



Centre for Research on Settlements and Urbanism

Journal of Settlements and Spatial Planning

Journal homepage: <http://jssp.reviste.ubbcluj.ro>



The Localization Role of Infrastructure and Its Impact on Population and Rural Economy

Emilia PATARCHANOVA¹

¹ "Neofit Rilski" University, Faculty of Mathematics and Natural Sciences, Blagoevgrad, BULGARIA

E-mail: epatarchanov@abv.bg

Keywords: *infrastructure, rural economy, transport corridor, rural areas, population*

ABSTRACT

In each economy infrastructure operates as a relatively independent subsystem that creates the basis for the development of other economic activities. At the same time it is an important element of the environment in rural areas. The state of the regional infrastructure of an area is an important part of its resources and development potential. It is proved that the localizing role of this transport corridor in relation to the other infrastructure elements had a strong influence on the spatial location of population and depopulation processes that occurred in rural areas. Based on these understandings we made an analysis of the current state of social infrastructure in rural areas, through which an international transport corridor passes. Hence, the infrastructure development in accordance with the necessities is an essential condition and further stimulator for sectoral and territorial concentration and specialization of the rural economy.

1. INTRODUCTION

The construction of infrastructure is an important prerequisite for the future socio-economic development of rural areas.

It provides optimum functioning of all areas, of real farm use of the territory, the development of integrated system of settlements, the integration into national infrastructure systems. Infrastructure plays the role of a localization factor.

Infrastructure has been developed according to the needs and it is an essential condition and stimulator for further sectoral and territorial concentration and specialization. In each farm, infrastructure functions as a relatively independent subsystem that creates a sustainable basis for development of economic activities.

The infrastructure is an important element of the environment. The state of the regional infrastructure of an area is an important part of its resources and development potential.

It strongly influences the possibilities for the diversification of the rural economy.

When a higher-class transport infrastructure is working on the territory – it is logical to expect its impact on economic activities and environment also to be greater, tangible and meaningful.

The purpose of this report is to provide the localization role of infrastructure and the impact of the international transport corridor (ITC) no. 10 on the population and the rural economy, in case of Dragoman, Slivnitsa and Bozhurishte villages.

2. MATERIAL AND METHOD

The study is based on classical methodology, widely applied in geographic studies. We primarily used comparative and statistical analysis of indicators related to the territorial location of the population of the different types of services and related infrastructure and economic activity. The analysis confirms that they evolve under the influence of the

ITC. The location demonstrated the role of infrastructure.

3. RESULTS AND DISCUSSION

3.1. Nature and role of the localization of infrastructure

Regional development is carried out in various ways. One of the most important, whose role has not yet been sufficiently recognized and appreciated, is the development of infrastructure. Originally the term was used by the military and it was used to denote a set of logistics facilities, which guarantee its military actions.

This complex included storage materials, military bases and other polygons. By the middle of the 20th century, the term began to be used in the western economy and economic science. It used to indicate the range of business sectors that served the industrial and agrarian economy. Later, the concept extended to systems serving not only production but also socially.

Once with the development of science it is established the law-relationship between production efficiency and the level of infrastructure development, the impact of infrastructure on the social situation in the country or region, the impact of infrastructure on public policies and overall social development.

It is known that the construction of infrastructure will not result in immediate substantial revenue. It is clear that the more developed and diverse infrastructure is in a territory (region), the more dynamically evolving it is, because it attracts investment, strengthens the economy, creates new jobs and achieves a larger number of workforce.

All this leads up to a higher standard of living of the inhabitants.

Thus, the infrastructure can become one of the means of regional policy and local development. Infrastructure has two important features – first, it performs an integrating function and second it helps the localization.

Its integrating function is expressed in terms of sectors, industries and activities that develop in a specific region. Function appears to be localized as a result of the following: infrastructure does not create material goods, yet it ensures the delivery of services, which cannot be stored. They are consumed during their production (according to the principle of “uno actu”), in most cases the contact between the recipient and services being a must. It thus raises the issue of localization services.

All types of services offered in a particular area must be located as close to consumers. Therefore, the infrastructure performs its localizing role in terms of sectors of the tertiary sector, providing services to the population and in case of other economic activities

carried out in specific territories. With the development of the transport and communication facilities increases the importance and the localization role of the transport infrastructure in particular. The higher – class is the given transport structure the stronger influence it has.

Transport infrastructure of international importance form the territory of any country transport corridors. They include that part of the territory that is in direct contact with the transport routes and their development in economic and social aspect largely depends on the corridors themselves.

This territory is defined as the zone of influence of international transport corridors. It is divided into direct and indirect zone [3].

Direct area of influence covers the settlements and long-distance areas located 3-5 km strip in direct contact with transport facilities having continuous access to them.

All forms of economic and social activity in the area are directly depending on the functioning of the transport corridor and the parameters of the composing transport facilities.

Indirect area of influence covers the territories situated to direct the end zone to 15 km in the countries of the linear elements of the transport corridor.

3.2. Peculiarities of the geographical location of the researched area

Researched area covers three rural areas – Dragoman, Slivnitsa and Bozhurishte which are part of Sofia Region (NUTS-3) and South-western planning region (NUTS-2).

Geographical location of researched area is one of the crucial determinants of its development. Although, it shows the exact fixing of an object in relation to other geospatial objects, processes and phenomena, geography is the relationship between structures.

The three rural areas are characterized by certain peculiarities of its geographical position. They are located between the capital city and the state border with the Republic of Serbia (fig. 1).



Fig. 1. Geographical location of the researched area.

A major international transport corridor passes through the territory (ITC), which affects their overall development.

This is a part of the route of the Trans-European Corridor no. 10: Salzburg - Ljubljana - Zagreb - Belgrade - Nis - Skopje - Veles-Thessaloniki Branch C: Nis - Sofia - Plovdiv - Dimitrovgrad - Istanbul. It connects Western Europe with the Middle East. Kalotina and customs are localized on the territory of Dragoman (table 1).

Table 1. General characteristics of rural areas [1].

Rural areas	Area (km ²)	Distance between the centre of Sofia and the region (km)	Distance between the centre of the region and Serbia (km)	No. of settlements
Dragoman	323.8	36	15	34
Slivnitsa	187.4	30	25	13
Bozhurishte	142.8	15	42	10

Peripheral geographical position of some of the researched area - rural Dragoman - to national border, is an important strategic advantage for cross-border cooperation with neighbouring countries. It additionally is made easier by established functioning border and transport infrastructure.

Compensation of peripherality and implementation of opportunities for cross-border cooperation depends on the integration of researched area in the national territory and at the same time – by opening its border to neighbouring Serbia and to ling their transport systems.

Bojurishte rural area is located closest to the capital (table 1), and its territory ITC no. 10 is crossed and connected to ITC no. 4 between Romania, Bulgaria and Greece through the Bulgarian section of Vidin – Sofia – Kulata. This makes its geographical location substantially more favourable and gives more opportunities for development.

With this numbering - ITC no. 10 and this name is a transport route from 90 years of the twentieth century (after the conference has been approved in Helsinki in 1997) but this time is actually much older. It keeps its meaning over the centuries, changing only its name.

For the first time it bore the name “Via Military” and later the “Trayan’s time”. Almost the entire period of Middle Ages it was called the “Constantinopolitan” because it is linking the capital of the Ottoman Empire to Europe. In the distant past and was known as “Diagonal Road.

Over the centuries, its importance is constantly expanding, and in parallel, and the impact that had on its surrounding territory.

The total length of the territory of Bulgaria border between Kalotina and Sofia is 60 km.

The proximity of the researched area to the border with Serbia and the capital largely determines the possibilities for developing local economy and improve communication and inter-regional links. It could be argued that regions have indeed favourable transport and geographic position.

And if the past 100 years the importance and the influence of the capital on their progress was more powerful and even decisive (not always positive), then in the past the importance of Diagonal Road, which passes through Southeast Europe and connecting Europe and Asia, has facilitated economic development in the territory of today's three rural areas.

3.3. Impact of infrastructure and ITC no. 10 on population and settlements

3.3.1. Peculiarities in the distribution, movement and education of the population

Demographic resources are very important for each area, as in quantitative terms as in terms of their qualitative characteristics. They are essential to rural development.

Therefore, people should be subject to special attention and policy.

This is even truer for countries like Bulgaria, where the demographic crisis is characterized by declining fertility, negative natural growth for 15 years and a negative migration balance. It forms a consistent trend of population decline in the country and parts of its territory as a result – mainly rural areas with pronounced depopulation. Despite the general trend of locally observed areas there are some differences.

Surveyed three rural areas are a good example (table 2).

Table 2. Territorial differences in population (2007) [2].

Territory	Rural areas	Sofia Region (NUTS-3)	South-western region (NUTS-2)	BG
		Indicator		
Population density (p/km ²)	Dragoman	37.5	103.9	70.3
	Slivnitsa			
	Bozhurishte			
Urban population (%)	Dragoman	59.9	82.2	71.1
	Slivnitsa			
	Bozhurishte			

In the westernmost rural area -Dragoman, population density is the lowest - only 18 p/km² which is much lower value compared to the other two rural areas and sites of higher rank to which they belong.

Differences in population density in the city (Dragoman) - 99.6 p/km², and villages - 8.3 p/km² the same region is even more obvious.

The big concentration of population is confirmed in the city, which offers better social and economic conditions.

They are the result of its favourable geographical position. Gr. Dragoman is located in the direct zone of influence of the ITC no. 10, giving it constant access to its transport facilities and a good opportunity to implement the economic and social relations within the country and with neighbouring Serbia.

Another reason for crowding of the population in the city is peripheral position of the rural area toward the national territory.

Therefore, the continuous migration occurred in direction village-city because the development of villages near the border with Serbia is a further difficulty.

There is a process of population caused the migration in searching of better living conditions, and the aging population and negative values of natural growth.

Mechanical growth is also negative, and although its values are not high they rise up. As a result of these processes there was a trend of population decline in recent years -1% - 1.5% per year.

In rural area of Slivnitsa there is a tendency to maintain the number of population (the reduction is less than 1%).

The density of population in this area is considered to be 51.7 inhab./km². Its density is higher than that in the Sofia region, but lower than that in the national scale.

The population is unevenly distributed in the territory. It is concentrated in the city (over 77%) and fewer in the villages.

A reason for this population distribution is the positioning of the municipal centre in the direct zone of influence of the ITC no. 10.

This fosters the economy in the city and thus attracts the working population of the villages in search of work. The main reason for negative values of natural growth is an aging population and low birth-rate. Mechanical growth is also negative (-18 persons).

The general trend of decreasing population in the country and in Sofia region, in Bojurishte rural region began to occur in recent years. Until 2003 year it retains its population.

Its density is of 54.8 p/km², which is below the national average (70.3 p/km²), but significantly above that in the Sofia region (37.5 p /km²). Here again we can see the influence of the ITC opens no. 10 which direct area is Bozhurishte. It should not be ignored and that the city is in the area of indirect influence of the ITC no. 4.

For these reasons, 67 percent of the population lives in the area of the city. This is the only area of the researched areas where there is a mechanical positive growth (+ 66 p).

The educational level of the population in the three rural areas is relatively good level compared to Bulgaria, Sofia region and Southwest region. Population with university and college degree in the researched areas has a smaller share compared to the population throughout the country.

The proportion of people that have completed secondary education in rural areas of Slivnitsa and Bojurishte exceed the average rate of Sofia and Bulgaria, but in Dragoman it is lower (table 3).

Table 3. The educational structure of the rural population (2001) [2].

Rural areas	Higher (%)	College (%)	Average (%)	Main (%)	Primary (%)
Dragoman	2.7	2	31.8	36	21.7
Slivnitsa	4	3.6	41.4	28.6	16.7
Bozhurishte	6.8	4.1	40.2	27	16

This reflects on the age structure of rural population and the fact that younger and more educated people migrate to the capital because of the higher salaries and more prestigious career.

The majority - over 85% of people with higher education in the researched area live in three cities that are centres of the regions. In the villages, the number of people with primary and primary education is dominant.

3.3.2. Features in development and urban network configuration

The settlements are a form of localization of population, production and service activities in a given territory. They are constructed, reconstructed and developed by people, but largely retain its appearance over the centuries.

The favourable geographical location of the rural regions Dragoman Slivnitsa and Bozhurishte is a reason for their early colonization and the appearance of settlements in ancient times.

This is proved by the ruins of Thracian culture, ceramics, sculpture and other tools in many villages. Near the village Aldomirovtsi were found remains of early Iron Age, when iron tools occurred. Almost everywhere in the territory were found remains of walls, pottery, foundations of old buildings.

Urban network of rural area of Dragoman consists of 34 settlements - 1 town and 33 villages. Small villages with a population - 200 residents dominates. As ten of them have 10 residents and sixteen - to 50 residents.

Only two villages are in the category of small i.e. their population between 200 residents and 1000 residents (table 4).

Table 4. Classification of settlements according to population in rural areas.

Rural areas Settlements	Dragoman	Slivnitsa	Bozhurishte
Many small towns (to 10 000 inh.)	1	1	1
Average villages (1000 – 2000 inh.)	-	1	-
Small villages (200 inh. – 1000 inh.)	2 – (Gaber, Kalotina)	-	5
Very small villages (to 200 inh.)	31	11	4

Clear process of depopulation of the territory, which develops from the border to the municipal centre and peripheral parts of the region to the route of the ITC no. 10 (two of the three larger settlements are in the direct zone of influence of the ITC, and the third in indirect).

Settlement network in rural area of Slivnitsa consists of 13 settlements - 1 town and 12 villages. Almost all villages except village Aldomirovtsi have fewer than 200 inhabitants and fall in the group of very small villages (table 4).

One of them has a population of less than 10 residents and three, respectively, with fewer than 50 residents.

There are here the process of depopulation that was caused both by negative natural growth and migration of the working population to the downtown area and outlying areas within the corridor (the two larger settlements are in the direct zone of influence of the ITC).

Historical facts show that this effect existed even in the past. The old village Slivnica was located 2 km northwest away from contemporary town Slivnitsa, along the road in the area of Sarai.

Because of the important complex situation on the international road from Istanbul through Sofia to Belgrade settlers of Slivnica played a variety of obligations to the Turkish feudal state, the most important of which was giving soldiers.

These soldiers guarded the route through the neighbourhood say Palanka former fortified settlement - now in the city centre, causing it to be defined as self-settlement with guard duties.

Settlement network in the municipality Bozhurishte is represented also by a city - centre of the region and nine villages.

The villages are almost equally divided the categories of small and very small villages. One of the villages has a population of less than 10 residents and two with fewer than 50 residents.

Almost half of the settlements in this region are located in the zone of influence of the ITC no. 10.

Therefore the process of depopulation in that region is not so strong.

3.3.3. Depopulation of the researched area

Depopulation process as a problem is typical for almost all rural areas in the country. Rates at which it occurs, however, are quite different in territorial aspect.

Researched area is also effected by the process of depopulation. There was a study in connection with the depopulation of rural areas in duration of 15 years.

There are two periods defined, the first tracks changes in population in settlements between the last two censuses in the country - 1992 year and 2001 year. The second is a reflection of the current state of the process of depopulation 2001-2007 year.

Depopulation of the area is most pronounced in rural Dragoman and especially in its border area. Proximity to the border, as well as the amount of many villages, that were settlements of scatterd type, are the main reasons for the widespread depopulation of territorial development.

In the other two regions, which are better integrated into the national territory, the process is less developed. Bozhurishte is even with better indicators of Slivnitsa. This is mainly due to mechanical positive growth, proximity to the capital and the favourable natural and environmental conditions.

There have been two directions of development of depopulation in the territorial aspect. The one direction in which depopulation is developing, the direction is from the border to the interior. Second direction of depopulation can be observed within the rural areas: from peripheral to central parts of the countryside. Therefore the process of depopulation grows and covers areas that are most distant from the route of the ITC no. 10.

In the researched area there are villages that increase their population. Only 3 of these villages increased their population throughout the period of studying (Gurmazovo, Novo Brdo and Radulovtsi), others do it only during 2001-2007 year. (Chorul, Gralska hollow Upper Village, and Malo Bratushkovo Malovo). All these villages are located in the direct zone of influence of the ITC no. 10. Most of them are from rural Bozhurishte. Only the population of Bozhurishte increases, but the rate of increase during the second period is less than that during the first. If this trend continues in the future as possible in the forthcoming census and Bozhurishte fall in the group of cities with declining populations.

As a result of depopulation is observed following negative phenomena:

- increasing uncultivated lands, lack of people who treat it;
- confined industries in small villages;
- close schools in the villages due to lack of students;

- growing disparities in living condition between rural areas and centres and others.

3.4. State of the selected branches of the tertiary sector

Tertiary sector includes service activities and has great social importance, as it is oriented to the needs of the population and raising its standard of living.

Sectors that are developed within the areas concerned are: transport, trade, banking, healthcare, education and others.

Services that are more specific to the study area compared to other areas of the country are those made in customs brokerage and representation within the office Kalotina free zone – Dragoman municipality and Dragoman in office. These activities are influenced by the border situation of the municipality and the crossing ITC no. 10.

3.4.1. Transport

In the three rural areas are developed road and railway transport. One of the main objectives of local authorities in rural areas Dragoman in recent years was the development and enforcement of bus transportation. It enshrines the municipal bus lines that carry traffic between different locations within the region.

There were found also regional bus lines that connect the settlements with the capital and other neighbouring municipalities. In the region there has been constructed 109.7 kilometres of fourth class roads, many of them needing urgent repairs, to perform their normal functions.

The main functions of the bus lines are related to the realisation of daily work trips of the population.

They provide access of the entire population to the area with some services and institutions that are not developed in Dragoman. The frequency of the transportation services between the downtown and villages is at intervals of 1-2 days a week. Some shipments are made only during weekends or once a week.

These services are not intensive because a large part of the territory is depopulated and a population that lives in it is over work active age. Usually they are used on weekends for trips of people from nearby towns or the capital to the villa zones in the region.

The territory of the region is crossed by railway Sofia - Dragoman - Kalotina – Nis - Belgrade (part of the ITC no. 10). Length in the direction Kalotina - Sofia is 52 km, the line has 10 stations and 5 stations. The average number of travellers is 190-200

people per course, as a day out of 8 courses in both directions.

Frequency of services from Dragoman is in Sofia for 2-3 hours, bit in the opposite direction is in 1-2 hours, and which complies with mainstream students and workers of the cities along the railway line.

Rail is used by people working in cities in this direction, it is the most convenient way for transportation to those places, and lack of bus services in that direction enhances the importance of the railway.

Nearly one third of users of railway transport to the workplace works in the chicken enterprise Kostinbrod in an adjacent area.

Railroad Kalotina – Sofia is one of the busiest in Bulgaria, this is further evidence of the impact of the ITCno. 10. There is also a railway-Stanyantsi Kalotina deviation, which serves only freight traffic - get coal mine Stanyantsi is transported to the TPP Bobov Dol.

Bus services operating on the territory of rural Slivnitsa are covered by the municipal company. They are between the villages of the region and its centre, and between the larger settlements of the region and the capital. The main areas are Sofia - Dragotintsi (43 km), Bulgaria - Well (40 km) and Sofia - Aldomirovtsi (30 km).

The number of day courses which take place in Sofia in the village Aldomirovtsi Slivnitsa is 13 in both directions, during the holidays these rates are reduced to 6. Frequency of services from the village Aldomirovtsi morning and 1600 hours from Sofia is in 30 minutes due to the large number of passengers using this transport link with their jobs and their place of residence and students with their schools. The average number of passengers using bus transport rate is 30 people.

The important feature that was observed in bus services in the region Slivnitsa is that here the intensity is greater working days, not during weekends. Frequency of services is much higher than those in Dragoman.

On one hand this shows Slivnitsa observed large daily work trips in the direction of the villages to the city and the capital. Employment potential of Slivnitsa is also greater than that of Dragoman.

Railway links within the region and with neighbouring and other major trends in this transport to Sofia. It is also widely used due to lower ticket prices.

Shipments are more comfortable working in a significant number chicken enterprise in Kostinbrod. The average number of travellers from the region of a course is 50-60 people, and the number varies depending on time of travelling.

Railway deviation Aldomirovtsi - Beli Breg coal mine connects "Beli Breg" with Aldomirovtsi station. Since 2002 year, in the direction there is no longer passenger trains and freight only travel.

Most of the rural areas Bojurishte fall in direct or indirect zone of influence of the ITC no. 10 and ITC no. 4.

An advantage is its proximity to Sofia, which provides its inclusion in the national transport network with all levels of transport and quick access to different parts of the country.

The actual transport services in the region is carried out by highway I-8 Sofia – Kalotina flowing in the northern part of the municipality and the third class road III-638 connects the centre with the villages to the southwest.

Shipments in the region are carried by shuttle cars, starting from the centre of Bozhurishte. Intensity of links between Bozhurishte and capital is quite high - 72 vehicles and 52 connections on a shuttle bus schedules.

Links with the villages of the centre are relatively well organized to complying with the flow travelling students and workers, the size of settlements and rail links with transport. In both areas Bojurishte and Slivnitsa 80% of the settlements are connected to each other by a road.

Negligible share of public transport services in the region has railway line Sofia - Bankya, which is used by people working in community banks and the military part of working in the divisions within the region Bozhurishte, but living outside it.

The main problems of transport in the region are:

- spatial organization of transport allows fast access from all locations to the centre, and from it to the capital;

- problems in transport services creates state of the roads in winter and before conducting maintenance. There are not good marks of some parts of the road and no part of the character holding Fourth class road sections;

- a significant resource in the transport field would be used ahead of the track and complexes "Airport" – Bojurishte and transforming it into an airport for business jets and private small aircraft.

In summary noted that the intensity of the transport corridor from distant locations no. 10 is reduced or active only on weekends.

This proves that before the process of depopulation in these villages reach their contemporary state, they had more numerous population.

Now there migrating populations maintain inherited properties (houses, villas, agricultural land) that visits and uses seasonal and weekend.

The demographical location of researched area and the transport corridors passing through it are

an important factors for the development of transport infrastructure and services.

Transport system plays an extremely important communication role in the conduct of economic relations between the operators in their daily work trips of the population of three rural areas and especially in its provision of services offered not only in this area but in other nearby cities - Sofia Pernik, Bankya and others.

3.4.2. Banking

On the territory of the studied rural areas operate branches of three banks. They are located in their centres Kalotina.

These are the most favourable locations for their placement in order that the route passes through them to the ITC no. 10 and lived most of the population who uses their services.

These activities are focused on payment and deposit services to individuals and businesses. It is widely shared lending by offering different terms and types of loans for private citizens and farmers.

The presence of more than one branch of the same bank in the region shows that there is sufficient in funding in there areas and makes it possible to increase and expansion of economic activity in the future.

3.4.3. Health

After starting the health reform in 2000 year. polyclinic in the town of Dragoman and other health services within the region are closed.

Population is served by three private doctors and five dentists.

GPs and dentists practicing in the offices of the former hospital and health services locations. To cover the needs of the healthcare of the population, municipal administration has given free premises practitioners from Sofia and from medical centers and Godech, Slivnitsa.

Professionals who serve the population are: cardiology, ophthalmology, internal medicine and others. The region has a unit of emergency.

In Slivnitsa there is a medical centre, which is completely (100%) municipal property.

The population of the area is served in it by 11 the number of specialists: obstetrician, paediatrician (two), endocrinologist, surgeon, neurologist, ear-nose-throat, psychiatrist, cardiologist, ophthalmologist and a clinical laboratory. In the building is located also a radiology laboratory.

There also operates an emergency centre, in which there are five work teams.

There are seven dentists, and two of them work in the medical centre, and five have private offices.

Villages are served by private physicians who are self-practice and their number is seven.

The average number of patients who have recourse to health care services in the municipality annually is around 4000. Pharmacy network is represented by four pharmacies, one of them is nonstop.

Health system in rural area of Bojurishte is developed only insofar outpatient care. Settlements are covered by medical practices that are concentrated in the former municipal hospital and former rural health services.

There are seven doctors and dentists - five, was discovered and one medical centre. It employs 10 specialists in cardiology, surgery, neurology, eye diseases, endocrinology, paediatrics and others. The region will link emergency aid.

The population is served by the unit for emergency medical assistance Kostinbrod which is in neighbouring area.

This is not effective enough because of the remoteness of a significant part of the territory of the target centre and the large area of service. There are legal obstacles to the creation of their own unit for emergency medical care.

There were made first steps towards the establishment of medical practice to perform round clock emergency medical care.

Problems that occur in health care in rural areas that are researched are:

- the need for further training of senior medical staff;
- provision of health centres with modern equipment;
- improve the hygiene and quality of services;
- providing fast and continuous access of people from outlying villages to qualified medical assistance and others.

3.4.4. Education

The state of the educational level of the population is of great importance for the development of every region and its level mainly depends on labour behaviour and participation in the local economy.

In the territory western of the most rural placements there is a school, a kindergarten, a nursery school. All of them are located in downtown area Dragoman.

Outside the village Kalotina operates a home for raising and educating children deprived of parental care. Since 1994 the school in the town of Dragoman is introduced pre-professional training in specialties banking and customs broking.

This is due to the presence in the municipality of the office in Kalotina checkpoint in the village and free zone.

Orientation of school just to these subjects shows that there is a desire to meet the needs of the customs of local manpower with appropriate skills.

The geographical location of the area and corridor 10 both affect the types of jobs and education majors which are promising and successful in the region. In 2004 in School "Hristo Botev" there was a new class with the technological profile - tourism.

By 2009 year worked around two primary schools in villages and hornbeam Kalotina but closed because of the lack of children. This is a result of the deteriorating demographic situation and the depopulation of the area.

Kindergarten "Radost" – Dragoman has four groups in the city and the Dragoman affiliate with one group in village of hornbeam, Crèche Zdravets only in the town of Dragoman.

Rural area of Slivnitsa has similar structure of the education system to that of Dragoman.

The difference is that only here in the centre of town there are two schools - School and Vocational School of Transport.

These are the two largest schools not only in the area, but in the whole researched area. Vocational School prepare fitters and drivers, which again is related to the impact of the ITC and larger outlets such medium-sized specialists in the local economy.

The high school students are taught both the city and the villages and even from neighbouring municipalities.

The region there is also another primary school in the largest village - Aldomirovtsi. Students are divided into 8 classes one in each class.

The school and teach children from neighbouring villages - Barlozhnitsa, Radulovtsi, Sourcing.

Childcare facilities are located in same locations as the capacity of this city in Slivnitsa is greater. Includes nursery and children's groups and has a central building and two branches in the city. Kindergarten in the village Aldomirovtsi with municipal finance and her 20 children are taught.

Development of education system in rural Bojurishte corresponds to the demographic structure and processes.

There is a reduced number of students in the villages and two schools were closed. The town has one school and two kindergartens.

The school has a stable number of students. There is no pronounced tendency to reduce their number, despite varying that number in small limits during the years.

Outside the downtown area there is only one elementary school in the village Herakovo.

It is a very old school, founded in 1860, now teaching about 100 students, divided into seven sections. Their number decreased in recent years.

After completing their primary education here students continue their education in high schools in Sofia, Bozhurishte, Bankya town or Slivnitsa. In Bozhurishte are localized both kindergartens.

4. CONCLUSION

Researched rural areas have very rich and diverse natural and mineral resources and can not rely on them in the development of activities of primary and secondary sector.

Mild winters and cool summers, and especially the proximity of Vitosha and Liulin, allowing some to develop alternative forms of tourism – ecotourism, rural tourism, cognitive etc., and to develop the production of herbs.

According to Ministry of Environment and Water (MEW) data Bojurishte territory was declared to be one of the cleanest areas in the country, in ecological terms (www.moew.government.bg).

This makes it more suitable for ecotourism.

The population density in the study area decreases from west (border area) to east from the capital. In rural area of Slivnitsa and Bojurishte population density is much thicker than the average rates for the Sofia region.

It is precisely due to the passage of a transport corridor and its impact on this area for decades.

Opportunities for economic activity, which are connected with it is undoubtedly one of the reasons for the slow process of depopulation and less loss of demographic resources.

Rates of mechanical growth change in the same direction- from a negative in Dragoman into a positive in Bozhurishte.

The loss of demographic resources is mainly due to unfavourable rates of demographic indicators that are the result of unfavourable age structure of population.

However, the values of reducing population are much lower than those in Sofia and in some other rural areas in the country.

The distribution of population according the education shows that in rural areas of Bojurishte and Slivnitsa proportion of people with secondary and above secondary education is relatively high - 51.1% and respectively 49%.

Therefore, regions have economically active population with a good level of education that will benefit the rural economy.

This share is lower in Dragoman Municipality - 36.5 percent. This is due to a larger share of rural population (45.4%), which traditionally have lower education.

Current state of the urban network in three rural areas makes a clear separation of the two poles

of different orientation and different dynamics. At one pole the settlements are located in the plains, passing through the ITC.

They have a stable and dynamic development in them is concentrated about 90% of the population. Near these settlements are developing economic activities. Land market is more active and faces stronger demand for land.

Often it is accompanied by a change of use of land and construction of mostly small production structures.

Availability of land and a significant manpower potential in rural Bojurishte area turn it to a promising partner for business and investments, and its proximity to the capital creates opportunities for the development of local economy.

Supportive role played by this development and through its territory ITC no. 10, which also promotes the orientation of enterprises is in this part of the municipality. The remaining villages are located in the foothill areas of the countryside. They are without serious development opportunities.

In most of the only economic activity is related to the agrarian economy. It focuses entirely on satisfying the people.

To some extent recreational prospecting and the development of villa areas have reascent role in these settlements. The condition of technical infrastructure and public works in these settlements is inadequate.

In each of the branches of the tertiary sector there is a close connection with the route passing through the rural ITC no. 10. The most powerful link is the link in the transport and trade.

The condition of transport infrastructure, frequency, trends and travel purposes, the entry of foreign capital, the establishment of joint ventures and meeting the needs of the population of a range of services, creating opportunities for professional development in the local economy have some impact on the transport corridor within the researched areas.

The corridor affects on education with the ability of schools in the municipalities to create specialized classes connected with transport and customs affairs. Such schools have in the municipalities and Dragoman Slivnitsa.

This shows that they are trying to steer the future local workforce to qualifications related to the opportunities and advantages that gives them exactly this corridor.

In other sectors of the tertiary sector, the impact of the corridor is indirect – through the population. Evidently here this corridor appears with a localized role - concentrating on services in cities that are centres of regions, and in most towns. But all of them are located in the direct zone of influence of the corridor.

REFERENCES

- [1] *** *National plan for regional development* (1999), www.strategy.bg
- [2] *** *National plan for regional development* (2006), www.strategy.bg
- [3] *** *Regional aspects of European transport corridors on the territory of Bulgaria* (1996) NTSTRZHP, MTRS, Sofia.