# FORMATION OF URBAN SYSTEM IN CENTRAL SLOVAKIA

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Abstract: The paper indicates analyses of development and particularities of towns of Middle Slovakia (former Central Slovakian Region). The main approach is based on rank - size rule, not only according to the urban system of Slovakia, but also in regard to the urban subsystems of the Middle Slovakian region (Považie, Pohronie, South Slovakian basin, Upper Nitra). Crucial period of analyses is last 40 years (1960-1998), when the Central Slovakian Region functioned as one administrative unit. The results indicate bicentrality of urban system of Middle Slovakia, it means that original state is prevailing. The subsystems are becoming more balanced and leads to regular type.

Key words: town, region, sub-region, rank - size rule, urban systems

### 1. INTRODUCTION

In our contribution from 1980 "Geographical Particularities of Regional Systems of Towns of the ČSSR" (O. Bašovský, 1980), we analysed systems of towns in regions of former Czechoslovak Republic from the point of view of rank - size rule. We divided urban systems of Czechoslovak regions into three groups. In the first group (the Central Bohemian Region, the South Moravian Region, the West Slovakian Region and the East Slovakian Region), there is a leading city of the first rank and the curve, which reflects real size of towns, moved upward. The urban systems of Central Slovakia Region, East Bohemia Region and the North Bohemia Region belong to the second group. The curve of real size of these towns moved downward, it means the towns of the first rank are over curve of ideal sizes (Fig. 1). The third group is represented by the urban systems of North Moravian Region, South Bohemian Region and West Bohemian Region. The

values of real and ideal sizes of the towns are drawing nearer and create regular type of towns.

The systems of towns are reflection of "total" regional structure of the territory. Lot of papers is dealing with the regional structure of Slovakia. With respect to the goal of this paper, the most important is contribution by M. Lukniš (1985). He identified three regions on the territory of Central Slovakia - northern corridor region with centre in Žilina and southern corridor region, which is divided into two sub-regions: Pohronie and Ipel'-Slaná sub-regions. We add that even the fourth regional unit of Middle Slovakia is Upper Nitra region (district of Prievidza).

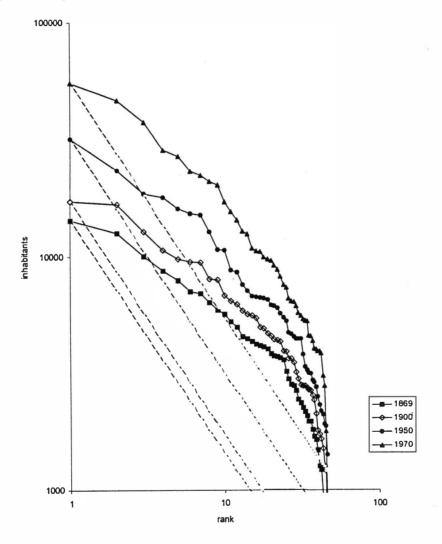


Fig. 1 Towns of Middle Slovakia Region according to the rank size rule (Bašovský, 1980)

The aim of this contribution is to show how the urban system of Middle Slovakia (Central Slovakian Region till 1989) was developed mainly during the last 30 years (1959-1989), when this region constituted one territorial unit. Our effort is to explain the following questions: Does the system come to uniformity or to higher differentiation of its subsystems? In addition, the next question is: What are the geographical distinctions in development of these subsystems?

# 2. THE MAIN CHARACTERISTIC FEATURES OF THE DEVELOPMENT AND PARTICULARITIES OF MIDDLE SLOVAKIA TOWN SYSTEMS

The urban system of central Slovakia contains 48 towns, what means 35,4% of 136 towns of Slovakia. In 1991, 865920 inhabitants lived in the Middle Slovakia's towns, it means 53,7% inhabitants of Central Slovakian Region and 29% of the total Slovak urban population. The number of towns, their size and the number of urban population of the region, as well as the urban subsystems of Central Slovakia are documented in the Table 1 and Table 2.

Table 1 System Middle Slovakia towns according to its subsystems in 1997

Size of towns	Považie	Pohronie	South Slovakian basin	Upper Nitra	Middle Slovakia
50000 inhabit, and more	3	1		1	5
20000-49999	4	3	2	-	8
10000-19999	4	2	2	1 1	10
5000-9999	10	5	3	1	19
2000- 4999	1	1	1	1	4
0-1999	-	1	1	-	2
Total	22	13	9	4	48

Table 2 The population of Middle Slovakia towns in 1991

System/ Subsystem	Total number of population	Number of urban population	Number of urban population %
Považie	837 954	441 260	52,66
Pohronie	393 024	240 244	61,11
South Slovakian basin	241 789	103 844	42,95
Upper Nitra	138 537	80 572	58,16
Middle Slovakia	1 611 304	865 920	53,74

Among all Slovak towns, according to Očovský, Bezák, Podolák (1996) the ranking of central Slovakia's towns is the following:

Central Slovakia towns, except Banská Štiavnica, are the products of modern age evolution. The towns achieved higher rank only after the World War Two. In 1991, they had the following ranking (Fig. 2): 5. Banská Bystrica, 6. Žilina, 8. Martin, 10. Prievidza, 13. Zvolen, 14. Považská Bystrica. Among the top 15 Slovak towns, there are 6 towns of the Central Slovakia urban system.

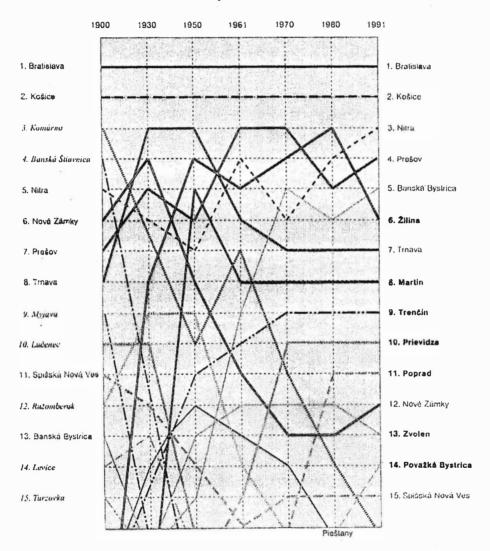


Fig. 2 Slovak urban system according to rank-size rule

The present system of central Slovakia towns (1998) represents Fig. 3. We can see that leading urban centre is missing in the town system of central Slovakia. The core is

replaced by couple of towns - Žilina and Banská Bystrica. From the point of view of our research question concerning the evolution of the systems of central Slovakia towns we can say, that the system has two leading centres, which are alternating in its ranking (1991 Banská Bystrica, 1998 Žilina). Others towns starting from Martin are drawing nearer to regular sizes. It seems that the deviation of the system of Central Slovakia towns is permanent.

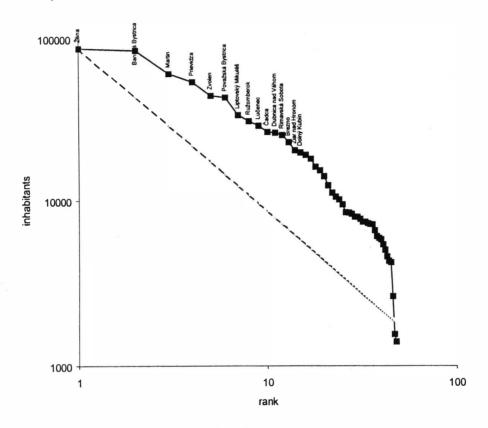


Fig. 3 Rank-size rule of the Middle Slovakia towns in 1998

## 3. SUBSYSTEMS OF MIDDLE SLOVAKIA TOWNS

We have identified 4 subsystems of central Slovakia towns in accordance with the regional division of Slovakia, resp. Central Slovakia (M. Lukniš, 1985). There are:

- 1. subsystem of Považie,
- 2. subsystem of Pohronie,

3. subsystem of south-Slovak basin

### 4. subsystem of Upper Nitra. (Tab. 1, 2).

The most significant according to the number of towns and inhabitants is subsystem of Považie, which has 22 towns and more than half of the whole population not only of the central Slovakian towns but also of the subsystem of Považie. The towns of this subsystem occupy the highest rank among central Slovakian towns (1, 3, 6, 7, 8, 10, 11,...). The system of towns of Považie represents four networks, which are applied one upon others. These networks were developed on the base of factors of market (Žilina, Bytča, Ilava, Rajec, Liptovký Mikuláš and others), transport (Žilina, Púchov, Vrútky and others), administration (Žilina, Martin, Liptovský Mikuláš etc.) and factor of industry localisation (Žilina, Považská Bystrica, Martin, Ružomberok etc.). The most important towns (Žilina, Martin etc.) were risen on the places where was identity of all the factors. Fig. 4 shows that town subsystem of Považie is the most balanced, the most developed and it is approaching to the regular type.

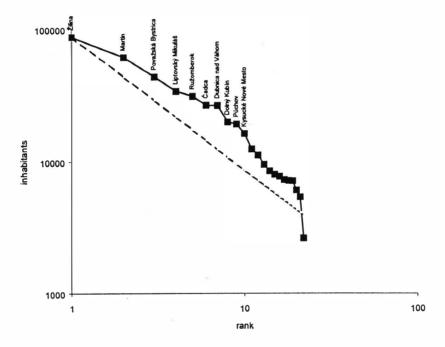


Fig. 4 Rank-size rule of the towns of Považie region in 1998

The second subsystem of towns is town subsystem of Pohronie. This subsystem has only 13 towns. The population of the towns composes 61,1% of the whole number of population of Pohronie, so we can say, that Pohronie is the most urban subregion of Central Slovakia. The towns also occupy the most important position in the ranking of central Slovakia towns (2, 5, 13, 14, 19, 23, ...). The subsystem of Pohronie got over

difficult development. Its leading centres were developed in coherence of mining industry and that is why the towns were located in the mountain areas. Only after the modern age development, mainly after the World War Two, the economic centres were moving to the basins and its towns. Ipso facto, the towns Banská Bystrica, Zvolen and others have been developing, while Banská Štiavnica, Kremnica and others have been declining. The town system of Pohronie is the most balanced among the urban subsystems of central Slovakia (Fig. 5).

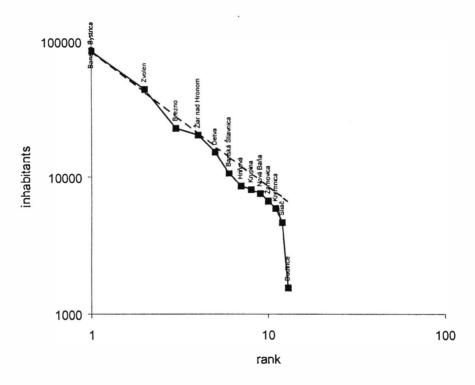


Fig. 5 Rank-size rule of the towns of Pohronie region in 1998

The third subsystem is town subsystem of south-Slovakia basin. It has 9 towns in which live 43% of the urban population of the subregion. The subregion is the weakest urban territory of Middle Slovakia. The rank of the towns is lower (9,12, 20, ...). Long-term economic and demographic stagnation of the districts of south-Slovakia basin has been reflected in slow growth of towns and urban population. In addition, this subsystem is more or less proportional (Fig. 6).

The fourth subsystem of towns of Horná Nitra is the smallest one. It has 4 towns with rank 4, 17, .... The towns comprise 58,2% of the population of the subregion. This subregion (Fig. 7) is bound to industrial and residential functions.

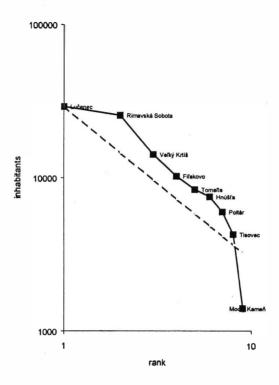


Fig. 6 Rank-size rule of the towns of south-central Slovakia in 1998

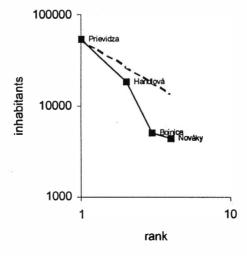


Fig. 7 Rank-size rule of the towns of Upper Nitra region in 1998

#### 4. CONCLUSION

The urban system of central Slovakia as well as its subsystems has undergone serious changes during the last 40 years (1961-1998). The changes are following:

- a) Central Slovakia towns have the highest rank among the middle-sized towns of Slovakia. However, the urban system of central Slovakia is different from the system of towns of West and East Slovakia. This system does not have leading core. The last 40 years did not lead to its formation within the meaning of regular type. Therefore two cities, Žilina and Banská Bystrica occupy significant position in the rank and their "fight" for the first position in the ranking continues.
- b) during the last 40 years the formation of individual subsystems of towns of Middle Slovakia (mainly Považie, Pohronie and South Slovakia subsystems) were finished and its specific features were appeared.
- c) the rank of some towns of the subsystems improved and were stabilised (Žilina, Banská Bystrica, Martin, Prievidza, Zvolen, Považská Bystrica, Púchov, Lučenec, Rimavská Sobota, etc.). Dolný Kubín, Nová Dubnica, Liptovský Mikuláš, Čadca, Dubnica nad Váhom, Veľký Krtíš have faced big changes in their ranking.
- d) the individual systems of towns of Middle Slovakia are progressively developing to regular type and becoming more balanced.

#### References

- Bašovský, O. (1980): Geographical Particularities of Regional Systems of Towns of the ČSSR. Geografický časopis, 32, pp. 156-162.
- Lukniš, M. (1985): Regionálne členenie Slovenskej socialistickej republiky z hľadiska racionálneho rozvoja. Geografický časopis, 37, pp. 137-163.
- Očovský, Š. Bezák, A. Podolák, P. (1996): Siedlungsstruktur und Zentrenentwiklung in der Slovakischen Republik. Beitrage zur Regionalen Geographische Institüt Länderkunde, Leipzig, pp. 55-103.

#### Resume

#### Formovanie sa systému miest Stredného Slovenska

Systém miest stredného Slovenska, ako i jeho subsystémy zaznamenali za uplynulých 40 rokov (1961 - 1998) vážne zmeny. Tieto zmeny spočívajú v nasledovnom:

a) Mestá stredného Slovenska zaujali popredné miesta medzi stredne veľkými mestami Slovenska. Systém miest stredného Slovenska je však odlišný od systému miest západného a východného Slovenska tým, že nemá výrazné jadro. Posledných 40 rokov neviedlo k jeho sformovaniu v zmysle priblíženia sa k normovanému typu. Naďalej v systéme zaujíma popredné miesta dvojica miest - Žilina, Banská Bystrica a ich "boj" o prvenstvo naďalej pokračuje.

- b) Počas posledných 40 rokov sa doformovávali jednotlivé subsystémy miest stredného Slovenska (najmä Považia, Pohronia, Južného Slovenska) a vystúpili ich špecifické črty.
- c) Časť miest týchto subsystémov postupne zvýšila a stabilizovala svoje umiestnenie v poradí (Žilina, Banská Bystrica, Martin, Prievidza, Zvolen, Považská Bystrica, Púchov, Lučenec, Rimavská Sobota a iné). Výrazné zmeny v poradí sa udiali u miest Dolný Kubín, Nová Dubnica, Liptovský Mikuláš, Čadca, Dubnica nad Váhom, Veľký Krtíš a iné.
- d) Jednotlivé subsystémy miest stredného Slovenska sa postupne vyvíjajú k normalizovanému typu a stávajú sa vyváženejšími.