

POSSIBLE RISKS IN AGRITOURISM AND WAYS TO OVERCOME THEM (BASED ON THE EXAMPLE OF THE GURIA REGION)

Murman Tshekladze¹, Salome Sulaberidze²

Abstract. Agritourism activities are sometimes associated with certain risks, protection against which can be seen as one of the important factors contributing to the development of agritourism. The purpose of the article is to analyze the risks in agritourism on the example of Guria, one of the regions of Georgia, and to outline ways to overcome them. The document outlines the risks associated with overcrowding in tourist destinations, climate change, seasonality of tourism, spread of various pests/diseases of agricultural plants and animals, food safety, environmental and air pollution, improper waste management, financial support for agritourism, etc. Their solution often requires both individual and joint coordinated efforts of farmers, local governments and visitors themselves, resulting in the opportunity to offer tourists a variety of safe tourism products in the form of recreation, interesting attractions, and a better understanding of local life, which will make their stay more enjoyable, useful and interesting. The main results of the article are based on the data of our research, which was conducted by direct survey (questionnaire) in one of the regions of Georgia – Guria. The study determined that there are 566 farms in all three municipalities of the Guria region (281 in Ozurgeti municipality, 110 in Chokhatauri municipality, in Lanchkhut municipality – 175), 400 farmers took part in the study, 80 of whom are engaged in agritourism (41 in Ozurgeti municipality, 16 in Chokhatauri municipality, 23 in Lanchkhut). The topic analyzes the peculiarities of the existing risk management and offers recommendations on measures to be implemented on the example of the Guria region.

Key words: agro-tourist, farmer, safety, climate, seasonality, waste, parasites, pollution, environmental protection.

JEL Classification: O13, Q12, Q53, Q58, Z32

1. Introduction

According to the World Tourism Organization, agritourism is one of the five strategic directions of tourism development and ranks second in popularity after sea tourism (Chkonidze ... 2019).

Its development was mainly determined by the prospect of increasing farmers' incomes. It is known that the outflow of able-bodied rural population to cities has led to a reduction in the number of rural residents and a decrease in agricultural income, and a shortage of natural products has emerged on the market. The desire of tourists to relax in the natural environment and have the opportunity to taste natural products has contributed to the reduction of migration from rural areas and the formation and development of agritourism as a specific industry

that has provided new employment opportunities for the local population and improved their living conditions (Tshekladze, 2022).

This issue is also relevant in the case of Guria, one of the regions of Georgia (see Figure 1). The region is located in the west of Georgia, on the Black Sea. It has great potential for agritourism development. The beautiful landscape, clean air, organic food, peaceful environment, Georgian hospitality, the opportunity to engage in agriculture, colorful traditions, etc. All this creates conditions for tourists to feel happy and have a great vacation. However, there are many challenges to overcome.

The results of our research have shown that for the development of agritourism it is important to: link agricultural activities, farms, village/

¹ Batumi Shota of Rustaveli State University & Center for Socio-Economic Research, Georgia (corresponding author)
ORCID: <https://orcid.org/0000-0002-7626-3355>
E-mail: murman.tshekladze@bsu.edu.ge

² Batumi Shota of Rustaveli State University, Georgia
E-mail: Salome.sulaberidze1900@gmail.com





Figure 1. Georgia, Guria region

community and customs, traditions and cultural values with tourism. Sustainable use and proper management of natural and potential tourism resources in the community/village.

One of the important components of good management is managing expected risks. Tourists should feel safe and receive as diverse a tourist product as possible.

Therefore, it is necessary to analyze all expected threats and take adequate measures to prevent them.

2. Methodology

In the direction of agrotourism, foreign scientists have dedicated their works: B. Bosk, J. Bridenhans, J. Lopa, E. Vikens, R. Mareski, R. Turner, O. Korobova, T. Volkova-Goncharova, S. Markarian et al.

At the regional level, they studied the potential of one of the tourism areas – agritourism.

Georgian authors include E. Kharashvili, M. Metreveli, L. Korghashvili, N. Chikhladze, G. Bedianashvili, I. Shalamberidze, G. Shanidze, L. Khartishvili, N. Jabnidze, R. Beridze, I. Gagnidze, c. Tsekhtadze, N. Khakhubia, N. Samchkuashvili, I. Akhalbedashvili, M. Diasamidze, A. Devadze, Z. Mikashavidze, P. Chaganava, the works of Gogelia, and others.

Based on the conceptual analysis of foreign and Georgian literature, the article uses a qualitative

research method – documentary analysis. A synthetic analysis of the obtained results is carried out.

The authors also used information technology, a systematic approach, and comparative analysis. To obtain the data, a survey was conducted by filling out a questionnaire.

Both local agritourism farmers and non-tourism farmers were interviewed. Information provided by representatives of local government entities also helped to assess the current situation and identify problems.

The data obtained from the survey were analyzed. The results were presented in the form of diagrams, conclusions and recommendations were formulated.

3. Results and discussion

The study identified the risks, threats and challenges that farmers may face in successfully managing agritourism:

Environment pollution. Its sources can include: industrial and thermal power complexes, household, construction, agricultural facilities, transportation, chemicals introduced into ecosystems by humans, intensive farming, consumption of chemical fertilizers and pesticides (Civil... 2019:30).

In addition to air, water is also polluted. For example, the Sufsa River not only worsens the

quality of coastal water, but often the waste and garbage left by the river pollutes the river banks and the sea coast in Grigoleti.

Since most of the local population uses yard latrines, sewage in the Guria region is currently not large in quantity, but in the future, with the improvement of living standards and tourism development, along with an increase in the number of modern latrines, the problem of domestic sewage will definitely be on the agenda.

Sewage not only pollutes surface water, but is often located near drinking water wells, which directly threatens to contaminate drinking water (Integrated...2019).

Any mass tourism destination may face the problem of poor or inadequate waste management when the number of visitors far exceeds the number of local residents. At such times, old landfills grow, which has a negative impact on nature and can lead to the spread of diseases.

Waste management is one of the most important environmental issues in the Guria region. It is complex and includes issues related to environmental pollution from household waste, prevention of unsanitary landfills, and hazardous waste management.

Relevant events were also held in the region, but on a smaller scale. In particular: Ozurgeti Municipality won a grant competition, and several dozen garbage cans were installed in the central areas of the municipality. The Ozurgeti cleaning service received new equipment. A group was created to clean the rivers flowing through the city.

As a result of the event, the pollution of beaches with household waste on the Black Sea coast adjacent to the municipality has decreased. Currently, there are four landfills in the region: Ozurgeti village, Ureki, Lanchkhuti and Chokhatauri villages, and Budzhak village. However, there is still no periodic collection and sorting of solid waste from villages remote from the center.

Climate change and natural disasters. Weather and climate are the two main factors that determine the bioclimatic resources of an area. Unfavorable climatic conditions and their changes can affect the flow of tourists or seasonal changes in tourism activities. This is especially true for tourism, which depends on the need to produce agricultural products.

Weather is mainly related to changes in the average annual temperature, the amount and

nature of precipitation, and extreme climatic events (droughts, floods, storms, strong winds).

Natural hazards in the region include strong winds, heavy rains, floods, landslides, and erosion of banks and rivers. Coastal erosion (Climate...2016).

In addition to Ozurgeti municipality, the so-called seismological and tectonic zones of Chokhatauri municipality in the Guria region are particularly vulnerable. The adjacent areas of Krip. The region's densely populated hilly terrain is characterized by a high risk of hazards.

There is also a risk of flooding in the Lanchkhut municipality. In 1997 and 2005, a 60-hectare area was flooded as a result of river overflows, and the total damage amounted to \$7 million. Landslides (melting of precipitation during rains) and erosion in river valleys (washing away of banks during summer and autumn floods) are also observed.

Based on the above, it is necessary to have an emergency response plan (Guria...2013).

Seasonality and changes in tourism. The study of seasonality in tourism allows to determine the degree of influence of natural and climatic conditions on the formation of a tourist product, to identify the factors that determine seasonality in tourism (Kartvelishvili, 2019).

Attention is paid to climatic conditions, especially in the case of agritourism. After all, agritourism is directly related to the production of organic products. The production of the product depends on the growth and development of plants, animals and birds, their reproduction and yield on farms. One of the conditions for a fruitful year for a farmer is favorable weather.

For example: Guria is divided into Bar and Mountain regions by natural conditions. It is characterized by humid subtropical weather. Due to rising temperatures in the summer, a period of drought begins. Currently, horticulture farmers do not have enough water and irrigation facilities. The lack of drinking water makes it difficult for pets and birds to survive. Therefore, farmers need help and support from local authorities in organizing water supply and irrigation systems.

In addition, the region is widely distributed. Most of the local population owns land plots. They grow corn. Due to climate change, the sowing season was postponed. If they used to sow corn in April, now they sow it in late May or

June. The corn does not reach full maturity and the harvest is of poor quality.

There are also cases of deforestation in the region. As a result, there are natural disasters such as floods, landslides, floods, droughts, and destruction of biodiversity.

The targeted use of forest resources: collection and processing of non-timber forest products, berries, medicinal herbs, tea, contributed to the development of agritourism.

In winter, bad weather and frequent rains interfere with traffic, movement, and recreation of visitors.

Finally, suitable natural conditions contribute to the development and productivity of farms, which is important for the health and recreation of tourists.

Various of pests / diseases spread risk. Pests cause enormous damage to agriculture. Agro-technical, physical and mechanical, biological, chemical and integrated control methods are used to eliminate them (Kanchaveli, 2022).

To protect plants from the Asian pheasant and other pests in the Guria region, the National Food Agency's mobile laboratory vehicle is used to travel to villages when necessary. It is equipped with the latest modern equipment and tools necessary for field work, and samples of fruits and vegetables brought by the public are checked on site, and appropriate recommendations are made on measures to be taken on household plots.

For example, such outreach events were held in the villages of Lanchkhut municipality (Lesa, Chochkhati, Zemo Chibati) (Food...2019).

It is necessary and important to take such measures, which should be active and systematic.

General principles of food safety and regulation. Local farmers offer consumers natural and diverse products. In order to improve their quality, measures are taken periodically to combat plant diseases. In the field of veterinary medicine, preventive and therapeutic measures are taken against particularly dangerous animal diseases. Private veterinary activities are coordinated by special services (Guria...2013:18).

However, there are cases when the quality of the products produced does not meet the demand of visitors. Or a large part of the population's income is spent on food products whose quality is not controlled. Therefore, the quality

of service and food safety issues still remain underdeveloped and need to be improved.

Economic risks consist of two main parts: 1) in agriculture – a year without a harvest and 2) in the enterprise – low key characteristics of the products manufactured. In both cases, the economic risks are low economic growth, economic instability, possible complications in international trade relations, low productivity of the agricultural sector, weak entrepreneurial skills in rural areas, insufficient economic diversification in rural areas, limited access to financial resources and modern technologies, and poor infrastructure in rural areas.

Social Risks. Currently, Guria district has a difficult demographic situation, which is negatively affected by migration. Migration processes are caused by a difficult social situation, low level of social infrastructure development and poor employment prospects. One way to solve this problem is to develop agritourism. Agritourism will help improve demographic processes in rural areas and reduce migration.

Pandemic. The COVID-19 pandemic has dealt a serious blow to this sector. The negative impact of the pandemic was also reflected in Georgian tourism. A decrease in the number of tourists was observed in all regions of the country. Guria was among them. Therefore, based on the study, the authors compared the situation before the pandemic with the period after it. In 2019, all three municipalities received a total of 140,844 visitors, of which 20,535 were agritourists. In 2021, 43,420 visitors visited the Guria region, of which 8,250 were visitors interested in agritourism. That is, over the past 2 years, the total number of tourists has decreased by 97,424, and the number of agritourists has decreased by 12,285 (see Figures 2, 3).

Ways of regulation. The existence of these risks requires the development of ways to regulate, implement and put into practice, in particular, **the main areas of risk regulation are as follows:**

1. Ensuring active and systematic preventive activities on the part of the farmer to minimize expected risks:

- **Technical tips to keep guests safe:**
 - Farms must be equipped with medical, fire, telephone, transportation and other types of communication that may be necessary in the event of an emergency;

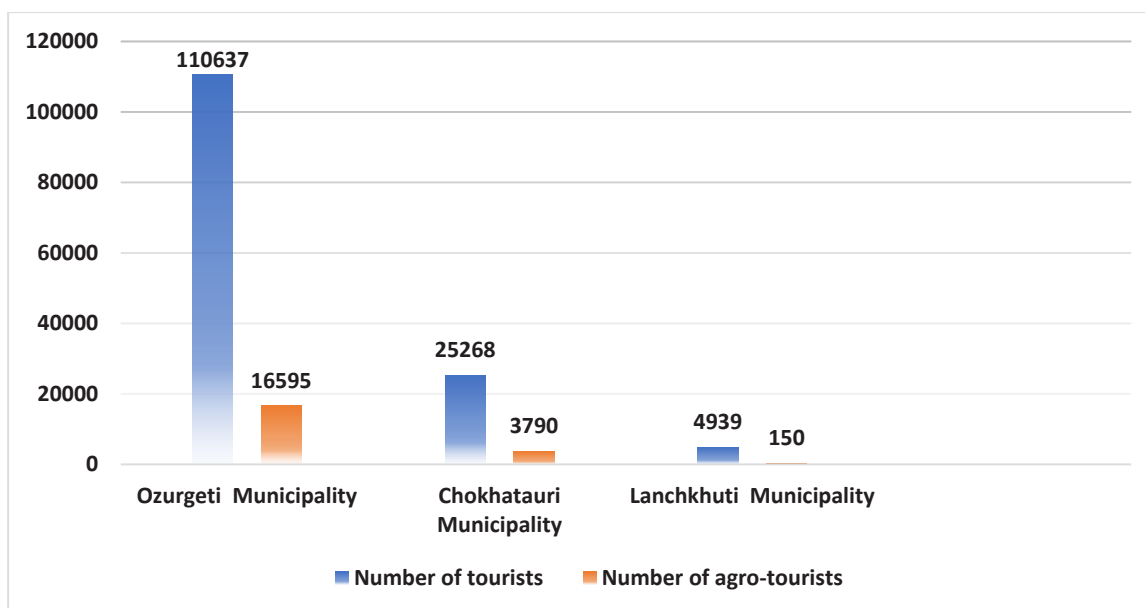


Figure 2. Number of tourists in all three municipalities in 2019

Source: tourism services of Ozurgeti, Chokhatauri and Lanchkhuti municipalities

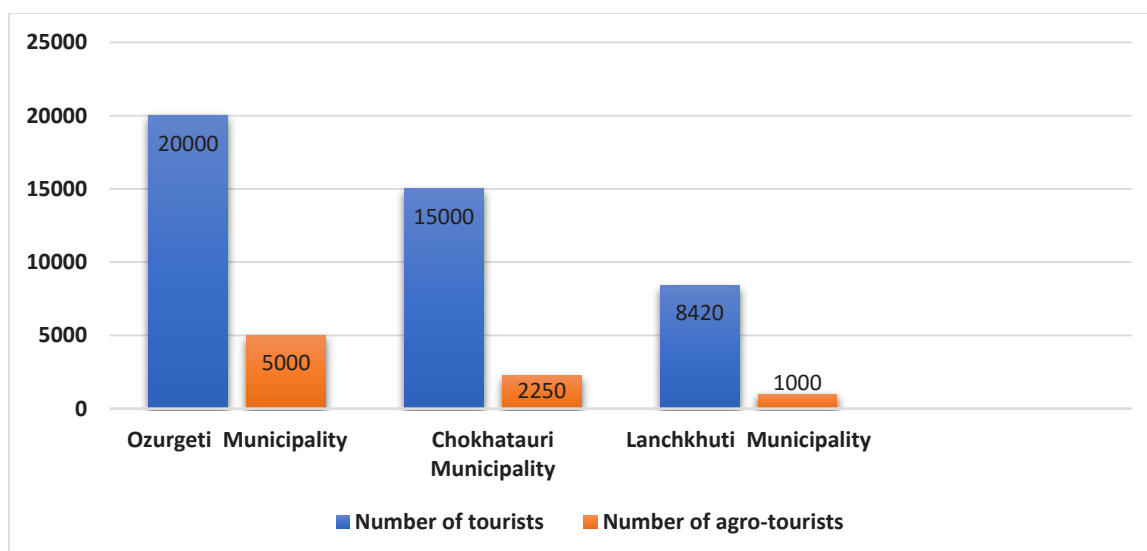


Figure 3. Number of tourists in all three municipalities in 2021

Source: tourism services of Ozurgeti, Chokhatauri and Lanchkhuti municipalities

- Necessary warning signs for visitors should be posted on the farm, as a significant number of tourists may not know the rules of behavior and life on the farm related to coexistence with pets and the use of farm equipment;
- Special signs should be placed in those parts of the farm where the movement of guests/tourists is restricted;
- The farm should have an internal communication system (e.g., a handheld voice transmitter) that allows guests to easily communicate with the farm staff;

- First aid kits should be available in all farm buildings, and farm guides should be equipped with first aid equipment;
- Animals should be placed away from tourists, and they should not approach tourists without guides working on the farm;
- Special sanitary facilities should be available for tourists in different parts of the farm;
- It is necessary to organize open and closed recreation areas for tourists. It is necessary to have drinking water and bathrooms available in these places;

– Garbage cans should be placed on the farm. It is desirable that garbage cans allow tourists to separate waste. Separated waste can be used for compost production, and the sale of metal and glass waste will bring additional income to farmers (Farmer, 2016:10-11).

In addition, it is advisable to use the views of other scholars on this topic. For example, Štetić s. Opinion regarding risk control in agrotourism:

Risk Control and Reduction:

– One of the essentially important tools in the fight against risk is insurance on responsibility (Page, Getz, 1997). Before rural destination start receiving tourists, they have to check security of rural destination, then the host should:

– Identify the places guests visit, the activities they participate in, how they are monitored, the precautions to be taken, and all rules of conduct and warnings should be posted in prominent places;

– Develop an emergency plan and always keep a box with a well-stocked first aid kit on hand; a plan should also be in place for natural disasters such as earthquakes, floods, and fires;

– Recommend that visitors wear appropriate footwear (closed-toe shoes, sneakers or deep boots, not sandals) and clothing;

– Provide guests with special instructions and explain to them that this is a farm; since some accidents are always related to the terrain (uneven ground, insects, climate, odors), visitors should accept any such risk and take certain precautions (Štetić, 2015).

It is also worth noting Rohana P. Mahaliyanarachchi's views on risk management in agritourism:

"Risk management in agriculture is vital for both individual farmers and agriculture as a whole, as higher risks threaten the sustainability of the agricultural sector and lead to the collapse of both the micro and macro economies in a country. Therefore, mitigating the impact of agricultural risks is essential for the progress of the sector, and identifying appropriate risk management strategies to overcome these effects is an urgent need. Risk management should not focus on just one risk factor or just one solution. Diversification is a good strategy to reduce agricultural risks. Within a normal level of risk, individual farmers are responsible for and able to manage their own business

risks. Farmers apply different strategies to manage the risks that affect their production and income. Agritourism is an enterprise that can be introduced to successfully diversify the farm business"¹ (Rohana P. Mahaliyanarachchi, 2016).

In addition to the safety of visitors, it is important to protect farmers' crops and their operations from potential risks. In this regard, it is worth noting the agricultural insurance program implemented by the Agrarian Development Agency. It is aimed at developing the insurance market in the agricultural sector, promoting agricultural activities, preserving income and reducing risks for those involved in these activities (Agroinsurance, 2014).

2. Cooperation and involvement of representatives of local governments and environmental protection authorities in the management of expected risks.

Measures of state support for agritourism can be divided into:

– Political stability and security;

– Establishment of tax benefits;

– Ensuring the possibility of obtaining a government grant;

– Provision of preferential credit resources.

– Development and implementation of projects and programs to promote agritourism;

– Arrangement of tourist infrastructure (Explanatory, 2021:13).

3. Respect for the environment and the rules of life of local farmers in a tourist location by visitors. The following key questions arise from the above:

From tourists: psychological or behavioral capacity is the point at which a visitor feels that additional tourists will spoil the experience. The ecological culture of tourists and vacationers is very important – knowledge of and compliance with environmental behavioral norms (Pavliashvili, 2018).

From the above, it follows that the implementation and use of the "main areas of risk management" in practice is a necessity. This will help the farmer to avoid possible risks when carrying out agritourism activities.

4. Conclusions

The study revealed the following problems:

1. Environment pollution.

¹ Department of Agri Business Management, Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka, Belihul Oya 70140, Sri Lanka.

2. Climate change and natural disasters.
3. Miscellaneous of pests / diseases spread risk.
4. Food safety and general principles of regulation.
5. Economic risk.
6. Disorganized infrastructure.

The solution to the existing problems is as follows:

Develop and implement an action plan for environmental protection and agriculture at the regional level. This should be taken into account:

1. A group of environmentalists should be mobilized to protect the environment. They should monitor the behavior of local farmers and visitors in the environment (cutting down trees, polluting the environment, interfering with flora and fauna).

Representatives of the cleaning department should also become more active against environmental pollution, focusing not only on cleaning central streets and districts, but also on placing bins in villages and near farms, and gradually removing and sorting garbage and waste. Take care of cleaning the central squares of villages and towns.

In addition, control over the internal and external security of the farm also lies on the farmers' shoulders. They are not able to create a safe environment for visitors to relax.

2. Climate change and natural disasters – to mitigate existing risks, it is necessary to have an emergency response plan.

Hydrometeorological stations should be established in municipalities. Accordingly, information about possible changes in climate conditions and natural hazards will be provided. The territorial unit should also have an early warning system for impending natural disasters.

Disaster risks should also be considered when preparing land use and farming projects, village taverns, cottages, spatial planning and engineering projects.

3. Various methods can be developed to prevent plant diseases: agrotechnical, physical and mechanical, biological, chemical, biophysical and biochemical.

Each village should have a veterinary service that will deal with preventive, therapeutic, and elimination measures against animal diseases.

4. According to local farmers: they offer natural and diverse products to consumers. Namely: Mzia Sharashidze's "Churchkhela enterprise" in the village of Tsikhisferd in Ozurgeti, "Natanebi" cooperative in the village of Natani in Ozurgeti, greenhouse and cold

storage – production of strawberries, fish farm "Mishos Aremare" in the village of Nigoit in Lanchkhuti, "Bichiko's Kvevrebis" in the village of Atsana in Lanchkhuti, host Bichiko Chkha-idze, In Chokhatauri, family hotel and dried fruit factory "Skiji House", host Darejan Berdzenishvili and others.

However, there are cases when the quality of the products produced does not meet the demand of visitors. Or most of the population's income is spent on food products whose quality is not controlled. Therefore, the quality of service and food safety issues are still underdeveloped and need to be improved. In particular:

Management and promotion of agri-food, agro-processing, agricultural, veterinary and plant protection industries;

Ensuring the rational use and protection of land to produce natural food;

Minimizing the use of poisons, chemicals, pesticides. fertilizing the soil with organic matter, peat and humus;

Compliance with the rules of food storage and procurement, hygiene and sanitary standards.

5. Local government representatives should be interested in farmers' problems. In particular, they should focus on the financial side. Attract investments and grants to attract farmers, stimulate them with financial assistance and benefits.

In addition, to help local farmers organize advertising and present agritourism tours internationally.

6. Infrastructure projects should also be implemented in villages. Designate a special team to provide information on rural access roads, water supply, irrigation systems, sewage, electricity, gas, internet, public toilets on the road, street lighting, street numbering, community center banners, road signs, and tourist centers.

Representatives of tourist centers provide information to tourists. Relevant: Maps, brochures and guides with specific information about the tours and the region direct visitors to the right farms.

Agritourism development is a prerequisite for strong villages in the region. Therefore, it is necessary to inform farmers about the benefits of agritourism activities so that more of them are interested and involved in these activities. As a result, the level of migration will decrease, jobs will be created, and their financial situation will improve.

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