

# THE PROCESS OF DEPOPULATION IN THE RURAL AREAS OF UKRAINE

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**ABSTRACT:** This study gives an analysis of the diversification of the demographic situation in the rural areas of Ukraine in the years 1992–2011 in a regional depiction (it corresponds to the NUTS 2 division applied in the European Union). The demographic situation of the rural population is undergoing increasingly distinct deterioration. It is the worst in central Ukraine and relatively the best in its western part. This is an effect of political, economic and social processes initiated in today's Ukraine after World War One. It overlaps with negative effects of the processes of political transformation taking place in already independent Ukraine. The chances of improving the demographic situation in rural areas are rather slim and depend on two factors: (1) a fundamental change in the state policy towards the Ukrainian countryside and (2) overcoming a prolonged socio-economic crisis.

**KEY WORDS:** demography, rural population, Ukraine

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## 1. Introduction

The European post-communist countries have noted a substantial fall in the population numbers for several years. There are two reasons (Michalski 2012a). One is of a universal character: it is an effect of a demographic transformation defined as the second demographic passage. The other, which deepens the negative effects of the first, involves social costs of the transformation processes occurring in this group of countries (cf. Mihał'ski 2007). It comprises: (1) a significant fall in the birth rates in all those countries; (2) lack of major changes in the mortality rate (in countries with successful market reforms) or an increase in

this rate (in countries with abandoned or failed market reforms); and (3) a big increase in emigration (Michalski 2010).

Naturally, depopulation processes influence populations of different countries of Central and East-Central Europe with different power; their effect also differs depending on the place of residence and the population status. This process has been of interest to scientists for years. Geographers consider it at all spatial scales, starting from local and regional (Bátorová 1999, Cudny 2012, Grzelak-Kostulska 2001, Yelsukov *et al.* 2010), through domestic (Matlovič 2005, Staśac *et al.* 2010, Szymańska *et al.* 2009) to continental (Kotowska, Józwiak 2003, Michalski 2012b, Uzzoli 2006). This



Fig. 1. Administrative division of Ukraine.

Source: Kučabs'kij (2010: 152).

study concentrates on the domestic scale. It deals with depopulation in the rural regions of Ukraine, focusing on the diversification of this process in a regional approach. The period 1992–2011 was analysed in the division into *oblasts*, which corresponds to the NUTS 2 level applied in the European Union. More precisely, there are 24 *oblasts*, 2 cities with special status (Kiev and Sevastopol) and one autonomous republic (the Autonomous Republic of Crimea) (Fig. 1).

The data used in the study come from the State Statistics Service of Ukraine website. To determine *oblasts* with similar changes of the values, Mc Quitty's method was used (division into separate types was made with the value of the correlation coefficient at less than 0.900).

The rural settlement system in Ukraine includes various historical forms of settlement units. Pawlow (2005) describes the country's rural settlement as characterised by a large number of small units.

In the communist period, especially at the time of the collectivisation of agriculture, there was a constant standardisation of rural settlement in

Ukraine. First, this involved the liquidation of the smallest units (*khutor*), while the emphasis was on the development of huge settlements – seats of collective farms (*kolkhoz*). The remaining localities acquired the status of 'non-prospective' villages and were doomed to a slow and steady collapse because all investment in the countryside came down from the central budget to chosen localities.

Adverse conditions for the development of rural settlement in Ukraine even worsened in the late 1950s and early '60s. Then reforms of the administrative division were carried out in the entire USSR through merging small administrative units (mainly *raions*<sup>1</sup>). It resulted in a total decline of the former centres of the eliminated areas, thus far flourishing in socio-economic terms (Olujko *et al.* 2005).

To keep the workforce on collective farms, until 1976 their workers were deprived of the right to hold identity cards. Therefore, for the ru-

<sup>1</sup> An equivalent of NUTS 4 in the European Union terminology.

ral population leaving the countryside was tantamount to escaping from captivity. In this way rural areas experienced decades-long population outflows.

Gaining independence by Ukraine did not cause any major changes in the organisation of its rural settlement. This was due to an almost total destruction of any forms of initiative and entrepreneurship of country dwellers. However, it is worth mentioning a few processes which had a significant influence on the distribution of the rural population in Ukraine.

First, the tendency for the young active part of the rural population to move to cities has strengthened. As Prokopa (1998) states, for the majority of country residents in Ukraine the possibility of satisfying medical, commercial, housing, and educational needs is very limited.

Secondly, the intensification of the economic crisis in the mid-1990s made some inhabitants of Ukrainian cities return to their home localities. However, those were mainly people past retirement age who could not find their place in the urban milieu. Their return to the countryside did not involve any entrepreneurial activity, and the countryside offered them rather a place for an easier survival of hard times.

Thirdly, the impossibility to satisfy existential needs of the family set off wide emigration for economic reasons from Ukraine. According to Pawlow (2005), in today's Ukrainian conditions the most conspicuous problem of the rural population is poverty. There has appeared a model of a typical country family where one member permanently goes abroad to ensure relatively favourable life for his/her relatives. In this way there have appeared practically one-parent families with corresponding effects: demographic (e.g. a dramatic fall in births), economic (enterprising passivity), and social (decline in raising children and young people).

In Ukraine (as in the majority of post-communist states, except Poland and Yugoslavia), nationalised farming dominated (Grykień 2004). The fall of the communist system caused the process of de-collectivisation, which did not result in the productivity growth of farming in the countries of the former USSR (without Estonia, Latvia and Lithuania).

## 2. Rural population in a regional approach

In the analysed period the population number in Ukraine was greatly reduced, from 52.1 million in 1992 to 45.8 million in 2011. This also involved a fall in the number of the rural population (from 16.8 m in 1992 to 14.3 m in 2011). Since the decrease in rural regions was slightly greater than in cities, the proportion of the rural population in the total figure fell from 32.2% in 1992 to 31.3% in 2011, with the mean for the entire period 1992–2011 amounting to 32.1%. This slump can be described by the following equation:  $y = -0.0075x^2 + 0.1274x + 31.80$  ( $R^2 = 0.60$ ).

The rural population appears in all the analysed units except the special-status city of Kiev, the greatest number living in the Lviv *oblast* (1,052,000), and the smallest in the special-status city of Sevastopol (22,000). Fig. 2 presents territorial differences in the proportions of the rural population and its dynamics in the country's total population. Notable in this respect is the division of Ukraine into two major parts: the 'historical' one (central and western *oblasts*) and the 'steppe' one (southern and eastern *oblasts*). In the 'historical' part, where the settlement system formed in the times of the First Republic (14<sup>th</sup>–17<sup>th</sup> c.), the rural population has a relatively large share. In turn, the 'steppe' part of Ukraine underwent huge rural colonisation only in the 19<sup>th</sup> century, stopped by a wave of industrialisation and urbanisation of those areas that started at the beginning of the 20<sup>th</sup> century. This obviously has resulted in a somewhat different ethnic composition of the rural population (Dnistrâns'kij 2008).

The dynamics of change of the proportion of the rural population over the last 20 years has been mainly influenced by the proximity of an *oblast* to the country's capital city (type A) as the main destination of domestic migration as well as to the western border (type B).

The western *oblasts*, which mainly constitute type B (except the Kherson *oblast*), are characterised by smaller fluctuations in the number of their rural population. This can be explained by their greater stability, as the communist reforms, disadvantageous for rural development, lasted shorter here and have not led to the total damage

of the traditional forms of life of the rural community.

In type A units, a downward trend dominated with a one-time surge in the percentage of the rural population in 2001–2002. In this they are similar to units of type B, although here both the general downward tendency and the one-year surge were far less distinct. Units classified into type C showed an almost complete lack of changes in the percentage of the rural population. In the two units categorised as type D, changes in the percentage of the rural population were also slight, but it was possible to note that at the beginning and end of the study period it was the smallest and slightly larger in its middle. The remaining units were classed as one-element types, each with a different patterns of change (they were marked as X in Fig. 2).

The mean value of the feminisation rate of the rural population of Ukraine for 1992–2003 was quite high, at 118.1, and underwent small changes in time (the coefficient of variation amounting to a mere 2.1%). The variation of the feminisation rate in the analysed period can be described with

the following equation:  $y = -0.4041x + 122.32$  ( $R^2 = 0.60$ ).

Fig. 3 presents territorial differences in the feminisation of the rural population. Central *oblasts* can be seen to have the largest proportion of women. It is this part of Ukraine that has been a source of workforce for decades. The emigration of men, especially young, to cities in the forced industrialisation period mainly came from here.

A vast majority of units (except four marked X in Fig. 4) belonged to one type (A), characterised by a slow fall in the predominance of the number of women over men.

### 3. Vital statistics

The analysis of the rural vital statistics was conducted first for natural increase (with a division into live births and deaths), then for net migration (without a division into emigration and immigration), to focus finally on population change.

The mean rate of live births from the years 1992–2011 in the rural regions of Ukraine amount-

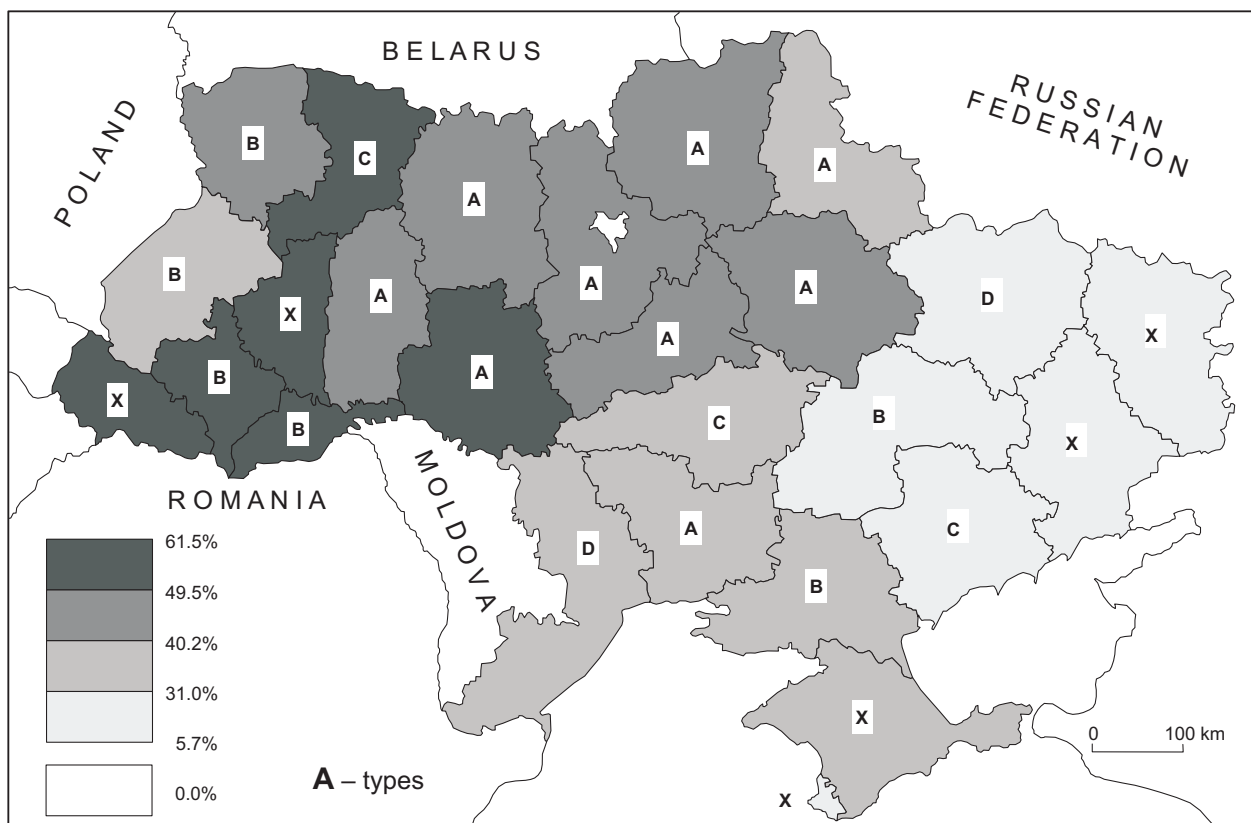


Fig. 2. Percentage of the rural population in Ukraine, 1992–2011 average.

Source: The State Statistics Service of Ukraine, <http://www.ukrstat.gov.ua/>

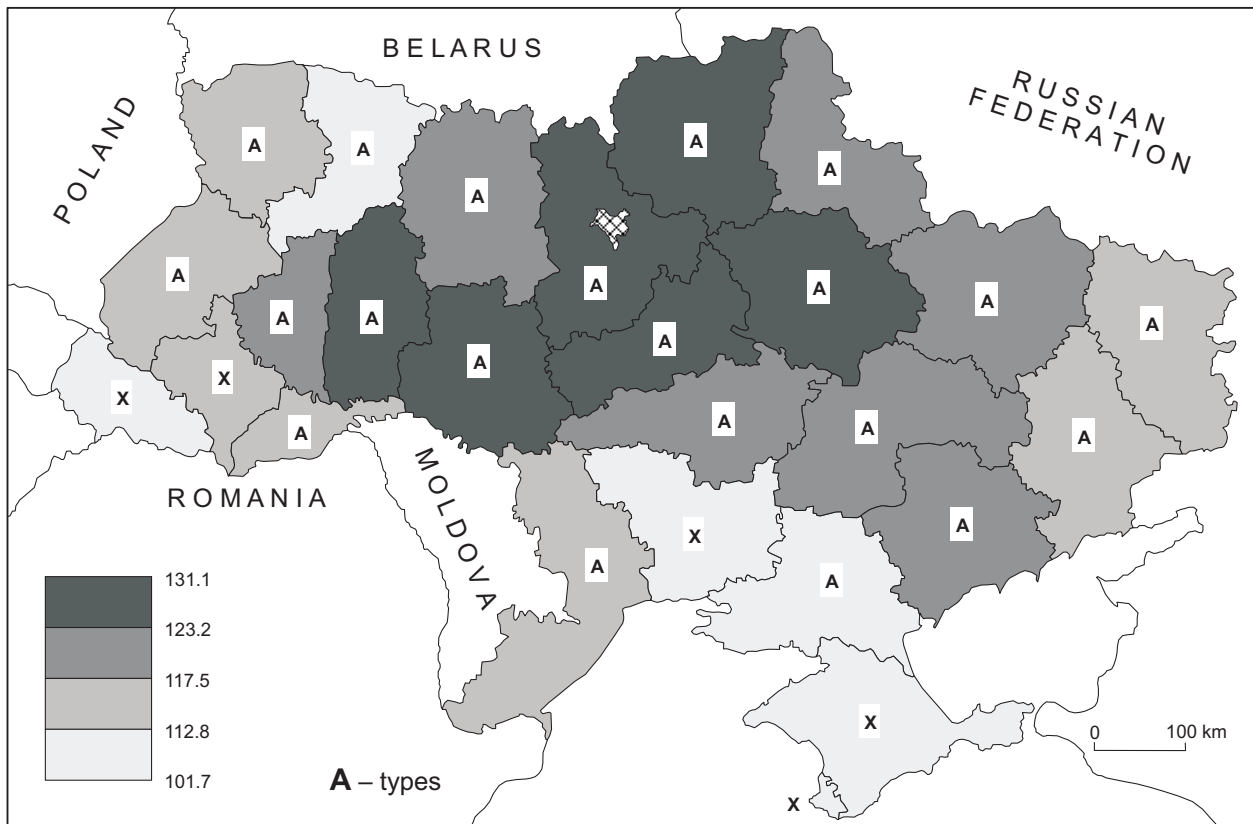


Fig. 3. Feminisation rate of the rural population in Ukraine, 1992–2011 average.

Source: The State Statistics Service of Ukraine, <http://www.ukrstat.gov.ua/>

ed to 10.5 per 1,000 inhabitants and was subject to average changes in time (the coefficient of variation being 11.4%). It is possible to describe the coefficient in the analysed period with the following equation:  $y = 0.0389x^2 - 0.8182x + 13.55$  ( $R^2 = 0.92$ ). Thus, after the 1999–2005 slump in the birth rate, the situation improved in this respect.

Fig. 4 presents territorial differences in live births of the rural population in the particular *oblasts*. It is possible to note a dependence between the duration of the totalitarian regime in the given area and its rate of live births. Thus, the highest rates are noted in *oblasts* incorporated into the USSR later than the remaining ones, i.e. only after World War Two. The *oblasts* where traditional family values have been seriously damaged under the pressure of forced communist values show comparatively low rates of live births. With the exception of two units: the city of Sevastopol and the Chernihiv *oblast* (marked as X in Fig. 4), changes in the particular units (marked as A) are similar to those noted in Ukraine as a whole.

In the examined period the average mortality rate in the rural population of Ukraine was 19.0 per 1,000 inhabitants and underwent only slight changes in time (the variation coefficient amounted to 3.8%). The variation of this rate was very complex: there were two maxima (a smaller one for 1994–1996 and a bigger one for 2006–2009) divided by a slight minimum. But a very low value of the birth rate is the most characteristic element of these changes at the beginning (17.6) and the end (17.7) of the period.

Fig. 5 shows the mortality rate in a territorial approach. The worst conditions in this respect were recorded in the central *oblasts*, where the process of population ageing started earlier due to a lasting period of emigration of young people to other areas of the then USSR (in connection with forced industrialisation).

In about half of the units (marked as type A in Fig. 5) changes in mortality rates were close to those noted in Ukraine as a whole. The remaining units (marked as type X) were placed in one-ele-



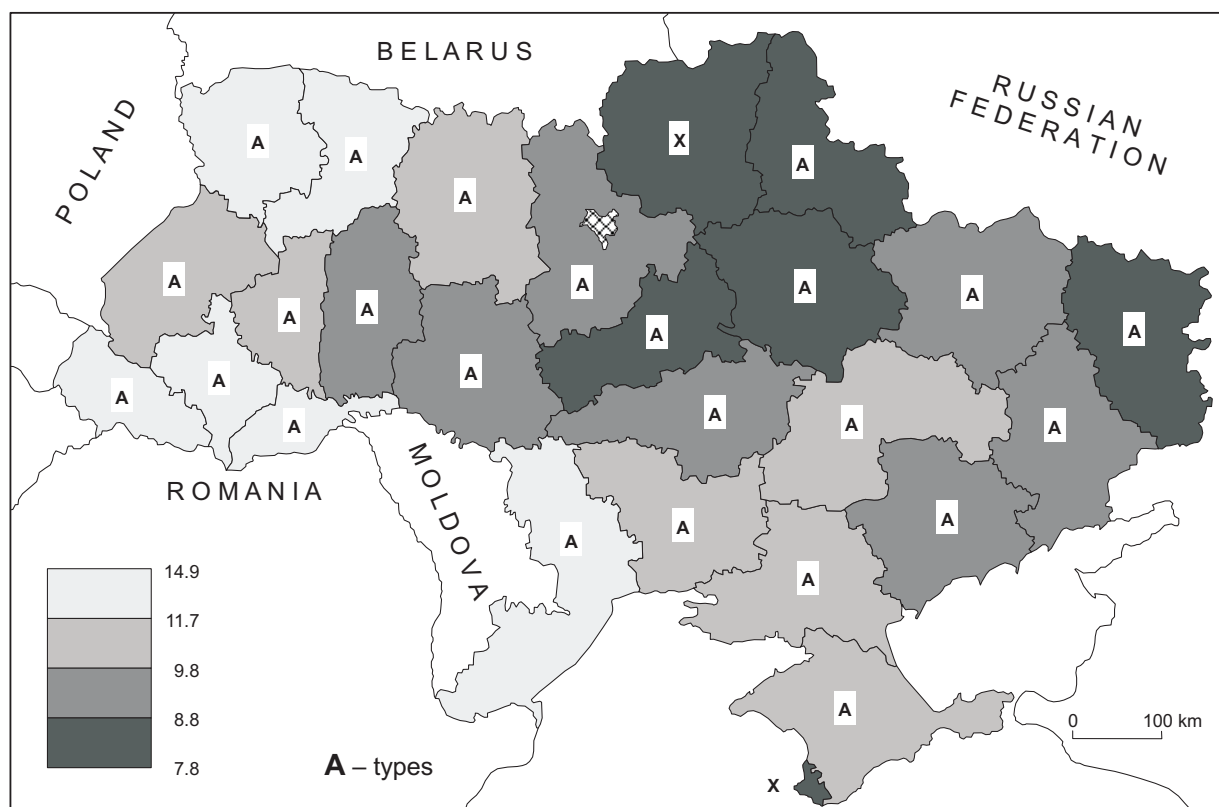


Fig. 4. Live births per 1,000 rural population in Ukraine, 1992-2011 average.

Source: The State Statistics Service of Ukraine, <http://www.ukrstat.gov.ua/>

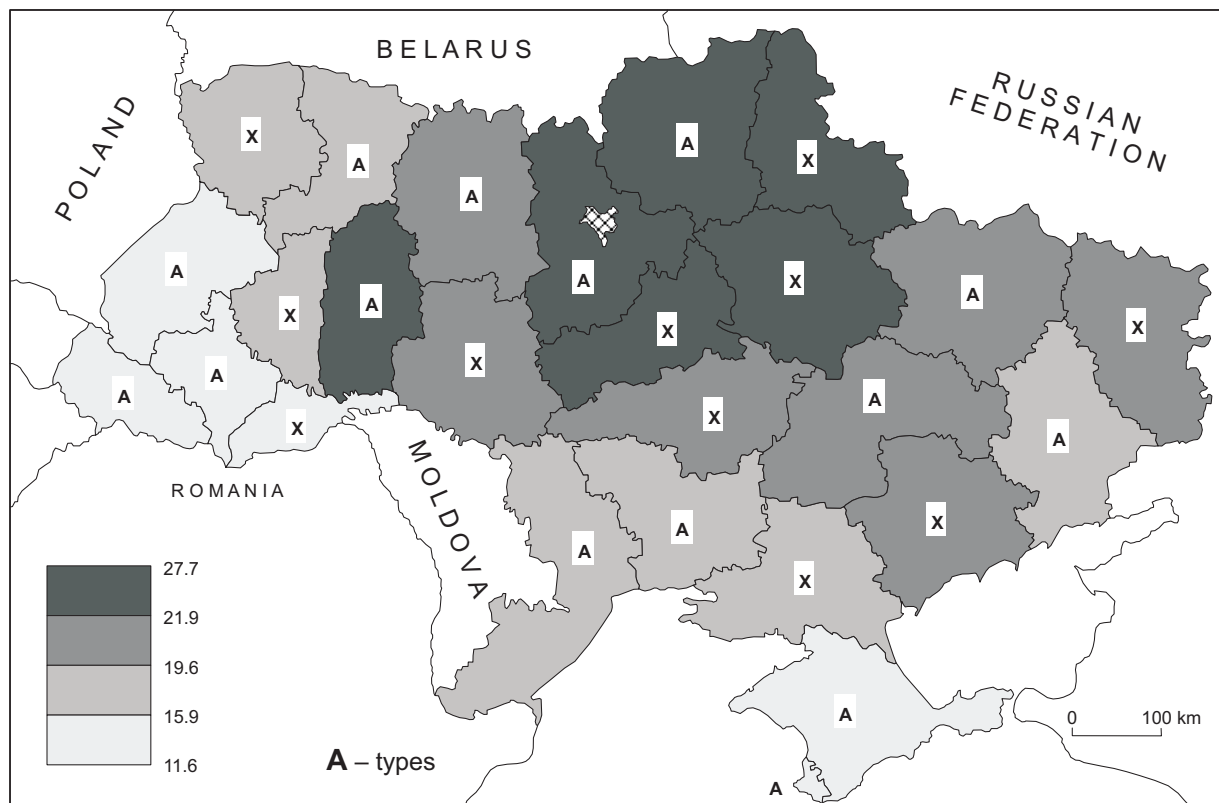


Fig. 5. Deaths per 1,000 rural population in Ukraine, 1992-2011 average.

Source: The State Statistics Service of Ukraine, <http://www.ukrstat.gov.ua/>

ment types, each of a different character of changes in the mortality rate.

The changes in the rates of live births and deaths produced a change in natural increase. Its mean for 1992–2011 in the rural areas of Ukraine was quite low, at –8.5 per 1,000 population, and characterised by an average variation (the variation coefficient amounted to 19.5%). Its variation in time can be described using the following equation:  $y = 0.0527x^2 - 1.1520x - 3.96$  ( $R^2=0.91$ ), with a minimum of –11.1 in 2005.

Spatial differences in the natural increase of the rural population of Ukraine over the analysed period are presented in Fig. 6. One can see the influence of the latest history. The shorter a given area was part of the USSR as the Ukrainian Socialist Republic, the better its situation. This concerns those *oblasts* of western Ukraine which were part of Poland, Czechoslovakia or Romania before World War Two, as well as the Autonomous Republic of Crimea and the special-status city of Sevastopol, which were admittedly in the USSR before the war, but as part of the Russian Socialist Republic. However, changes in natural

increase were the same as those in live births, i.e. in almost all units (except Sevastopol and the Chernihiv *oblast*, marked as X in Fig. 6) they were similar to those noted in Ukraine as a whole (indicated as A).

The situation was rather dynamic in the case of changes in net migration in the rural regions of Ukraine. Although the 1992–2011 average was 0.9 person per 1,000 population, it was characterised by a very low stability (the variation coefficient amounted to 438.7%). Until 2001 net migration showed gains, to turn to losses later, which can be described by the following equation:  $y = 0.0473x^2 - 1.4432x + 9.29$  ( $R^2 = 0.53$ ), which is rather weak due to great fluctuations of 1992 (4.6), 1993 (15.7) and 1994 (0.0).

Fig. 7 shows the migration of the rural population in the regional approach. It is impossible to explain territorial regularities in this respect in unequivocal terms because many diverse factors are in effect here. The main one is the influence of the largest urban agglomerations (Kiev, Kharkiv, Donieck, Dnepropetrovsk, Odessa, Lviv) on the development of rural areas. Owing to the rigidity

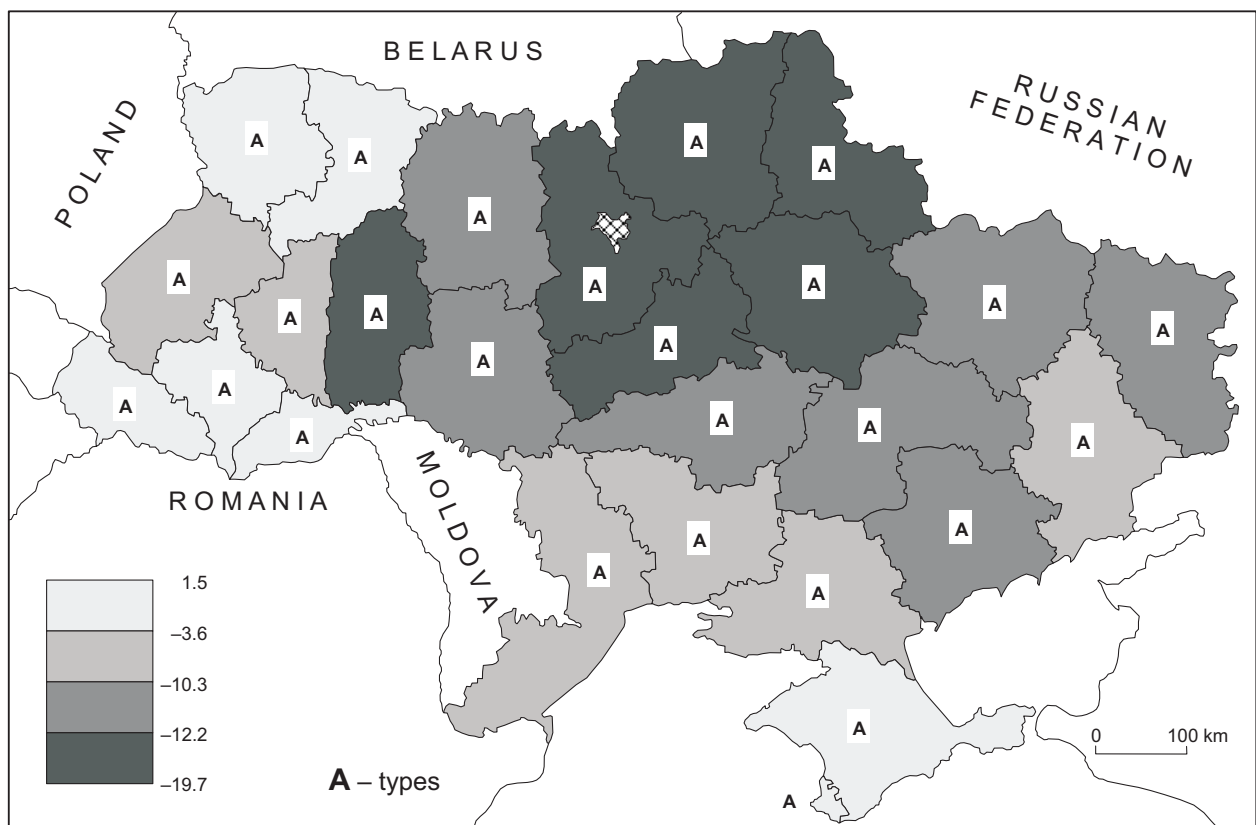


Fig. 6. Natural increase per 1,000 rural population in Ukraine, 1992–2011 average.

Source: The State Statistics Service of Ukraine, <http://www.ukrstat.gov.ua/>

of administrative borders, an active expansion of metropolitan areas onto the countryside has been taking place over the last years. The first symptoms of suburbanisation in Ukraine occurred still in the late days of the USSR and mainly concerned *oblast* capitals. However, for over a decade now one can observe an increasing wave of re-urbanisation around the main macro-regional centres.

Changes over time in net migration between particular units are the most diversified of all the demographic parameters analysed here. Only in 11 units (marked as type A in Fig. 7) were they similar to those noted for Ukraine as a whole. The remaining units had to be placed in one-element groups, each representing a different type of change in net migratory movement.

Population change is a resultant of natural increase and net migration. Its 1992–2011 mean for the rural areas of Ukraine amounted to -7.6 persons per 1,000 residents and was characterised by quite a great variation (the variation coefficient amounted to 66.5%). The change was positive only in 1993 (9.3) and this was due to the net in-migration. Its changes can be described

with the equation:  $y = 0.1101x^2 - 2.5952x + 5.33$  ( $R^2=0.67$ ). After a very distinct worsening of the situation, since 2006 we can observe its slow although slight improvement.

Fig. 8 presents a change in the number of the rural population in the particular regions over the last 20 years. Clearly visible on the map are the effects of the destructive communist rule in Ukraine. The less time a specific region was part of the USSR, the better its demographic situation (particularly in the countryside). The central *oblasts*, those most affected by the genocidal policy of communist authority (collectivisation of agriculture, initiation of the great famine, industrialisation), look dismal today in terms of population potential. It is hard to tell whether the authorities of independent Ukraine are able to offer effective mechanisms of repair of the demographic situation, or whether the processes of depopulation will go on intensifying.

The majority of units were placed in type A, with changes similar to those noted in Ukraine treated as a whole. In two units put into type B (the Autonomous Republic of Crimea and the

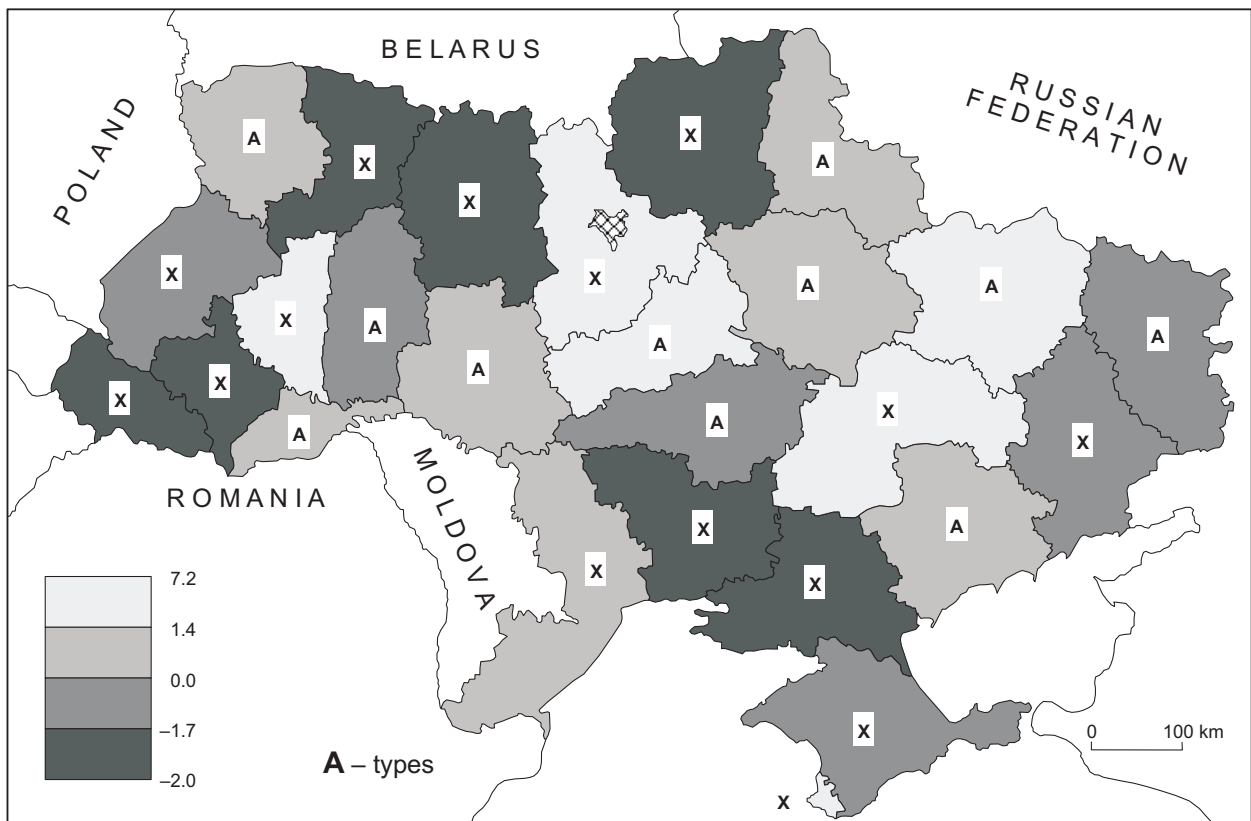


Fig. 7. Net migration per 1,000 rural population in Ukraine, 1992–2011 average.

Source: The State Statistics Service of Ukraine, <http://www.ukrstat.gov.ua/>



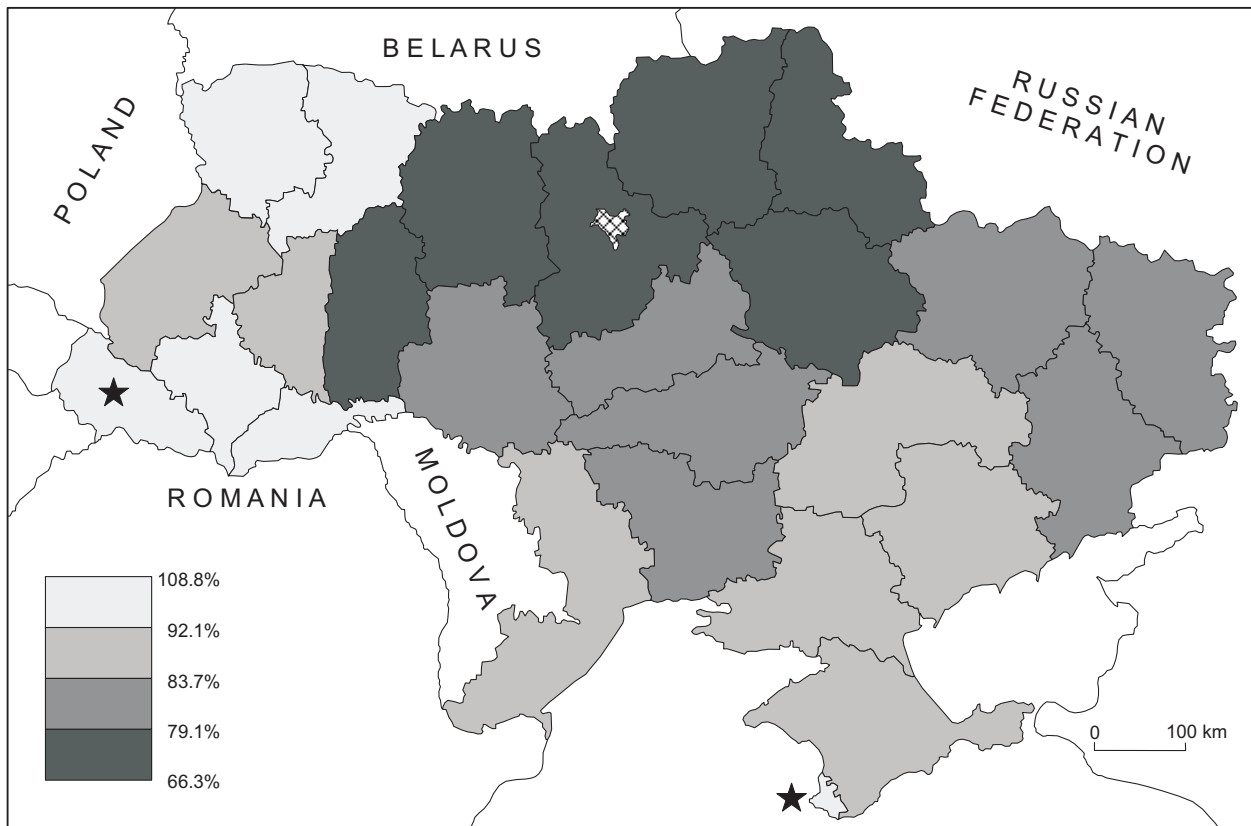


Fig. 8. Change in the number of the rural population in 2011 compared with 1992 (1992 = 100%).

Source: The State Statistics Service of Ukraine, <http://www.ukrstat.gov.ua/>

Odessa *oblast*) the changes were partly similar, but at the end of the analysed period a positive population change was observed. The other units (marked as X in Fig. 8) were categorised as one-element types, each with a different type of change.

#### 4. Conclusions

Having analysed territorial differences in the demographic situation of the rural population in Ukraine, we can state that the membership of a region in the USSR has negatively affected its present demographic situation (particularly in the countryside). It is the worst in central Ukraine, and the best in its western part.

Looking at depopulation processes in Ukraine in the city-countryside division, one should take into account their partly different causes. While in both populations a fall in numbers has been taking place as a result of a sudden fall in the rate of natural increase, in most cities there are additional factors reducing migration into them after the collapse of the industrialisation policy (Flaga 2006).

The demographic situation in the Ukrainian countryside is largely due to the political, economic and social processes initiated in today's Ukraine after World War One. They have been reinforced by negative population effects of the political transformation occurring in the already independent Ukraine (Stefanišin 2006). Thus, the factors diversifying population processes in the rural regions of Ukraine are primarily associated with history:

- the older one connected with different processes of settling today's Ukraine;
- artificially triggered tides of famine, especially in the Stalinist period;
- the policy of forced industrialisation in the communist period;
- a top-down steered process of change in the settlement of rural areas in the communist period; and
- differences in the time of exposure to the harmful propaganda of the communist period.

Unfortunately, it is hard to note a tendency that could fundamentally improve the demographic situation in the Ukrainian countryside.

On the contrary, without much doubt, in the near future one can expect further depopulation of rural areas in all parts of Ukraine, especially in the zone of direct influence of the capital agglomeration. The situation can only be repaired after a substantial change in the state's policy towards the Ukrainian countryside and will also depend on the country's breaking out of the long-term socio-economic crisis.

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