



Navigating the Challenges of Shrinking Cities: Insights from Zarasai, Lithuania

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Executive Summary

The research report presents a comprehensive study conducted in the Zarasai District of Lithuania, employing mixed methods. The study aimed to understand Zarasai's history, culture, government, media trends, and the challenges it faces due to population decline. The research utilized surveys, interviews, focus group discussions, and a media analysis to gather data. The findings provide valuable insights into the town's potential, challenges, and perceptions, contributing to key concepts such as migration theories, smart shrinking, place attachment, well-being, and sustainable development.

Introduction

Aims of the study

The study focuses on evaluating the overall quality of life and well-being of residents in Zarasai, Lithuania. The main aim is to assess the various aspects that contribute to residents' satisfaction or dissatisfaction with life in the town. The sub-aims of the study include:

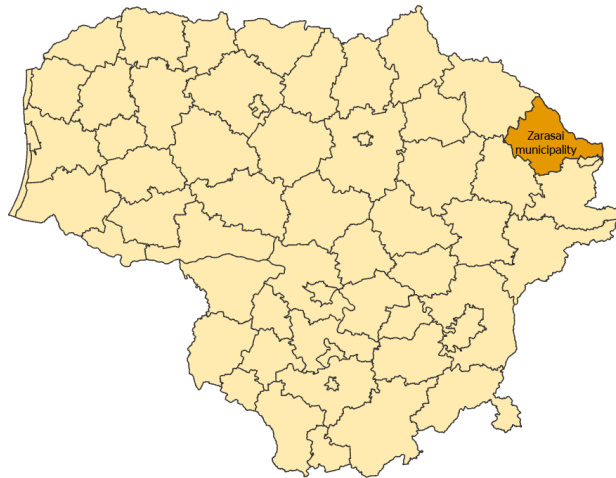
- Determining key factors influencing residents' overall satisfaction or dissatisfaction with life in Zarasai. This includes investigating the aspects that have the most impact on their wellbeing.
- Understanding local perceptions and experiences of population decline to gain insights into how residents perceive and cope with the resulting challenges.
- Assessing residents' access to healthcare, education, and other important services which are vital for maintaining a high quality of life and wellbeing.

- Understanding how people interact with government and media and how these entities influence the development and public perception of Zarasai.
- Understanding community engagement and youth involvement in the development of the region to shed light on the role of community engagement and the active participation of individuals in shaping the future of Zarasai.

Case study area: Zarasai, Lithuania

About the location

Zarasai, a small town located in northeastern Lithuania, has a population of 6,077 people (Statistics Lithuania, 2022). It borders Latvia, covering an area of 1,339 sq. km. Situated on a peninsula surrounded by four lakes, the biggest of which is Lake Zarasas, the town is known for its picturesque and pristine nature, with many small rivers and other lakes in the surrounding area.



Map 1: Location of Zarasai in Lithuania

While venturing through the town center, one will come across significant historical landmarks such as the Church of St. Anthony of Padua and the old town hall. It is important to note that this district faces certain challenges and limitations attributed to a declining population. Nonetheless, it remains an intriguing tourist attraction, offering occasional cultural events, a modest cultural heritage, and a few noteworthy points of interest. The region exhibits a diverse mix of ethnic groups and strives to maintain a modest tradition of music, dance, and storytelling despite its current circumstances.

Relevant statistics

Zarasai experienced a population decline of 17.81% from 2011 to 2021, with the population standing at 15,114 in 2021 (Statistics Lithuania, 2022). The median age of 45.8 years indicates an aging population, which has implications for the labor force, healthcare, and other services. Notably, there was a significant increase in the number of elderly people compared to 2011. The region faces economic challenges, as reflected by the higher unemployment rate of 21.5% in 2021, surpassing the national average of 7.1%. Furthermore, there is a notable vacancy

rate of 23.6% in dwellings (Statistical yearbook of Lithuania, 2022), presenting opportunities for repurposing vacant buildings. While the town boasts a well-educated population, with a significant proportion holding tertiary degrees, the educational attainment of 22.3% among individuals aged 30-34 falls slightly below the national average (Statistics Lithuania, 2022). Additionally, Zarasai grapples with a high suicide rate, recording the highest average from 2011-2016 among municipalities in Lithuania (Suicide rates statistics in Lithuania 2011-2016).

In Lithuania, the term "eldership" denotes the smallest administrative division within a municipality. Within Zarasai, there are a total of 10 elderships, each representing a distinct local area. Table 1 presents the male and female population data for Zarasai elderships in both 2011 and 2021 (Statistics Lithuania, 2022).

| Zarasai elderships | Male population in 2011 | Female population in 2011 | Male population in 2021 | Female population in 2021 |
|------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
| Zarasu eldership | 1020 | 1069 | 946 | 947 |
| Suvieko eldership | 271 | 310 | 259 | 267 |
| Zarasai city eldership | 3213 | 3952 | 2685 | 3392 |
| Imbrado eldership | 470 | 476 | 407 | 388 |
| Dusetu eldership | 1244 | 1424 | 992 | 1099 |
| Salako eldership | 473 | 527 | 381 | 401 |
| Antalieptes eldership | 356 | 335 | 272 | 265 |
| Antazaves eldership | 488 | 515 | 384 | 394 |
| Deguciu eldership | 447 | 482 | 324 | 354 |
| Turmanto eldership | 624 | 694 | 453 | 504 |
| Total | 8606 | 9784 | 7103 | 8011 |

Table 1: Population Distribution by Age Group in Zarasai: 2011 vs. 2021 (Statistics Lithuania)

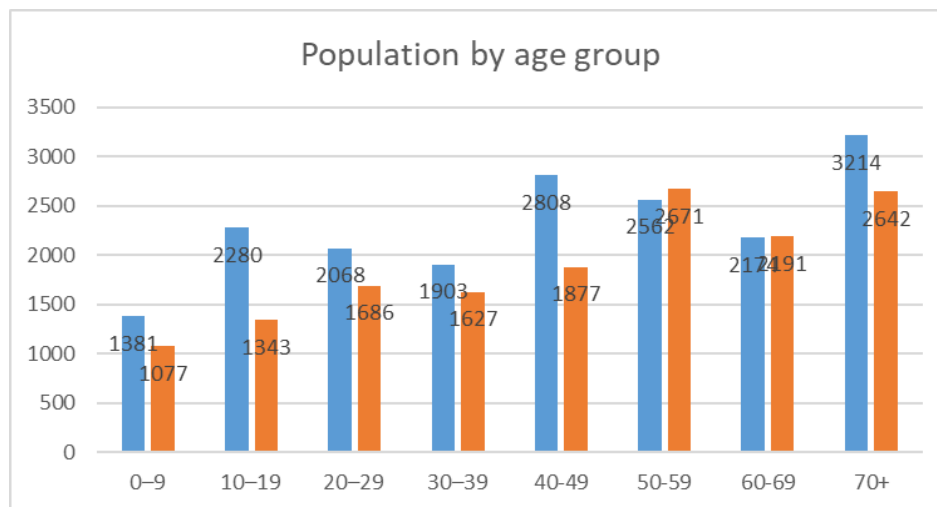


Figure 1: Population Distribution by Age Group in Zarasai - 2011 and 2021 (Statistics Lithuania)

Overview of Zarasai's Amenities, Services, and Cultural Offerings

| | |
|-----------------------------------|--|
| Healthcare | Hospital, clinics, and pharmacies offer various healthcare services |
| Education | Primary and secondary schools, kindergarten Zarasai Agricultural School for vocational training |
| Transport | Proximity to major highway Reliable bus and taxi system Regional transportation hub |
| Food, groceries, amenities | Diverse eateries and grocery stores Parks, playgrounds, and sports facilities |
| Leisure and entertainment | Cultural institutions: museum, cultural center, theatre Annual festivals and celebrations that showcase local traditions and cultures |
| Information services | Zarasai Public Library as a resource center that hosts events and educational activities for all ages such educational activities focused on literature and reading for children and teens |
| Tourism | Well-established tourism industry focused on natural beauty, cultural heritage, and outdoor activities |
| Culture | Rich cultural life, awarded as the first Lithuanian capital of culture in 2008 |
| Investments and Innovation | Increasingly attractive region for investors and developers Focus on sustainable development and agriculture |
| International partnerships | Active partnerships with various European cities for cultural exchanges and cooperation in tourism and planning |

Table 2: Overview of Amenities, Services, and Cultural Offerings in Zarasai

Challenges

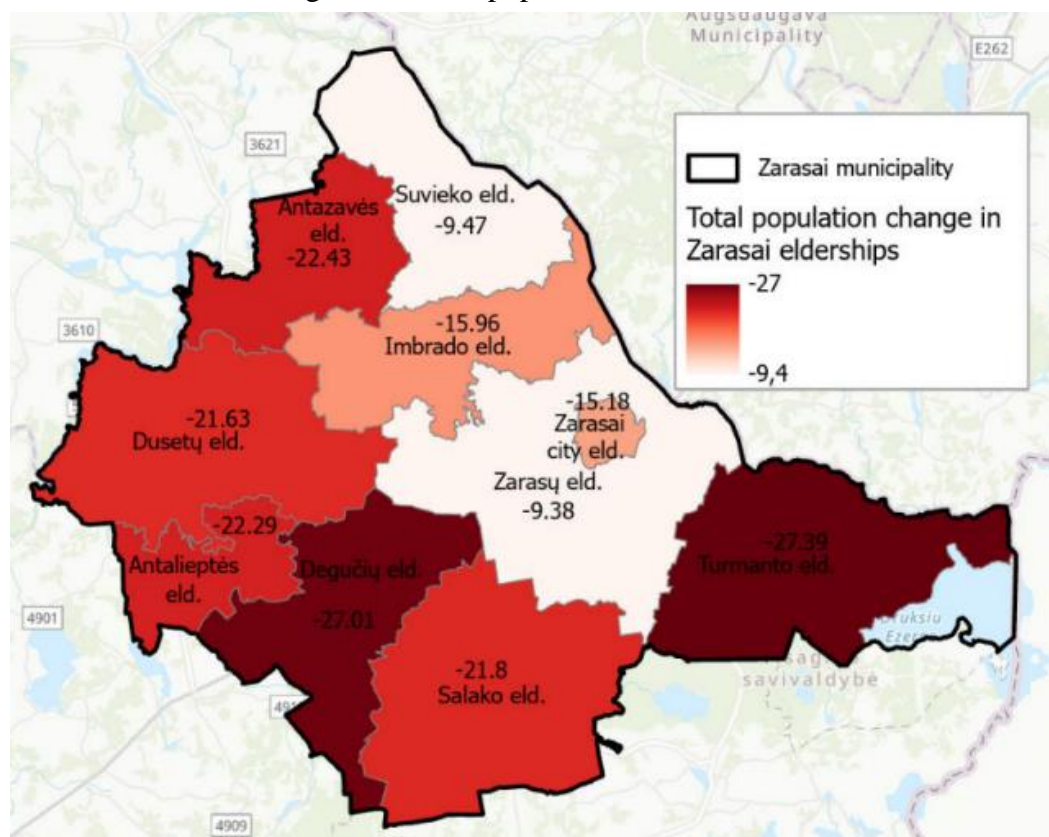
A decline in population over the past few decades has led to some economic and social challenges in the region. Zarasai faces a significant challenge with a high at-risk poverty rate, exceeding 33%. This stands in contrast to Vilnius City and District, where the at-risk-of-poverty indicator is the lowest, with rates of 13.5% and 17% respectively. The economic difficulties in Zarasai create a situation where individuals may feel compelled to migrate in search of better opportunities elsewhere. This struggle with poverty could contribute to the population decline in Zarasai, as residents seek improved economic prospects and living conditions elsewhere.

Locals describe the town as "dead in the winter," indicating a significant decrease in activity and liveliness during the winter season. This can have implications for

the town's economic and social vibrancy, potentially impacting its overall appeal and vitality during this time.

Zarasai encounters difficulties in the areas of healthcare, housing availability, and education opportunities. The healthcare system may face limitations, while the availability of rental houses is insufficient. Additionally, the town experiences a lack of educational options, and there have been instances of school closures.

Another challenge is the limited variety of prices, making it difficult for low-income groups to access essential services. This disparity in pricing can further exacerbate inequalities within the community, hindering access to necessary resources for certain segments of the population.



Map 2: Population Change in Zarasai Elderships from 2011-2021, based on data from Statistics Lithuania and created using GIS technology

Relevant Theory and Literature

Economic migration theory and push-pull theory

Economic migration theory examines the role of economic factors in driving migration. It suggests that individuals or groups migrate in search of better economic opportunities, such as higher wages, improved job prospects, or access to resources (Hatton and Williamson, 2005). Economic disparities between regions or countries can create a "pull" effect, attracting individuals to migrate to areas with better economic conditions. On the other hand, the push-pull theory focuses on the interplay between push and pull factors in migration decisions (Massey et al., 1993). Push factors refer to the circumstances or conditions in a person's place of origin that compel them to leave, such as poverty, political instability, conflict, or lack of job opportunities. Pull factors, on the other hand, are the positive attributes or opportunities in a destination that attract migrants, such as better living standards, employment prospects, education, or political stability. The connection between economic migration theory and push-pull theory lies in their shared focus on understanding the motivations and factors influencing migration. Economic migration theory emphasizes the role of economic opportunities as a driving force, while push-pull theory recognizes the complex interaction of both push and pull factors in shaping migration patterns. Together, these theories provide insights into the economic, social, and environmental dynamics of migration in Zarasai.

Wellbeing

Wellbeing is a broad and multifaceted and subjective concept that encompasses various aspects of an individual's life, such as physical, mental, social, and emotional wellbeing (Diener et al., 2002). It is often used as a measure of a population's overall quality of life and can be influenced by a range of factors, including economic conditions, access to healthcare, social support, and environmental factors. In the case of smaller or rural places like Zarasai, understanding the wellbeing of the local population is especially important, as these areas often face unique challenges that can have a significant impact on residents' quality of life (Erwin et al., 2010). For example, the decline in population and economic opportunities in Zarasai can lead to a sense of isolation and decreased access to essential services, such as healthcare and education. These challenges may affect residents' physical and mental wellbeing as well as their overall satisfaction with their quality of life.

Social Capital Theory and Place Attachment

The social capital theory focuses on the resources embedded within social networks and the benefits individuals derive from their social connections (Dubos, 2017). It emphasizes the value of social relationships, trust, and norms in enabling collective action and individual well-being. Social capital theory suggests that individuals with stronger social ties and networks are more likely to have access to resources,

opportunities, and support, which can influence their migration decisions and experiences.

The theory of place attachment proposes that people develop emotional bonds with the places where they live or have lived, which can influence their sense of identity, well-being, and behavior (Mihaylov & Perkins, 2014). In the context of shrinking populations, place attachment can be relevant because it can affect whether people choose to stay in a place or leave it, as well as their willingness to invest in its development or resist changes that they perceive as threatening to their attachment.



Figure 2: Key aspects of social capital contributing to community development and well-being

The connection between Social Capital Theory and Place Attachment lies in their focus on the role of social relationships and connections in migration processes. Network theory examines the structure and influence of social networks on migration, while social capital theory explores the resources and benefits derived from these networks. Both theories recognize the importance of social ties in shaping migration patterns. Place attachment, on the other hand, complements these theories by emphasizing the emotional and psychological aspects of individuals' relationship with a place, which can influence their migration decisions and attachment to new locations. Together, these theories provide insights into the complex interplay between social relationships, personal connections, and individuals' attachment to specific places in the context of migration.

Smart shrinkage and ageing populations

Smart shrinking, a strategic approach to managing population decline, improves residents' quality of life (Shucksmith et al., 2018). It involves promoting entrepreneurship, developing innovative services, and leveraging natural and cultural assets. This is especially significant in rural areas with distinct advantages like natural and cultural heritage, renewable energy resources, and appealing living environments. To unlock the potential of rural areas amidst depopulation, ageing, and economic stagnation, a proactive and forward-looking approach is crucial (Swagemakers et al., 2018).

Rural areas must adopt flexible approaches, especially in health and social care, to meet the needs of an ageing population (Steiner & Teasdale, 2019). Collaboration, embracing technology, and partnership work are essential. The rural economy plays a crucial role in supporting older people through employment, social networks, and a sense of identity (Shucksmith et al., 2018). Strategies are needed to attract businesses, entrepreneurs, skilled workers, and support local enterprises and community initiatives.

This approach encompasses diverse strategies and interventions, including economic diversification, entrepreneurship promotion, infrastructure improvement, cultural and social enrichment, and preservation of natural and cultural heritage. By adopting a proactive and collaborative mindset, rural communities can overcome challenges linked to depopulation and economic stagnation, creating sustainable futures that capitalize on their distinct assets and opportunities.

Sustainable development and nature-based tourism

The connections between sustainable development, employment, and tourism have gained significant attention in recent years. The public sector, particularly in healthcare, education, and social services, plays a crucial role in promoting rural employment and sustainable development (North et al., 2013). Regions with a thriving tourism industry can benefit from policies facilitating eco-tourism or cultural tourism, while areas rich in natural resources may require policies promoting sustainable forestry or agriculture.

Collaboration among small towns and villages is a key strategy for addressing challenges related to shrinking populations and limited economic opportunities (Jaszczak et al., 2021). By sharing resources and expertise, communities can develop sustainable and resilient strategies. Additionally, place-based development

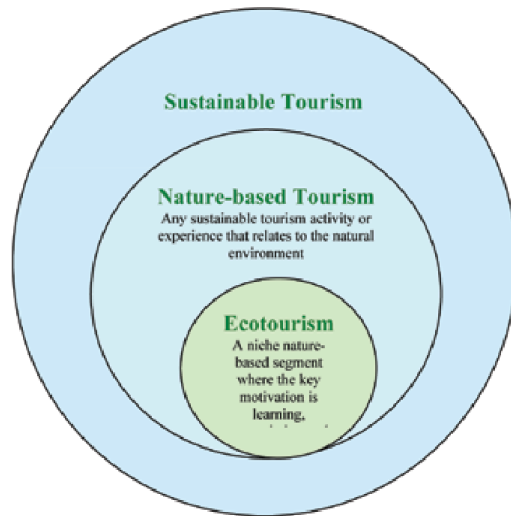


Figure 3: Positioning of nature-based tourism and ecotourism within the framework of sustainable tourism (Zewdie & Kindu, 2011)

strategies that promote local assets, such as cultural heritage and natural landscapes, are important for sustainable development (Vaitkunaite et al., 2021).

Achieving sustainable development requires coordination across policy domains, including agriculture, forestry, environment, energy, transport, and tourism. Engaging diverse stakeholders, such as farmers, NGOs, communities, and businesses, is crucial for successful sustainable development initiatives (Buller and Hoggart, 2017).

Methods

The research team employed a mixed-methods approach to achieve the study's objectives, which involved surveys, interviews with residents and government experts, focus group discussions, and a brief media analysis. By employing a mixed-methods approach, the research team aimed to obtain a holistic view of the district, encompassing various perspectives and stakeholders.

Survey

A survey was conducted by the research team to gather insights and perceptions from the local population regarding the town. The survey encompassed various categories, including demographics, education, work, transport, quality of life and services, government, and media. It provided both quantitative and qualitative data to complement other research methods.

To ensure a wider reach and higher response rate, a web-based survey was chosen (Fleming & Bowden, 2008). The survey design followed academic guidelines outlined in texts such as "Designing quality survey questions" (Robinson, 2018). This approach facilitated access to individuals outside of Zarasai and enabled the gathering of data from diverse geographical locations.

To expand the survey's reach, participants were encouraged to share the survey's QR code with their acquaintances, including municipal employees, school students, residents, and service providers encountered during the research period. The survey included a combination of closed-ended questions capturing demographic

information and open-ended questions addressing topics such as government interaction, social media, quality of life, and local involvement in planning.

The student researchers, who are native Lithuanian speakers, translated the survey responses.

Interviews

Interviews in qualitative research offer rich and in-depth data, capturing participants' perspectives and experiences (Gubrium & Holstein, 2001). They enable the exploration of complex topics, uncovering unique insights and contextual understanding. Semi-structured interviews specifically also allow for clarification, probing, and adaptability, fostering a dynamic research process (Dearnley, 2005).

Using a semi-structured approach, we designed a question bank encompassing themes such as daily life, civic participation, community, culture, relationship with government, and media. These questions were carefully crafted in line with the theories and concepts identified in the literature review. During each interview, we selected questions from this bank based on the specific direction of the conversation. The duration of interviews varied from 15 minutes to an hour, accommodating the preferences and availability of participants.

Rather than transcribing the entire conversation, we took detailed notes on the key points discussed. This approach allowed us to capture the most important information while maintaining the integrity of the interviews. By conducting interviews with local residents in Zarasai as well as **expert interviews** with the mayor and municipality experts, we gained valuable insights into various issues including government affairs, healthcare, challenges faced by kindergartens, as well as aspirations and potential opportunities within the community.

Focus group discussion

We conducted a focus group discussion with seven local school students to explore their perspectives and experiences of life in town, assessing what aspects are effective and what needs improvement. The discussion included both prepared questions and spontaneous inquiries, covering topics such as mental healthcare, town innovation, seasonal trends, and career support. The purpose of the focus group discussion was to stimulate meaningful conversations and gather valuable insights from the students, specifically addressing themes like school schedule, after-school activities, career counseling, interest in town innovation, involvement with the Youth Council and government, future aspirations, and mental healthcare within the school. Creating a safe and inclusive environment was crucial to encourage open and honest participation. The focus group discussion provided a

platform for students to express their thoughts, contributing to a comprehensive understanding of their needs and perspectives.

Observation

Observation is one of the most important methods in social science, but at the same time, it is one of the most complex (Ciesielska, Boström & Öhlander, 2017). Our goal in Zarasai was to take a position of an outsider and we tried to observe the area from a distance and to be as open-minded as possible (Ciesielska, Boström & Öhlander, 2017). In practice, we did observation for instance by walking around the city and its surroundings trying to make some kind of relevant findings. That was one important part of this research, mostly for realizing the value of Zarasai's nature and surroundings. One way to do observation was also visiting a youth music festival concert. For this kind of observation, it is important that the researcher spend considerable time in the field and has the potential of adopting different roles in order to gain more understanding of the place and the people living there (Baker, 2006, pp. 171-189).

Media analysis

Lastly, the research team conducted a brief media analysis of news articles and social media pages such as Facebook and Instagram to get an overall idea of how the town was being portrayed in the media, both locally and nationally. This helped identify any biases or misrepresentations of the town's culture or challenges.

Data analysis

The data from the survey was analyzed using Geographic Information System (GIS) software and Excel. GIS allowed for the visualization and spatial analysis of the survey data, enabling the identification of patterns and relationships in the responses. Excel was used for data organization, calculation of descriptive statistics, and generating charts or graphs to present the survey findings.

For the interviews, a thematic analysis approach was employed. Based on the notes taken, key themes and patterns were identified based on the questions asked and the theories and concepts from the literature review that guided the interview design. The analysis involved coding and categorizing the data to identify recurring ideas and perspectives.

During the focus group discussion with school students, the responses were recorded and subsequently analyzed thematically. The themes discussed, such as mental healthcare, innovation, and career support, were examined to understand the students' perspectives and experiences. Similar to the individual interviews, key themes, and patterns were identified through the process of coding and categorization.

Observation data were analyzed through a qualitative lens. The researchers recorded their observations while exploring Zarasai and its surroundings, making note of relevant findings and insights. This approach allowed for the collection of rich, descriptive data about the town's nature, culture, and other aspects. The researchers aimed to adopt an open-minded perspective and immerse themselves in the local context during the observation process.

For the media analysis, news articles and social media pages were reviewed to gain an understanding of how the town of Zarasai was portrayed in the media. This analysis involved examining the content, tone, and representation of the town's culture and challenges. The findings from the media analysis provided additional insights into the external perception of Zarasai and helped identify any biases or misrepresentations.

The data analysis process involved a combination of quantitative techniques (GIS and Excel) for survey data, qualitative approaches (thematic analysis) for interviews and focus group discussions, and descriptive analysis for observation and media data. These methods allowed the research team to extract meaningful insights and draw conclusions from the diverse sources of data collected during the study.

Limitations

The study conducted in Zarasai, Lithuania, had limitations and weaknesses in the fieldwork situation, interviews, and translation, which could potentially affect the accuracy of the results. Firstly, the study was only conducted for a short period, which may not provide a complete representation of the quality of life and well-being of different demographic groups. Secondly, linguistic barriers posed a challenge to effective communication with participants, making it difficult to obtain comprehensive data and ask follow-up questions. Additionally, the lack of professional translators contributed to problems with translation, which could have resulted in misunderstandings and inaccuracies in the collected information.

Given these limitations, it is crucial to exercise caution when interpreting the findings and recognize that more data would be necessary to draw definitive conclusions about disparities that may exist among the different demographic groups in Zarasai. Nonetheless, some initial observations can be made, and the study provides a starting point for future research in this area.

Analysis and Interpretations

By conducting interviews with 28 residents, valuable insights were gained regarding the town's potential, such as nature-based tourism, youth initiatives, and winter activities. The interviews also highlighted challenges in the Zarasai District

such as seasonal changes and limited access to employment, education facilities, and healthcare. The survey, which garnered responses from 74 individuals, provided data on the local perspective of the government, quality of life, and the use of media for place branding. Expert interviews provided valuable information on the municipality's development plans, specifically with regards to shrinkage. Focus group discussion highlighted youth and student-specific concerns, and the media analysis provided data on how the community is perceived in media, shedding light on potential areas of improvement and the overall reputation of the municipality.

Key data from the survey

The survey, conducted from May 7th to May 10th, 2023, received 74 responses. The age range of respondents varied from 18 to 80 years old, with approximately 23% in the 18-34 age group, 32.5% in the 35-49 age group, 40.5% in the 50-65 age group, and 4% in the 65-80 age group.

In terms of gender, around 81% of the respondents were women, approximately 17.5% were men, and approximately 1.5% identified as non-binary.

Regarding length of residence in Zarasai, two respondents had been living there for 1-5 years, while five had a residence length of 6-15 years. Twenty respondents had been residents for 16-30 years, and thirty respondents had resided in Zarasai for 31-60 years. Additionally, twenty respondents had a residence of 6+ years, and two respondents had lived in Zarasai since birth.

In terms of area of residence, out of 74 respondents, approximately 50% live in the city center of Zarasai, approximately 46% live in the Zarasai district municipality, and approximately 4% have moved away.

Regarding employment status, approximately 88% of respondents stated they are currently working, while approximately 12% are not working.

In terms of transportation to work, approximately 53% of respondents use private transport, approximately 32% use other means such as car-pooling, biking, scooters, or walking, and only approximately 3% use public transport.

Among the respondents, approximately 23% have school-age children, while approximately 69% do not. Out of those with school-age children, approximately 20% transport their children to school using private vehicles, approximately 3% use the school bus, approximately 5% prefer walking, and approximately 3% use other forms of transportation.

Regarding satisfaction with education, approximately 27% of respondents agreed that they were satisfied, approximately 8% completely disagreed, approximately 5% did not agree, and approximately 16% neither disagreed nor agreed.

Regarding satisfaction with the government, approximately 9% of respondents expressed satisfaction, approximately 31% answered negatively, and approximately 59% remained unsure or had mixed perceptions.

Key data from interviews

The interviews conducted with various individuals in Zarasai provided valuable insights into the town's challenges, perspectives, and aspirations. Despite linguistic barriers at times, the residents of Zarasai were generally friendly and willing to share their experiences. However, the age group between 25-40 appeared to be less available for interviews. Here are the key findings from the interviews:

With residents

An unemployed mother in her 40s expressed concerns about waiting lists for kindergartens, lack of government funding for childcare, and disparities in financial support for adoptive and non-adoptive parents. She also mentioned high restaurant prices and the need to travel to larger cities for children's healthcare.

A man who returned from the UK during his senior years praised the healthcare facilities in Zarasai, highlighting their convenience and accessibility.

A surveyor from a nearby town discussed plans to build an electric car charging station in Zarasai, emphasizing the importance of nature in the area and mentioning job opportunities in remote work.

Elderly individuals expressed concerns about business closures but were determined to stay in Zarasai to be close to their families. They also praised the air quality and medical care in the town.

A Rotary Club member highlighted the declining population and job opportunities, particularly for young people. They emphasized the need for more investment and the challenges in attracting investments.

A local teenager expressed appreciation for the town's nature, water sports, music culture, and close-knit community. She mentioned the challenges of making friends but expressed a desire to return to Zarasai after studying elsewhere.

Families from the surrounding areas visited Zarasai during weekends, particularly on Sundays, to enjoy the open spaces and natural surroundings. The availability of services and facilities varied depending on the tourist season.

With people in the service sector

A knowledgeable museum employee shared insights into the town's industrial past, the presence of Jews in Zarasai, and the challenges of limited industries and employment opportunities.

The librarian at the local library discussed the library's offerings, challenges in finding new employees, and participation in various EU-funded projects. The library serves as a gathering place for children and older individuals and hosts events.

The Cultural Center organizes events primarily attended by retirees, with specific events targeting young people.

A cafe waitress highlighted the shortage of services, particularly during the offseason, and described Zarasai as quiet in winter.

An older fisherman expressed concerns about younger generations taking jobs, contributing to the perception of Zarasai as a "dying city" that comes alive during the summer.

An employee at the tourist center mentioned the attractiveness of Zarasai as a tourism destination for young people, collaboration with other tourist centers, and the need for targeted advertising. They also expressed a desire for more young people to work at the tourist center.

These insights shed light on the challenges faced by residents, including childcare, employment opportunities, and government support. The perspectives shared by individuals from different age groups and sectors contribute to a comprehensive understanding of the town's dynamics and aspirations.

Expert interviews: Mayor and municipality

We had a fairly long conversation of 1.5 hours with the mayor of Zarasai along with others from the municipality including an innovation expert. Below are some highlights from the conversation:

| Themes | Plans |
|-------------------------------------|---|
| Business and New Investments | <ul style="list-style-type: none"> • Investors see the potential in Zarasai and want to open new businesses. • The city's location near Latvia and the Kaunas-Daugpilis road attracts tourists and businesses. • Plans to make the city accessible year-round. • The municipality is planning to build a spa and has investors planning a swimming pool. • Flexibility and support offered to new businesses settling in Zarasai. • Efforts to open space for local businesses and enable locals to sell their products. • Plans to build retirement homes in Salakas and Dusetos due to population aging. |

| | |
|--|--|
| | <ul style="list-style-type: none"> • Renovation of public spaces for residents' use and leisure of tourists using EU funds. |
| Demographics and Activity of local people | <ul style="list-style-type: none"> • Most of the population comprises senior citizens. • Some individuals from Germany are buying houses near Dusetai lake for the natural environment. • Limited availability of properties for sale in Zarasai city. • Lack of participation from long-time residents affects the motivation of newcomers. • Communities are generally not very active, with the same faces participating in local events. • Exceptions exist, such as a family planning to return to Zarasai due to lower housing prices and nature. • Challenges in attracting young families due to lower educational levels and limited after-school activities. • Lack of kindergartens. But the municipality plans to open a private kindergarten with partial price compensation. • Zarasai is popular for second homes among Lithuanians due to nature, lakes, and tranquility. |
| Activity of Young People | <ul style="list-style-type: none"> • Lack of job and career opportunities leads young people to leave the municipality. • Difficulty in attracting them to local activities, with limited participation from youth in poor families. • Negative examples within families contribute to the lack of participation. |
| Infrastructure | <ul style="list-style-type: none"> • Plans to build 11 electric car charging stations and create a detour for heavy traffic. • Public spaces are managed with EU funds, but local community involvement is low. |
| Events | <ul style="list-style-type: none"> • International fishing competition planned in Sapnai village. • The municipality aims to organize Sartai races as the Ministry of Agriculture refuses to do so. |

| | |
|--|---|
| | <ul style="list-style-type: none"> • Collaboration with Latvia: Collaboration on projects related to ecological improvement, social inclusion, and World War I heritage route exhibit. |
|--|---|

Table 3: Insights from Expert Interviews: Mayor and Municipality Perspectives on Zarasai's Development

Key data from the focus group discussion

- **Employment Opportunities:** Businesses in Zarasai show interest in hiring local youth due to profitability. The municipality provides funding for summer jobs, and students are satisfied with the salary they receive. However, they express concerns about long work hours and the hectic school schedule.
- **Education System:** Students believe that younger teachers are needed in schools to adopt more effective teaching methods. They perceive the school as currently being somewhat dormant, resulting in a disconnect between students and teachers. The presence of a school therapist is limited to two hours, and students express the need for more mental health resources within the student community.
- **Hobbies and Interests:** Students mention that their hobbies and interests vary depending on the season. Winter is described as quiet and uneventful, while summer is lively and enjoyable. They express a desire for more opportunities to pursue their innovative ideas, such as the establishment of a sports club or more frequent outdoor events beyond the existing once-a-week activities.
- **Future Paths:** Students express interest in pursuing different programs in the future, such as multimedia and engineering. However, they feel a lack of guidance and support from the school in choosing their career paths. They also note the absence of music clubs or artistic activities, contributing to a sense of disconnection from the Youth Council which meets infrequently.
- **Community Enhancements:** Students express a desire for a branch of the trendy shopping chain "LIDL" in their town. While they appreciate the enjoyable summer experiences, they find the winter season boring. The bus schedule does not align well with the students' needs, and there is a lack of satisfactory bus services for those living outside of the town.

Key data from observations

Outskirts of Zarasai

During our assessment of quality of life and wellbeing in the region, we conducted an exploration of the outskirts of Zarasai. Utilizing Google Maps, we planned our route to the edge of Gražutės Regional Park, considering the range of our e-

scooters. We identified a suitable bike and walking lane that led us to the camping area where we parked our scooters. Notably, there was an activity park nearby, which operates during the summer months.

Along the main route, we observed new properties and an area with larger houses and gardens. However, due to limited transportation options, we were only able to reach the very edge of the park, highlighting the challenges of accessing the Regional Park without a car or bike. The initial 2 km of the route comprised asphalt, transitioning to gravel roads afterward.



Observation walk

— 16km route

Map 3: Outskirts of Zarasai and Gražutės Regional Park: Residential Areas, Beekeeping, and Cleared Land Patches

Approximately 5 km from Zarasai, we encountered a residential area consisting of 10-15 houses, two of which were recently constructed. Throughout our journey to Gražutės Regional Park, we observed a total of around 30-40 houses. These residences varied between second homes or summer cottages and year-round residences. Additionally, we came across two houses involved in small-scale beekeeping, maintaining 4-15 hives.

Previously, the Regional Park area predominantly comprised grass fields dedicated to farming. However, during our exploration, we did not come across any crop or cattle fields. The region was abundant with wildlife, birds, and insects, with the grasslands evoking a sense of heritage and traditional biotopes.

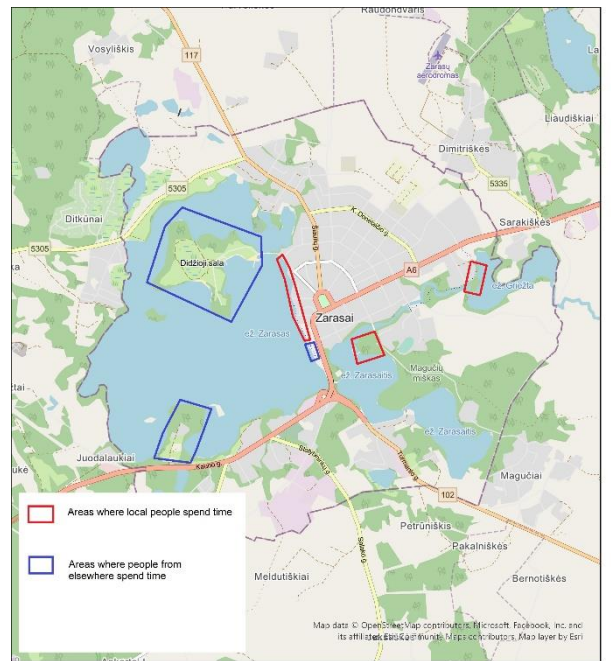
The surroundings of the area were well-maintained, featuring wetlands, streams, and lakes. Notably, during our visit to Gražutės Regional Park, we observed the clearance of certain land patches, ranging from approximately 5-10 hectares.

Satellite imagery indicated that most of these cleared areas within the park measured between 10 and 50 hectares.

The road we traveled from Zarasai did not primarily serve as an entrance to the Regional Park. Instead, it mainly facilitated access for property owners. Despite following a designated bike path, we encountered minimal cyclist activity throughout the day, with the exception of one older lady traveling towards the neighborhood.

Within the Zarasai city

We also observed the city area for several days. Most of the observation time was on the weekend and we wanted to see where people go in their leisure time. The weather was good but there were usually not too many people outside. Sunday was perhaps the most popular day for people to go out. Due to our observations and interviews, we made Map 3 of the places that attract people the most.



Map 4: Leisure Hotspots in Zarasai: Popular Destinations for Recreation and Entertainment

Key data from media analysis

While Zarasai may not be well-known on a global scale, it has been mentioned and represented in various traditional media, i.e., Lithuanian publications, such as the national newspaper "Lietuvos Rytas" and the regional newspaper "Utenos Diena", which cover local news and events in the town, including cultural festivals, sports tournaments, and local politics. In online media, particularly travel blogs and websites—many visitors to the town share their experiences and photos on social media platforms such as Instagram and Facebook, and travel bloggers have written articles about their trips to Zarasai, highlighting its natural beauty and historical landmarks. Additionally, Zarasai has been featured in some documentaries, particularly those focused on the history and culture of Lithuania. For example, the Lithuanian documentary "Aukštaitija: Land of the Gods" includes footage of Zarasai's beautiful lakes and forests and explores the region's rich cultural heritage.

Interpretations of the data

Based on the push-pull theory, following factors were identified:

| Push Factors | Pull Factors |
|--|---|
| Limited access to employment, education facilities, and healthcare | Nature-based tourism and outdoor activities |
| Perception of limited job prospects | Proximity to essential services |
| Seasonal changes and limited services | Cultural offerings and history |
| Declining population and limited social connections | Affordable housing options |
| Limited recreational and entertainment options | Strong community support and sense of belonging |
| Lack of career advancement opportunities | Access to quality education and professional development |
| Limited infrastructure and public transportation | Serene and peaceful environment |
| Harsh weather conditions | Close-knit community and friendly neighbors |
| Economic instability and low wages | Opportunities for entrepreneurship and small business development |
| Lack of cultural diversity and exposure | Potential for a slower pace of life and reduced stress |
| Limited opportunities for personal growth and development | Close proximity to natural landscapes, lakes, and forests |

Table 4. Possible Push and Pull Factors for Migration Decisions in Zarasai

| Factors Influencing Economic Migration in Zarasai |
|---|
| <p>Limited Employment Opportunities Limited access to employment, particularly for the younger population Need for diverse job options within the district Seasonal Changes and Job Availability Fluctuations in employment due to seasonal changes Focus on creating year-round job opportunities in tourism and outdoor sectors</p> |
| <p>Job Opportunities for Remote Work Potential for attracting professionals who can work remotely Development of infrastructure and resources to support remote work</p> |
| <p>Challenges with Poverty and Population Decline High at-risk poverty rate exceeding 33% Economic difficulties contributing to population decline</p> |
| <p>Decreased Activity and Liveliness in Winter Significant decrease in activity and liveliness during the winter season Implications for the town's economic and social vibrancy</p> |

| |
|---|
| <p><i>Difficulties in Healthcare, Housing, and Education</i></p> <p>Limitations in healthcare system Insufficient availability of rental houses Lack of educational options and instances of school closures</p> |
| <p><i>Limited Variety of Prices and Inequalities</i></p> <p>Difficulty for low-income groups to access essential services Disparity in pricing exacerbating inequalities within the community</p> |

Table 4. Factors Influencing Economic Migration in Zarasai: Challenges and Opportunities based on economic migration theory

Social capital and sense of place

| Aspect of Social Capital | Data Sources |
|---------------------------------|---|
| Trust and Cooperation | <p>Positive interactions observed during interviews</p> <p>Friendly and willing participation of residents in sharing their experiences</p> <p>Collaborative efforts mentioned in interviews (e.g., building an electric car charging station)</p> <p>Close-knit community mentioned by a local teenager</p> |
| Civic Engagement | <p>Survey responses indicating mixed perceptions or uncertainty about government</p> <p>Interviews highlighting the need for government support, investment, and job opportunities</p> <p>Rotary Club member expressing concern about declining population and youth leaving the town</p> <p>Interest in local involvement in planning mentioned in the survey</p> <p>Focus group discussion with school students regarding their involvement with the government and youth council</p> |
| Social Networks | <p>Interviews conducted with residents representing diverse backgrounds and age groups</p> <p>Library serving as a gathering place for different generations</p> <p>Cultural events organized by the Cultural Center bringing together retirees, young people, and their parents</p> <p>Positive bonds and connections mentioned by a local teenager</p> |
| Community Support | <p>Concerns expressed by residents about limited government funding for childcare and disparities in financial support</p> |

| | |
|----------------------------|---|
| | <p>Positive experiences shared regarding healthcare facilities in Zarasai</p> <p>Positive perception of the library as a resource and gathering place for children and older individuals</p> <p>Collaboration among residents mentioned for gathering survey responses through acquaintances</p> <p>Supportive services mentioned for working parents visiting Zarasai during weekends</p> |
| Social Cohesion | <p>Positive interactions observed during interviews</p> <p>Strong bonds mentioned by a local teenager</p> <p>Friendly and supportive atmosphere in the library and cultural events</p> <p>Sense of community mentioned by residents, especially during the summer season</p> <p>Collaborative efforts mentioned in interviews (e.g., building an electric car charging station)</p> |
| Information Sharing | <p>Survey responses providing data on local perspectives of government, quality of life, and media usage</p> <p>Expert interviews providing information on the town's development plans and challenges</p> <p>Media analysis shedding light on the portrayal of the town in news articles and social media</p> <p>Library offering books in multiple languages and organizing events and computer training</p> <p>Tourist center developing new projects and collaborating with other centers</p> |
| Sense of Belonging | <p>Positive interactions observed during interviews</p> <p>Residents expressing their appreciation for the town's nature, cultural offerings, and close-knit community</p> <p>Emphasis on the importance of Zarasai's history and cultural heritage</p> <p>Visiting families perceiving Zarasai as a place for quality time and work-life balance</p> <p>Sense of belonging mentioned by residents, especially during the summer season</p> |

Table 5. Aspects of social capital based on data gathered

Place Attachment: The attachment of residents to Zarasai can be inferred from their expressed reasons for staying in the town. For example, the unemployed mother in her 40s chooses to remain in Zarasai due to its proximity to essential services, while

the elderly residents express a desire to stay close to their families. The attachment to the town is also evident in the positive feedback regarding healthcare facilities, natural surroundings, and close-knit community mentioned by different individuals.

As per the research aims outlined, we arrived at the following reflections.

Overall quality and wellbeing

The overall quality of life in Zarasai district municipality exhibits a mixed perception among residents. Positive aspects include the municipality's natural beauty, tranquil atmosphere, and proximity to essential amenities. Residents appreciate the presence of educational institutions and the opportunity for leisure activities. However, concerns are raised regarding the lack of job opportunities, low salaries, limited access to healthcare services, and inadequate transportation infrastructure. Municipal services receive mixed opinions, with some expressing satisfaction and others calling for innovative solutions. The demographic analysis reveals an older population, a higher percentage of female respondents, and a stable population with long-term residents. Employment opportunities appear reasonable, although details about the job nature and quality are lacking. Private transport is the primary commuting method, indicating potential limitations in public transportation infrastructure. Education satisfaction shows room for improvement, while satisfaction with the government is low. Interviews and observations reflect both concerns and positive remarks, highlighting issues like childcare, employment opportunities, and government support, but also mentioning healthcare facilities and a close-knit community positively. The challenges include long waiting lists for kindergartens, limited employment opportunities for young people, a declining population, and limited participation in local activities. However, opportunities exist for new businesses, investments, and tourism development, particularly in the summer months.

Key factors that influence local life

Various factors influence the overall satisfaction and well-being of individuals in Zarasai. Economic opportunities, including job availability, income levels, and career prospects, play a significant role. The standard of living, determined by infrastructure quality, housing, healthcare, education, and public services, also affects well-being. Strong social connections and supportive relationships within the community contribute to higher life satisfaction. Safety and security, along with low crime rates, contribute to a greater sense of well-being. Access to healthcare,

recreational activities, and opportunities for personal growth and education are crucial for overall satisfaction. Cultural and recreational opportunities enhance the quality of life, while a clean and sustainable environment contributes to a higher sense of well-being.

Local perceptions and experiences of population decline

The population decline in Zarasai can be attributed to various factors based on local perceptions and experiences. The age distribution indicates a higher proportion of older individuals and a lower representation of younger age groups, suggesting that young people are leaving the town in search of better job opportunities and career prospects elsewhere. A linguistic barrier was observed during interviews, hindering effective communication with English-speaking researchers and potentially limiting the understanding of residents' perceptions and strategies related to population decline. Limited employment opportunities in Zarasai, with only a few industries and a need for remote work skills, contribute to the departure of young individuals after completing their education. Challenges in childcare, such as long waiting lists for kindergartens and insufficient government funding, pose difficulties for families. Some residents, particularly the elderly, perceive Zarasai to be in decline due to business closures, limited property availability, and a predominantly senior population. This perception may discourage young people from returning to the town and affect the motivation of newcomers. However, Zarasai's natural environment, including lakes, wetlands, and parks, attracts tourists during the peak season, although limited services in the offseason contribute to the perception of the town being less vibrant. The municipality is actively investing in infrastructure development, such as electric car charging stations, a spa, and a swimming pool, to enhance accessibility, attract businesses and tourists, and improve amenities for residents.

Access to services

Access to services in Zarasai presents both challenges and opportunities. Long waiting lists for kindergartens raise concerns about the availability of childcare services, indicating a potential issue in accessing early childhood education. Furthermore, there is a disparity in financial support between adoptive and non-adoptive parents, highlighting a gap in government funding for childcare. Limited healthcare services for children necessitate travel to larger cities, indicating a potential lack of specialized medical care within Zarasai.

On the positive side, there is satisfaction with the general healthcare facilities, as highlighted by a resident who praised their convenience and accessibility. However, the usage of public transport is relatively low, with only approximately 3% of respondents utilizing it for commuting. This suggests a need for more efficient and accessible public transportation options in the town.

Efforts are being made to improve infrastructure and promote environmentally friendly transportation. Plans to build the first electric car charging station in Zarasai indicate a commitment to sustainable development and encourage the use of electric vehicles. However, observations from the outskirts of Zarasai reveal challenges in accessing the Gražutės Regional Park without a car or bike, potentially limiting community engagement and enjoyment of natural attractions.

Relationship with government and expectations

The residents of Zarasai district municipality have various expectations from the government to address challenges and improve the overall situation in the area. They suggest several solutions, including being responsive to residents' concerns by adopting a proactive problem-solving approach. Improving living conditions can involve providing free healthcare services for minors, free transportation to schools, and access to psychological services. Solving the housing shortage and attracting businesses and investors can create job opportunities and increase accommodation availability. Enhancing the education system through initiatives like universal access to kindergarten and better transportation options for rural areas is essential. Addressing administrative issues, creating jobs, improving mental health support, stimulating economic development and investment, supporting businesses and entrepreneurship, maintaining essential services, improving infrastructure and amenities, attracting settlers and young professionals, and engaging youth with entertainment options are also important aspects to consider. These measures aim to enhance the quality of life in Zarasai and make it an attractive place for residents, businesses, and young professionals.

Relationship with media

Positive media coverage of Zarasai often focuses on the town's natural beauty and cultural heritage. For example, travel bloggers and online magazines such as "Lonely Planet" have praised the town's picturesque lakes, forests, and hiking trails, as well as its historical landmarks such as the Zarasai Synagogue and the Church of St. Anthony of Padua. Negative media coverage of Zarasai is relatively rare, but there have been some instances of negative publicity in recent years. One example is the controversy over the construction of a new Catholic church in Zarasai, which

some residents opposed due to concerns about the location and potential damage to historic sites. This issue received coverage in the Lithuanian media and sparked debate among local officials and community members.

Another example of negative media coverage of Zarasai is related to a rise in crime and social issues in the town. Reports of drug-related crimes and other social problems have led to concerns among residents and local officials, and this issue has been covered in both local and national media. Being called “one of the worst municipalities” to live in, as mentioned by the Lithuanian National Television and Radio, can have a significant impact on the perceptions of people living in or from Zarasai. Being labeled as the worst municipality to live in could have negative psychological effects on residents and could affect the town's reputation in the eyes of outsiders.

On the other hand, it is important to keep in mind that rankings and surveys are often subjective and based on a limited set of criteria. While Zarasai may have its challenges and shortcomings like any other town, it also has unique strengths and positive qualities that may not be reflected in such rankings (Paviešino atlyginimus Lietuvos..., 2022).

Social Media

According to respondents, social media has the potential to encourage people to come and live in the Zarasai district. They recognize the advantages of using social media platforms to showcase the positive aspects of the area. However, it is widely acknowledged that social media alone is not enough to attract people. Respondents emphasize the need to address social conditions such as employment opportunities, healthcare services, education facilities, and infrastructure improvement to create attractive living conditions. Skepticism exists regarding the effectiveness of social media campaigns without tangible solutions, as other factors like job opportunities and living conditions are seen as more influential in the decision-making process. Some respondents acknowledge the role of social media influencers in sharing positive experiences of living in Zarasai, contributing to a positive image of the area and attracting newcomers. Ultimately, personal needs and factors beyond social media play a significant role in people's decisions to live in an area. The importance of improving infrastructure, services, and creating a satisfying living environment is stressed by respondents, highlighting that satisfied residents and positive word-of-mouth are crucial in attracting new residents.

Community Engagement and Youth Involvement

- Population decline and job opportunities: A Rotary Club member highlighted the declining population and job opportunities, leading young

people to leave after completing their education. This suggests a lack of employment prospects and the need for more investment in Zarasai.

- **Challenges in attracting young families:** The mayor mentioned challenges in attracting young families due to lower educational levels and limited after-school activities, indicating a lack of educational and recreational opportunities for young people in Zarasai.
- **Limited participation in local events:** The mayor mentioned limited community engagement and participation in local events, with the same faces consistently involved.
- **Attraction for young people:** A young resident appreciated Zarasai's nature, water sports, music culture, and close-knit community, indicating that these aspects can engage and attract young people.

Recommendations

Relevant future studies and research

- **Nature-Based Tourism Development:** Conduct a comprehensive study on the potential of nature-based tourism in Zarasai, including an assessment of resources, infrastructure needs, marketing strategies, and partnerships with local stakeholders.
- **Youth Engagement and Initiatives:** Explore ways to increase youth engagement by identifying their concerns and needs. Study after-school activities, career guidance programs, and extracurricular opportunities to retain and attract young people to Zarasai.
- **Education and Healthcare Improvement:** Study the feasibility of expanding educational institutions, improving education quality, and increasing healthcare services. Prioritize mental well-being and adequate hospital facilities for children and vulnerable individuals.
- **Job Market and Economic Development:** Assess the local job market, identify sectors for growth, and explore strategies to attract new businesses and investments.
- **Infrastructure Evaluation:** Evaluate transportation networks, public spaces, and recreational facilities. Propose plans for infrastructure development to enhance quality of life.

- **Strengthening Community Engagement:** Investigate factors influencing community involvement and develop strategies for fostering belonging and connection among residents.
- **Population Aging and Social Services:** Study the impact of population aging and develop strategies to address the needs of the elderly. Assess social services, retirement homes, and support systems.
- **Childcare and Family Support:** Investigate challenges faced by families, such as limited access to childcare and financial support. Study the feasibility of expanding childcare services and government funding.
- **Cultural and Recreational Activities:** Assess cultural offerings and recreational activities. Study the feasibility of organizing more events and diversifying opportunities.

Strengths, possibilities, and Potential of Zarasai

Small peripheric cities are important administrative, cultural, and service centers for villages. Although economic aspects are important in the development of every town, all the focus should not be aimed at them, since these small towns usually cannot compete economically with bigger cities. Instead, the focus could be more on social, natural, and cultural potential, which often also peripheric cities have (Jaszczak et al., 2021, pp. 262).

Repurposing infrastructure

In the smart shrinking strategy, it is crucial to think about how to use existing resources, such as buildings, more effectively and in a way that benefits the existing population the best. It seems that the town has a relatively high proportion of vacant dwellings, which could be repurposed as part of a smart shrinking strategy. That can be seen as a strength since there is room for business and other activities to develop existing facilities.

For attracting business, Zarasai has one key strength: a main road goes through the city center. Due to some interviews, it has been a central element of the formation of the city. The road connects for instance Kaunas to Daugavpils and Rēzekne. The distance from Daugavpils, the Latvian second largest city, is under 30 kilometers, and Zarasai has had an important role in the Post logistics. Formerly and before the Russian war the importance of this road has might been even greater since it has connected some main Russian cities to central Europe through Kaunas. However, we noticed that the amount of traffic going through, especially heavy traffic, is still high. There could be potential for more business around the year. Stopping places

could perhaps be more advertised. Some businesses could perhaps be developed for heavy traffic and normal traffic, for instance, a bigger gas station with restaurants, showers, and a parking lot for the trucks to stay the night.

Free time and culture

A major concern in Zarasai seems to be the lack of activities during Winter. That could be somehow developed. Perhaps there could be for instance more variety in concerts to entertain local people of different ages. More sports possibilities were also hoped for young people. The most favorable way to do it could be to increase the usage of schools' existing sporting facilities in the afternoons and evenings. That is also best related to the smart development theme. For instance, there could be more open turns and possibilities to book your own turns in the school's sports hall.



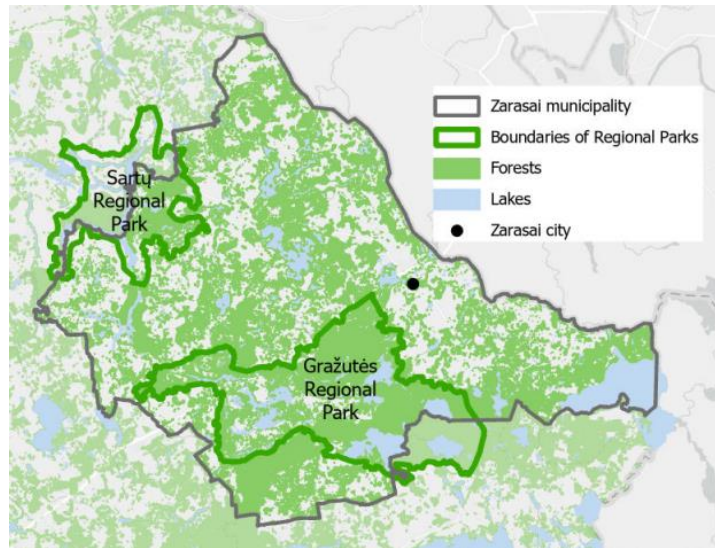
Figure 2: Community suggestions for wellbeing and development including comments for the local government

Below are some proposed ideas for wellbeing and development.

Proposed Idea #1: Regional parks and nature in the Zarasai area and in Zarasai city

Zarasai City and especially the Zarasai area can be seen as having great potential for the development of natural tourism branding and development. The Zarasai area has a lot of heritage biotopes and nature in the region. Sartai Lake is the 5th biggest lake in Lithuania, and the surrounding nature is unique in the country as woodlands cover most of the area, as in the following map is shown.

According to interviews and observations, nature tourism exists, and second homes and summer cottages are especially popular in this area. However, there are still plenty of things to develop in this field. Tourism, and especially nature tourism, is perhaps the latest significant form of economy to grow in rural areas, and it is considered a highly important way to improve the peripheral



Map 5: Map of Zarasai District Municipality: Boundaries of Regional Park, Lakes, and Forests

regions (Mose, 2007). By concentrating on regional parks in surrounding areas, there is a possibility of increasing tourism with a reasonable amount of investment. One factor is branding. When promoting the natural and sustainable development of travel and tourism in the Baltic Sea region, is usually successful (Studzienicki & Kurjata 2010, pp. 527). This could preferably happen in cooperation with the larger region instead of competing against them (Studzienicki & Kurjata 2010, pp. 528).

In Europe, the protected areas gain significant recognition in local development, and they work as instruments when planning sustainable development in rural areas (Feyeh, 2016). Improving knowledge of the importance of protected areas for wildlife and ecosystem services has been a pushing factor for the rural areas with protected areas nearby (Feyeh, 2016). Protection is the primary objective of national parks, and it is good to consider the benefits for the communities, local and social factors, and the cultural context (Fortin & Gagnon, 1999). In industrial and service-based economics, the benefits of tourism are considered greater than the

negative impact on nature and on the old lifestyle in the region. For that reason, regional parks have been discovered to improve nature tourism in rural areas (Fortin & Gagnon, 1999). There is always the possibility of a conflict between the local communities and regional parks. To avoid this kind of conflict, it is important to take the local communities into account when planning the next steps between protected areas and communities (Fortin & Gagnon, 1999).

In our observations, we noticed that there is also a possibility of making regional parks more accessible to people who don't own cars. In the year 2020, Lithuania had the sixth-fewest amount of motor vehicles in the EU (460 per 1000 persons) and Latvia had the lowest number in the EU (353) (Acea, 2022). This could indicate that there is more hidden potential in natural tourism among the people who don't own a car. Latvia is important since its border and the city of Daugavpils are nearby. For instance, promoting a bike or e-bike rental service could be quite lucrative. There are roads in good condition leading to the closest regional park. By foot, the distance is too long, and with a rental scooter, you cannot park that far away. But with a bicycle, the distance would be perfect for many people.

For instance, in Daugavpils, there are surely people of different ages who don't own a car. For those getting to Zarasai by bus, renting a bike could be an interesting possibility. Without the car, it is hard to say how the mapping and trails are in a regional park, but from Zarasai, there are not any paths and trails from the edge to the park. Zarasai has one beautiful trail next to the river, but it is badly marked from the city. We accidentally found it, but walking without purpose, it is hard to find it.

Trails and paths in nature give the people possibility to contact nature. Visitor centers, cooking facilities, camping sites, and other recreational facilities are a big part of developing the use of natural areas (Neuvonen et al. 2010, pp. 224-229). When thinking of the scale of improving the facilities in the area and the magnitude of the economic impact of tourism in the area it is important to know the numbers. Number of visitors and how much the visitors use the facilities and how much they spend time in the area and where they spend the most time (Neuvonen et al. 2010, pp. 224-229). How the new facilities and road signs change the behavior of the visitors in the area. Weight in the marketing and facilities in the area affects the visitors (Neuvonen et al. 2010, pp. 224-229). Because of this, it is important to measure the improvements and collect the data step by step and improve in the direction that is wanted. More specific guidelines for visitor monitoring can be found for instance in the publication *Visitor Monitoring in nature areas – a manual based on experiences from the Nordic and Baltic Countries*. Swedish Environmental Protection Agency (Kajala et al., 2007).

Proposed idea #2: Nature-based strategies and rebranding, combined with the effective use of social media

Nature-based strategies involve leveraging the natural assets and resources of a place to enhance its appeal and create unique selling points. In the case of Zarasai, the city's natural potential can be highlighted as a key branding element. This could involve promoting the natural beauty of the surrounding landscape, such as lakes, forests, and scenic views, and positioning Zarasai as a destination for eco-tourism, outdoor activities, and nature-based experiences.

To effectively implement nature-based strategies and rebrand Zarasai, several steps can be taken:

- Identify and promote unique natural assets: Conduct a comprehensive assessment of the natural features in and around Zarasai. Identify the most distinctive elements, such as the pristine lakes or rare flora and fauna, and develop marketing campaigns that showcase these assets.
- Develop nature-based experiences: Create a range of activities and experiences that allow visitors to engage with the natural environment. This could include hiking and biking trails, nature walks, birdwatching tours, water sports, and camping opportunities. Collaborate with local businesses, tour operators, and community organizations to develop and promote these experiences.
- Enhance infrastructure and amenities: Invest in improving the infrastructure and amenities that support nature-based tourism. This may involve developing visitor centers, upgrading trails and viewpoints, providing signage and information boards, and ensuring proper waste management and conservation practices.
- Engage the local community: Involve the local community in the planning and development of nature-based initiatives. Encourage residents to become ambassadors for their city and its natural assets, and involve them in conservation efforts and ecotourism activities. This can help create a sense of ownership and pride among the residents and ensure the long-term sustainability of the initiatives.
- In addition to nature-based strategies, leveraging social media can be a powerful tool to promote Zarasai and attract visitors. Social media platforms provide a cost-effective and far-reaching way to engage with potential tourists, showcase the city's natural beauty, and generate buzz. Here are some suggestions for effectively using social media:

- Create captivating content: Share high-quality photos, videos, and stories that highlight the natural attractions, local culture, and unique experiences in Zarasai. Focus on creating visually appealing and shareable content that evokes a sense of wanderlust and inspires people to visit.
- Engage with the audience: Respond to comments, messages, and inquiries promptly. Encourage visitors and locals to share their experiences and photos using specific hashtags or by tagging the city's social media accounts. This helps build a sense of community and encourages user-generated content.
- Collaborate with influencers: Identify influencers or bloggers who align with the city's branding and have a significant following in relevant niches, such as travel, outdoor activities, or eco-tourism. Invite them to experience Zarasai and share their experiences with their audience, amplifying the city's reach and exposure.
- Run targeted advertising campaigns: Utilize social media advertising tools to reach specific demographics or geographic regions that align with the target market for Zarasai. Tailor the content and messaging to resonate with the interests and preferences of the target audience.
- Monitor and analyze performance: Regularly track social media metrics to evaluate the success of campaigns and identify areas for improvement. Pay attention to engagement rates, reach, and the sentiment of the audience. Use these insights to refine strategies and adapt content accordingly.

By combining nature-based strategies with effective social media utilization, Zarasai can build a strong brand image as a nature destination, attract visitors, and stimulate economic growth and development.

Proposed idea #3: Creating a Zarasai Local Action Group

Local Action Groups (LAGs) are community-led partnerships that bring together public, private, and civil society organizations to develop and implement strategies for rural development. In Lithuania, LAGs are seen as a potential way to address the challenges faced by rural regions, such as depopulation, low economic activity, and a lack of infrastructure. LAGs are supported by the Lithuanian government, and there are currently over 40 LAGs operating across the country.

Zarasai district does not have a LAG (Vilkė & Šarkutė, 2018). The causes for this may include a lack of community interest or awareness, or difficulties in securing the necessary funding or resources. However, there are potential benefits to

establishing a LAG in Zarasai, such as increased community engagement and participation, improved collaboration between local actors, and the development of a comprehensive and coordinated strategy for rural development. By bringing together stakeholders from different sectors and backgrounds, a LAG in Zarasai could help identify and address the unique challenges faced by the district and promote sustainable development and growth.

Studies have shown that LAGs are effective in promoting community-led rural development, improving collaboration between stakeholders, and addressing the unique challenges faced by rural regions (European Network for Rural Development, 2017; Šojić et al., 2018). In contrast, rural regions without LAGs may struggle to attract investment and resources, and may face challenges related to depopulation, low economic activity, and a lack of infrastructure (European Commission, 2017). Therefore, the establishment of a LAG in Zarasai district could provide numerous benefits, such as increased community engagement and participation, improved collaboration between local actors, and the development of a comprehensive and coordinated strategy for rural development.

Conclusion

Addressing demographic change requires a multifaceted approach that spans various policy and planning domains. The coordination of policies in areas such as health, housing, social care, education, employment, and transport is crucial (Buller and Hoggart, 2017, pp. 59). To develop Zarasai in a smart and sustainable manner, several possibilities can be explored. These include optimizing the use of existing facilities, enhancing the branding of regional parks and nearby recreational areas, and capitalizing on traffic flows to benefit local businesses. By efficiently utilizing resources, the town can create a more affordable and attractive environment.

A key aspect of fostering growth and vitality in Zarasai is the creation of new job opportunities. This can be achieved by supporting local entrepreneurship, nurturing existing businesses, and attracting new enterprises to the area. By providing a diverse range of employment options, the town can attract and retain young people, fostering their long-term engagement in the community.

Recognizing the significance of families as the backbone of the community, it is essential to provide comprehensive support systems. This includes investing in high-quality childcare facilities, offering financial incentives to families, and creating family-friendly spaces and activities. By prioritizing family well-being, Zarasai can enhance resident retention and encourage population growth.

Zarasai possesses abundant natural beauty, cultural heritage, and recreational opportunities. By promoting the town as a tourist destination, it can attract visitors and generate revenue that can be reinvested in the community. Emphasizing its unique offerings will not only bolster economic growth but also instill a sense of pride among residents and foster community cohesion.

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Annexure

Survey

Demographics

1. What is your age?
 - 18-35
 - 36-60
 - 61-80
 - 80+

2. What is your gender?
 - Male
 - Female
 - Non-binary

3. How long have you lived in Zarasai?

- 1 to 5 years
 - 6 to 15 years
 - 16 to 30 years
 - 31 to 60 years
 - 60+ years
 - Since birth
4. Where do you currently reside?
- Zarasai city
 - Zarasai district municipality
 - Previously resided in Zarasai

Education, work, and transport

5. Do you currently work?
- Yes
 - No

If answered yes:

How do you currently commute to work?

- Walking
 - Private vehicle
 - Public transportation
 - Other
6. Are you currently a student in Zarasai?
- Yes
 - No

If answered yes:

How do you travel to school?

- Walking
 - Private vehicle
 - Public transportation
 - Other
7. Do you have children who go to school?
- Yes
 - No

If answered yes:

How do they travel to school?

- Walking
 - Private vehicle
 - Public transportation
 - Other
8. How satisfied are you with the quality of education provided by schools in Zarasai?
- Very satisfied
 - Satisfied
 - Neutral
 - Dissatisfied
 - Very dissatisfied
9. How can it be improved?
Open-ended

Quality of life and services

10. Are you satisfied with the quality of life in Zarasai?
- Yes
 - No
 - Not sure
11. Why/why not?
Open-ended
12. Rate each of the following services on a scale of 1 to 5 (1 being very bad to 5 being very good):
- Healthcare
 - Food
 - Stores for household goods and basic amenities
 - Personal items
 - Self-care & leisure activities

Government

13. Are you satisfied with the efforts of the municipal administration in addressing residential problems in Zarasai?
- Yes
 - No
 - Not sure

14. In what ways can the municipal government better serve the interests and needs of the population of Zarasai?

Open-ended

Media

15. How satisfied are you with the way Zarasai is portrayed in various media platforms such as news outlets, social media platforms, and newspapers?

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied

16. Do you think that the media accurately represents the opportunities and potential of living in Zarasai?

- Yes, the media accurately represents the opportunities and potential.
- No, the media does not accurately represent opportunities and potential.
- Not sure

17. In your view, how effective is social media in encouraging people to come and live in Zarasai?

- Highly effective
- Moderately effective
- Ineffective
- Not sure

18. Do you think social media could be utilized to better promote Zarasai?

- Yes
- No

19. If answered yes: How could social media be utilized to better promote Zarasai as an attractive place to live?

Open-ended

Interviews question bank

We picked questions from the following list, depending on the person being interviewed - their profession, background, responses, etc. - and the direction the interview took.

For the people in the municipality

- How big is the difference between the summer and winter seasons? (Impact on the local economy and the well-being of people in the area, and what specific challenges and opportunities arise because of these seasonal variations?)
- Do you engage with locals and youth?
- What are the most pressing challenges facing the community/area?
- What is the realistic future for population and tourism in the area, and what plans are in place to support sustainable growth?
- How should the quality of people's lives be developed?
- How popular are second homes in this area, and how do you benefit from them?
- What is the impact of remote work on the local economy and workforce in the area, and how can it be used to support smart shrinking in the region?
- Are there any collaborations or partnerships with Latvia to support the development of the community?
- What are people's opinions on nature protection in the community, and how are these views being taken into account?
- How has the municipality utilized EU funding to support development initiatives in the area?

For residents

Daily life

- How long have you been living in Zarasai?
- How would you describe your quality of life in this area?
- What do you like most about living here?
- Do you feel that you have access to the services and amenities you need?
- What would you like to see changed or improved?
- What kind of relationship do you have with the surrounding nature?

Community

- Do you feel that you have a voice in the decisions that affect the local community?
- What are your hopes and expectations for the future of the area?
- How would you describe the sense of community in this area? What community events or activities do you participate in, and what benefits do you derive from them?
- Could the lake and the surrounding nature be better used/accessed?

Civic participation and Relationship with the Government

- Do you feel that the government has been responsive to the needs of the local community?
- How do you think the government could better address social and economic concerns?

Media

- Do you feel that the media accurately reflects the reality of life in this area?
- Have you seen any examples of positive or negative media coverage in this area? Can you give some examples?
- Do you feel that the media pays enough attention to the needs and concerns of residents?

For school students

School Schedule

- How do you feel about the current school schedule? Are there any aspects that you find challenging or beneficial?
- Are there any changes or improvements you would like to see in the school schedule? What specific suggestions do you have?

Activities Post School

- What do you typically do after school? What are your preferred pass time activities?
- Are there any specific opportunities or resources you would like to have for engaging in activities after school? If so, what are they?

Interest in Innovation or Development of the Town

- Are you aware of any innovative initiatives or developments happening in our town? If yes, please provide examples.
- How interested are you in the innovation and progress of our town? What areas or aspects do you find most intriguing or important?

Youth and Student Involvement with the Government and Overall Relationship with the Government

- Are you familiar with the existence of a youth council in the town? If yes, can you share your understanding of their role and activities?
- How well do you think the youth council represents the interests and concerns of young people in our town? What improvements, if any, would you suggest?

Future

- When you think about your future, where do you see yourself? Would you like to stay in our town or explore opportunities elsewhere? Please explain your reasons.
- What factors, such as career prospects, quality of life, or other considerations, would influence your decision about your future location?

Mental Healthcare in the School

- How aware are you of the mental healthcare services available at our school? Have you or anyone you know utilized these services?
- What measures or resources would you suggest improving mental healthcare support for students in our school?

Career Counseling or Support

- Have you received any career counseling or guidance at your school? If yes, how would you describe your experience? If not, do you think it would be beneficial?
- What kind of career counseling support would you like to have to make informed decisions about your future?