

# The Impact of Covid-19 on the Tourism and Accommodation Sector in Lithuanian Rural Areas

## Abstract

This article aims (1) to underline the level of impact of COVID-19 on the accommodation sector in Lithuanian rural areas, (2) to evaluate transformation possibilities and new opportunities for rural tourism, and (3) to present a new model of the tourism future in the regions. The article discusses the historical aspects of the accommodation business in Lithuania, the territorial distribution of accommodation in rural areas of Lithuania, and the impact of the COVID-19 pandemic on the accommodation sector in rural areas. Spatial analysis, together with qualitative and quantitative methods, was used in this research. The primary data for the article were received from the questionnaires filled out by fifty representatives of the Tourism Information Centres from different Lithuanian regions. Also, the analysis is supplemented by the secondary official statistical data. The research results revealed the direct impact of COVID-19 on the accommodation sector in rural regions of Lithuania. The proposed RegTour model contributes to reducing the impact of COVID-19 on the country's economy and promoting the development of new forms of knowledge-based business and the transformation of the sector. Moreover, the research revealed the unexploited opportunities of rural tourism and the possible directions of change.

**Keywords:** COVID-19 and tourism, accommodation in rural areas, rural tourism, RegTour model, tourism in Lithuania

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## 1. Introduction

The tourism industry is quite vulnerable for economic, military or health crises but most of them so far had only regional or local impact. COVID-19 pandemic has influenced the tourism services across the whole world and became the major challenge for many tourism related economies since World War II. According to data of World Tourism Organization (UNWTO) the number of tourists decreased by 71 % in 2020 in the world. The decrease in Europe reached 66 %, and it was the highest in Northern Europe (72%) and Central and Eastern Europe (70 %). In 2021, compared to 2019, the number of tourist arrivals in the world decreased by 70% and in Europe by 59% (UNWTO, 2022). However, though the decrease in international tourism flows was evident around whole world, the situation in domestic markets was differentiated. As the decrease in world tourism was caused not by the economic reasons (decreased incomes), the situation in tourism sector of the particular country should have depended on the actual spatial dimensions of traveling restrictions on international, country or municipal level. Growing restrictions at international level could have led to growing demand for tourism at local one.

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The majority of Governments of European countries has introduced various business support measures, which still were not able to eliminate negative consequences of pandemic on tourism service markets (Collins-Kreiner & Ram, 2021). The social consequences related to shrinking labor market were also different in different countries and different employees. According to Organisation for Economic Co-operation and Development (OECD) the pandemic had most negative consequences on women, youth employees and residents related to tourism services (OECD, 2020). Under such situation we may hypothesize that regions with higher proportion of local population dependent on tourism will be affected more. On the other hand, we also must take into account that different tourism activities have been damaged unevenly.

The article analyses the case of Lithuania rural tourism development in the context of COVID-19 pandemic. In doing so, this study extends existing research that focuses mainly on the impact of COVID-19 pandemic on rural tourism (Silva, 2021; Sánchez-Rivero et al., 2022; Marques et al., 2022; Panzer-Krause, 2022; Vaishar & Št'astná, 2022; Rogerson & Rogerson, 2022; Marco-Lajara et al., 2022). The changes of accommodation service network and its importance for rural economy in rural areas is at the centre of the research. Namely rural tourism, which is less dependent on international visitors, had different conditions for development comparing with other tourism services. The regions, traditionally active in nature and related rural tourism had to adapt to fast changes of demand for tourism services.

Second, this research identifies the elements of tourism vulnerability in rural destinations. Tourism destinations take strategic actions to reduce their risks and structural vulnerability factors. Finally, the relevant methods applied to this study enables researchers to capture the interplay among tourist needs, the destinations, and the transformative actions, when understanding the complexity of both tourist decision-making and accommodation markets in rural areas by proposing the RegTour model.

In order to fill the research gaps, this article aims to understand the level of impact of COVID-19 on the Lithuanian accommodation sector and evaluate new possibilities for rural tourism, while proposing a new tourism development model.

## 2. Literature review

The COVID-19 pandemic revealed the vulnerability of the tourism sector on crises, and at the same time it also revealed new opportunities for business to adapt, to implement new solutions and to expand (Almeida et al., 2022). Many studies on the impact of the pandemic have focused on special measures to diminish the losses, risk management perspectives or tourism future (Liutikas, 2023). Gerwe (2021) provided an overview of the effects of the COVID-19 crisis on the accommodation sharing sector. She pointed out such elements of the post-COVID-19 tourism recovery as shifting from global to local, shake-out amongst accommodation providers and the new standards of service, cost cutting, greater focus on profitability and greater sustainability (Gerwe, 2021). Del Chiappa et al. (2021) pointed out the usefulness of chaos theory compared to traditional models of crisis management. However, their research in Italy showed that entrepreneurs and managers operating in the hospitality sector were focusing on interventions from public sector organisations, rather than on actions implemented on a business-level (Del Chiappa et al., 2021). Marco-Lajara et al. (2022) highlighted that rural tourism has fast recovery capacity, it was less influenced during the COVID-19 pandemic, as it was considered a safe option during the pandemic. Panzer-Krause (2022) noticed that COVID-19 pandemic can provide an opportunity to reset locked-in structures in the tourism sector and to strengthen rural tourism resilience with regard to transformative innovation.

Sustainable and resilient rural tourism could become an attractive alternative to mass tourism. Duro et al. (2022) identified such indicators of tourism vulnerability as tourism intensity and density, rural accommodation, domestic and proximity demand, seasonality and incidence (this indicator related to coronavirus) to understand the complex and multidimensional characteristics of tourism vulnerability. Liutikas (2023)

proposed the concept of re-tourism driven by societal and technological changes, and based on improved knowledge and application of innovations. It involves adaptation and mitigation of negative impact, flexibility and dynamic, change and transformation.

The innovative business models related to tourism in rural areas include the approaches of sustainability, green and circular economy, and digitalisation. Craig and Karabas (2021) analysed glamping phenomenon after the coronavirus pandemic. They noticed the increased viability of glamping, this kind of tourism provides accommodation that allow social distancing, outdoor recreation, and novel experience (Craig & Karabas, 2021).

The increased demand of the rural tourism also could be related to the mode of transport. Usually, it is related to the self-drive tourism and use of private cars, campervans or motorcycles. Such self-drive tourism demonstrate autonomy in choosing which route to take, where to stop or stay (Butler et al., 2021). Cooper and Buckley (2021) noticed that nature acts as a tourism attraction. Rural destinations are being related to the health framework and physical and psychological well-being activities (Rogerson & Rogerson, 2022; Lewandowicz & Bac-Bronowicz, 2022).

In general, recreation and tourism activities in the rural areas become active and significant agents of environmental, economic and social change, it can revitalise and reorganise local economies, to supplement income of farming, craft and service sectors, and to provide opportunities to re-evaluate natural and cultural resources of landscape (Hall et al., 2016; Rakitovac & Urošević, 2023).

Liutikas (2023) included social, environmental, and technological factors in the analysis of the post COVID-19 tourism. Some other researchers (Assaf et al., 2022) highlighted a research agenda for post pandemic tourism. Post COVID-19 research pillars in tourism includes consumer behaviour (the impact of COVID-19 on tourist behaviour), demand and performance modelling (at the destination level analysis of spatial effects on various geographical scales, such as country, regions, cities, rural areas), forecasting, destination and facility management, information technology, and quality of life (importance of sustainability and safety, use of climate friendly tourism products (Assaf et al., 2022).

During the COVID-19 pandemic accommodation sector has been hit badly due to different health management measures, such as travel bans and various quarantine requirements. Tourists change their travel plans, and hosts have to evaluate the short- and long-term impacts on their hosting practice (Farmaki et al., 2020) and the decision-making process of different types of tourists. A COVID-19 management framework included actions in artificial intelligence and robotics, hygiene and cleanliness, and health and health care (Jiang & Wen, 2020).

Some accommodation services remain on demand during the pandemic, especially in a remote rural area. However, it is important to know how accommodation sector has been preparing for the future risks, when business perspectives depend on various external factors and based on both destination- and tourist-level characteristics (Jang et al., 2021). Location becomes one of the most important factors affecting the operating performance of accommodation providers such as rural tourism homesteads. Beautiful natural settings and landscape, peaceful environment, fresh air, intangible heritage as culture, gastronomy and lifestyle are highly valued by tourists (Kastenholz & Carneiro, 2016). The locational advantage may outweigh disadvantages such as lack of touristic activities.

Key words of the tourism in rural areas become local food, nature and natural heritage, sustainability, slowness and local traditions. Rural tourism homesteads tend to be family-owned firms or operated by families (Jaafar et al., 2015).

During the pandemic crisis, the tourism sector was affected differently across urban and rural areas. Cities usually experienced huge financial losses in absolute terms, rural communities were more significantly affected in relative terms (Jang et al., 2021). The effect of COVID-19 on accommodation can vary across different areas. Destination competitiveness is related to various local factors such as destination management,

marketing applications, tangible and intangible products and services, images and experiences, infrastructure and superstructure (Pınar & Günlü, 2012). Successful management of specific destination's attributes (i.e., cultural and natural resources, accommodation) whether urban, intermediate or rural, affects tourist intentions to travel to the destination and satisfaction of the trip. So, the effect of COVID-19 on accommodation consumption varies across locations and depends on the destination's attributes in each case (Jang et al., 2021).

### 3. Methodology

As a part of the project 'Transformations and perspectives of the tourism sector after the COVID-19 pandemic' implemented by the Lithuanian Centre for Social Sciences (a project financed by the European Regional Development Fund), the survey of the tourism situation during and after the pandemic was carried out. Fifty Tourist Information Centres' representatives located in different municipalities were interviewed. These municipal agencies promote tourism in the territory of a specific city, inform visiting tourists about the places to be seen and take care of tourism promotion and development projects. The questionnaire consisted of 38 questions. This survey aimed to collect information from the representatives of Tourist Information Centres on the situation and trends of local and inbound tourism during and after the COVID-19 pandemic. Questions were related to the evaluation of the vitality of tourism in different regions, assessment of the new opportunities for local tourism and rural tourism homesteads, and new services (education, tastings, rural work experiences, celebrations) provided by business representatives working in the local tourism sector, and new local tourism products (objects, routes, services).

We also used secondary data analysis to address the research objectives. We used data from the Lithuanian State Data Agency database (Statistics Lithuania, 2022) and their annual publications on tourism development "Tourism in Lithuania" of different years (1995; 1996; 2002; 2006; 2015; 2016) for the analysis of varying accommodation-related indicators. These data, along with the data from the State Consumer Rights Protection Service (SCRPS) on accommodation providers in Lithuania (State Consumer., 2022), were used for the cartographic visualization of the distribution of accommodation facilities in rural areas.

## 4. Results

### 4.1. Transformation of accommodation business in Lithuania: Historical development and features of spatial distribution

Tourism is one of the areas of the economy that has undergone significant changes after the restoration of Lithuania's independence in 1990. The changes that have taken place are related not only to the transformation of the economy, but also to fundamentally changed and extremely increased tourist flows (the international tourism is essentially a new phenomenon). A very important change in the ownership of accommodation facilities is worth noting: after 1990, most of the accommodation facilities owned by the state or state-owned enterprises were privatized.

**Table 1**  
*Accommodation establishments and their leading indicators in Lithuania in 1995-2021 (without rural tourism services)*

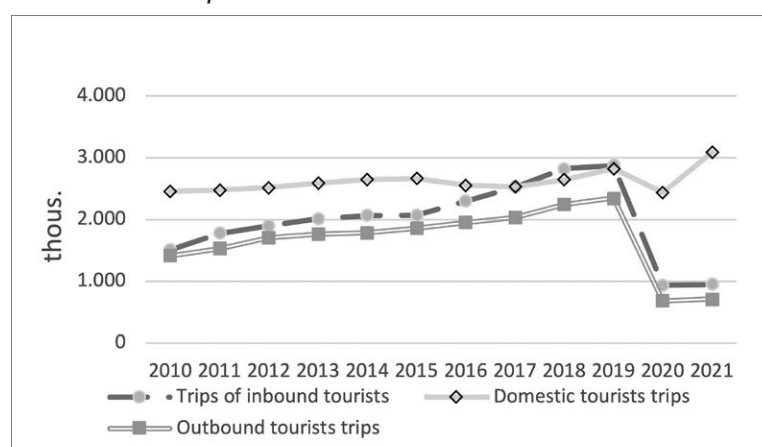
Year	Number of accommodation establishments	Number of beds in general, thousands	Number of accommodated tourists		Nights spent in accommodation establishments, thousands
			Number of tourists accommodated in accommodation establishments, thousands	Foreigners in %	
1995	475	35,4	628,3	33.6	n.d.
2000	552	41,6	631,7	47.4	2942,2
2005	663	43,7	1325,6	51.4	4251,1

**Table 1 (continued)**

2010	908	50,1	1552,9	54.1	4330,0
2015	1664	59,3	2502,5	54.4	6001,3
2019	3075	93,1	3642,4 (max)	52.2	8225,3
2020	2787	100,7	1892,9	26.7	4529,4
2021	3199	112,0	2221,9	22.3	5109,2

Source: Statistics Lithuania. Database of indicators (2022), Tourism in Lithuania (1996).

The tourism and recreational use of the destinations decreased due to the economic turmoil in the first years after the restoration of independence and the subsequent development of accommodation services in Lithuania is closely related to the general economic trends of the country. The particularly rapid growth of the economy is observed after Lithuania joined the European Union in 2004. The accommodation sector also extremely rapidly expanded after the 2008 economic crisis. The main tourism indicators (both inbound and outbound tourism) increased approximately two times from 2010 to the beginning of the COVID-19 pandemic (Figure 1; Table 1).

**Figure 1**  
**Number of tourist trips in Lithuania 2010-2021**

Source: Statistics Lithuania (2022).

The growth of accommodation services was not spatially even. 556 or 2/3 of all classified accommodation establishments (hotels, guest houses, motels, camping service providers) were located in 16 urbanised municipalities (city municipalities and regional centres) according to the data of SCRPS. Unclassified accommodation providers tended to concentrate in rural municipalities.

**Table 2**  
**Development of rural tourism in Lithuania**

Year	Number of rural tourism homesteads	Number of beds	The average number of beds	Number of accommodated tourists		Nights spent, thousands
				Number of tourists, thousands	Share of foreigners,	
2001	179	1,624	9	34,4	12.2	74,2
2005	398	6,735	17	155,0	11.5	440,1
2010	590	12,421	21	227,5	5.8	352,3
2015	665 (1,173) *	14,482	22	303,3	9.2	579,9
2019	679	15,347	23	395,3 (max)	9.6	721,3
2020	565	13,980	25	233,8	2.5	402,4
2021	1,064(1,260) *	17,891	17	246,1	3.9	433,0

Source: Tourism in Lithuania (2002; 2006; 2015; 2016); Statistics Lithuania (2022).

\* Authors calculation (Kriaučiūnas, 2016; State Consumer., 2022).

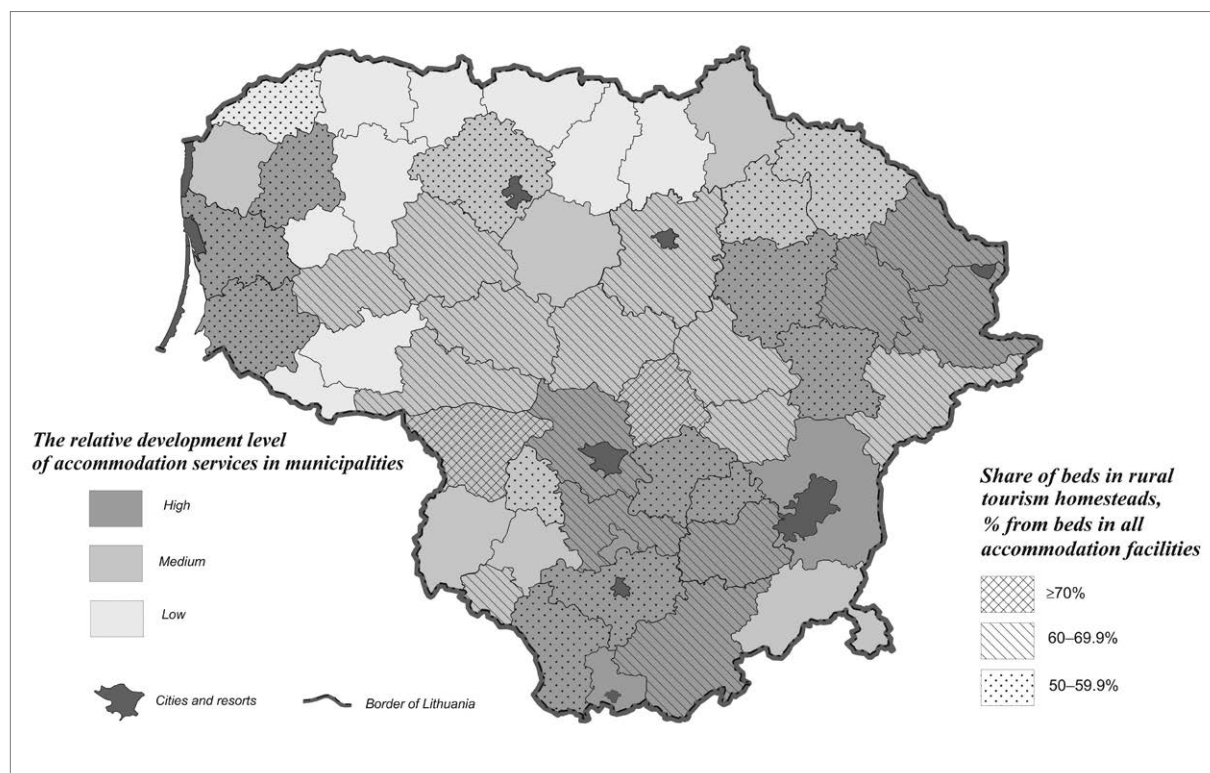


Thus, we can see that the Lithuanian tourism sector as a whole, as well as the accommodation and the rural tourism sectors were constantly and rapidly growing. They reached their maximum right before the COVID-19 pandemic in 2019.

The accommodation sector of Lithuania, like in most other countries, is concentrated in cities. According to our calculations, 76.3% of all lodgings were in cities, and only 23.7% in rural areas in 2021. Although the accommodation sector does not play a leading role in majority of rural municipalities, but it is an important and even the most important job provider in some local rural areas.

We can notice very significant spatial differences of the intensity of accommodation sector in different municipalities (Figures 2 and 3). These differences primarily depend on the abundance of recreational resources (these are forests and lakes in the case of Lithuania) and on the location of the particular municipality in relation to the largest cities. The rural tourism business is the main accommodation provider in most municipalities. There were 31 municipalities (out of 60) where more than 50% of all accommodation places were provided by rural tourism homesteads. The rural accommodation service is more significant in eastern and western Lithuania, and less significant in northern and central Lithuania, where municipalities are characterized by intensive agriculture.

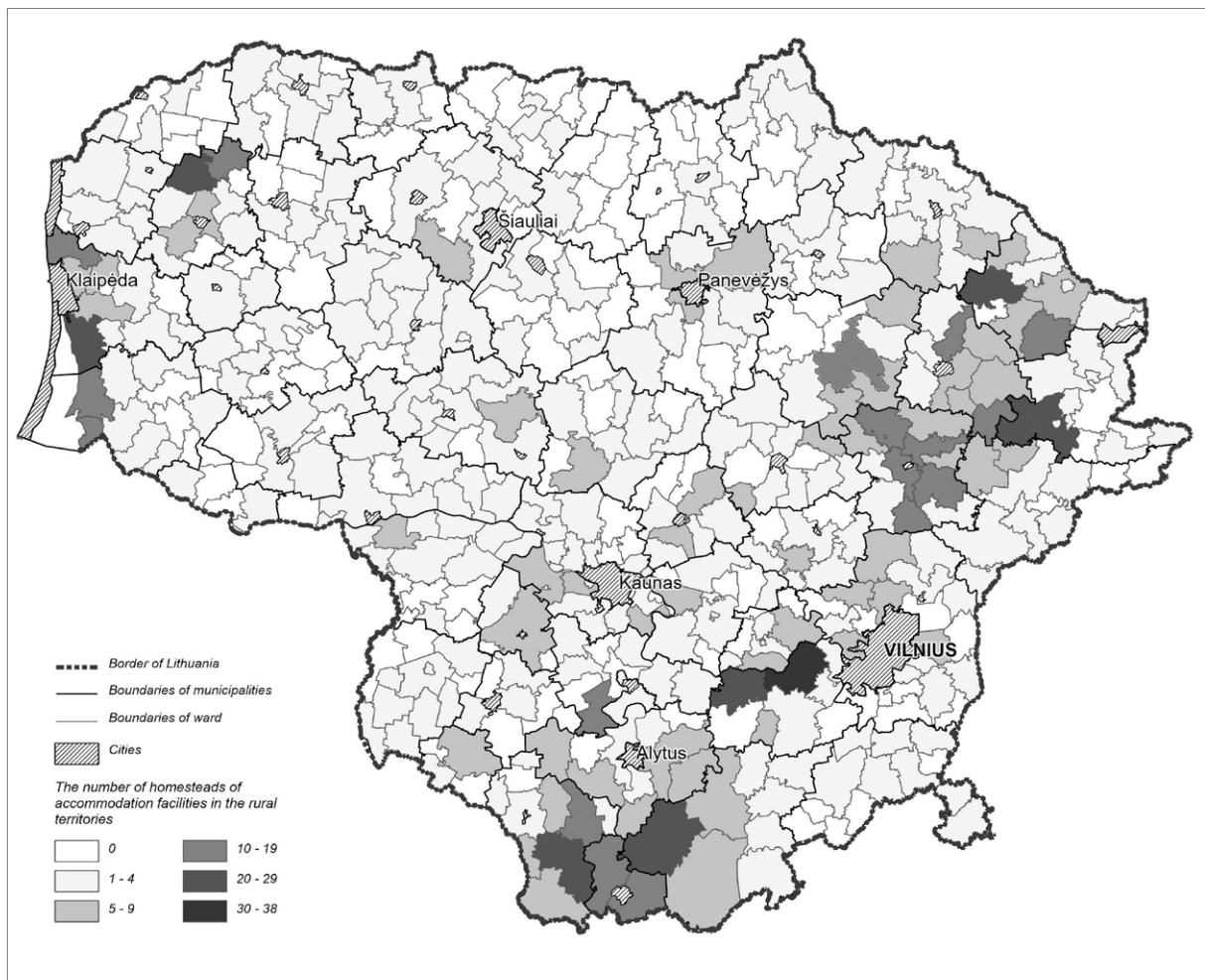
**Figure 2**  
The territorial distribution of rural tourism and other accommodation services in predominately rural municipalities 2022



Note. According to Statistics Lithuania (2022). The research data (2022).

Comparing the present distribution of the tourism homesteads with the results of research conducted in 2015 (Kriaučiūnas, 2016), we notice that the number of the accommodation establishments is relatively stable. This allows us to conclude that the most important rural tourism regions are already formed and the territorial dispersion of the accommodation business in rural areas will remain relatively stable.

**Figure 3**  
*The distribution of tourism homesteads providing accommodation services in the rural elderships (LAU 2)*



Note. According to State Consumer (2022). The research data (2022).

The number of tourists increases several times during the holiday season in areas characterized by a particularly high concentration of accommodation facilities. The central settlements located in these areas act as service centres benefiting from increased demand for retail services during high season. During our research, it was noticed that approximately 4,000 tourists stayed in Linkmenys eldership (Ignalina district municipality) on summer weekends, when the local population was 763 in 2021 (Statistics Lithuania, 2022). The situation is similar in other elderships characterized by intensive recreational use, most of which are located in sparsely populated Eastern Lithuanian territories (Daugirdas et al., 2013). The accommodation business in such elderships can create about 50% of the jobs, bearing in mind that it is a seasonal business (Kriaučiūnas, 2016). Thus, although the accommodation business in rural areas in general is not a significant sector of economy, there are areas where this business is very important. Fewer and fewer rural residents work in the traditional activities of rural areas in Lithuania (Kriaučiūnas & Burneika, 2019). Agriculture, forestry provide less and less jobs so the rural tourism business occupies a relatively small but significant place in the process of activity diversification, when in small places every job counts.

## 4.2. The impact of the COVID-19 pandemic on the accommodation sector in rural areas of Lithuania

### 4.2.1. COVID-19 and accommodation sector in rural regions of Lithuania

Economic fluctuations result in changes of demand for various goods and services across different sectors and consequently in space. The first two major economic crises, which struck Lithuanian economy during the first decade of independence, mostly damaged peripheral areas of the country (Burneika, 2007). The main result was losing jobs in industry and agriculture. The economic crisis, that started in 2008 had damaged exporting industries and real estate markets so economies of the bigger cities suffered more across Central and Eastern European countries. (Blažek, 2010; Gorzelak et al., 2012).

The decrease of 73 percent of international arrivals was monitored in Lithuania in 2020. This decrease was similar to that of the whole world and Northern Europe. The growth of tourism in 2021 was minimal, and the number of inbound tourism trips remained at the level of 2020 (Statistics Lithuania, 2022). Thus, the changes in international tourism flows that took place in Lithuania during the COVID-19 pandemic are similar to these in the Northern European region, which was affected more than remaining Europe (Statistics Lithuania, 2022; UNWTO, 2022).

Worldwide, the decline in international tourism flows during the pandemic led to an increase in domestic travel. The share of domestic trips compared to the total number of trips in Europe increased from 55 percent up to 69 percent (Knezevic et al., 2021). The share of local tourists increased from 52 percent in 2019 till 76 percent in 2020 and 79 percent in 2021 in Lithuania (Lithuania Travel, 2022). Domestic tourism somewhat compensated the losses of international tourism, but still did not replace it. Spatial changes during the pandemic were different along the urban-rural axis.

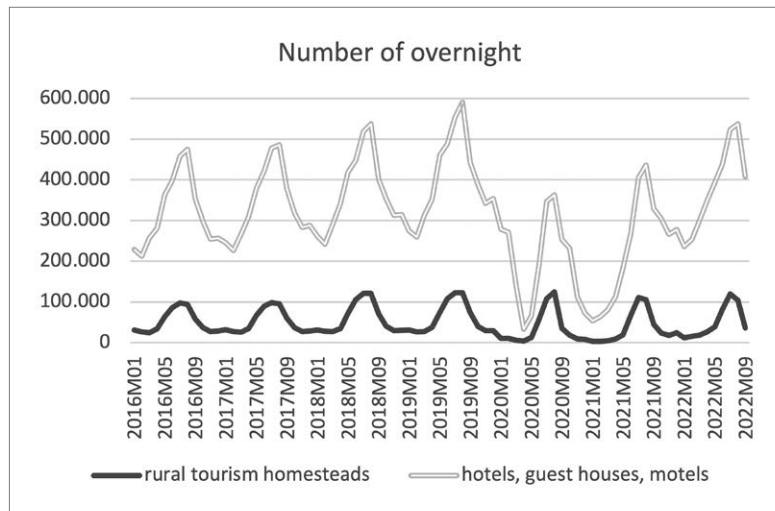
Tourists from abroad have always occupied an insignificant share in the rural tourism in Lithuania, (Table 2). Lithuanian citizens formed for 90 percent or more of all tourists in rural tourism homesteads before the COVID-19 pandemic (Statistics Lithuania, 2022). This share of local tourists increased to almost 100 percent during the pandemic (Table 2), when city dwellers started traveling in their own country. However, despite the increase in domestic travel, the total number of tourists in rural tourism homesteads has decreased. The decrease was about 40 percent in 2020. The number of tourists increased in 2021, but this increase was insignificant (Table 2). Thus, internal tourism only partially saved the accommodation business in rural regions.

Another important aspect is the seasonality differences, which became particularly evident during the pandemic. The restrictions on movement within the country during the quarantines were in force in low seasons. Those restrictions had been removed during the summer seasons, when the number of overnight stays reached approximately the pre-pandemic level. Although, the flow of tourists in rural tourism homesteads generally decreased during the pandemic, the flow of tourists was higher than before the pandemic in July and August, both in 2020 and 2021.

In Figure 4 we can notice the increased seasonality of accommodation sector during the pandemic. The seasonal trends in the hotel sector were similar. However, the decrease in the number of overnight stays was much higher in the winter season, when it fell to minimum values. The number of overnight stays was almost twice lower than the number of overnight stays before the pandemic in the summer season. We can state that the rural accommodation sector was less affected by the pandemic than the urban one.



**Figure 4**  
The number of overnight stays in hotels, guest houses, motels, and rural tourism homesteads in Lithuania 2016-2022



Source: Statistics Lithuania (2022).

The data from The State Social Insurance Fund on the number of hotels' employees and their salaries (Sodra., 2022), also illustrate that this sector was the most damaged in the 3 biggest Lithuanian cities, where the number of employees has dropped by more than 25 percent. The relative decrease was more than twice smaller in predominately rural municipalities and was evident mostly during the low season.

#### 4.2.2 The impact of the COVID-19 pandemic: Approach of tourism experts

A considerable number of tourism experts (36%) emphasized the significant decrease in the flow of foreign tourists and the predominance of local tourists in domestic trips. This was the main answer to the free assessment of the overall tourism situation. Some experts highlighted that the age structure of travellers and the size of tourist groups have also changed. It became evident that mainly young families travelled and the trips were made in small groups during the pandemic. Due to this, the demand for group travel has decreased significantly. The opinion of representatives from Rokiškis (North-Eastern Lithuania) tourism and business information center reflects the most important trends:

*This was the golden age of local tourism, because most travellers turned to the homeland during the pandemic period and began to explore it. There had been a significant decrease in a group or large chartered tours. The tourists travel in small groups as in family, family with friends, or just a group of friends. The chosen destinations are explored during the trip at a leisurely pace. Tourists searched of unique sights, new experiences, and untasted tastes. Locality became a very important dimension.*

business did not benefit from such trips The regional specificities of particular areas also emerged in the answers since tourism experts were interviewed throughout the territory of Lithuania. The drop in tourism was more significant and reorientation towards the local tourist was more difficult in specific resort areas, where tourists from abroad made up a significant part of their accommodation.

The representative from Trakai tourism office (Trakai is a tourist town near the capital Vilnius):

*The situation was difficult in Trakai but also in Lithuania, since Trakai was dominated by inbound tourism before the pandemic. In 2021 we only reached 20% of inbound tourism level of 2019 (especially group). The situation is similar in Lithuania in terms of incoming tourism. The*

*planned bubble of the Baltic countries suffered the failure in 2020 - because there were a little more Estonians, but a dozen times less Latvians than before the pandemic, Lithuanians travelled around the Baltic countries but our neighbours did not. Local tourism recovered a little, but before the pandemic it accounted for about 20 percent in Trakai - which is roughly what it remains. .*

The tourism expert from Druskininkai (Druskininkai is a SPA resort in southern Lithuania) emphasized:

*Tourist flows fell by more than 50% in Druskininkai, which until 2019 lived only from tourism and almost 50% of flows were from abroad. Tourist facilities e.g., rural tourism homesteads, which existed only from the Lithuanian tourists, may have even increased their turnover after closing the opportunity for Lithuanians to rest elsewhere. The Lithuanian tourists discovered other Lithuanian tourism objects.*

The tourism expert from Šilutė (Western part of Lithuania):

*Tourism really flourished in the last years before the pandemic in the seaside region. We lost foreign tourists, especially Germans, majority of whom were visiting sea side resorts before the pandemic. We have also lost tourist groups and vacationers traveling on camping trips.*

The significance of local tourism is distinguished because as much as 94 percent of respondents believed that local tourism can boost regional vitality. Despite the negative impact of the COVID-19 pandemic many tourism experts also emphasized new opportunities opening up in the time of this challenge. 56 per cent of tourism experts emphasised new opportunities opening up for rural tourism homesteads. 1/3 experts underlined the visible decrease of foreigners and dominance of local tourists in tourism trips assessing tourism situation in Lithuania in comparison with pre-pandemic period (Table 3).

Most experts believe that local communities can contribute to the development of tourism through involvement, participation and cooperation. Some noted that local communities are already actively engaged in this process. It was also noticed, that local communities are relatively few in number, they have a few active people. Such a situation negatively affects the activity of the community.

**Table 3**  
**Assessment of the situation and possibilities of Lithuanian tourism, considering the Covid-19 pandemic**

Question and expressed opinion	Number of mentions in the answers (units)	The proportion of responses (%)
<b>Have the travellers and your clients changed in comparison with the pre-pandemic period?</b>		
Yes, they have:	33	66
<i>The decrease in foreigners and increase in local's tourists.</i>	16	32
<i>The groups became minor and younger, and trips were shorter.</i>	8	16
<i>Tourists became more curious</i>	4	8
No, they haven't change	8	16
<b>Are you noticing new services provided by local tourism service providers?</b>		
Yes, we are!	34	68
<i>(Remark. Most often, answers indicate the adaptability of businesses and introduced new services (new, more diverse night stay places for niche markets (individualized products), more varied services – nature tours, an increase of transport rentals, increased business cooperation by combining provided services).</i>		
<b>Did you introduce some technological or nontechnological innovations in your business since the beginning of the pandemic?</b>		
Yes	40	80
<i>(Remark. Most often, this is related to the transfer of some services into virtual reality (virtual tours, information, helpdesks)</i>		
<b>Did you notice new possibilities for local tourism?</b>		
Yes, we notice.	38	76
<i>(Remark. This is mainly related to the possibility of developing local tourism and its products, nature and ecotourism, rural tourism and smaller groups (families) oriented tourism services.</i>		

Table 3 (continued)

<b>Do you think that new possibilities for developing rural tourism farmsteads and second housing in rural places appear?</b>		
They appear	28	56
Partly appear	13	26
Status quo	4	8
Can't see any new possibilities	1	2
Don't know/ have no opinion	2	4
<b>What new domestic tourism products (attractions, routes, services) would be in demand and popular?</b>		
For learning about nature, ecological	11	22
Gastronomic	8	16
New activities	7	14
Tourism products for families	5	10
<b>Can local tourism promote the liveability of regions?</b>		
Yes, it can	47	94
<b>What, in your opinion, is missing in popularizing the concept of slow tourism in the regions?</b>		
Information and advertising	16	32
Service providers, infrastructure	13	26
Targeted policies, visions, perceptions, marketing	10	20

Source: Authors' calculations based on a survey of tourism information centres.

The absolute majority of the tourism information offices (80%) applied or tried to introduce new innovations during the pandemic. Usually, it was the transfer of services to the virtual space (including creation of virtual tours). These findings go in line with the suggestions made by some authors right at the beginning of the pandemic, concerning positive effects of the pandemic, which opened up possibilities for positive changes in the tourism development (Benjamin et al., 2020; Brauder, 2020; Fuchs, 2022; O'Connor & Assaker, 2021).

## 5. Planning the post-covid future of tourism: RegTour model

To meet the needs of the tourism sector in general and businesses in rural tourism and accommodation sector, the new tourism models should be developed. Tourism transformations involve renewal, recovery, rethinking and reviving. The main aspect of a new model is a need to include societal and technological changes, elements of resilience for the future crisis, flexibility and transformation. Such model could promote the development of new forms of knowledge-based business and the transformation of the sector. The innovative business models related to tourism and accommodation sector should include the approaches of sustainability, green and circular economy, and digitalisation (Liutikas, 2023).

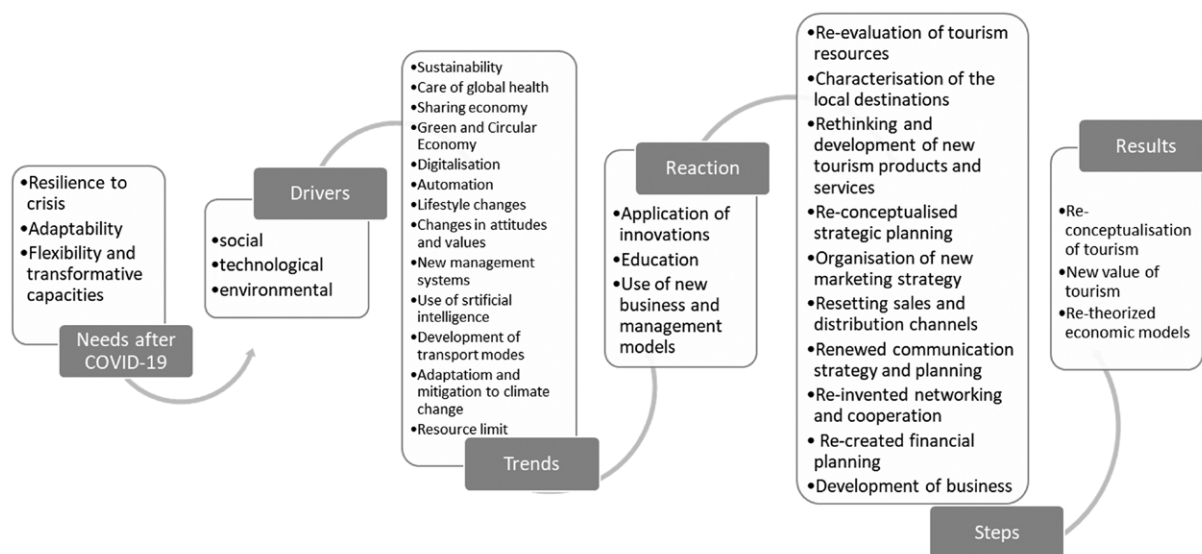
The authors of this article propose the new RegTour model (Figure 5). This model could create significant effects on travel arrangements and for notion of tourism value. The RegTour model is an answer to the impact of COVID-19 on the country's economy, as well as possibility to promote the development of new forms of knowledge-based business. RegTour model emphasizes the economic viability of regions. In our opinion, such a new model should include such elements as resilience, sustainability, adaptability, education and innovations. The developed RegTour model includes both scientific recommendations and the application of innovative products and services in the tourism sector, as well as the assessment of new opportunities available to the tourism business.

There is a need to re-evaluate Lithuanian tourism resources and tourism opportunities in the context of sustainable business development, adoption of innovations, digitization, climate change, health, social security and the labour market. Possible directions of changes in the tourism sector are related to the application of new technological and non-technological innovations, new services and products, implementation of the

principles of circular economy and green transformation. The development of tourism innovations and tourism services in the regions is necessary due to the decrease in incoming tourism.

The actual question is whether the accommodation sector is capable of applying new business models. However, introducing of the new forms of knowledge-based tourism business and involvement of the tourist stakeholders could create possibilities for a new tourism service in country's regions. Social innovations include new offerings for tourists, reorganization of service processes and the change in tourists' behaviour (e.g. social interactions based on technological development). Transformation of tourism and accommodation sector is an ongoing process. However, the deeper analysis is needed to develop this model, including further conceptualisation, testing and applications.

**Figure 5**  
*The proposed RegTour model for tourism future in the regions*



## 6. Discussion and conclusion

Taking into account the results of our research, we can state that despite the extremely negative impact of the COVID-19 pandemic on the tourism sector both in the world, and in Europe, and specifically in Lithuania, the accommodation sector in rural areas suffered less than in urban areas. Although the COVID-19 pandemic has hit the entire tourism sector very hard, rural tourism suffered the least. Such advantages of the rural places as ecological environment and the possibility of having more space and less physical contacts due to the sparse population became apparent during the pandemic. The importance of rural tourism services in the context of public health became also apparent during the pandemic. Rural tourism was particularly compatible with slow and small-scale tourism. Young families, who loved traveling abroad before the pandemic, discovered local tourism, and this trend served for the diminishing the negative COVID-19 effects in rural areas.

During the COVID-19 pandemic, the rural accommodation sector adapted to changing conditions, the absolute majority of service providers managed to survive and develop. The increase in local travel accelerated the supply of services related to such travel, while the restrictions on movement applied during the quarantine encouraged the creation of more diverse tourism products, and also contributed to the digitization of the sector and the growth of virtual travel. Similar trends are observed by other authors (Brozović & Saito, 2022). All these newly developed products would undoubtedly accelerate the recovery and further development of the

tourism sector after the end of the pandemic. Even before the pandemic, the role of innovation (especially the transfer of service advertising to the digital space) was important. Innovations were spreading during the COVID-19 pandemic, and electronic tools, which before the pandemic were mainly used for advertising, were also used for some services. The regularities identified during the research allow us to think that the experience gained by the providers of accommodation services in rural areas during the pandemic will allow them adapt and develop successfully in the context of new global challenges.

There is reason to believe that domestic tourism, which became popular during the pandemic, would remain popular after it at least to some extent. Such factors as increasing costs of international traveling and changing attitudes towards environmental challenges will make their influence.

The inbound tourism service providers were able to withstand the challenges of the pandemic because of governmental support (Pociute-Sereikiene et. al. 2022) but also because of their ability to innovate and change. The development of new more sustainable forms of services along with the more nature friendly tourism activities can be named as the most important positive consequences of the pandemic period. This definitely makes tourism dependent regions more resilient and less vulnerable in these turbulent times.

The new proposed RegTour model for the implementation of tourism innovations in the country's regions is based on the adaptation of regional infrastructure to tourism needs and the introduction of new products and services. Involvement of local residents is an important task for the spatial changes of tourism value chain. New services, new tourism products and new business forms will help to keep the level of attraction for domestic and foreign tourists in the future.

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