# Transformation of Rural Space in Serbia Caused by Industrialization

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## Introduction

This paper deals with rural space changes that have been caused by the industry development as the most active factor of social economic changes and transformation processes. All these consequences led to important territory polarization. Spontaneously and speedy up processes of urbanization in Serbia (caused by industrialization) have brought on significant migratory changes of inhabitants. Those processes have produced population emigration of rural space and its vacation as well as transformation of physiognomic (morphologic) and functional structure of rural settlements.

Industry was the key factor in the transformation of the entire territory of Serbia. Industrialization, in the narrower sense of the word, is the appearance, development and spread of industry (factories etc.). In a wider sense of the word, industrialization includes the transformation of the geographical space, with all the complex good and bad consequences (Grcic, 1994, p. 18; Feletar, 1985: 176-177). Understanding industry as one component of the spatial structure of a country involves understanding also of relationships and links between industry and other spatial structures (morphological, functional, populational). These links are two-fold and two-directional (Veljkovic, 1997: 187) - the location, functioning and development of industry are determined by many characteristics of the space (expressed through the factors of location), but, at the same time, industry proves to be a significant factor of the transformation of space.

Being the most active factor of the socio-economic changes and the motive force of various transformational processes (urbanization, de-agrarization, migrational push-and-pull effects, widening and interpenetration of integrational processes in space), industry has caused significant polarization of space in Serbia - into the developed, and the undeveloped part; into center and periphery; into city and village. Namely, the development "as a process of dynamic structural changes of quantitative and qualitative nature" (Deric, Perisic, 1995: 3) has not happened on the entire territory of Serbia, it happened only in several narrow zones and belts, those that possessed the necessary potentials for development and for concentration of activities and population.

The supremacy of agriculture, once the main activity of Serbian population, was replaced by quick development of non-agricultural activities with very strong developmental effects. Thus was initiated a spontaneous process of urbanization, and the consequence was a rapid demographic emptying (depopulation) of large rural areas, especially in the hilly and mountainous regions of Serbia.

In the period 1961-1991, the percentage of city-dwellers in Serbia increased from 29.8 % to 50.7 % of the total population (while in 1948 it was 17.3 %). At the same time, the percentage of agricultural population went down from 56.1 % to 17.6 % of the total Serbian population. This transfer of agricultural population culminated in the period 1971-1981, when in merely ten years 1.4 million people left agriculture.

The migration of people from dispersed rural settlements (rural habitats) into the cities was the cause of the formation of two kinds of zones with opposite characteristics (Stojanovic, 1990:194): zones of concentrated population, relatively small territorially, with stable demographic development, rapid economic development, and high urbanization, and, in contrast to this, zones of depopulation, territorially much larger, sparsely populated, demographically stagnating or dwindling, with pronounced economic undevelopedness, and rural use of space.

Observed on micro-level, investment went into cities and municipal centers, primarily as money for new factories and similar industrial objects; this caused two inter-related processes. The first process was the development of those towns or cities that happened to be the centers of municipalities. The other process, caused by the first, happened in the nearer or further countryside around such local centers. Thus were formed regional systems, consisting each of several functionally complementary and compatible subsystems differentiated mainly by the actions of the municipal authorities. In such subsystems, municipal or town centers were the immigration enclaves (demographic growth poles) clearly differentiated from the strongly depopulational (rural) surroundings (Tosic, 1999: 202). Depending from the importance, size and role of the industry (whether the industry became dominant, or not), this transformation of space involved either a single municipality, or several of them at once creating a large industrial zone. These changes proceeded unevenly and to a large degree arbitrarily and chaotically, which also contributed to the differences in populational development (Miletic et al., 2000: 48) namely, influenced the demographic polarization and the transformation of the spatial structures in the rural areas.

## Changes of the Spatio-Demographic Characteristics of Rural Areas

Without going into historic and socio-political causes because of which the Serbian village, once the core of the national vitality and the main carrier of the stability of the Serbian State, became so demographically emptied and devastated (Radovanovic, 1999: 9.) we will here point out only to the basic characteristics of the demographic processes and structural changes in the rural territories of Serbia. Until the 1950-es, Serbia was, by its economic structure, an agricultural country, and by its habitation structure a rural country.

From the year 1960 until today (year 2001), the processes of functional and demographic polarization dominated; and they were reflected in the changes in socio-economic structures and in the spatial placement of the population, with more and more pronounced differences between the developed center and the depressed periphery (outer areas, countryside). Daily interaction between the city and its surroundings, expressed in commuting, became a permanent process, illustrating the center's power to integrate the periphery (Tosic, 1999: 204).

Seeing this developmental influence of city centers, and knowing the connections and relationships of municipal centers with their spheres of influence, it is possible to discern **two phases** of the demographic processes (Vojkovic, et at., 2000: 337). The first phase coincides with the period of very intense industrialization of cities in Serbia (from 1960 to mid-1970-es). Work-force was hired for the new, non-agricultural purposes, but hired mainly from the cities themselves, and from the surrounding, nearest villages, so that there was even a decline in the number of inhabitants in these villages. Urban functions were, during this first phase, concentrated in the cities. But in the next phase (from the mid-seventies), the centers began to act stimulatively on the surrounding settlements and villages, thus attracting population migrations into them. Since 1981, intense migration of villagers into towns begins to slow down, while the suburbia begin to urbanize themselves more strongly; commuting becomes stronger, and daily (day-time) urban systems are created. This second phase, based upon the tertiary and quatriary economic activities, initiate the processes of periurbanization, reducing contrast and gradually erasing the spatio-functional "village-versus-city" dichotomy (Tosic, 1999: 59-63).

However, unlike the villages in the closer or further proximity to cities, those other villages (really remote from cities, municipal centers, and other centers of influence) suffered a constant, steady dwindling of population, which became smaller and smaller during both phases. Thus the rural areas themselves became clearly differentiated into **two zones**

with different functional and demographic development:

The first zone are the villages and other settlements near a developmental center. These are in a favorable geographical-transportational position, so they become zones of concentration of population and of economic activity; they also become more densely populated; all this is consequence of the positive influence of the developmental center. Intense immigration, with positive natality-mortality ratio (more are born, than die), helped maintain a favorable age-structure of the population in them. The process of de-agrarization was very rapid and strong, and followed by the forming of a nucleus of non-agricultural businesses, so that the proportion of agricultural population fell below 20 % (and in some settlements even below 10 %). And yet, the outflow of non-agricultural population is not always accompanied by the same tempo of their spatial reallocation[1]. For these reasons, such settlements and villages transformed themselves very quickly from agrarian into mixed type, which will in time grow together (morphologically and functionally) with the city, into one entity.

The second zone is the zone of villages rather more remote from developmental centers and with poorer communication and transportation links to them. Here are manifested, very strongly, demographically and in other ways, the negative effects of developmental influence of cities. The main characteristics here is a very strongly expressed process of depopulation, and, linked to it, the process of demographic aging. Earliest migrations to towns started from here, and the average age of the inhabitants is the greatest. Economically, the population is still predominantly agrarian, while the transfer of men into non-agrarian economic activities, and also the emigration of the young, cause an increased involvement of women in agricultural work. Woman takes more and more of the farming work on herself, thus becoming a significant factor in the survival of this branch of economy. Departure of those who are capable for work and for reproduction has, as its consequence, not only the aging, but also a reduction in the reproductive ability of the remaining population, which means: low birth-rate. According to the 1991 census, average age of the agricultural population of central Serbia was 46.9 years, the index of aging was 2.27, and the proportion of the inhabitants older than 60 was already greater than one third of the total.

## Changes of Functional and Physiognomic Structure of Rural Areas

The intense process of de-agrarization and urbanization, initiated by the development of industry, caused radical changes of the economic structure, and reduced the importance of primary economic activities - agriculture first of all. As the primary sector became less important, the consequence was that the structure of the economy diversified. Spatial changes (changes in space) directly or indirectly caused by the spreading and development of industry were reflected also in the altered organization of the networks of settlements and of the economic activities in them. Traditionally agricultural villages change their structure, mainly in regard of function: besides living and farming, other things begin to happen, such as work in the tertiary and quartiary sectors of the economy. These processes are very pronounced in the first zone. A large part of the now-non-agricultural population still lives outside the cities, thus the number of commuters (daily migrants) is growing. Construction of new flats (residential buildings) is intensified, and accompanied by a rising level of the communal infrastructure. The city way of life spreads into these residential areas, giving them urban characteristics. One of the consequences of the general development of these villages and settlements is the growth of the built-over surfaces, at the expense of the arable, just-earth surfaces; continual built-over tissue of the cities has completely encircled and absorbed some previous villages.

The settlements and villages in the second zone have a much different tendency of spatial transformation. Depending on their natural-geographic and transportational-geographic position, these changes in the functional-spatial and physiognomic-spatial structures are more

[1] According to 1991 census, 49% of the total population of Yugoslavia lives in the villages, but only about 17% is agricultural population (Radovanovic, 1999: 13).

or less pronounced. Namely, the habitats in the plains, despite depopulation, have a growing number of daily migrants (commuters), an increase in the construction of residential buildings, an improvement in infrastructure, and improved living conditions. In the large mountainous and hilly areas, however, the populational weakening of the villages is manifested through changing physiognomy of the habitat and through a transformation of the agrarian landscape: less food is produced, plow-fields are converted into grazing-grassfields or even revert to natural, wild greenfields (surrendered to weeds), the total agricultural surface shrinks, land is used for other purposes, and many homes are totally deserted, with zero residents, which makes them into a surplus of residential space. One extreme form of this, when de-agrarization and depopulation go really very far, is the desertion and abandonment of the entire village; and, in fact, many Serbian villages have already died out in this manner (Spasojevic, 1999: 159).

## Conclusion

These trends suggest that the agrarian overpopulation problem was adequately solved by migrations to non-agrarian economic activities in the cities, in the beginning of the process of rural transformation, but that later, in the 1980-es and ever since, such processes became alarming, causing a decline of agricultural production and becoming a barrier to any future development of such rural areas. A peculiar paradox is shown here, a disharmony between great agricultural potential of very large territories in Serbia and very small economic, infrastructural and quality-of-life (Rakic, 1997) investment in those territories.

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