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DEMOGRAPHIC ASPECTS OF CHANGES IN RURAL AREAS

Introduction

Settlement structure of the Slovak Republic is generally considered a comparably balanced one, at least in the sense that the number of settlements has been relatively stable for a long time. Monitoring of its problems is justified as the countryside becomes the focus of attention with the forthcoming turn of millennium. It is caused *inter alia* also by the reasons that after a long period of concentration of population, precisely the life in countryside becomes again attractive and the concentration was substituted by deconcentration, when the population is moving in many cases into the immediate hinterland of the cities and metropolises. Countryside has become in developed countries a less agricultural and more polyfunctional area.

Several decades lasting socialisation of agriculture and industrialisation in Slovak had also its demographic consequences, for instance, the origin of new urban centres of work opportunities and hence also housing opportunities, regardless the increasing level of commuting from the traditional rural settlements. Concentration and centralisation of practically all areas of life in old regime (economy, management, state administration, work opportunities, housing opportunities, etc.) led to a decrease of the number of administrative centres above all in the 70's. The process of concentration has practically stopped after 1990 though because of other reasons than the effort or will to go on living in countryside.

The subject of rural settlement and the related problems in geographical studies has received more attention especially in recent years when the questions of depopulation of the rural settlements, changes of demographic structures as related to general development of countryside move to foreground. Let us quote for instance Andrlé, Srb (1987), Grafton (1982), Huba (1996, 1997), Kollár (1995, 1997), Michálek (1996), Mládek (1998), Pašiak (1990, 1997), Podolák (1995, 1996), Székely (1996), and Šťastný (1997).

This contribution is dedicated to the subject of demographic development of the smallest rural settlements (population below 500) which represent the core of the Slovak countryside and which are because of the small number of population most immediately threatened and sensitive even to the apparently slightest and harmless demographic influences. Demographic changes are observable at two levels. One of

them is the level of administrative communities possessing a comparably long-time records of various demographic characteristics though too scarce for making some decisive conclusions. A more precise view of the geographic and demographic aspects of the depopulation process of countryside in Slovakia under way is provided by basic characteristics processed at the level of settlements. Comparable stability of a set of settlements in Slovak is given by the fact that their number (around 10,000, Lukniš, 1987) has not changed in the course of the last twenty years. Changes of the number of small settlements were caused by the construction of water reservoirs, part of them as taken in by the construction of towns or other projects but out of the total number of settlements the number of disappeared ones is very low. As it is not possible to analyse the settlements in scale of entire Slovak (there is no statistics available concerning the single settlements and a detailed field research is possible only on a small section of territory), basic settlement units — result of statistic classification — represent a suitable aid. They are the units chosen for the needs of censuses of persons, houses and flats which respect the limits of administrative communities. In difference from the communities they are more homogeneous. The principles of their identification are close to the principles comprised by the geographical definition of the settlements but normally they are not identical with them. The rule observed by such identification is that one administrative community includes one or more basic settlement units and one basic settlement unit consists of one, but usually more settlements. The largest group of settlements in a basic settlement unit can be observed naturally in the areas with dispersed settlement where there are small individual settlements (hamlets or secluded houses) clustered into one statistic basic settlement unit. The data-base at the level of basic settlement unit makes use only of basic characteristics of population number and their age structure. Nevertheless, these basic data allow for conclusions concerning the degree in which the intense depopulation process changed the population structure in source rural areas with a logical effect on the development of demographic indices and processes in the whole country.

Demographic changes in communities and rural settlements of Slovakia

The number of administrative communities was decreasing in the 70's and it dropped in the course of 10 years by 100 small communities, as a result of administrative measures. Part of them was declared as having no perspective under the Urbanisation Project and the construction of houses and infrastructure were constrained. Small communities joined into one or became the parts of adjacent towns. Small communities started to gain their independence again in the mid-80's. Their number grew to 200 by 1991.

Table 1: Small communities with population under 500.

	NUMBER OF COMMUNITIES			SHARE OF TOTAL NUMBER OF COMMUNITIES (in %)		
	- 199	200-500	- 500	- 199	200-500	- 500
1970	200	863	1063	6.5	27.9	34.4
1980	237	727	963	8.7	26.7	35.4
1991	349	825	1174	12.7	29.1	41.4

Table 2 brings a survey of the development of population number in small communities from 1970. The total population numbers in small communities is comparably balanced but their share in the total population number in Slovak drops in long term.

Table 2: Population in small communities.

	POPULATION IN THOUS.			SHARE OF TOTAL POPULATION (in %)		
	- 199	200-500	- 500	- 199	200-500	- 500
1970	28	303	331	0.6	6.7	7.3
1980	31	251	282	0.6	5.1	5.7
1991	44	285	329	0.8	5.0	5.8

Tables 3 and 4 show how the population number in the smallest rural settlements below 500 dropped in the years 1970-1991. It is evident that the decrease of the total population number in these settlements was bigger in the 70's than in the 80's. The most dramatic decrease was recorded precisely in case of the smallest settlements with population number below 50 during the years 1970-1980. The rural settlements as a whole with population number below 100 are characterised by two to four-fold population decrease compared to the settlements with population under 500 as a whole. The population number in the smallest rural settlements of the Slovak Republic decreased in general terms by more than 17 % since 1970.

Table 3: Population in small rural settlements.

	1970	1980	1991
1-49	71,748	23,880	23,005
50-99	63,171	48,658	42,450
100-199	130,443	112,442	106,909
200-499	487,867	474,308	452,167
TOTAL (TO 500)	753,229	659,288	624,531

Table 4: Population change in small rural settlements (1970–1991).

	1970–1980		1980–1991		1970–1991	
	ABS.	%	ABS.	%	ABS.	%
1–49	–47,868	–66.7	–875	–3.7	–48,743	–67.9
50–99	–14,513	–23.0	–6,208	–12.8	–20,721	–32.8
100–199	–18,001	–13.8	–5,533	–4.9	–23,534	–18.0
200–499	–13,559	–2.8	–22,141	–4.7	–35,700	–7.3
TOTAL (TO 500)	–93,941	–12.5	–34,757	–5.3	–128,698	–17.1

The share of small settlement population in national population number was constantly decreasing in the period of interest, i.e. after 1970, in 1991 it was lower by 5 % compared to 1970 and this decrease was manifested in all size categories of small settlements, especially the ones with population below 200. Evaluation of the group of settlements with population below 500 reveals a drop of the share of population in the smallest size categories (below 200). The share of the size category 200–500 experienced a slight increase within the whole size category of small settlements.

Table 5: Share of population of small rural settlements.

	SHARE OF TOTAL POPULATION (in %)			SHARE OF POPULATION OF SMALL SETTLEMENTS (in %)		
	1970	1980	1991	1970	1980	1991
1–49	1.5	0.5	0.4	9.5	3.6	3.6
50–99	1.4	1.0	0.8	8.4	7.4	6.8
100–199	2.9	2.2	2.0	17.3	17.1	17.1
200–499	10.8	9.5	8.6	64.8	71.9	72.4
TOTAL (TO 500)	16.6	13.2	11.8	100.0	100.0	100.0

The process of demographic ageing of population which manifested in the 70's in the whole population of Slovakia is evident also in the smallest settlements, the ageing of which is quicker than the national mean due to depopulation of the younger population groups. As it was mainly the younger generations which moved to the towns during the 70's, the age structure of the urban population was getting younger (as compared to countryside) or the urban population was ageing relatively more slowly than the rural one. The smallest settlements were ageing much more rapidly than the national mean. The drop of the share of population in the most productive age is much higher precisely in the smallest rural settlements (population number under 200) than the national mean. As the table 6 shows, there is even more conspicuous difference in growth of population number in post-productive age again in the smallest settlements. Table 7 documents the growth of difference in age index

in the smallest settlements for the years 1970–91 compared to the population of whole Slovakia. Mainly the fact that the smaller the settlement the more disadvantageous age structure of population with low representation of pre-productive and high representation of post-productive population components is obvious.

Table 6: Population age structure in small rural settlements.

	SHARE OF POPULATION IN %								
	PREPRODUCTIVE AGE			PRODUCTIVE AGE			POSTPRODUCTIVE AGE		
	1970	1980	1991	1970	1980	1991	1970	1980	1991
1–49	27.2	18.8	17.9	53.7	52.4	46.3	19.1	28.8	35.8
50–99	27.0	22.6	21.4	54.5	55.3	49.8	18.5	22.1	28.8
100–199	26.7	23.0	21.0	54.3	55.2	52.7	18.0	21.8	26.3
200–499	26.9	23.7	24.5	53.8	55.5	48.7	19.3	20.8	26.8
TOTAL (TO 500)	26.8	23.3	23.2	54.0	55.3	49.6	19.2	21.4	27.2
SLOVAKIA	27.2	26.1	24.9	56.2	57.6	57.7	16.6	16.3	17.4

Remark: Preproductive age — younger than 15.

Productive age — men 15–59, women 15–54.

Postproductive age — men over 60, women over 55.

Table 7: Index of age of population in small rural settlements.

	INDEX OF AGE		
	1970	1980	1991
1–49	70.2	153.2	200.0
50–99	68.5	97.8	134.6
100–199	71.2	94.8	125.2
200–499	71.7	87.8	109.4
TOTAL (TO 500)	71.6	91.8	117.2
SLOVAKIA	61.4	62.5	69.9

Remark: Index of age is defined as number of population in postproductive age (men over 60 and women over 55) / number of population in preproductive age (younger than 15) × 100.

Some spatial aspects of the quoted demographic changes are shown in the maps and they allow for the following main conclusions:

Age index (the shares of post-productive and pre-productive population components) shows in 1970 the source areas of population growth in countryside feeding mainly the Slovak towns. Practically the entire eastern Slovakia was characterised by high share of young population. Continuous migration to the towns of the eastern and

other parts of Slovakia has weakened the sources to such an extent that the towns will have to rely on their own sources in the future. A pronounced ageing of the rural population is evident in the map 2, the process being most intense in fringe areas of the north and east of the country. Also an extensive area with high representation of older population in the south of the central Slovakia expanded in fact to the whole of the western Slovakia and with the exception of the Orava region also the whole of central Slovakia.

The pronounced ageing processes along with depopulation also changed the situation in spatial distribution of the natural increment values after 1970. At the beginning of the 70's almost all communities with the natural population decrease were those of the depopulation area of the south of the central Slovakia. The majority of the communities was characterised by the values of natural increment higher than 10 %. Before the beginning of the 90's (and especially in the first half of them) the situation suddenly changed and at the present time the majority of the communities is characterised by the natural population decrease. The change is evident in the fringe areas in the north-east and east of the country, as well as in some areas of the central and western Slovakia.

Comparison of the values of migration balance at the beginning of the 70's points at one of the causes. Migration out of the rural areas was far more intense twenty years ago, than at the beginning of the 90's. Slowing down of the migration wave was partially caused by the exhaustion of demographic sources in some rural areas and partially also by actual freezing of construction and lack of flats in the towns. It is obvious that the depopulation of countryside is a multi-factorial process connected with urbanisation. Combination of natural and migration increments is reflected in spatial distribution of the values of total increment (decline) of population. Only the northern areas of the central, central part of the eastern Slovakia and smaller areas in the south-east of the country preserved the positive values and an overall growth of population. The rest of the areas of rural Slovakia is characterised by negative values.

Fringe areas are not so much characteristic for extreme emigration values as for permanently low values of immigration. The basic fault, after exhaustion of own demographic sources is immigration to such settlements both in terms of absolute figures and adequate age structure. It points at the need (a matter of further research of depopulation of countryside) to assess not only the qualitative but also quantitative aspects of migration.

Conclusion

Regarding the process of depopulation of countryside, it is not clear yet to what extent other than economic agents will influence its slowing down or stopping, as the demographic sources in many rural areas are exhausted, there simply does not remain anybody to leave. Another agent may be the spatial preference of population in terms

of environment, even though the complex economic situation of the majority of families can postpone such motivation to more distant future. In case of interaction of the quoted factors and agents the depopulation process existing in countryside will slow down (or even acquire the opposite trend) and the distribution of the population will become more even.

It is not purpose of this article to tackle other problems of the process of depopulation as it is a subject placed at interface of several scientific disciplines — for instance there are some sociological studies pointing at a more intense relation and higher degree of settlement-regional identity in smaller settlements which might be in certain economic circumstances a motif to development or demographic revival of precisely these settlements. But stabilisation in these settlement can be reached only by enhanced infrastructure and by creating work opportunities. It is obvious that the problem of small settlements can be approached to only in the framework of the entire settlement system at the national or at least regional level. These are also long-term processes the same as are their consequences and results.

Evaluation of the past developments shows, that the prognosis of development of the settlement network of rural area cannot be submitted to an outlived conception of population concentration. It is presumable that it is a time-limited trend which will be to certain extent influenced also by change in individual's value scale and life style of population. The future development of settlement in Slovakia will be also controlled by housing policy which should not concentrate on building the big tenement houses but also pay attention to maintenance of the existing houses in rural areas. Also the tendency to construct single-floor houses in the hinterlands of towns, i.e. sub-urbanisation can be expected.

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