approach to designing and optimising the residential use of rural country is thus proposed.

rural; landscape planning; dwelling potential; residential zoning; recreation; countryside

### INTRODUCTION

Landscape habitability is one possible perspective applicable in planning and developing rural areas. It is a method of rational and sustainable landscape use, conserving and developing landscape values, utilisation for recreation and residential activities, and a method of creating an environment for both arriving and local rural inhabitants. It is an aspect that has recently been increasingly employed, which makes it obvious that besides fundamental landscape architectural topics and issues concerning people's contact with landscape, their needs and ways of meeting them have to be dealt with systemically. The topic should be first and foremost dealt with in connection with rational landscape planning and future sustainable landscape uses.

The present-day lifestyle is highly associated with technologies, and everyday contact with the virtual world has gained a firm position among leisure activities of both urban and rural dwellers. However, as L ö w and Míchal (2003) has stated, "It is evident that people alienated from nature have a growing need for natural beauty."

The need for contact with nature and landscape will continue to be something that cannot be extirpated and displaced. Interest in the residential functions of is likely to grow, and it is necessary that we begin thinking and devising methods for coping with such interest: what its manifestations, requirements, advantages and pitfalls are, and what the response of land-use planning processes and strategies should be (M a r e  $\check{c}$  e k , 2006). It seems that the essential prerequisite for that is to find a balance in land-scape use, cultivation and care.

The countryside and the people who live there are key in caring for the (cultivated) landscape. "The countryside has to offer such conditions that can sustain a stable population and reduce migration to towns and their subsequent suburbanisation," say Majerová et al. (2006).

The topic is touched upon in papers by many authors, but mostly they describe only component aspects of habitability. Ž á k (1947) was the last to assume a comprehensive approach. He understood habitability as space intentionally reshaped for dwelling, and identified basic means of and obstacles to landscape habitability. The means he identified were transport, accommodation, and settlement design and plantation. The obstacles were improper manufacturing and settlement and excessive traffic. He dealt in more detail with landscape conditions and capacity for recreation of urban populations.

Mareček (2006) deals with habitability in a landscape planning context, defining major broader, generally valid residential forms and values of landscaping: the macroclimatic and hygienic suitability of the area in question,

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its high aesthetic value, human dimension or scale of the area in question, identity or spiritual value – genius loci, suitable acoustic conditions, adequate degree, extent and spatial distribution of visual elements, sociability as an opportunity for civil encounters, adequate availability and equipment of sojourn areas, outdoor recreational furniture, and physical safety of visitors.

Some relevance to landscape habitability can be found in other closely related research topics and outcomes of related papers, such as recreation (Me j s n a r o v á, 2004), land adjustments and legislative framework for landscaping measures, leisure activities, rural life quality (Majer o v á et al., 2006), social aspects and functioning of rural communities (L i b r o v á, 1988), developments and methods of soil management (Sýkora, 2004; Löw, Míchal, 2003; Zachar, 1981), quality of the natural environment (Bell, 1993; Day, 2000), cultural and historical attractiveness and landscape footprints (G o j d a, 2000; Hájek, Bukačová, 2001) and landscape structure and access (Květ, 2003). Stibral (2005) and Appleton (1973) describe a closely related topic when relating people's bonds to the country with psychologically experienced archetypes and perceptions of country in general.

Habitability of rural country is largely an anthropogenic perspective, which is why thorough sociological research is an imperative. Examples abroad include B atty (2007) and the periodic systemic mapping of the opinion pool and status quo by DEFRA, the UK governmental agency for rural development. Domestically, Majerová et al. (2006) made sociological enquiries as part of her assessment of the rural socio-economic situation and found that only 4.8% of the population works in agricultural and related jobs, which means that landscape care needs to be undertaken in other sectors too. Moreover, she mapped factors that should contribute to rural development according to rural inhabitants. The top-ranking factors mentioned include development of technical infrastructure and public amenities, support to businesses, and new housing development. Environmental and habitability issues, such as developing local traditions, appeared among the top ten factors, but at the lowest rank of importance.

K r e š l o v á (2006) examined issues of leisure activities and exercise in country areas. She described preferences for staying outdoors in each season for the rural dweller category, stating that 56.6% spend their holiday at home, exploiting the surrounding country for recreation. She also evaluated the frequency of outdoor stays in each season for both urban and local rural dwellers.

Fundamental obstacles and potential limitations to landscape habitability can be found in complementary topics such as environmental impact of recreational activity and sport (D o l e ž a l et al., 2007) and location of unsuitable developments and urbanisation. (MŽP et al., 2009).

On interpreting the available literature it can be summarised that determining and developing the basic values that inform habitability of rural landscapes represents the means for improving the quality of rural life. In addition,

such an approach can provide opportunities to address the interest of urban dwellers in recreation in the natural environment and country. Last but not least, it is one way of giving a new purpose to places that have been so much transformed by human activity that a new spirit and purpose have to be found for them.

Overall, it can be stated that dwelling potential and preconditions for dwelling have not been defined for land-scape planning purposes in full.

The objectives of the present paper are therefore to:

- determine the basic preconditions for dwelling in rural landscapes by means of defining and analysing habitability indicators;
- define existing and possible dwelling potential of an area and devise and verify a viable method of transforming it into a design;
- define landscape components that are most suitable for developing dwelling values, and outline an application for a specific model area;
- define principles of habitability of rural areas, which will be applicable in effective landscape planning, meaningful territorial development strategies, and efficient allocation of public as well as private resources.

#### MATERIAL AND METHODS

To achieve the objectives, a three-stage basic analysis and evaluation of the area was undertaken.

First of all, the analysis determined constituent landscape elements which were the strongest factors in residential experience, and defining criteria for their evaluation. The elements were evaluated for their psychological effect, role in the landscape composition, qualities exploitable for dwelling, and activities linked to them. These findings were described and each evaluated characteristic was compiled as annotated photographs in A3 summary documentation sheets.

Next, a suitable model area was sought with attributes which enable verification of methodology. Part of the Džbány Microregion, on the border of Central and South Bohemian Regions was chosen for its notably rural character, absence of burdens from large operations, manufacturing plants, transport infrastructures, inconsiderate past measures and developments. It is free of major social and economic problems, and is within the general range of conditions characteristic of the Czech Republic.

In the second stage, information concerning landscape evaluation in the public domain was sourced as part of land-use and landscape planning. Documents were analysed, and the necessary sources containing characteristics of the area in respect of its habitability were identified and interpreted. Historic mapping, climatic conditions, basic area characteristics, natural area characteristics, regional forestry plans, spatial area structure, and demographic data were located, interrogated and interpreted for habitability values

Unification of scales to enable data comparison was enabled by use of AutoCAD 3D: raster maps were digi-

tised, elements were vectorised. Mapping layers were thus compiled.

The third analytical stage was an evaluation of the status quo in the area. First, field surveys of the study area were conducted to determine the basic condition and extent of vegetation. This was compared and specified using orthophotographs and plotted onto the 1:25,000 basic digitised raster map (RBM). The existing recreational values, such as infrastructure, basic facilities and public amenities in villages, were documented in a second step. These composite data were then transferred as digital attributes in the AutoCad Map 3D model interface into the RBM in 1:1.

Habitability is an anthropocentric concept, which is why the opinion pool and preferences of landscape users – both local rural and arriving urban dwellers – were evaluated. A quantitative sociological survey method was employed to design a structured questionnaire which contained 40 questions concerning the following basic issues: opinion on enquiries assessing quality of rural life, interest in the country and public space, need for present changes and willingness to become involved in them, spending leisure time in the country, preferred landscape types and elements, activities in the country and opinion on the necessity of various landscaping measures. The basic survey was conducted and evaluated using the SpreadSheets software.

The entire data set identified in the previous analyses and assessments was converted to a single platform. The summary area potential, allowing or prohibiting habitability, was displayed in a polygonal fashion in the GIS. In the next step, the data were synthesised by layering topographical attributes. The various layers of the dwelling potential were thus defined. A single aggregate layer was created, and its components were specified in detail. Management regimes and utilisation of components, operations and other characteristics of desirable residential uses were described.

A model application with verification and evaluation of the dwelling potential was projected for application in the study area in the form of a design for utilisation of its dwelling values. To verify the habitability system imple-

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Fig. 1. Preconditions for dwelling based on water elements in a broad landscape context

mentation method in the design, its southern part east of the town of Votice towards the market town of Louňovice pod Blaníkem was elaborated in more detail. It comprises 22 settlements in the municipalities of Jankov, Louňovice pod Blaníkem, Neustupov, Ratměřice, Votice, and Zvěstov.

Parts of the design were elaborated at three levels of detail. In addition, a methodological approach to planning residential landscape uses was proposed.

## RESULTS AND DISCUSSION

The following features and their qualities were determined to be most important when determining elements contributing to the residential experience: water elements, forest cover, natural environment and vegetation, anthropogenic elements (comprising the cultural-historical and spiritual components), and road networks. Additional elements and phenomena, which may be understood as obstacles to habitability (area utility limitations, buffer zones, unsuitable elements) were added to the list for the sake of completion. In total, 42 identification sheets were developed for the individual elements (Figs 1 and 2).

Following the second stage of the analysis, which interrogated and interpreted suitable publicly available information for evaluation of landscape habitability, a model set essential for evaluation of habitability was compiled. Methods of interpreting and in-depth analysis were suggested for some of the documents; for example, assigning soil productivity scores to different soil typological units, determining their categories in the area, creation of a 3D model of the area from digital maps, and evaluation of a historic map to determine the development of passability and the landscape mosaic, were treated in more detail.

The base survey showed that the area had a relatively good structure suitable for developing residential functions, and contained a stabilised mosaic of dispersed vegetation, particularly in relation to an increased proportion of water elements in the area. They were identified to include facilities for private and short-term recreation, supplemented



Fig. 2. Anthropogenic preconditions documenting the importance and attractiveness of small-scale landscape elements

with elements of municipal recreational infrastructure. The recreational accommodation capacities were not sufficient, and there were no specific purpose-built facilities. A set of reference symbols usable in subsequent analysis were devised for all these elements.

The sociological survey, conducted employing the questionnaire method, involved 142 respondents. A total of 60% of the respondents were permanently settled in the area while 40% were regularly visiting. According to the local inhabitants, transport services were the most important factor of the rural development policy, followed by care for and developing landscape values. In addition, an overview of frequency of outdoor stays in different seasons and landscape types was compiled. Areas around water elements, broadleaf forest, and coniferous forest were by far the most preferred types (Fig. 3). Walks and pleasure trips were the most common activity undertaken by both the groups in the outdoor environment. Other findings were incorporated in the subsequent synthetic and design stages.

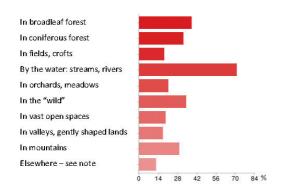


Fig. 3. An example of the sociological survey results: determining the preferred leisure activities in connection to specific landscape environments showed a high preference for habitation by water

A synthesis of these materials and evaluations provided information on the basic characteristic of the area in respect of its habitability: the dwelling potential. It was quite clearly shown that four basic layers comprising the landscape dwelling potential was categorised into four main layers:

- (a) cultural, social, historical dwelling potential,
- (b) dwelling potential of the natural component,
- (c) potential of economic activity in the country,
- (d) area accessibility potential.

These components were juxtaposed with limitations to the uses of the area, which can be seen as a negative potential. The component layers were developed in interrelated and harmonious fashion as any support for individual layers without connection to the others would provide an unrealistic representation (Fig. 4).

The relationship between component layers was translated into a design of dwelling values. This was done in the GIS applications by polygonal rendering of the aggregate potential of the area which allows or prohibits habitability. Incorporation of topographical data created a layer of the combined properties of the entire set of

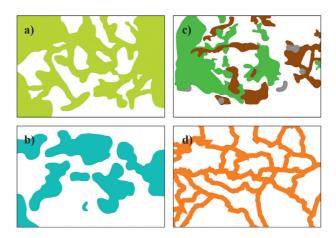


Fig. 4. Component layers of the dwelling potential

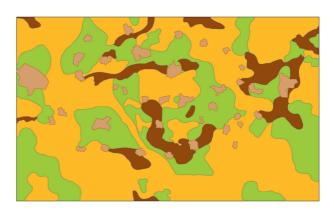


Fig. 5. Synthetic layer of the potential: proposed residential zoning of the area. Zone I shown in green; zone II in orange; zone III in brown; zone IV in beige

dwelling potential source information, which was described earlier. A master layer of residential zoning was thus achieved and is shown in Fig. 5.

Zoning is the most appropriate way of translating landscape dwelling potential into landscape planning, or a rational design for the residential, recreational and economic use of landscape. The treatment method enables applicability at various planning levels. It can be used as the only layer for local self-government purposes, or as one of the layers for higher-level land-use plans.

Four basic residential zones were defined with the following desired uses and regimes proposed for each segment of the dwelling potential: I. primary residential zone: predominant residential use; II. secondary residential zone: can be understood as developable and natural zone; III. third residential zone: predominant agricultural production; and, IV. fourth residential zone: continuation of rural settlements. In aggregate, their content may be described as follows:

I. The primary residential zone is intended for developing the dwelling values of an area. It should not incorporate valuable nature sites, but if it does, they should be included in the design with great care (at most through vistas or views from peripheral areas, roads should avoid them or associate with them considerately). In respect of the access potential, it has and requires the densest paths,

which should be fully equipped. This means not only the related planting along the paths, but also stopping places and nodes, outdoor furniture and other fittings. The dwelling potential of attractions in the area, including spiritual values and traditions, should be exploited as much as possible; it should be appropriately included in the landscape composition. Agricultural and forestry production should be subordinated to residential needs in respect of both crops used and cultivation technologies. No obstacles to habitability should be present in zone I.

II. The secondary residential zone is intended for considerate management practices, not appropriate for intense agricultural production (which should be concentrated in zone III). Highly sensitive, endangered species or communities of plants and animals, which the presence of human visitors could be expected to negatively impact, may be situated here. Development of residential functions in this zone should show optimum parameters, but will not be located here primarily. At the same time, residential functions will be harmonised with the other required functions that may follow from the other planning components.

III. The third residential section is dominated by agricultural uses; respecting all elements of nature and nature site conservation are a must, but residential functions will be suppressed in favour of maximum utilisation of the production potential. Accompanying residential facilities and their related planting compositions will be minimised. The road network will make use of existing roads and access.

IV. The fourth residential zone is closely linked to the urbanised area and should primarily focus on providing public and cultural amenities and quality interior environments. Outside the settlement, the zone shall be designed in such proportions that enable a natural contact of the urbanised area with the outer country area, functioning as a buffer and container zone. Related urbanist professions deal with the issues of rural settlements and associated infrastructure in detail. In respect of landscape habitability, the connection to landscape contexts should be preserved: chiefly in road routing, vistas, accommodation facilities, public amenities, information functions, etc.

A method for translating these results as defined zones into the study area was used. The zoning was exemplarily applied to the model area in the form of a residential use of rural country. Three basic levels of detail were seen as most appropriate. The first level was the level of associated, co-operating municipalities. A microregion association seems ideal, but only providing that the association is functional. A local action group, or association of municipalities – could also be suitable. It is pertinent to remember that basic development issues affecting the habitability of the broader area connect to other related activities and strategies such as bicycle touring, agritourism, international hiking trails, the large territory land-use concept and regional development programmes.

So-called landscape habitability centres were defined, comprising a kind of 'home bases' and information infrastructure for incoming visitors. These may be important villages, historic sites, or other elements enjoying in-

creased visitor interest. Designing of trunk touring routes (preferably themed ones) – the basic precondition for usability of the residential elements – is important. The routes may in part use existing touring paths and routes. However, the survey conducted showed clearly that existing routes are in dire need of – revision and rerouting in many places due to their inappropriate course and traffic. These facts were derived from the preceding survey work, which identified, among other things, that 25% of the total length of the touring routes in the study area were routed inappropriately, often along dangerous road stretches.

The more detailed design level dealt with the habitability of the associated landscape area of each village and residential centre (Fig. 6). A programme content of the area was designed in order to maximise the dwelling potential in all its categories. Special care was given to key accessibility, which guarantees habitability, at several levels of utilisation. Routes were designed as circuits with nodes that allow their circularity, in the following categories: full-day circuits, half-day circuits, everyday one-hour circuits, and links (neighbourhood routes) between neighbouring villages.

The most detailed design level dealt with actual landscaping measures and added the missing equipment for the residential infrastructure. This was a detailed treatment of the area in its various composition frameworks (Fig. 7), comprising specific design of the programme content, residential uses of plots, road network, and planting, including the species composition of permanent vegetation elements.

The effectiveness of the dwelling potential and design of residential zoning for the Džbány Microregion was treated exemplarily. The village of Jankov, one of the residential centres in the area, was eventually chosen for detailed attention.

Comparison of the results of the original sociological survey with M a j e r o v á et al. (2006) shows a clear shift in the interest in dwelling as well as shaping the surroundings. The transport services to the rural area retain the weight of the most important factor in both surveys. Whereas economic policies (support to businesses, new housing development) were given top priorities in the survey of M a j e r o v á et al. (2006), the respondents today show a clear shift away from them, pushing them to the margin of interest. Instead, preferences towards nature and landscape conservation and environmentalism have become stronger. A shift in opinion thus seems to be taking place, which might be crucial to rural development into the future.

K r e š l o v á (2002) is rather sceptical to the rural population exploiting their surroundings for recreational functions. Based on the survey findings, however, a gradual shift in the rural population lifestyle preferences are clearly reflected. It can also be detected through the growing frequency of their visits to the country and increasing willingness to take part in landscaping the surroundings of settlements and the country.

We can fully agree with Žák (1947), who formulated the tenets of future landscape formation and delineated the

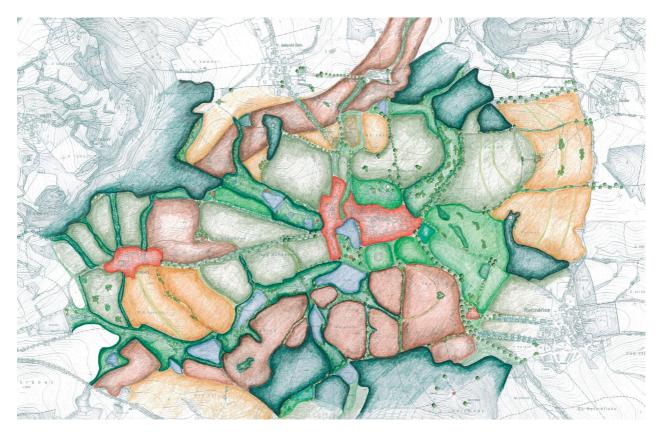


Fig. 6. A project documentation example: a design drawing for the residential centre of Jankov

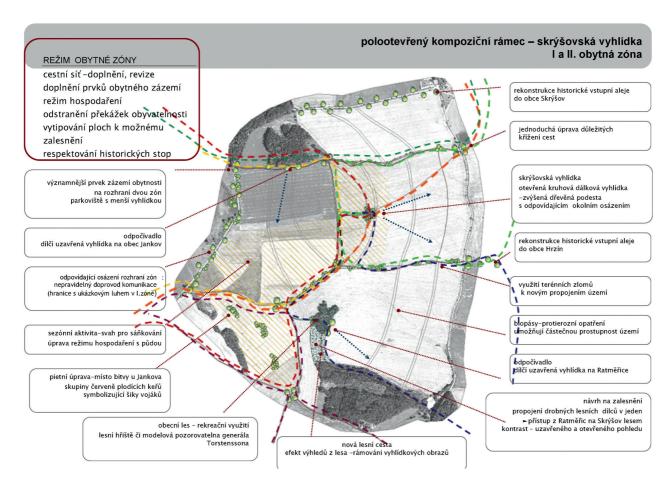


Fig. 7. Composition framework of the Skrýšov Vista showing programme content and accessibility of the area

growing need for conserving and developing landscape values. However, new approaches have to be sought to accomplish them. Above all, Žák (1947) dealt with ways of satisfying the needs of urban dwellers, while nowadays it is equally, if not more important to focus on the needs of local, i.e., rural dwellers.

Several valuable contributions to designing the residential use of landscape can be found among works of other authors that touch upon the topic marginally. It seems, nevertheless, that a comprehensive treatment of the issue is most appropriate in order to cover all the elements involved.

#### CONCLUSIONS AND RECOMMENDATIONS

The sociological survey conducted shows that interest in using country for recreational and leisure activities is growing among both urban, i.e., arriving, and rural dwellers. This interest is reflected not only in the intensity and number of visits throughout the year but also in the willingness to take part in landscaping both the surroundings (82% of the respondents) and villages. Both these parameters have seen an increase compared to 2002. The reluctance to become involved in public or community planning (51% of the respondents do not want to speak publicly) remains a somewhat negative phenomenon.

The primary vehicles of residential experience in landscape, so-called preconditions for dwelling, were determined and described. The most important ones were water elements, forest units, economic activity in the country, anthropogenic elements, and natural preconditions. The major obstacles to habitability can be divided into natural obstacles and anthropogenic limitations.

The paper proposes a method for identifying landscape dwelling potential, which is the current and comprehensive supply of aspects and values of area habitability. Its main basic layers are defined as 1) the dwelling potential of the natural environment and vegetation, 2) the anthropogenic dwelling potential (including the spiritual and social components), 3) the dwelling potential of economic activity in the country, and 4) the dwelling potential of access, and the limits to dwelling potential.

A synthesis of the dwelling potential layers was made using GIS, producing residential zoning: the basic tool for landscape habitability planning. The content and regimes of each of four basic residential zones are defined:

- the primary residential zone is intended for the most intense development of residential functions;
- the secondary residential zone is an indifferent, developable one;
- the tertiary residential zone is intended for performing economic functions;
- the quaternary residential zone is linked to habitability of settlements.

The zoning is the principal means of designing uses and development of landscape habitability, which should be multi-level to encompass all the components of the po-

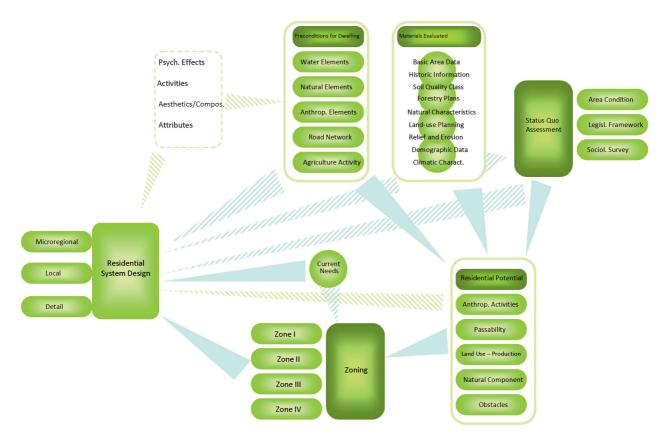


Fig. 8. Diagram of design and evaluation of landscape habitability systems

tential. The procedure, determining the potential, defining the zones, and the subsequent multi-level design were verified on a model area. The zoning is an effective differentiation of an area in respect of suitability of developing its residential functions, thus contributing to optimisation of landscape use and rational landscape planning.

The set objective was achieved because a method for a comprehensive approach to finding, reconstructing and planning dwelling values of rural landscape was determined. The methodology described can be understood as a system of approaching landscape habitability that can be expressed graphically as follows (Fig. 8).

The usability of the habitability design consists in the fact that it is applicable both as part of complex topics and plans, and separately (locally), which further increases its applicability scope. It is an accessible method for areas and regions that cannot afford the time and money consuming planning documentation processes, yet still need to deal with issues of recreation and quality of life in villages directly. In many cases, non-systemic development of an area bureaucratic limitations can be avoided thus saving time.

Landscape habitability plays an important role with respect to nature conservation. It is in fact one of its tools. In a broader landscape context, it directs landscape utilisation, particularly for recreational functions. It helps people identify with the country, understand its values and processes. This understanding then translates into the need to conserve and care for it.

It would be appropriate for future work to elaborate on the outlined procedures for application in other areas, especially those highly anthropocentric areas, such as periurban landscapes, which are of a different character and sociology yet still require the use of potential habitability functions of landscape. As shown in the sociological survey, the approach to habitability of rural settlements should also be revised.

In conclusion, it can be said that the landscape habitability layer should be part of landscape planning, because it can help resolve some of the crucial rural problems. At the same time, it is a contribution to the sustainability of future uses of rural cultivated landscapes. If implemented, it can also be expected to contribute to optimising the economic activities in the country and to environment protection and improvement, and play an important role in future rural development.

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Hodnocení a rozvoj obytných hodnot venkovské krajiny v České republice.

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Obytnost krajiny je v současnosti aktuálním tématem v problematice racionálního využití a plánování venkovského prostoru. Zejména v souvislosti se změnami životního stylu je zřejmé, že se jedná o vrstvu krajinného plánování, která je jedním z nástrojů udržitelnosti, zlepšení kvality života na venkově a ochrany venkovské krajiny.

Cílem práce bylo determinovat, jaké jsou základní obytné předpoklady využití venkovské krajiny, a to pomocí stanovení a rozboru ukazatelů obytnosti – obytných předpokladů. Následně práce definuje stávající a možný obytný potenciál území, navrhuje a ověřuje reálný způsob jeho přenesení do návrhu a vymezuje takové krajinné segmenty, které jsou pro rozvíjení obytných hodnot nejvhodnější. Dalším záměrem bylo nastínit možnou, příkladnou aplikaci na konkrétním modelovém území. Na základě toho práce vymezuje platné principy obytnosti venkovského prostoru, které jsou využitelné pro efektivní krajinné plánování, smysluplné rozvojové strategie území a účelnou alokaci veřejných i soukromých prostředků.

V analytické části byly nejprve identifikovány hlavní prostředky obytného zážitku – obytné předpoklady. Jejich nejvýznamnějšími nositeli jsou vodní prvky, les, přírodní prostředí, hospodářská činnost v krajině, antropogenní prvky a cestní síť. Bylo zvoleno modelové území typicky venkovského mikroregionu Džbány, na rozhraní Středočeského a Jihočeského kraje. Pro hodnocení krajiny z hlediska obytnosti byl dále sestaven modelový soubor podkladů, které byly příkladně interpretovány. U části materiálů byla navržena hlubší analýza a vyhodnocení (např. práce s BPEJ a jejich výnosností, sestavení a řezy prostorového modelu území či analýza historického trasování). Závěrečnou částí analýzy bylo zjištění současného stavu. Na základě průzkumů in situ byla popsána aktuální situace v modelovém území z hlediska porostních struktur, kulturně-historických hodnot a rekreačního zázemí.

Bylo provedeno základní kvantitativní sociologické šetření ke zjištění preferencí jak místních, tak přijíždějících obyvatel. Z výsledků tohoto šetření, které bylo dalším podkladem pro výsledný návrh obytného využití krajiny, jasně vyplynul zájem obyvatel o pobyt v krajině. Byla sledována zvyšující se četnost návštěv v měsíci i během jednotlivých ročních období. Zvyšuje se rovněž ochota lidí aktivně se zapojit do obnovy krajiny (82 % respondentů). Z výsledků četnosti jednotlivých činností v krajině vyplynulo, že převažující aktivitou je právě pobyt v ní (78 %), zatímco hospodaření je nejfrekventovanější činností pouze u 13 % dotazovaných, a to jak u venkovských, tak u přijíždějících obyvatel. Je jasné, že téma obytného využití krajiny nabývá na důležitosti a je třeba na tuto poptávku reagovat.

Zjištěná data z analytické části byla převedena pomocí geografických informačních systémů (GIS) do digitální podoby a byly jim přirazeny jednotlivé atributové znaky. Na základě toho byly polygonovým vyznačením stanoveny kategorie obytného potenciálu území a jeho jednotlivé vrstvy. Vznikly tak čtyři základní kategorie obytného potenciálu (vrstva antropogenního potenciálu, hospodářského potenciálu, potenciálu přírodního prostředí a potenciálu prostupnosti územím), které můžeme chápat jako vyloženou nabídku hodnot a aspektů, jež se na krajinné obytnosti podílejí. Pro celistvou informaci o obytném potenciálu je třeba tyto vrstvy doplnit limitami využití území, které můžeme posuzovat jako potenciál negativní.

Topologickým překrytím, syntézou jednotlivých vrstev, vznikla vrstva finální – vrstva obytné zonace, která je výsledným nástrojem k plánování obytnosti krajiny a přispívá k racionálnímu využití území. Prostřednictvím čtyř základních zón (primární – obytné, sekundární – indiferentní, terciární – hospodářské, kvartérní – obytnosti sídel) se obytný potenciál převádí do konkrétního návrhu.

Jedná se o systém přístupu k plánování a rozvoji obytných hodnot území. Tato metodika byla příkladně ověřena aplikací zonace v modelovém území ve třech podrobnostních úrovních řešení. Návrh byl zpracován na úrovni regionální, na úrovni lokálního centra a v detailu kompozičního rámce.

Závěrem lze konstatovat, že bylo dosaženo vytčených cílů a byl navržen komplexní přístup k řešení a optimalizaci obytného využití venkovské krajiny.

venkovský; krajinné plánování; obytné předpoklady; obytná zonace; rekreace; venkov

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