



Technical approaches to the geographical investigations of the dynamics of socio-economic condition of the rural settlements during the transition period (based on the example of Ivano-Frankovsk region, Ukraine)

Vasyl Dzhaman¹, Ivan Kovbas¹, Jaroslav Dzhaman¹

¹ Faculty of Geography, Chernivtsi Yuriy Fedkovych National University, Ukraine

To cite this article: Dzhaman, V., Kovbas, V., Dzhaman, J. (2015). Technical approaches to the geographical investigations of the dynamics of socio-economic condition of the rural settlements during the transition period (based on the example of Ivano-Frankovsk region, Ukraine). *Lucrările Seminarului Geografic Dimitrie Cantemir*, Vol. 39, pp. 99-108. DOI: 10.15551/lsgdc.v39i0.09

To link to this article: <http://dx.doi.org/10.15551/lsgdc.v39i0.09>





TECHNICAL APPROACHES TO THE GEOGRAPHICAL INVESTIGATIONS OF THE DYNAMICS OF SOCIO-ECONOMIC CONDITION OF THE RURAL SETTLEMENTS DURING THE TRANSITION PERIOD (BASED ON THE EXAMPLE OF IVANO-FRANKIVSK REGION, UKRAINE)

Vasyl DZHAMAN¹, Ivan KOVBAS², Jaroslav DZHAMAN³,

Abstract. Modern socio-economic development of Ukraine is characterized by notable qualitative and quantitative changes for the worse practically in all the spheres of vital activities of the population. At the same time rural settlement experiences the burden of transition period. The article deals with the technical approaches to the geographical investigations of the dynamics of socio-economic condition of the rural settlements (based on of Ivano-Frankivsk region, Ukraine). The geographical aspects of the rural depopulation problem as the identifier of economic and social state of the region are revealed; the territorial peculiarities of the villagers' level of employment in social production as the basis of their financial condition and in personal subsidiary husbandry are disclosed; the geography of employment is shown: a) within the limits of "own" settlement, b) outside the "own" settlement, including the settlements abroad; structure of the employment of rural settlement depending on the economic activity; presence of the economic activity objects in rural area and their sectoral structure.

Keywords: rural area, rural settlement, mortality, depopulation, migration, employment of the population, structure of the employment.

1. Introduction

Problem statement. Under the condition of economic crisis and transition, the problem of economic and social situation in rural area increases: the number of economic activity of objects (especially in production sphere) and social infrastructure decreases. Correspondingly the number of employed in social production decreases and the number of unemployed increases. The level of material security of the villagers reduces and illegal labor migration grows, depopulation and outflow of migration continues and as a result – the depressed territories increase.

The aim of our investigation is to have a closer look to the modern problems and to disclose the territorial differences of the dynamics of the demographic situation, economic and social position of rural settlements based on the Ivano-Frankivsk region, Ukraine from the

¹ Faculty of Geography, Chernivtsi Yuriy Fedkovych National University (Chernivtsi, Ukraine)
v.dzhaman@chnu.edu.ua

² Faculty of Geography, Chernivtsi Yuriy Fedkovych National University (Chernivtsi, Ukraine)

³ Faculty of Geography, Chernivtsi Yuriy Fedkovych National University (Chernivtsi, Ukraine)
ydzhaman@mail.ru

point of view of administrative districts, paying special attention to the imbalance in space-system “centre-periphery” and in different categories of rural settlements (big – middle – small).

The task of the investigation is to disclose the peculiarities of the technical approaches and infobase of the problem under the investigation, to set the “horizontal” (territorial) distinction of the vital rate and depopulation of the rural settlement in Ivano-Frankivsk region from the point of view of the administrative regions and their “vertical” peculiarities in different by population categories of rural settlement; to show the geographical peculiarities of the villagers’ employment level in social production and in personal subsidiary husbandry; (according to the place of abode, pendular labour assignments, labour migration and emigration) the occurrence of the objects of economic activity in the rural area; their sectoral structure and the structure of employment according to the economic activity.

Reference literature overview. The basis of the investigation is compiled from the fundamental Geographical theories, conceptual approaches of Ukrainian and foreign scientists to the complex studying of socio-economic systems, complexing and integral processes. Methodology of the socio-geographical investigations of the territorial system and complexes was elaborated by Saushkin Yu. H., Pistun M. D., Rudenko L. H., Topchiev O. H., Shablii O.I., Oliynyk Ya. B. [8, 11, 12, 17, 19] and others. The theoretical regulations of the population Geography and territorial systems of settling are revealed in works by Kovaliov S. O., Pokshyshevskiy V. V., Khorev B. S., Nudelman V. I., Pitiurenko Yu. I., Dotsenko A. I., Dzhaman V. O. [1, 3, 5, 7, 9, 10, 18] and others. Less attention was paid to the Geography of rural population, but Kovaliov S. O., Krisanov D. F., Ftomov H. S., Shepotko L. O., Dotsenko A. I. [2,4,6,13,20] and others are noted for the outstanding contribution to this field.

Study sources and methods. Legislative authority and executive authority pay great attention to the problems of rural areas in Ukraine, thus affirming their national significance. During the latest years a number of legislation considering this very problem was enacted. In particular, laws “On the master plan of territory development in Ukraine”, “On the stimulation of the development of local regions and depressive areas”, “On the acceleration of the social and economic development of depressive areas”, in the ordinance of Verkhovna Rada “On the concept of population center development”, in “Concept of the National Programme of rural areas revival for 1995-2005” and other legislative acts that define the legal, economic and organizational mechanisms in regard to socio-economic development of the regions and population centers.

According to the “Concept of the National Programme of rural areas revival for 1995-2005” the 4 total investigations of rural areas in 1991, 1996, 2001 and 2005 were executed by the State Statistics Service of Ukraine. The aim of such a monitoring (which is held once in 5 years) was to observe and analyze the statistical data of socio-economic situation in rural areas, creation of the data bank for the state policy development which aims at forming steady living conditions in rural areas, satisfaction of the economic and social needs of rural population, complex development of the rural territories.

The investigation of the dynamics of the economic and social situation of the settlement region foresees the investigation of special phenomenon of concentration and deconcentration, contraction and diffusion, centralization and decentralization, differentiation and levelling, etc. For example, the comparison of the population concentration and the amount of social services for different time periods represent the intensification of the concentration or on the contrary- deconcentration:

$$I_c = C_2 / C_1 ,$$

where: C_1 and C_2 - concentration factors in previous and succeeding periods, I_c - change of the factor C . In case $I_c > 1$ takes place the process intensification of concentration of the analyzed phenomenon, on the contrary – when $I_c < 1$ we can observe the process of deconcentration.

The process of centralization (or decentralization) is defined during the confrontation of the quotients of the analyzed index (the amount of corresponding social service) of the main center of local settlement during the investigated period:

$$I_z = Z_2 / Z_1,$$

where: Z_1 and Z_2 - centralization in previous and succeeding periods; I_z - change of the centralization.

Study results.

In order to execute monitoring in rural areas, the form of statistical recording #1 – village “Socio- economic characteristic of the rural area” was elaborated. The precise characteristic of socio-economic situation in each rural area of Ukraine is disclosed in 82 items which are specified by 136 subitems.

Serious prerequisites to the formation of economic and social positions in rural area are its population. The importance of population is defined in such a way because the size of the villages in terms of the population determined the geographical binding of the economic objects of social and production sphere and formed their functional type and population potential. Average population in Ivano-Frankivsk region is (stated on 01.01.2013) – 1022 persons [16, p. 23-24]. This is the third index among the 25 regions of Ukraine, the first one is Transcarpathian region (1361 persons) and the second is Chernivtsi region (1310 persons). The average population of rural settlements in Ukraine is 498 persons. In total only 3 regions in Ukraine have an average population of the villages – over 1000 persons (category of big villages), and in 13 regions we observe the population of less than 500 persons (small villages).

The number of big villages (stated on 01.01. 2005) in Ivano-Frankivsk region comparing to other Ukrainian regions is still high – in particular 41,2 % (315 villages), but they keep on diminishing (338 villages in 1996). Only one third of small rural areas in the region (259 villages in 2005) is observed and their number grows (in 1996 – 238 villages). This process has a negative symptom because the degradation and depopulation phenomena are typical of this very category of settlement. In total the average population of the villages in Ivano-Frankivsk region has dropped to 6, 3 % during the last 22 years (from 1091 persons in 1991 [15, p.7] to 1022 persons in 2013).

The phenomenon of depopulation took place in 274 rural areas in Ivano-Frankivsk region (small settlements predominate) [15, p.3]. Starting from 1991 to 1995 the natural increase in the region exceeded 3 thousands of people and it was positive in 12 out of 17 districts and the depopulation phenomenon occurred in 5 neighboring plain districts: Rohatyn, Halytsk, Tlumach, Horodenka and Sniatyn (the zone of Podnistrovia and Pokuttia). In succeeding 5 years mortality has exceeded natality and the number of depopulation was 8,5 thousand of people embracing already 9 districts (the zone of 4 foothills regions was included to the previously mentioned districts, namely Kalush, Tysmenytsia, Kolomyia, Kosiv districts) and rural areas of the territory of Ivano-Frankivsk city council. During the 2001-2004 the depopulation made up 13,7 thousand of people. The depopulation phenomenon didn't take place in Verkhovyna district and in the villages subordinated to Yaremcha city council (the settlements have status of mountain districts) (see Figure 1). During 2001-2004 the depopulation phenomenon was typical to 608 villages (almost 80 % of rural settlements of the

region), thus becoming widespread in 83,6% of middle-sized and 79 % of big villages [14, p. 4, 41].

The demographic situation has the territorial differences not only from the point of view of the districts but also huge difference in various (in population) categories of rural settlements. In Tysmenytsia district the index of vital records is differentiated by the population:

- a) the natality in big villages was 10‰, in middle-sized villages– 9,6‰, in small – 7,9‰;
- b) the mortality in big villages was 13,1‰, in middle-sized villages– 17,2‰, in small – 20,8‰;
- c) the percentage of depopulation in big villages was 3,1‰, in middle-sized villages– 7,6‰, in small – 12,9‰.

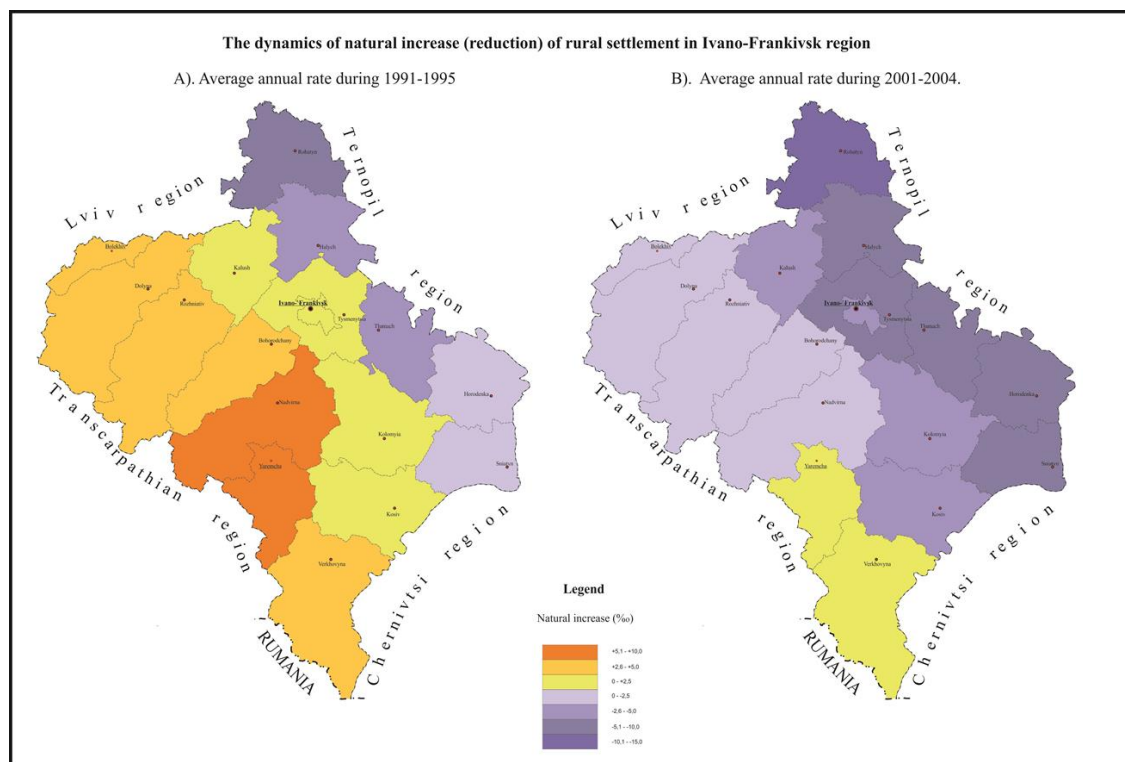
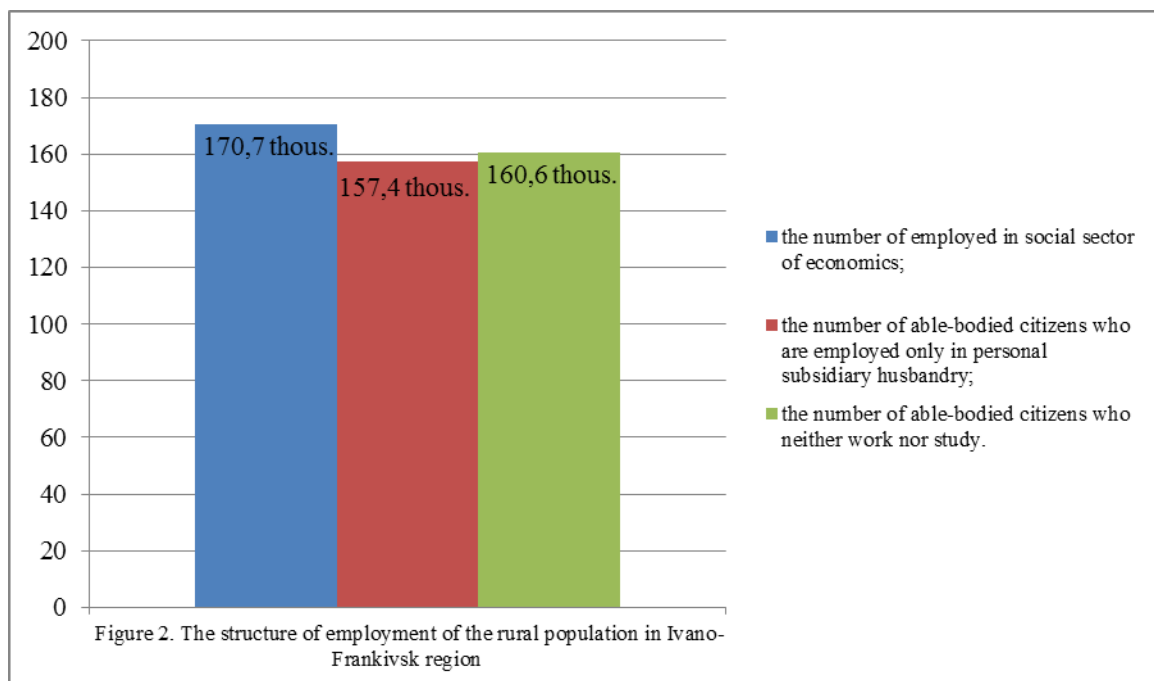


Figure 1: The dynamics of natural increase (reduction) of rural settlement in Ivano-Frankivsk region

The situation with the age distribution of the population in small villages is a bit difficult. For example the percentage of children under 16 in small villages of Halytsk district is 15,6 %, people over active working age – 36,4% compare with the indexes in big villages – 19,2% and 24,4% correspondingly.

Indexes of the level of employment and amount of wages for the population are very important in terms of economic and social position of the population. In the beginning of 2005, 170,7 thousand of Ivano-Frankivsk district inhabitants worked at the organizations and companies of different property categories(see Figure 2), which was only 38,4% out of the total number of people of active working age. In addition to that the number of employed people comparing with 1996 had reduced in 1,6 times [14, p. 45] and in 2,2 times comparing with 1991[15, p. 15].



The number of employed in common production had reduced in Tlumach, Kolomyia, Horodenka, Sniatyn, Rohatyn, Bohorodchany and Halytsk districts. In total, speaking about the results of economic crisis during 1991-2005, 210,4 thousand of people became unemployed in Ivano-Frankivsk region. The majority of employed (67,2%) were working outside their native district, thus losing extra time and money to overcome the distance “home-work-home”. There increased the number of villagers from Ivano-Frankivsk region who were working outside their own region in other Ukrainian regions and abroad.

The total number of employed who are working in their own district is 56 thousand of people (32,8% work in common production). In the beginning of November, 2005 only 248 enterprises of husbandry (except farming) were functioning in 200 villages of Ivano-Frankivsk region(out of 763), there were 425 enterprises of industry, functioning in 190 villages, 28 enterprises of mining industry in 23 villages, 97 organizations of forestry were situated in 66 villages, 88 building organizations were situated in 52 villages, 40 transport organizations could be found in 20 villages, in 15 villages – 15 fishery organizations, in 18 villages – 27 entertainment establishments (health resorts, holiday centers, etc.) [14, p. 57-60].

In the course of economic crisis the decline of material production is observed, in particular, in agricultural enterprise, industrial organizations, building and transport enterprises and new forms of husbandry management were not established in rural areas. Sectoral structure of villagers’ employment in social industry during the transition, according to the inhabited area was formed as follows: 27,6% - in educational sphere, 18,9% - in husbandry, 12,9% - in trading, 8,6% - in health care and social assistance, 8,4% - in industry, 5% - in government, 4,8% - in transport and communications, 4,7% - in forestry, 2,9% - in building industry [14, p. 46] (see Figure 3).

The worsening of the villagers’ material status is connected with job loss and with the changed structure of employment, since at the inhabited areas predominate jobs which are less paid. The level of average monthly wage of the work-hand according to the type of economic activity in 2012 in fishery was the lowest– 1552 UAH, in husbandry, hunting, forestry – 2077

UAH, health care – 2201 UAH, building– 2491 UAH, in education – 2527 UAH and in industry – 3500 UAH and the average wage according to all the indexes of economic activity in Ukraine – 3026 UAH [16, p. 380]. Thus, a 2/3 of the employed in social industry in Ivano-Frankivsk district has the lower wage than the average wage index in the country.

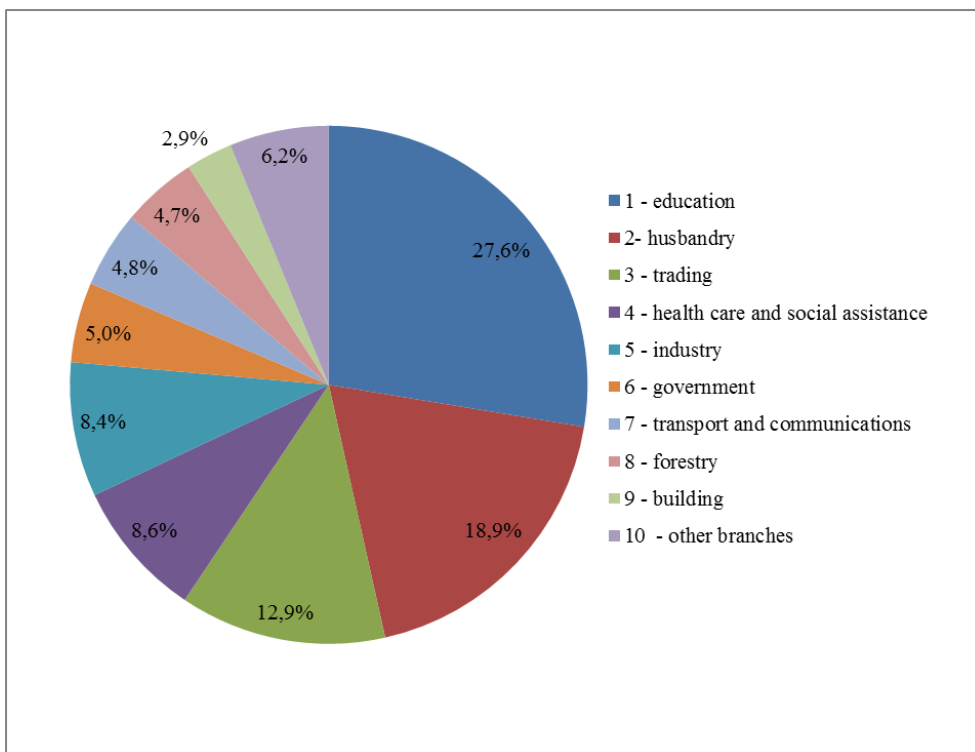


Figure 3: Branch structure of the rural settlement's occupation in Ivano-Frankivsk region in social sector (according to the place of abode):

A special attention is paid (in 2005) to the people of active working age who are occupied only in their subsidiary husbandry – 157,4 thousand of people, who make up 1/3 of active working age people [14, p. 48]. This category of population has increased in comparison with 1996 in 41,9%. Especially the number of employed only in personal subsidiary husbandry has increased in provincial Horodenka (in 3,4 times), Sniatyn (in 3,0 times), Rohatyn (in 2,2 times), Tlumach (in 1,9 times) districts and also in villages that are subordinated to Bolekhiv and Yaremcha town councils (in 2,0 times). The number of employed has increased only in subsidiary husbandry and only in those districts were the number of jobs in social industry reduced. The rank correlation coefficient between the absolute indexes of reduction of the number of employed in social industry and increase of the number of employed only in subsidiary husbandry constitutes – $K = +0,72$, it means that the dependence is direct and considerable. In several districts (Verkhovyna, Tlumatsk, Sniatyn, Kolomyia, Nadvirna, Bohorodchany) and rural areas of the town councils (Yaremcha and Bolekhivsk) the number of employed in subsidiary husbandry in 2005 exceeded the number of employed in social industry.

160,6 thousands of active working age people in 2005 were not studying nor working which is more in 4,6 times in comparison with 1996 year. If the handicapped in 1996

constituted 25,7% out of the number of unemployed and not studying people, so in 2005 they constituted 6,7 % [14, p. 44].

Reduction of the number of jobs in rural areas and neighboring towns, low wage caused the migratory outflow of the rural youth and labour emigration which leads to the worsening of the demographic situation and so the number of depressive spaces grows.

Debatable issues. Due to the investigation of the rural inhabitants' employment we can point out the following peculiarities:

1) The majority of the employees work beyond their native district, namely in cities and towns;

2) The level of employment in social industry is higher in the districts which border upon big cities than in provincial areas and the quotient of the employees who work beyond their native district is there quite high;

3) There is a considerably less number of employed in subsidiary husbandry in suburban areas comparing to the employees who work in social production in provincial areas;

4) The Geography of the employees beyond their native districts is bound with the number of human resources and jobs:

a) The presence of the big city with the great number of employees (Ivano-Frankivsk) and comparatively small number of human resources in suburban districts (Tysmenytsia) gives an opportunity to work nearby, performing the pendular labour trips – 95% of villagers in Tysmenytsia district, who work beyond their own district having found the job nearby and only 4,7 % - work in Ukraine beyond their own region and 0,3% of people work abroad;

b) The presence of a big city and comparatively great number of human resources in the suburban area (the city of Kalush, Kalush district) is not able to provide jobs: 70,2% of labor rural migrants work nearby, but the greater part works in other Ukrainian regions (21,4%) and abroad (8,4%);

c) Small rural settlements with small number of jobs and much more human resources in rural settlements in provincial districts (the city of Sniatyn, the town of Zabolotiv – Sniatyn district) make it more difficult to work near the settlement place. That's why 47,3 % of villagers from Sniatyn district who work beyond their settlement area have found earnings abroad, more than 9,3% in other Ukrainian regions (beyond Ivano-Frankivsk region). The same thing we can observe in Rozhniativ, Horodenka, and other provincial districts.

Conclusions

The detailed information (according to the form #1- village) about the population, objects of economic and social destination, occupation of the human resources enables us to study the development dynamics of each Ukrainian rural district during 15 years' time (1991-2005) and creates double informative basis for regional, local and national policy development which aims at forming all the living conditions in rural areas.

Rural area feels a serious burden of economic crisis: the number of economic activity objects has reduced (especially material production), social infrastructure, the number of employees in socio production has reduced and the number of unemployed and those who do not study has increased. The level of wage in the primary economic sector (husbandry, forestry), health care, education, building (in the prevailing sectors of villagers' employment) is less than the average wage index in the country. All this has led to the level of the proprietary security of rural settlement.

The socio-economic situation of the small village settlements and of the provincial settlements worsened. The process of degradation and depopulation takes place there. There can be observed structural improvement in terms of settlement growth having the agricultural

functions, moreover the number of employees in subsidiary husbandry grew (we come back from the collective commodity production to a personal subsidiary natural and small-scale production).

The reduction of jobs, low wage caused the labour migration (abroad and to the other Ukrainian districts), which has led to the deterioration of the demographic situation. As we can observe the tendency of depopulation only in small villages and in the provincial areas at the beginning of this process (in 1990 the mortality exceeded natality in 36% of rural settlements in Ivano-Frankivsk region), so in the course of time this situation was to be observed in middle-sized and big villages, thus embracing the vast rural spaces (in 2001-2004 the depopulation process was observed in 80% of villages).

References:

1. Джаман В.О. Регіональні системи розселення: демогеографічні аспекти / Джаман В.О. – Чернівці: Рута 2003. – 392с. (Dzhaman V.O. Regional Systems of Settling: Demographical Aspects / Dzhaman V.O. – Chernivtsi: Ruta, 2003. – 392 p.)
2. Доценко А.І. Сільське розселення в Україні: динаміка та структура / Доценко А.І. – К.: Фенікс, 2010. – 288с. (Dotsenko A.I. Rural Settling in Ukraine: Dynamics and Structure / Dotsenko A.I. – K: Feniks, 2010. – 288 p.)
3. Доценко А.І. Територіальна організація розселення (теорія та практика) / Доценко А.І. – К.: Фенікс, 2010. – 536с. (Dotsenko A.I. Territorial Organization of Settling (Theory and Practice) / Dotsenko A.I. – K: Feniks, 2010. – 536 p.)
4. Ковалев С.А. Сельское расселение (географическое исследование) / Ковалев С.А. – М.: Изд. МГУ, 1963. – 371с. (Kovalev S.A. Rural Settling (Geographical Investigation) / Kovalev S.A. – M: MGU Publishers, 1963. – 371 p.)
5. Ковалев С.А. География населения СССР. / Ковалев С.А., Ковальская Н.Я. – М.: Изд. МГУ, 1980. – 287с. (Kovalev S.A. USSR: Geography of Population / Kovalev S.A., Kovalskaya N.Ya. – M: MGU Publishers, 1980. – 287 p.)
6. Крисанов Д.Ф. Сельское расселение: социально-экономический аспект / Крисанов Д.Ф. – К.: Наукова думка, 1988. – 142с. (Krisanov D.F. Rural Settling: Social-Economic Aspect / Krisanov D.F. – K: Naukova Dumka, 1988. – 142 p.)
7. Нудельман В.И. Региональная схема расселения на территории УССР / Нудельман В.И., Павлышин Б.В., Фильваров Г.И. // Строительство и архитектура. – 1980. - № 2. – С. 8-10. (Nudelman V.I. Regional Scheme of Settling on the territory of Ukrainian SSR / Nudelman V.I., Pavlyshin B.V., Filvarov G.I. // Building and Architecture. – 1980.- No 2.- P. 8 – 10.)
8. Пістун М.Д. Конструктивна регіональна політика: суспільно-географічний аспект / Пістун М.Д., Олійник Я.Б., Балабанов Г.В. // Український географічний журнал. – 2000. – №1. – С. 3-9. (Pistun M.D. Constructive Regional Policy: Social-Geographic Aspect / Pistun M.D., Oliynyk Ya.B., Balabanov G.V. // Ukrainian Geographical Magazine. – 2000. – No 1. – P. 3 – 9.)
9. Питюренько Е.И. Системы расселения и территориальная организация народного хозяйства / Питюренько Е.И. – К.: Наукова думка, 1983. – 139с. (Pityurenko Ye.I. Settling Systems and Territorial Organization of National Economy / Pityurenko Ye.I. – K: Naukova Dumka, 1983. – 139 p.)
10. Покшишевский В.В. Население и география. Теоретические очерки / Покшишевский В.В. – М.: Мысль, 1978. – 315с. (Pokshyshevskiy V.V. Population and Geography. Theoretical Essays / Pokshyshevskiy V.V. – M.: Mysl, 1978. – 315 p.)
11. Руденко Л.Г. Фундаментальні географічні дослідження та їх прикладне значення у сучасних умовах / Руденко Л.Г. // Український географічний журнал. – 2003. – №1. – С.9-15. (Rudenko L.G. Fundamental Geographical Investigations and their Applied Significance in Present-Day Conditions / Rudenko L.G. // Ukrainian Geographical Magazine. – 2003. – No 1. – P. 9 -15.)

12. Саушкин Ю.Г. Экономическая география: история, теория, методы, практика / Саушкин Ю.Г. – М.: Мысль, 1973. – 559с. (Saushkin Yu.G. Economic Geography: History, Theory, Methods and Practice / Saushkin Yu.G. – M.: Mysl, 1973. – 559 p.)
13. Социально-экономические проблемы развития села (расселенческий аспект) [Фтомов Г.С. и др.]. – К.: Наукова думка, 1988. – 328с. (Social-Economic Problems of Rural Development (Settling Aspect) [Ftomov G.S. et al.]. – K.: Naukova Dumka, 1988. – 328 p.)
14. Соціально-економічна характеристика сільських населених пунктів Івано-Франківської області: Статистичний збірник / За ред. Костюк О.В. – Івано-Франківськ: Головне управління статистики в Івано-Франківській області, 2006. – 131с. (Social-Economic Features of Rural Settlements within Ivano-Frankivsk Oblast: Statistical Digest / Ed. by Kostiuik O.V. – Ivano-Frankivsk: Head Department for Statistics in Ivano-Frankivsk Oblast, 2006. – 131 p.)
15. Соціально-економічний стан сільських населених пунктів Івано-Франківської області на 1 січня 1991 року: Статистичний збірник. – Івано-Франківськ, 1991. – 61с. (Social-Economic State of Rural Settlements of Ivano-Frankivsk Oblast as of 1 January 1991: Statistical Digest. – Ivano-Frankivsk, 1991. – 61 p.)
16. Статистичний щорічник України за 2012 рік / За ред. Осауленка О.Г. - К.: ТОВ «Август Трейд», 2013. – 566с. (Statistical Annual Report: Ukraine in 2012 / Ed. by Osaulenko O.G.. – K.: TOV “Avgust Treyd”, 2013. – 566 p.)
17. Топчієв О.Г. Основи суспільної географії / Топчієв О.Г. – Одеса: Астропринт, 2001. – 560с. (Topchiyev O.G. Fundamentals of Social Geography / Topchiyev O.G. – Odesa: Astroprint, 2001. – 560 p.)
18. Хорев Б.С. Проблемы городов (Урбанизация и единая система расселения в СССР) / Хорев Б.С. – М.: Мысль, 1975. – 428с. (Khorev B.S. Problems of Cities (Urbanization and Unified System of Settling in the USSR) / Khorev B.S. – M.: Mysl, 1975. – 428 p.)
19. Шаблій О.І. Основи суспільної географії / Шаблій О.І. – Львів: ЛНУ ім. І. Франка, 2012. – 296с. (Shabliiy O.I. Fundamentals of Social Geography / Shabliiy O.I. – Lviv: LNU im. I. Franka, 2012. – 296 p.)
20. Шепотько Л.О. Соціальний розвиток села на сучасному етапі / Шепотько Л.О. – К.: Знання, 1982. – 48с. (Shepotko L.O. Present-Day Stage Social Rural Development / Shepotko L.O. – K.: Znannia, 1982. – 48 p.)

