RURAL DEVELOPMENT IN BOSNIA AND HERZEGOVINA UNDER THE INFLUENCE OF LOCAL COMMUNITIES

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Key-words: rural development, local communities, natural resources, Bosnia and Herzegovina.

Abstract. In this paper, rural development in Bosnia and Herzegovina, under the influence of local policy, and its main function – agriculture, is facing numerous challenges, as well as better prospects for the future. In this regard, demography, economy, environment, energy and traffic are the foundation of everything. Demographic averages in Bosnia and Herzegovina considerably determine rural development in the future. Many rural areas in Bosnia and Herzegovina are undergoing depopulation, decrease in birth-rate and increase of the aging population. Local communities in the rural areas of Bosnia and Herzegovina, in the conditions of a predominantly spontaneous transition, acquired a significant role in directing the funds towards rural areas aimed at their revival and a higher quality of life for the population living in these areas. Rural potentials in Bosnia and Herzegovina are a basic precondition for the effective planning and utilization, by political and economic factors, for development in relation to the physical characteristics of the land. New economic and political concepts must be developed and implemented in order to promote the preservation of biodiversity by introducing ecological criteria to stimulate for agricultural development.

1. INTRODUCTION

Bosnia and Herzegovina is one of the most rural countries in Europe, and more than sixty percent of its population live in rural areas. Therefore, the main question regularly asked by geographers is: do those rural areas, especially agriculture, have a potential to start the economy of Bosnia and Herzegovina? The analysis also looks at the advantages and disadvantages of rural life: are those rural areas sheltered from urban pressure, symbols of a long and healthy life, or are they just lone places on the edge of misery, far away from the political, economic and social structures of the closest urban centers. The main aim of this study is to use a modern methodology for research into the future of rural development in Bosnia and Herzegovina, especially in the context of the future process of coming closer to the European Union.

The modern rural area of Bosnia and Herzegovina is more or less characterized by a deep crisis of economic, social and demographic development, which is reflected in an evergrowing atrophy of the population, especially in the local communities. The scope and depth of crisis characteristics of the development processes is reflected by the current development index, 58.2%, of the local administrative units (city and municipality administration) which lies below the threshold of 75% of average development in Bosnia and Herzegovina, where 10.5% is below the 50% threshold of the country’s development. Considering that, depending on the geographic position (especially distance from more developed local communities, as the center of areal development) and also the intensity of development processes – issues and development outcomes of certain local administrative units are significantly different. These differences are clearly seen in the diversity of areal structure, that is, a mosaic landscape of rural areas, and they are supported by the current typology of rural and urban settlements in Bosnia and Herzegovina (R. Nurković, 2012).

This paper emphasizes, among other things, that every rural area in this study has its own particular individuality and specificity. Various research methods were used, from critical evaluation

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and compilation of previous research results, interviews and research dialogue, to space-time analysis of indicators of the rural development in modern times of local communities in Bosnia and Herzegovina. The interview method, includes three leading actors in the rural development of local communities from the recent past and present. As a basic source of data, the *Annual reports on cooperative entrepreneurship for 2015* (B&H Statistical Agency Sarajevo, 2017) were used, and their analytical data were considered within a space-time context. Other unpublished (official statistics) and/or published data were resorted to well.

Negative development trends in rural areas are intimately related to the agricultural crisis, agriculture being traditionally the most important economic area with a greater influence on development processes and stabilization of suburban areas. Since the beginning of the transitional period, agricultural development in Bosnia and Herzegovina has been burdened by a series of problems that have resulted in the continuing decrease of manufacturing and an increasing negative intensity of the balance sheet of the agricultural – food sector. Crisis of rural agriculture and its characteristic had a deep-going impact, worsening the agricultural and social position in rural areas. This, along with other unfavourable factors, has encouraged increased migration of population, and in that way, the destabilization of population in a significant part of the rural area of Bosnia and Herzegovina.

Long-term negative trends in the area’s agriculture are the result of the interrelated influence of multiple factors: from the direct and indirect consequences of war in the nineties, through a manipulated model of transformation and privatization of social ownership, not conducted, or incompletely conducted restructuring, to the competition of foreign manufacturers in the conditions of joining the European Union (Woods M., 2009). This was supported also by a continuing crisis of co-operatives in Bosnia and Herzegovina, which has, from the beginning of the transition period, started from destruction, almost to the level of survival, to mild revitalization in the past few years. In such circumstances, the co-cooperative sector, burdened by the crisis, has proportionally a modest influence on agricultural development, and consequentially on the stabilization of rural areas in the local communities.

Currently, rural areas in Bosnia and Herzegovina are becoming ever more a destination for the settlement of the urban population eager to leave the urban way of life for the countryside environment. Rural tourism is a new type of selective tourism, which has lately expanded to economically less developed European countries. It is founded on the need of the urban population to search out new attractive sites, and the younger generations of tourists to choose between two types of vacation, that is, passive and active.

2. METHODS AND DATA SOURCES

The methodological approach is well-adequate to the intent of the paper to investigate the rural in Bosnia and Herzegovina. Studies on economic rural development cover both local and regional areas. The assessment of rural development and its contribution to the development of new areas is made almost exclusively by resorting to quantitative methods, from deterministic to stochastic. The data used in the elaboration of this paper are based on the secondary publications of previous studies, and the previous study on rural geography by the author, as well as statistical documentation of the Agency for Statistics in BiH. Especially important are field research data that help determining the actual situation on the ground. The other group of papers on rural-geographic research focusses on data collection from sources and the expert literature. The sources used are special geological, pedological, agro-climatic, demographic, and traffic maps. A valuable source are various photographs, either of the bird's eye view type or photographs of former country life. Very useful are satellite photographs, “remote sensing” videos (recorded by using infrared rays), and data from the cadaster of territorial units (Woods M., 2009).

The quantitative method was used in examining rural areas in Bosnia and Herzegovina, stated that rural habitats are said to be the only area of human geography where we may find and locate the
development of habitat geography. Rural habitats are the end-product of a combination of several physical and cultural factors that may be represented through various quantitative methods. There are two sets of variables that influence the habitat type in rural areas: agglomeration and d’agglomerational. Both factors are of a physical and cultural nature and, under the influence of centripetal and centrifugal forces, they may be brought to form a compact or dispersed settlement (Mandal R.B., 2001:78).

A significant source are various statistical censuses, either of population, or special censuses of households, rural areas, poultry, agricultural technology or title deed structure and ownership. If we study previous rural opportunities, we should look at urban land registrars, or other archive materials (for example, old cadaster sketches for studying areal distribution). Surely, it is necessary to emphasize that, during the writing of this paper, we have warned the experts about the political and economic situation in Bosnia and Herzegovina about the problem that may arise from the discrepancy between the statistical data of different government agencies. Through the analysis of available data we have grouped investor countries by similarity criteria, which enables a clearer overview and easier tracking of differences in the focus of investors on certain local communities. Namely, based on statistical data, we may clearly determine the orientation of certain international geo-political subjects according to the exponents of their interests in Bosnia and Herzegovina. On the contrary, due to easier comparisons of the amount of invested capital we considered more appropriate to use relative values in describing and interpreting them. Similarly, we have created a series of parallel graphic images using various geographic methods (Vukušić, J, 2007).

3. DEMOGRAPHIC CHANGES IN THE RURAL AREAS OF BOSNIA AND HERZEGOVINA

Demographic processes in Bosnia and Herzegovina are important in determining rural development in the future. Numerous rural areas were undergoing depopulation, depleated natality rate and population aging. This relates primarily to remote rural areas, such as the high mountains of the peripheral areas of large city settlements. An important factor is also the low socio-economic sustainability of rural areas that causes the migration of younger people in search for work and higher incomes to rural or urban areas of great socio-economic sustainability. A consequence of this process is the decrease in the development potential of rural areas and in the number of rural population (Lorber L., 2010).

In the area of Bosnia and Herzegovina, there are no definite rural regions, nor a definition of a rural area (Halfacree K., 1993). At the beginning of the twenty-second century, about 43% of the area’s total population lived in the rural. Analysing the number of rural population and the rural characteristics of Bosnia and Herzegovina, means also analyzing the current situation within a broader historical context. Rural areas, ever since the middle of the nineteenth century, especially during the real-socialist economic system, until the mid-fifties to the nineties, along with the transition in the past ten years, and also in the 1992–2017 period, were exposed to degradation processes leading close to village extinction – the main element of a rural area. Civilization and historical processes of de-ruralization, industrialization and urbanization, are present in certain phases of development in all parts of the local communities, which had an extremely selective and negative influence on the development of a Bosnian and Herzegovinian village (Nurković, R., 2012).

The real-socialist planned economy favoured industrial development, and Bosnia and Herzegovina, as a typical rural country, underwent de-ruralization, which became very distinct after 1955. Due to increased industrialization and a decrease of interest in agriculture, a process of de-ruralization occurred, that is, abandonment of villages as places of residence. De-ruralization was an accelerated process in the past fifty years or so. In 2017, over 70% of the rural areas showed distinct development regression, which represents a negative element for socio-cultural and area-planned indicators. These areas experience a deep-going process of extinction due to traffic isolation, high population aging, and a great share of elderly and female population. We must take concrete measures for the further
development of these areas, because, without those interventions, they are lagging behind in development, having in view that 40% of the rural areas experience a balanced development, and about 30% are expanding (Table 1) (Nurković R., 2007:101).

Table 1

<table>
<thead>
<tr>
<th>Size of city settlement</th>
<th>Number of city settlements</th>
<th>% of total number</th>
<th>Number of residents</th>
<th>% of total city population</th>
<th>% of total active population</th>
</tr>
</thead>
<tbody>
<tr>
<td>100,000 – and more</td>
<td>2</td>
<td>2.1</td>
<td>279,400</td>
<td>16.7</td>
<td>6.3</td>
</tr>
<tr>
<td>20,000–99,999</td>
<td>10</td>
<td>10.6</td>
<td>743,985</td>
<td>44.4</td>
<td>16.9</td>
</tr>
<tr>
<td>5,000–19,999</td>
<td>48</td>
<td>51.0</td>
<td>541,651</td>
<td>32.3</td>
<td>12.3</td>
</tr>
<tr>
<td>2,000–4,999</td>
<td>34</td>
<td>36.1</td>
<td>107,819</td>
<td>6.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Total</td>
<td>94</td>
<td>100.00</td>
<td>1,672,855</td>
<td>100.00</td>
<td>38.2</td>
</tr>
</tbody>
</table>


Rural areas in Bosnia and Herzegovina are economically poor and, lack a communal and social infrastructure. Crushed and irrationally scattered properties are unprofitable and do not provide an opportunity for developing a commercial agriculture. Also, those properties, focussed on quantity and have the necessary preconditions, are facing great competition on the market. Development and the practice of new, non-agricultural activities in rural areas is not usually a planned process, but rather a consequence of failure of living only through primary sector activities. The social reputation of villagers has also decreased very much. A series of factors, characteristic of the development of villages and rural areas, have led to this situation, mainly since the middle of the nineteenth century and the abolition of serfdom.

Village revitalization, in the sense of sustainable and holistic development, is a necessary process of preservation of rural areas as primary manufacturing areas of food and other goods, areas of specific anthropogenic landscape with emphasis on natural, traditional, cultural and historic elements, an oasis of green and ecological balance, and last but not least peaceful and recreation areas from the dynamic and stressful urban life. Rural tourism is one of the factors that may play an important role in the revival and sustainable development of villages.

According to B&H Statistical Agency, Bulletin 6/2015, most people who have returned to the rural are primarily young or too old. Survey results from various non-government organizations, active in rural areas, show that most youth think of their residence in the rural as temporary, and doing agriculture and other activities is only a way of receiving a minimal income which they save in order to move to town and get employment there sectors in other. On the other hand, older people see agriculture as a solid source of food and income, rather than a commercial activity. Economically, the highest active population section, aged 25 to 49, is least present in farming activities. It is often expected from this group to be most active and motivated to develop farming capacities with an aim to get a good living. This demographic profile is exactly that with a low income in the rural areas of Bosnia and Herzegovina. Also, the number of households shows that Bosnia and Herzegovina is relatively a rural country. Thus, according to 2015 data, out of a total of 1,054,613 households, 58.5% were located in rural areas.

Exact and reliable data about the rural population and the labour markets are very limited. This is mostly due to the fact that there was no official population census in the country since 1991. In the past 15 years, country demographics have drastically changed. Official 2015 data by B&H Statistical Agency show a number of 3,531,159 residents in all, out of which 1,110,770 were actively employed. The first step included a differentiation between urban and non-urban settlements, according to a well-known model, Vresk’s model of extracting urban settlements, and it was critically considered and amended in this case, especially in the sense of using the degree of centrality as an important indicator of the functional independence of a settlement, one of the basic preconditions for understanding the concept of a city in a formal sense. (Table 1, Map 1) On the basis of the analysis conducted in terms of
large, medium and small cities, we conclude that the level of sub-regional centers is a desirable level of centrality – local meaning of settlements that are considered cities in the formal and geographic sense.

The implementation of such a modified Vresk’s model for 2015 resulted in 139 city settlements with 2,393,746 residents, according to the last census, that is, 53.9% of the total population. A group of 5,215 rural settlements with 1,985,000 residents is also defined, which is about 49% of the total population. A series of variables were considered within the 11 groups: location characteristics; number, allocation and population demographics; demographic dynamics; employment and circulation; socio-economic settlement structure; significance and structure of agriculture as a source of income; the way in which land is used; function and state of residential funds; infrastructural household equipment; centrality of settlements and accessibility to central and functionally better equipped settlements. The share of non-agricultural households in 2015 amounted to 50%, and that of those employed in residential settlements, except for the active agricultural population, was of 25%. Each group of indicators can analyze two basic areal levels: municipal and regional, and the data obtained from municipalities, or possibly settlements, should be used as a justification of regularities, or as emphasizing exceptions in areal distribution. It should be determined how, in most of the analyzed variables, a level of differentiation between certain areas in Bosnia and Herzegovina is emphasized (Table 2).

**Table 2**

<table>
<thead>
<tr>
<th>Settlement size (number of residents)</th>
<th>Share of non-agricultural households</th>
<th>Share of the employed in residential settlements, except for active agricultural residents</th>
<th>Centrality degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,500–1,999</td>
<td>50% and less</td>
<td>25% or more</td>
<td>subregional center</td>
</tr>
<tr>
<td>2,000–4,999</td>
<td>50% and less</td>
<td>25% or more</td>
<td>–</td>
</tr>
<tr>
<td>5,000–9,999</td>
<td>–</td>
<td>25% or more</td>
<td>–</td>
</tr>
<tr>
<td>10,000 and more</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

*Source: B&H Statistical Agency from 2015.*
For the purpose of monitoring and analysing shifts in population numbers in certain municipalities of Bosnia and Herzegovina, we applied the degree of urbanization and, based on it, the degree of ruralization. The degree of ruralization is a percentage of population that resides in rural areas. The degree itself, and the ruralization dynamics of a country, or a region, was measured by certain indicators. One of the most often used indicators, is the coefficient of ruralization. The coefficient of ruralization represents the relation of the rural population versus the total population of a certain country, or region. The respective formula may look as follows: \( Kr = \frac{Sr}{St} \). In this formula, the coefficient of ruralization is equal to the quotient of the number of rural population and the number of total population in a certain country, or region.

4. MODERNIZATION OF RURAL AREAS IN BOSNIA AND HERZEGOVINA

The modernization of society in the rural areas of Bosnia and Herzegovina is generally often described in the works of many authors by infrastructural development programmes, such as electrification, construction of roads, or restauration of rural houses. Such projects have left a significant mark on the rural landscape of the local communities of Bosnia and Herzegovina; however, their greatest significance lies in the possibilities created for the rural population to take part in the new commercial society and buy technological innovation items that will change their lives. The list of technological innovations that have changed the aspect of the rural society and its economic life-styles is large, however, three examples may illustrate our assertion. The development of tele-communication technologies has spared many rural areas from remoteness and peripherality. On the one hand, it meant placing new industries, such as bio-technology and telematics, rural areas being no longer vulnerable, and allowed to, as Howard Newby stated, “compete on a fair basis with cities regarding employment”, for the first time since the industrial revolution (Marsden et al., 1993:2).

On the other hand, people from rural areas are new consumers, through television, radio and the Internet, of those same cultural goods and experiences as urban residents are, which destroys the attractiveness of local rural traditions, events and cultural customs, even despite the attempts to revitalize them. Besides, the impact of modernization on rural areas is not limited only to technological innovations. George 1987: 88, defines modernization as a paradox, an old and relatively new word in the social science dictionary. George cites Havilland (2002) who states that modernization is defined as an all-embracing global process of cultural and socio-economic changes, where a society in its development attempts to gain the characteristics of industrial societies. Today, modernization has been proven to be extremely powerful, but also an unpredictable force. It has a great impact on the environment and the social structure of a society. Bright (2000:145) explains that modernization is a concept that relates to a process of change through which traditional societies can adjust to the demands of the modern world. Modernization is also seen as closing the gap between food manufacturers and consumers through the organization of village fairs, where, besides finished goods, we may see the way it took to come to those finished products (Fig. 2).

The rural population in Bosnia and Herzegovina is growingly aware of its health and dependence on health centers that are ever more present in rural areas as well. Clinics and pharmacies have become a part of the infrastructure of many rural areas. The traditional approach to healing is becoming scarce. Collecting herbs and daily walks have been replaced by modern and latest medicine and therapies. There is clear evidence that information-communication technologies help the introduction of innovations in agricultural manufacturing – from support in precise sowing and care for the health of animals, to ensuring information on markets and prices of agricultural products, and in that way, they have significantly impacted the change of organization of farms and their operations. This applies to rural development as well: for example, information-communication technologies are
extremely important for the development of rural tourism, and also for ensuring important services to
the rural population, such as, tele-medicine (medical diagnostics and on-line treatments) (Horvat
U. 2010). Reducing the differences in the level of their use in urban and rural areas is important for
reducing the development imbalance, and also for ensuring an instrument that may significantly
contribute to solving long-term problems of rural areas in Bosnia and Herzegovina.

Fig. 2 – The concept of modernization in rural areas, 2017.

5. THE AGRICULTURAL ROLE IN RURAL DEVELOPMENT
IN BOSNIA AND HERZEGOVINA

Agricultural manufacturing is still traditionally the dominant activity in the rural areas of Bosnia
and Herzegovina. Large numbers of returnee residents succeeded in building their own farms with the
intention of manufacturing and selling goods, without the possibility of any other economically
acceptable opportunity. Many of those people are former employees of the industrial and tertiary
sectors, however, they have returned to the farms owned by their families. Their capabilities are
limited, as is their farming experience. There are usually several animals and a large number of small
seedlings on farms, and most of them are consumed and traded locally, producing a very small
income. At the beginning of the twenty-first century, according to B&H Statistical Agency, Bosnia
and Herzegovina had 2,450,000 hectares of orchards, 4,000 hectares of vineyards, and a remaining
470,000 hectares of meadows, and 935,000 hectares of grasslands. This means that agricultural land is
a deficient resource which must be handled very carefully in order to create as much added value as
possible (available per capita 0.26 ha of arable land). Despite that, more than 40% of the agricultural
land is still unused (Figs. 3 and 4).

At the end of 2015, rural areas in Bosnia and Herzegovina had approximately 35,000 small
farms and farming households of approximately 2.5 ha of land. Only 15% out of the total number of
these farms may be considered commercial, that is, they owe more than 5 ha of land. Amongst those
farmers, there is a special type of poverty. Life-styles differ from household to household. Most of
them still depend on loans, pensions, donations from the diaspora, employment in urban areas, public
sector or small businesses. Smaller farms represent a very significant area in the lives of their owners,
because they provide them with food and create employment possibilities, especially for women,
youth, and the elderly.
Fig. 3 – Mini-plantations of grapevines close to Srebrenik, 2013 (Source: R. Nurković, 2013).

Fig. 4 – Average size of agricultural land in Bosnia and Herzegovina, 2013 (Source: Agency for statistics of Bosnia and Herzegovina, 2009).

Fig. 5 – Farm structure in Bosnia and Herzegovina according to area in ha, 2015 (Source: Agency for Statistics of Bosnia and Herzegovina, 2010).
As can be seen in Figure 5, more than half the households had less than 2 hectares in 2010. At the beginning of the twenty-first century the situation was much more unfavourable considering the Law on Inheriting Land, which states that each child inherits an equal part of land and he/she has a right to do with it as they please. It is very important to emphasize the very unfavourable structure of agricultural property size. The average size of a property is 3.1 ha, and properties are usually divided in 7 to 9 parcels, a main element in slowing down the modernization of this sector.

After 1995, agriculture began reviving, the process being ruled by projects of co-operative recovery in Bosnia and Herzegovina. The whole co-operative sector contains 348 cooperatives, their recovery being assumed by the entity of co-operative unions formed immediately after the war and the establishment of a peaceful life for the population. Recovery of the general co-operative sector, including the agricultural one, was rather slow after the war as pre-war co-operatives were in the lead. Today, it is very difficult to determine how much of the property belongs to co-operatives, and how much to individuals and legal entities. This acts as a brake for many old co-operatives to turn into modern business organizations, and it is doubtful whether their plans can solve the problem. In every case, the monotony represents a very good copy of the ex-Yugoslavian and the same Bosnian and Herzegovinian co-operative system: however, it is completely different from that offered by the “old-Yugoslavian” Bosnia and Herzegovinia, especially the overall co-operative system of Old Yugoslavia. Available data point to it, as, in 1939, from the total of 9,359 various types of agricultural co-operatives, almost 2,080 (22%) had some specialized manufacturing-processing orientation (crop, wine-vineyard, orchard, oil, livestock-pasture, turnip, rosemary, machinery, and other). This is exactly the reason why such co-operatives should be taken, in a structural sense, as an example to follow (Bečirović S., 2000).

The restructuring processes of rural areas in Bosnia and Herzegovina have developed with various intensity and with different outcomes in several areas in terms of the mutually dependent impact of several factors. Amongst them, three had a basic meaning:

– Development specificities caused by differences in the socio-political order at the beginning of transition, or government-planning management in the former communist countries;

– Forms of deconstruction of the collective order of complex government formations in times of peace or war;

– The recent position of certain countries within the European integration processes (Lukić, A. 2010).

This also prevents the establishment of active land markets, which, again, prevents farmers from obtaining and using modern technology and modern know-how capable to ensuring benefits from the market economy. Besides, only 0.4% of the lands are irrigated. All of these are reasons for the low competitiveness of the agricultural sector in Bosnia and Herzegovina. According to BiH Statistical Agency 2004 data, in the period from 2001 to 2015, all economic sectors recorded economic growth. The average national growth in the mentioned period was 28.2%, while, during the same period, growth in agriculture was only 13.8%, that is the lowest among all sectors. As a result, the structure of GDP in Bosnia and Herzegovina changed significantly after 1995. According to official statistical data, the share of the agricultural sector is significantly low. However, even though the situation in both entities is generally developing in a similar direction, there still are noticeable differences. The primary sector (agriculture, fishing, forestry) is still one of the more significant ones in the Republic of Serbia (20% GDP), while the same sector has fallen below 10% in the Federation of Bosnia and Herzegovina.

4. INFRASTRUCTURAL ASPECTS OF DEVELOPMENT IN THE RURAL AREAS OF BOSNIA AND HERZEGOVINA

A great significance for rural development of Bosnia and Herzegovina has traffic. Considering its being weaker in rural areas, the transport of goods and services is much more difficult in most such areas. Especially so, as highly negative consequences affect the industry dislocated in rural areas and
its settlements. Roads, railroads, caravan roads are known as transport routes. They are considered one of the most important factors that encourage and influence the development of rural areas. The location of rural settlements depends primarily on transport lines, which considerably increase the efficiency of a settlement and open up a series of possibilities for its residents. An easier approach is to see how settlement impacts morphology, health and the trade network, and also many services and institutions. So, it is obvious that transport lines have a multiple significance and impact on rural communities (Fig. 4).

Transportation is undoubtedly necessary in order to achieve rural development in Bosnia and Herzegovina, however, the way in which different components of development interact is influenced by the various roles played by deseveral institutions. An improved transportation network brings rural settlements closer to the source of politics, economy and society. This stimulates changes in the economy of rural areas. The process of rural change is encouraged by the possibilities offered to rural communities to improve their socio-economic standard. These possibilities come in the form of improved agricultural manufacturing, greater non-farming employment, market expansion for products, a greater market of formal loans, higher land values, better accessibility to education and healthcare, and a higher living standard (Munsi S., 1975:54)

![Road network diagram](image)

**Fig 6 – Transportation improvements in the rural areas of Bosnia and Herzegovina, 2015.**
The transportation infrastructure is also an important factor of the social-economic sustainability of rural areas. Manufacturing and services depend on market accessibility. In return, tourism and settlement greatly depend on the accessibility of Bosnia and Herzegovina rural areas. At the same time, increased accessibility is connected with increased competition with other areas. This may be a challenge for rural areas in which agriculture prevails and also in those areas that discharge different activities. The traffic system is of great importance for the economic and social development of every country. The development of a traffic system enables greater mobility for the rural population, in the countryside itself, and to the urban area. The process of daily trips from rural areas to employment in the urban requires good road connections and a developed bus lines of suburban traffic.

The analysis of traffic for rural development clearly reveals that, as physical manufacturing was continuously increasing, freight transport in Bosnia, beside passenger transport, increased as well. The intensive growth of work in industry has led to a numerical increase of rural people engaged in traffic, hence, the greater share of Bosnia and Herzegovina (B&H Statistical Agency from 2007) in the total GDP. Along with extremely high motorization, besides the increase of daily trips, and the number of people employed in industrial enterprises, the suburban and rural settlements along the roads have also developed, which made them more accessible to residents from remote areas. The basic means of transport that connects rural areas to urban centers are the buses, massively used in the suburban and urban transport of most travelling-workers and students (Deichmann J. I., 2012).

5. DEVELOPMENT PERSPECTIVES IN THE RURAL AREAS OF BOSNIA AND HERZEGOVINA

Development trends in the rural areas of Bosnia and Herzegovina, can be seen in many different aspects. Currently improvement of infrastructural development in rural areas is being advocated. From the previous industrial development, some of the minor industrial piths were preserved, and they may be a good basis for future processes in rural areas. Creating new job opportunities in the rural areas of Bosnia and Herzegovina in the upcoming period must be based on energy potentials, on the one hand, and on a qualified labour force on the other, that is, economic success of smaller enterprises with lesser location demands. Considering that, a smaller economy in local communities will emerge in the upcoming period. Still, the priority should be given to the food industry operations which would rely on the location of land and water (Velagić, I, 2011).

On the other hand, smaller industrial operations for food processing – milk, meat, fruit, potatoes and other vegetables – could be developed in rural areas, and their activities could successfully fill existing gaps in Bosnia’s markets and wider. This would, amongst other things, also mean opening smaller industrial operations (textiles, graphic, and wood industry) on bigger locations. In the future, development, should search for a common solution to the manufacturing of food products in the food industry. Food industry factories in Bosnia and Herzegovina should not be allowed lose to their production at times when there are excellent location conditions for them. Considering the existence of location factors, the existing industry operation structure, and the qualification structure of the labour force, the smaller food industry should operate on a lower scale (Sarajčić S., 2006).

The rural development of Bosnia and Herzegovina in the future economic development must go in the direction of positive de-industrialization, that is, in the direction of a more equal number of employees in rural areas. Incentives and support systems to agriculture should be synchronized, and those incentives should be directed towards registered agricultural properties. Also, it is necessary to establish an agricultural market information service to strengthen the government capacity of collecting statistical data and analyze policies in modern agriculture. Science and technology are an extremely important dimension of life quality in the rural areas of Bosnia and Herzegovina. They will become more dominant with the further development of civilization, because they will find adequate
solutions to all living conditions of rural people in. The influence of this dimension on the quality of life has a direct and indirect impact. In the future, this dimension will directly influence the quality of life in striking a balance with the natural environment and create a sustainable development for human communities, and a safe quality of life for future generations.

Considering that each sector of modern society is intensively influenced by the development of science and technology, rural areas make no exception. For example, we must study the possible effects of modern biotechnology on agriculture, the raising of cattle and the food industry, if we wish to get an insight into the process of rural development. Important questions in this study refer to new technologies, and the extent of their impact especially on rural development. Changes that the modern information technology has made in some sectors of the rural economy are already visible, e.g. direct marketing and tourism, with new possibilities for economic growth in the rural areas of Bosnia and Herzegovina. These trends must be analyzed, in order to consider further development and answer the question as to which sectors of rural development could be included in it. For example, it is assumed that rural areas located on the edge of bigger cities will experience a new sub-urbanization due to the increase in telecommunications, or through home-working using tele-communication channels. A special dimension of rural growth has the impact of globalization. In the future, The World Trade Organisation (WTO) will increase its pressure on the agriculture of Europe. Besides, other trends of globalization are also important. Firstly, it is the information technology which may lead to market expansion for certain rural products and services, such as tourism and high value products in Bosnia and Herzegovina.

6. CONCLUSIONS

During the middle of the nineteenth century, Bosnia and Herzegovina was mostly an agricultural and rural country. Three quarters of the population lived in rural areas, and more than half of the total population have based their existence on agricultural manufacturing. Complex and mutually intertwined processes of industrialization, urbanization, de-agrarization and de-ruralization, have resulted in deep changes in the image of Bosnia and Herzegovina. Between 1953 and 2001, the share of the rural in the total population decreased from two thirds to 42–49%, and the share of the pure agricultural one lowered ten times, from 56.1 to 5.5%. In the sixties and seventies, the climax of the agrarian exodus, just like in other Balkan countries, was registered together with the development of industry and the tertiary sector, as well as with migrations abroad. General and agrarian policies did not support private country-side properties, affecting the social and economic impoverishment of the rural area, alongside with the above-mentioned processes. As a consequence, most modern studies emphasize the negative demographic, economic and social characteristics of the Bosnian and Herzegovinian rural area at the beginning of the twenty-first century.

It is necessary to focus on the specific infrastructural necessities of the rural areas, especially on the serious lack of water supply and of a sewarage system, which still affect a smaller part of the rural population. Public services, responsible for water supply, sewarage and urban planning, should be key-partners in solving this issue. In the rural areas of Bosnia and Herzegovina, early education, at home and in pre-school institutions, should be improved, which should be done by the national education system and social institutions in partnership with the local communities. For rural areas that lie closer to urban centers, the development of urban jobs and services might represent the most efficient and economic way of supporting the rural population, and, at the same time, providing direct support to middle-sized cities, where economic development is the weakest. In order to attain this goal, rural development planners should leave aside the traditional land-based approach to the rural issues, and take into account the best experiences of economic development and job creation, wherever those experiences may be.
Improvements in rural transportation and communications would have a significant benefit. By shortening travel time to urban centers, many more village residents could have economic possibilities and provide services to the urban population. The topography of Bosnia and Herzegovina makes the construction of roads very expensive, however, the improvement of roads and of public transportation would greatly contribute to reducing the unattractiveness of rural areas. Considering that funds for rural development are strictly limited, Bosnia and Herzegovina should attempt to include rural questions and tasks in their general policies on transportation, education, healthcare, and economic development. Such policy-makers should carefully assess all costs, including the fact that a decrease in the growth of urban centers will affect neighbouring rural communities as well. They must also consider that the rural areas produce almost half of the GDP, and therefore, they will be directly taxed in order to finance rural development measures. That is why, policies should focus not on attempts to resist the inevitable, but rather on helping people adjust to changes and make the best use of new opportunities those changes may bring about.

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