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MIASTA ŚWIATA – WYBRANE PROBLEMY

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DEPOPULATION PROCESSES IN THE URBAN AREAS
IN ASIAN PART OF RUSSIA

Procesy depopulacyjne na obszarach miejskich w azjatyckiej części Rosji

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Treść: W artykule zostały przedstawione zmiany zaludnienia w miastach i osiedlach typu miejskiego na Syberii i rosyjskim Dalekim Wschodzie po rozpadzie Związku Radzieckiego. W celu ukazania przestrzennego zróżnicowania wyludniania obszaru badawczego zastosowano metodę analizy statystycznej. Analiza zmian liczby ludności stanowi wstępny etap w badaniach przestrzennych obszarów objętych procesami depopulacyjnymi. Do prezentacji procesów depopulacyjnych wykorzystano metodę kartogramu diagramicznego. Podjęta została próba wskazania przyczyn zmian zaludnienia na obszarach miejskich.

Słowa kluczowe: procesy depopulacyjne, miasto, osiedle typu miejskiego, Syberia

Key words: depopulation processes, cities, urban-type settlement, Siberia

Introduction

Asian part of Russian Federation is the biggest territory, in the terms of area (12 765 900 km sq.), where depopulation processes occur. It is worth underlining that in this area no war operations take place and this very process occurs in peaceful conditions. In the historical meaning the whole territory is regarded as Siberia, nevertheless this definition is very simplified. In socio-economic geography the area on the east from Ural was divided into: West Siberia, East Siberia and Far East (treated as a distinct region). Russian Far East is a part of the region of equivocally set borders in eastern Asia, by the Pacific Ocean.

The depopulation processes of Siberia and the Far East followed the disintegration of Soviet Union in 1991. In Russia, 1992 was the last year, when increase in population was observed, although in particular units of the researched area, decrease in population was noted. Depopulation processes progressed with

unusual intensity in the Far East, particularly in Chukotka Autonomous Okrug, where number of inhabitants in period between 1991 and 2001 decreased by 51.48 %. In the case of examining changes of population in absolute values in years 1991-2001, the population of Siberia and the Far East decreased by 1 573 500 people (from 32 425 9000 to 30 852 400). The most, by as much as 182 200 people, in Primorsky Krai (Maritime Province).

Depopulation processes take place in the urban areas as well as in the rural areas. Changes in number of inhabitants in the urban area in the Asian part of Russia, after the disintegration of Soviet Union, will be characterized in this work.

The aim of this work is to present spatial differentiation of depopulation in the urban areas of Asian part of Russia and the trial of pointing depopulation processes conditions occurring in the area researched.

The characteristic of the researched area

Both the population of the cities, and urban estates, accepted a transient phase between the villages and cities, is, in statistic terms, included in the category of urban settlement units in Russia. Those centers fit in the concept of rural-urban continuum elaborated and used in the area of former Soviet Union.

Changes in population in the urban areas of Asian part of Russia will be analyzed in the specified administrative units. In view of accessibility of the data, concerning the whole researched area, higher units of administrative division were accepted to the analysis, as a benchmark guaranteeing accurate illustration of the phenomena in dynamic point of view.

In this work, 29 subjects creating regions: West Siberian, East Siberian, Far Eastern are treated as units of Siberia and the Far East. This group involves: three countries, twelve districts, one autonomous district and five republics. The units are characterized by strongly varied area, from dozen of thousands sq. kilometers (ex. Irkutsk Oblast – 767.9 thous. sq. km), to the biggest Sakha Republic – 3 103.2 thous. sq. km. In this work, it is essential to focus the attention not on the area occupied by the unit, but on the number of inhabitants living there.

Each administrative unit is characterized by a big differential of the cities quantity. In the area researched, the biggest number of cities, in 2001, was located in Krasnoyarsk Krai (24), in numerous units, there were only a few cities, while in four autonomous districts: Agin-Buryat Autonomous Okrug (Aga Buryatia), Evenk Autonomous Okrug (Evenkia), Koryak Autonomous Okrug (Koryakia) and Ust-Orda Buryat Autonomous Okrug (Ust-Orda Buryatia) there was not even one. Units are characterized also by different numbers of urban-type settlements. Most such estates existed in 2001 in Sakha Republic (Yakut) – 57, while in Ust-Orda Buryat Autonomous Okrug and Altai Republic urban-type settlements have not existed at all (Čisslenost' naseleniâ ... 2002).

From among ten cities in Russia, with over a million inhabitants in 2001, only two were located in Asian part of the country. Novosibirsk was the biggest city

(third place in Russia) inhabited by 1 387 800 people. Omsk inhabited by 1 127 300 people was, in 2001, the second city of Asian part of the country, in the terms of population.

Research foundations

The spatial analysis of depopulation will be conducted on the basis of homogeneous criteria and precisely fixed identification principles.

Assignment of criteria enabling qualification of a particular unit to the category of depopulating areas, is an important methodic aspect. Natural movement, as well as migration movement, influence changes in population in every territorial unit. Some researchers are of the opinion that every absolute decrease of a number of particular area inhabitants, results in depopulation. For other researchers the drop of population does not prove depopulation. It occurs in the moment, when quantitative changes are accompanied by unfavorable socio-demographic transformations. It is quite arguable and relative interpretation (Eberhardt 2002). In this work, units which were characterized by the decrease in number of inhabitants between set time intervals, irrespective of oscillation of indicators of marriages, divorces, births, deaths and migrations were qualified to the depopulating areas.

In order to present spatial differential of depopulation of Siberia and the Far East the method of statistic analysis was used. Analysis of the population changes accounts for the first phase in spatial research of areas involved in depopulation processes. Accuracy of statistic indicators selection, concerning changes in population of the each territory, as well as skilful graphic presentation, allow to conduct studies upon reduction of the territory permanently inhabited by a human. Accurate interpretation of used research methods' results and cartographic presentation are integral part of the whole cognitive process. In the population research, the distinctiveness of geographical method in comparison with sociologic and economic methods consist, largely, of precise location of the data. Analogically, in the depopulation research, author of the work is of the opinion that it should be the same. Map, a traditional tool of geographic research, plays essential role in the presentation of depopulation proceeding in particular areas.

Diagrammed-cartogram method was used in order to present depopulation processes. Most of the cartograms present the data involving population of the particular area, or only part of the area of the benchmark unit. It is essential so that in the cartogram, the statistic data was relative and involves the whole area of the spatial unit. In diagrammed-cartogram, in every spatial unit, a geometric figure was placed – diagram of appropriate size, consistent with denominator of the presented indicator (Paśławski 1993). Diagrammed-cartograms presenting changes in the population of Siberia and the Far East are read on the two levels. A color or a hachuring of diagrams fulfillment supplies with information, whether particular spatial unit was characterized by an increase or a decrease of the number

of inhabitants. The diagrams size informs about the number of people, in 2002, in every benchmark field.

Establishing a time interval of the conducted research was connected with the decision involving source data selection. The possibility of using in the work appropriate statistic material influenced setting the research period beginning and its end. During establishing the research beginning and end, a willingness to display a depopulation processes origin, in the area examined, played an important role. In view of the fact that the data used in the work from the current register are up to date only in the period between population censuses, statistic-calculation research had to be ended in 2001, a year preceding realization of the population census in Russia. In this way, the research period are years between 1991 and 2001.

Changes in the number of urban population between 1991 and 2001

Depopulation processes in the Asian part of Russia, in the major part, involved urban, not rural areas. Among 29 units from the highest administrative level in Siberia and the Far East, in 23 a decrease, in four an increase and in one a stabilization of the inhabitants number was observed between years 1991 and 2002. From among all the subjects, Ust-Orda Buryat Autonomous Okrug was excluded from the analysis of population changes in the urban areas. In 1992, as a result of administrative changes, all the urban estates located in its area were transformed into rural ones. In this way, the total decline of the urban inhabitants number took place in an unnatural way, and hence, it is the only administrative unit of the highest level in the area researched, where there are neither cities, nor urban-type settlements.

Seven units located in Siberia (Fig. 1) are ranked, in the researched period, as a subject which decreased its population in the smallest extent (from -0.01 to -5.0 %). There is a clear relation between the size of the cities in each area and an extent of depopulation. All the units, in which the biggest cities of Siberia are located (Irkutsk Oblast, Omsk Oblast, Novosibirsk Oblast, Krasnoyarsk Krai) are included in the group characterized by the smallest decline of population.

The next group consists of eight federative subjects, in which, during the researched period, a decline in the number of urban population by -5.01 to -10.50 % was observed. Among them there is: Altai Krai and oblasts: Kemerovo and Tomsk in Siberia and five units lying in the southern part of the Far East. It can be observed that the subjects, where relatively big cities were located, were included in this group, as well. Relation between size of the city and scale of the depopulation is particularly visible in the Far East, where units, in which the biggest cities are located, were characterized by much less advanced depopulation processes in the researched period (Khabarovsk Krai, Primorsky Krai (Primorye), Amur Oblast).

Units located in the northern and eastern part of the area researched are characterized by the strongest depopulation of the cities and urban type settlements.

In two federative subjects, a decrease of urban population by a half was observed in the researched period. It concerns autonomous districts: Koryak Autonomous Okrug (Koryakia), where the drop of population amounted -50.67 % and Chukotka Autonomous Okrug -54.59 % in years 1991-2001.

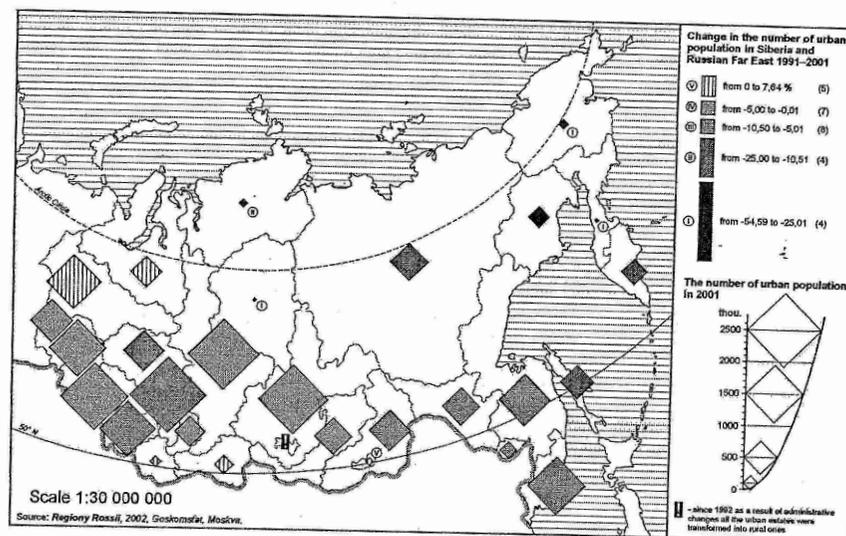


Fig. 1. Changes in the number of urban population in Siberia and Russian Far East 1991-2001

Social and economic transformation, in the period researched, was leading to intensification of unfavorable changes in the natural movement and migration movement in urban settlements. In each unit, on a different scale, complexity of unfavorable processes leading to the decline of population, can be observed. These are: decrease in number of marriages, increase of divorces, accompanying small number of births and high number of deaths. In the depopulation processes of urban areas, also migrations were of consequence.

Four subjects located in Siberia, where general increase in population was noted, are included in the group of administrative units, in which the increase in urban population took place. The urban population of Khanty-Mansi Autonomous Okrug (Khantia-Mansia) increased the most, by as much as 7.64 %, as well as the urban population of Yamalo-Nenets Autonomous Okrug (Yamalia) – by 4.35 %. Presence of numerous watch settlements in these areas, where work proceeds in specific way, and life conditions are considerably better, may be the cause of the rise of population in these units. During a year, a worker takes part in five watches and two months of holiday period are entitled to him. After one month

of work, involving mining natural materials, or work in the forest in inconvenient conditions, workers spend the following month at home, on the south of the Asian or European part of Russia, where they bring their high earnings, received in the mines. Increase of the population in watch estates may be, probably, related to the fact that contract workers receive healthy, highly caloric food. Limits concerning usage of alcohol, and in some estates even prohibition, are in force there (Škol'nikow et al. 1994). The health state of people living there is better than in permanent settlements in Siberia and the Far East. Considerably smaller rise of urban population share took place in southern Siberia in the republics of: Altai and Tuva Republic. Whereas the number of urban inhabitants in Agin-Buryat Autonomous Okrug (Aga Buryatia) underwent no changes in the analyzed period.

Changes of urban population share in each unit are, partly, caused by incorporation of the numeral data concerning, so called, closed cities, in the '90s of the XX c., to the statistic material, despite the fact that they have already existed since the first half of the XX c. The secrecy of their functioning influenced the ban to place numeral information about them in the general statistics. It led to the numerous statistic malformations and falsifications (Vendina et al. 1997). After the disintegration of Soviet Union, in some of the big cities, disclosure of functioning secret settlements, populations of which were formerly attributed to those cities, influenced the decrease of the urban population share. It did not have any influence, though, on the decline of urban population share in the whole administrative units. In Siberia and the Far East secret settlement units were located in the following areas: Krasnoyarsk Krai, Primorsky Krai, as well as in: Amur Oblast, Chita Oblast, Tomsk Oblast, Kamchatka Oblast (Lejzerovič 1997).

While the relations between the size of the cities in the particular territory and the progression level of the depopulation processes are visible, the relations between the number of cities in each unit and changes in the number of urban inhabitants are not as clear. Federative subjects, in which many cities were located, are characterized by moderate decline values in urban areas population, ex. in Krasnoyarsk Krai, in which the biggest number of the cities (24) in the researched area was located, the decrease in urban population amounted -4.57 %, while in Irutsk Oblast, where 22 cities were located in 2001, the decrease amounted -3.98 % in the period researched.

Considerably more visible is the relation between the small number of cities in each unit and marked demographic regress of, located there, urban areas. There were three cities in 2001 in Chukotka Autonomous Okrug, and only two in both Koryak Autonomous Okrug and Magadan Oblast, whereas the decline of urban population was the biggest there. The example of Evenk Autonomous Okrug seems extremely interesting, in the period researched, there were no cities at all, only one urban-type settlement used to function, the population of which decreased by 30.14 %.

To the author of the work, it appears that in the greatest extent, not the number of the cities, but their importance in each unit hierarchy, influences changes in population. In the area, where the majority of cities are headquarters of the region, more favorable demographic situation was observed. Among sixteen cities of Khanty-Mansi Autonomous Okrug (Khantia-Mansia), fourteen performed administrative functions, while in Yamalo-Nenets Autonomous Okrug (Yamalia), for seven existing cities, in all of them, regional offices were located.

Whereas, the less administrative functions cities in the particular area performed, the bigger was a decline in the number of inhabitants. In Sakhalin Oblast, in which, in period examined, a decrease of urban inhabitants by 17.23 % ensued, 18 cities used to function, only nine of which performed regional functions. Similar situation took place in Chukotka Autonomous Okrug, in which, from among three existing cities, administrative functions were performed by only one, the capital – Anadyr, and where the decline in number of urban inhabitants was the biggest from among all the units of Siberia and the Far East. It can be assumed, thus, that the administration artificially upheld population.

In those federative subjects, which were characterized by small decline of population in general, the decline in number of urban inhabitants decided on qualifying them to the depopulating area. Both in Tyumen Oblast and in Khakassia Republic rural areas increased their population in the researched period, and only bigger decline of urban areas population caused that these administrative units were admitted depopulating subjects.

In some cases, in a result of liquidation of small urban-type settlements, decrease in share of urban population ensued. In 2001 in Sakha Republic following urban-type settlements stopped to exist: Kankunskij, located in the region of Aldan and Lazo in Vierkhoians Region. It was not stated whether the liquidation of the estates was a result of freewill or enforced abandonment by the people inhabiting them (Čisslennost' naseleniä ... 2002).

The liquidation of the settlements was also often a result of natural disasters. In 1995 as a result of earthquake on Sakhalin, an urban-type settlement Naftegoersk, located in Okhinsky District, destroyed utterly, was liquidated. Also after the floods, disastrous in their results, which would usually occur in the spring time, liquidation of numerous settlements, lying by Lena in Sakha Republic took place.

In other areas of Siberia, as a result of villages incorporation to the urban settlements, ensued an increase of the urban population, in the period examined. For example, in 2001 in Kemerovo Oblast villages: Komissarovo, with population 2 600 and Ulus-Mozzukha, inhabited by 300 people, were incorporated to the region of Zavodsky city – Kemerovo. What is more, two villages: Latishi and Pionierskij were in 2001 incorporated to the urban-type settlement Kedrovka (Čisslennost' naseleniä ... 2002). However, attention should be paid to the fact, that these activities changed the general image only to a small extent.

Remaining two settlements, in which a considerable decrease of population in years 1991-2001 was noted are: Tura in Evenk Autonomous Okrug (by 23.88 %) and Dudinka in Taymyr Autonomous Okrug (by 13.11%), accepted by the decision of the government a closed city in 2001. In the remaining units, in which progression of depopulation processes was lower, much less people left their capitals also.

Whereas capital cities of two federative subjects, which noted slight decline in population in general (in Khakassia Republic -0.67 % and in Tyumen Oblast by 1.08 %), were still characterized by increasing population (Abakan by 6.56 % and Tyumen by 1.08 %). Among the capitals, which noted a rise in population, both those located in the units characterized by a significant demographic regress and in those units in which an increase of population is noted, could be found.

The biggest growth of capital's population, from among depopulating areas, ensued in Yakutsk in Sakha Republic, despite the decline of the administrative unit population by 11.07 %, the capital noted a rise by 17.17 % in the researched period. There are a few implicit causes of this growth, though it is hard to say, what largely influenced the rise of Yakutsk's population from 198 600 people in 1991 to 23 2700 in 2001. The capital is the biggest city of the republic, its area exceeds 3 million sq. km and numerous natural resources are located there. Among them, diamonds have essential meaning, thanks to them former president – Nikolajew succeeded in negotiations of the contract at the beginning of the '90 of the XX c., in which it is stated that Sakha Republic, all by itself, sells 25% of extracted diamonds (Göler 2003). Inhabitants of Yakutsk derive main advantage of this.

The increase of the city's population is, partly, caused also by the fact that people from numerous, liquidated settlements located on the north of the republic, migrate to the capital. In the Sakha Republic, after the disintegration of Soviet Union, it often happened that the settlements were liquidated as estates with no prospects. Especially on the north, first "dead towns", emerged, as in the west of United States, after the gold rush (Wein 1999). In years 1998-1999, 133 most small settlements were liquidated, not only those located on the north, but also those lying in the eastern and central Yakutia. Majority of the population living there, headed to Yakutsk, some of them treated it as a convenient place from which they could start further journey to the European part of Russia (Göler 2003).

Yuzhno-Sakhalin was in the group of the capital cities, which increased their population, despite progressing depopulation processes in the unit (increase by 7.17 %, while in the Sakhalin Oblast a decrease of the population in the researched period by 18.77 % was noted). The rise of the capital city population, was to the large extent, caused by drain of people from the other, smaller settlements in the unit's area. In Sakhalin Oblast, there was the largest number of the cities, from among all the territorial subjects located in the Far East (18 in year 2001). Among them, eight were inhabited by less than 10 thousand people and in further nine the number of inhabitants did not exceed 50 thousand. Only Yuzhno-Sakhalin stood

out, both in the terms of population (183 800 inhabitants in year 2001) and the concentration of economic activity.

After the disintegration of Soviet Union, functioning of isolated, peripheral economic centers was impeded. Only sparse cities in Sakhalin had real prospects for development (centers connected with mining and petroleum processing) without the state subsidiaries. Many people left maintaining settlements and headed, mainly, to the capital, which seemed to be not very far but having greater opportunities for improving the level of life. It does not mean, though, that in Yuzhno-Sakhalin standard of living was so good that further steps aiming at leaving the island were not undertaken by its inhabitants. Marginalization of the periphery is, nevertheless, becoming to be a principle.

Among the cities located in the Far East, which increased their population, also the capital city of Amur Oblast – Blagoveshchensk can be found. In year 1991, 216 100 people lived there, in year 2001 – 223 300, so the rise of population amounted 3.33 %, while the decline of population of the whole district society reached 8 %. The rise of the number of Blagoveshchensk inhabitants could have been connected with the influx of the Chinese, who did not find it easy to settle down in Russia, what could influence such a small, at least, officially, increase of population in the areas neighboring with China. Intensified navigation along Amur, connecting Blagoveshchensk with the Chinese Heihe (Aihui) proves good fame of this city among the neighbors from the south. In the winter, in view of permanent huge concern to have the opportunity of contacts, transport along the frozen river was to be organized (Tarhov 1997).

The last group of the capital cities, in which a rise of population was noted in the research period consists of six units located in the federative subjects of Siberia, where the increase of population took place. These are the capitals of autonomous districts and republics. It can be easily observed that the more inhabited a particular capital is, the bigger increase in population was observed there. The biggest cities in this area were: Kyzyl in Tuva Republic with population 102 900 in year 2001 (it increased its population by 14.97 %) and Khanty-Mansi inhabited by 41 300 people in 2001, where the number of inhabitants increased by 14.72 %. In this group also Gorno-Altaysk in Altai Republic can be found, where the capital was the only city, which increased its population by 14.56 % in the period researched, although there were no urban-type settlements in the unit.

Summary

Characteristic of changes in the urban areas population in Asian part of Russia allowed to point the units, where depopulating processes are progressing, and those sparse federative subjects, where these processes do not take place.

In the area researched, depopulating processes progressed, to a greater extent, in the urban than in rural areas (decline in population of the cities took place in 24 units, while of the villages in 19). Areas located in the Far East, especially in its

northern part were depopulating on the greatest scale. Incorporation of so called closed settlements into the statistic material in the '90 of the XX c. influenced changes in the cities' population. Analysis of the changes in population of the units' capitals provide us with interesting conclusions. Among the capitals, which increased their population are both those which were located in the units characterized by significant demographic regress, as well as in the those with population rise.

Social and economic transformation lead to the intensification of unfavorable changes in natural and migration movement in the urban settlements. In Siberia and the Far East, in the researched period, a decline in marriage contracts and rise of the number of conducted divorces was observed. This was accompanied by small number of births and big number of deaths. Migrations were of huge importance in the progress of urban areas depopulation processes. In spite of the fact that in some individual migrations the fortuity factor played an important role, migrations formulated as the whole are characterized by regularities reflecting the history of this area and life-experience of people living there. Multitude of the causes of urban areas depopulation and their spatial conditions points at strong inner-regional differential and difficulty with giving straight answers on the presented subject.

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