

Traveling To the City, Factors Affecting the Mobility of Rural Residents

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ABSTRACT : *It is a process in which residents of rural environments regularly travel to urban centers for work, education, services, or a better quality of life. This paper analyzes the rural-urban mobility of the inhabitants of one village near Bitola, to determine the factors affecting their daily or occasional movement to the city. The survey is conducted through a questionnaire that covers demographic characteristics (age, occupation, level of education), economic conditions (height of income, household size), as well as transportation options (ownership of a car, type of transportation used, frequency of travel). Additionally, the reasons for traveling to the city, work, education, health services, shopping and administrative obligations are analyzed, as well as the degree of satisfaction with existing transport services. The results indicate that mobility is most strongly conditioned by economic opportunities, the availability of one's own transportation and the quality of public transport. The main causes of dissatisfaction were also identified, such as irregular bus lines, high costs and limited services in rural areas. The findings indicate the need for improved transport infrastructure and increased public transport provision to promote mobility and quality of life of the population in rural areas.*

KEYWORDS Rural Areas, Survey, People, Mobility, Bitola

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I. INTRODUCTION

Population mobility is one of the key factors shaping the quality of life, access to services and overall development of a community. In modern conditions, rural-urban mobility, i.e. daily or occasional travel from village to town, is of increasing importance, especially for residents of neighborhoods that are close to larger urban centers. Travel to cities is often related to work, education, health services, administrative duties and other needs that cannot be fully met in rural areas.

Although proximity to the city offers certain advantages, mobility often faces various challenges: irregular bus lines, high transportation costs, insufficiently developed infrastructure and dependence on one's own car. These factors directly affect the daily life, productivity and opportunities of the inhabitants.

The village of Gorno Orizari, located in the immediate vicinity of Bitola, is an example of a settlement where many residents regularly travel to the city. Despite the geographical connectivity, residents face problems related to public transport, limited transport services and financial costs that affect their mobility. Analysis of these conditions is particularly important to understanding how local conditions affect the daily activities of the population and what measures could be taken to improve transport solutions.

Gorno Orizari is a settlement (village) belonging to the municipality of Bitola and is geographically located north of the town. Although historically it started as a village, today it is considered as a suburb, close to the urban core of Bitola. At the 2021 census, Upper Orizari had a population of 2,521 people. The structure by age groups is: 0-14 years - 401 persons; 15-64 years - 1,785 persons; 65+ years - 335 persons. Ethnically, the population is predominantly Macedonian. Historically, the village was founded in the 19th century, during the period of Ottoman rule. In 1900, according to statistics, there were only 236 inhabitants.

Gorno Orizari is a neighborhood in the city of Bitola located at the exit to Prilep on the M-5 highway. In this neighborhood are located the schools - Todor Angelevski - Gorno Orizari, the factory "Lozar Pelisterka" and Sokotab. The Bitola-Skopje railway passes through this neighborhood. South of this settlement are the Bitola New and Old Holy Week Cemeteries, as well as the Church of St. John the Evangelist. - It was Sunday. Formerly a village, now a suburban settlement in Bitola, Gorno Orizari is located north of Bitola (at a distance

of only 2 km), east of the exit road to Prilep, and the limited road connecting Bitola with Ohrid and Resen (west) and Prilep (north).

Due to its proximity to Bitola, Gorno Orizari serves as a 'residence' for people working, studying or using services in the city, while living in the wider suburban/rural environment. This means that mobility - i.e. transportation to and from Bitola - is of great importance to the residents. Figure 1 shows the area and location of the Gorno Orizari rural environment.

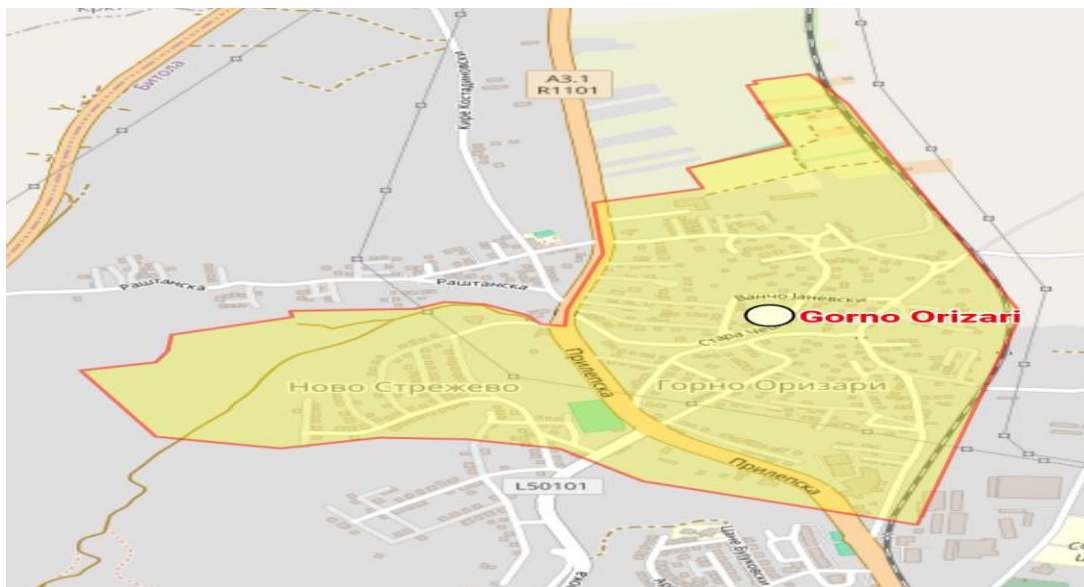


Fig. 1 Boundaries and geography of the Gorno Orizari rural environment

II. MATERIALS AND METHODS

The survey was carried out to determine the factors affecting the mobility of residents from rural areas near the city of Bitola, with special reference to the village of Gorno Orizari. To that end, a quantitative research approach was applied, which allows the collection, processing and analysis of data through a standardized research tool.

The reasons why this rural environment has been put under analysis are the following:

- Because it is in the immediate vicinity of the city of Bitola and the residents make daily mobility.
- Considering the 2021 census, we could notice that of the 100% children are 15.9% and 70.8% are people aged 15-65, this knowing that we have a young and working population that makes more mobility.
- The continuous improvement of living conditions, which leads to an increase in the number of residents living in this village.

The survey method is one of the most used techniques for collecting data on the attitudes, habits and socio-demographic characteristics of the respondents.

The questions were combined: part closed-ended questions with suggested answers, part multiple-choice questions, and several open-ended questions that allowed respondents to provide more specific comments.

Groups of questions that were covered in the research are as follows:

- demographic data (age, level of education, occupation),
- economic situation (height of salary, number of family members),
- transport options (ownership of a car, type of transport used),
- frequency of travel to Bitola, most frequent locations,
- reasons for travelling (work, education, health services, shopping, etc.),
- problems and proposed solutions to improve mobility.

The forms were filled out:

- with direct field surveying,
- with personal contact in households,
- or with short interviews in places where people move (shops, bus stations, local buildings).

This method of data collection allowed a larger number of respondents to be covered in a shorter period of time. Figure 2 shows the implementation of the survey in the rural area of Gorno Orizari.



Fig. 2 The implementation of the survey in the rural area of Gorno Orizari

III. RESULTS AND DISCUSSION

The survey carried out gave the following results:

- Gender: The largest percentage of respondents were men, 63%, while women were 37%.
- Age of the respondents: 47% of the respondents were aged 36- 65, 33% were over 65, 17% were aged 18-36 and a very small percentage were under 18. This is shown in figure 3.

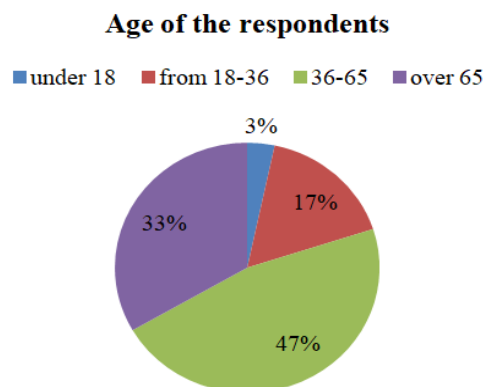


Fig. 3 Age of the respondents

- Occupation: The majority of respondents are pensioners 54%, employed 30%, and a small percentage of the remaining options offered. This is shown in Figure 4.

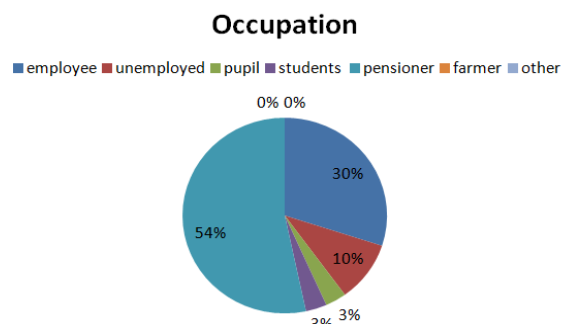


Fig. 4. Occupation

- Education level: The survey showed that most of the respondents have a secondary education, 53%, a large percentage have a primary education, 27% and a very small percentage have a higher education.
- Number of family members: Most families numbered four, of whom at least two were employed and travelling outside the living area.

- Monthly income: As monthly income most of the answers were from 30 to 50 000 denars.
- If there are any students in the family, what vehicle do they use to travel to school? Most of the respondents in their family do not have any students, 53%, while the others who did most often travel by public transport, 27%, and by car, 17%.
- What vehicle do respondents use to travel to the city, at the top of the pyramid is the car, then public transport.
- Reason for travelling to the city: 53% agreed to purchase, 19% to work and 14% for health services, as shown in Figure 5.

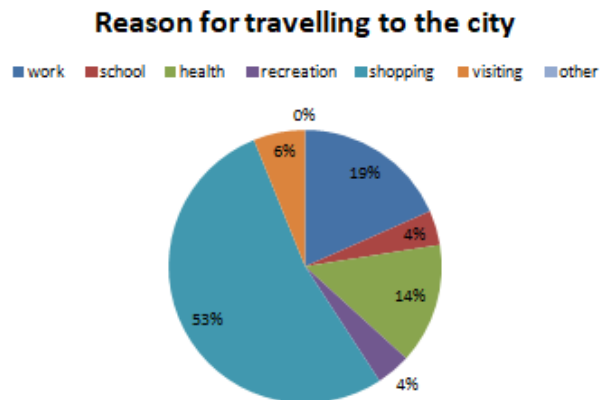


Fig. 5 Reason for traveling to the city

- Most of the respondents had a car as their vehicle, some of the respondents had two cars in their family.
- If a minivan is introduced, most of the subjects will use it.
- It can be said that the inhabitants of Gorno Orizari, on a daily, weekly and monthly level go to Bitola 3 or more times.
- On the question of the reason why you are not satisfied with the mobility to the city, the answers were different: mainly because of the poor infrastructure and not having a driver's license.
- Gorno Orizari residents have access to public transport, but rarely use it, the survey showed. The same people feel that to improve living standards, more jobs and higher wages are needed. Figure 6 shows the line of public urban transport No. 4 that serves the residents of Gorno Orizari.

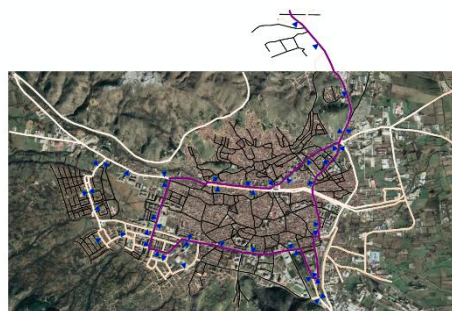


Fig. 6 Line 4 of the public transport

- Lines of desire to travel

The residents of Gorno Orizari, besides going to work, visit Bitola also to other destinations: Brusnicka, market, hospital, Epinal, Pedagogical Faculty, Taskforce, Broad Sokak, Javor, Vero, Faculty of Information and Computer Technologies, Secondary Medical School. This is shown in Figure 7.

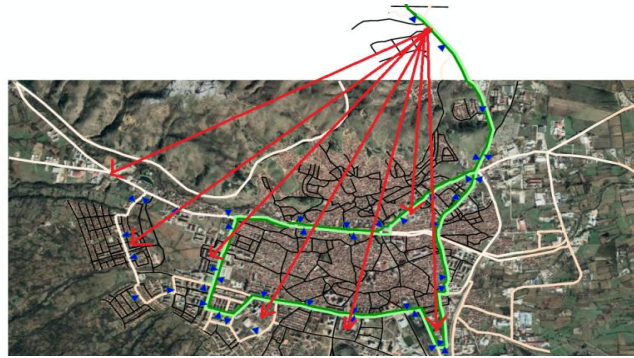


Fig. 7 Line 4 of desire to travel

➤ The problems faced by the inhabitants of Gorno Orizari are several aspects of irregular public urban transport, drivers do not adhere to the timetable or arrive early or very late at the parking lot, poor infrastructure, etc.

IV. CONCLUSIONS

The movement of the population from rural to urban areas is a complex process that is conditioned by multiple economic, social and infrastructural factors. The analysis shows that the main reasons for such mobility are improved employment opportunities, access to education, health and administrative services, as well as the need for greater connectivity and quality of life. Although rural areas offer a peaceful environment and lower living costs, their limited infrastructure - such as irregular public transport, weak road network, inadequate services and lack of social content - often encourages residents to travel or even move to urban centers.

At the same time, the results show that mobility depends not only on physical distance, but also on the availability of means of transport, the economic situation of households and the quality of public infrastructure. Residents who own personal vehicles have significantly greater freedom of movement, while those who depend on public transport are often dissatisfied due to irregularity, poor capacity or lack of coverage of certain terms.

Overall, rural population mobility is an indicator of the development and functionality of local communities. Improving transport infrastructure, increasing the availability of public transport and developing basic services in rural areas could significantly reduce the pressure on cities and create more equal living conditions.

In this paper the subject of analysis was the rural environment of Gorno Orizari, in the immediate vicinity of the town of Bitola. Based on the survey conducted in the village of Gorno Orizari, it can be concluded that residents are generally dissatisfied with the quality of urban public transport services. Although a bus line exists and formally connects the village with Bitola, residents usually do not use it, mainly due to the irregularity, delay or premature departure of vehicles, as well as due to frequent technical problems. These shortcomings reduce confidence in public transport and motivate most households to rely on their own car as a primary means of transport. The survey showed that the most common reasons for traveling to Bitola are going to work, shopping and using health services. These needs require safe, predictable and affordable transport, which in the current situation is not fully provided. Additionally, residents also highlighted the poor infrastructure in and around the village - damaged roads, insufficient street lighting and insufficient safety for pedestrians, which further complicates the journey.

From the opinions gathered it can be concluded that the residents have clear proposals for improving mobility. The most common recommendations are:

- improvement of local infrastructure; the purchase of new, technically correct vehicles for the public city transport.
- timely arrival of buses in a clearly defined order.
- provision of free transport for pensioners throughout the day.
- introduction of other carriers for more competition and better service; the introduction of real-time queueing information.
- Establishing a regular service on Sundays and public holidays.

In summary, although Gorno Orizari is spatially close to Bitola, problems with public transport and poor infrastructure significantly affect the daily mobility of the population. Improving these segments would enable greater connectivity, reduced reliance on personal vehicles and a better quality of life in the village.

This indicates that future policies should be geared towards balanced territorial development, which will ensure better connectivity, equal opportunities and greater social and economic integration of rural settlements.

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