

# THE ROLE OF AGRITOURISM'S IMPACT ON THE LOCAL COMMUNITY IN A TRANSITIONAL SOCIETY: A REPORT FROM SERBIA\*

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## Abstract

This study assessed local residents' attitudes in Serbia toward the impact of agritourism in their surroundings, using a Tourism Impact Attitude Scale (TIAS). Till now, analysis of the impact of tourism on the attitudes of residents in rural areas of Serbia and other Balkan transitional countries is insufficiently researched. The analyzed items of the TIAS were grouped into four factors: personal and community benefits (grouped eight items); negative impacts (seven items); concern for the local tourism development (five items); and general opinion about tourism development (three items). The factors explain 47.47% of the variance. Furthermore, the results showed that residents consider the possibility to have more money to spend as the most important impact of tourism development. It is followed by the support of local authorities to promote tourism development. The third relevant issue for the residents is related with encouragement of tourism in the local community. These are the key propositions to start an initiative for the local communities to actively participate in agritourism development. The results provide residents, tourism organizers and local authorities with important community perceptions pertaining to the agritourism's impact.

**Keywords:** agritourism, Tourism Impact Attitude Scale (TIAS), residents' attitudes, rural area, Serbia.

## 1. Introduction

This paper evaluates current issues surrounding the role and development of agritourism's impact in Serbia (focus on Vojvodina Province in Northern Serbia), as an example of a transitional society. It examines many factors of agritourism development and change. Data problems beset most critical analyses of agritourism development, but they are particularly notable in this part of Europe, where few recorded data exist to provide a coherent overall picture of this phenomenon. The global economic and financial crisis in Serbia, after the dissolution of the 'Eastern bloc', was very deep, with low development status, low economic growth and high unemployment. These were followed by an informal ('gray') economy, an inappropriate institutional framework, poor technical infrastructure, huge public debt, poverty, a prolonged regulatory gap in the economy, etc. (Zeković, Vujošević and Maričić, 2015). According to the same authors, during the 1990s, Serbia faced deep economic crisis, when its GDP dropped more than 50%. Following the subsequent transitory drop of almost all macroeconomic indicators (GDP, employment, standard of living, etc.), the European socialist countries, such as Serbia, were forced to introduce many development reforms, particularly in (poor) rural areas. The reforms in Serbia were evidence that good economic results are not sustainable without radical changes in macroeconomic policy. Strong macroeconomic background is the primary precondition for sustainable development, which indicates that the model of economic development of Serbia should move in the direction of creating a market and export-oriented economy.

The effect of global processes on economic growth is reflected in the intensity and the direction of tourist flows, as well as in the development of particular types of tourism, so called *special interests tourism*. This term includes customized tourism activities, i.e. specific interests of individuals and/or groups. In modern studies on the development of international tourist trends, agritourism has increased as its relevant segment. This type of tourism currently has strong advantages on the international tourism market, as it has already played a key role in the rural development of some areas that were economically and socially depressed (Blaine, Mohammad and Var, 1993; Sznajder, Przeborska and Scrimgeour, 2009; Todorović and Bjeljic, 2009). It is an important segment of tourism in Europe, which is obvious in the impressive number of 200,000 known registered service providers in agritourism on this continent, with more than 2,000,000 beds. The decrease of traditional subventions for agriculture makes agritourism become more and more important as a key form of diversification, which supports economically sustainable rural communities. In Serbia, as well as in many other European countries, agritourism is an important factor of multifunctional rural development (Knickel and Renting, 2000; Yasuo, 2007; Petrović, Vujko and Blešić, 2015; Petrović, Bjeljic and Demirović, 2016; Petrović *et al.*, 2016). Moreover, Knickel and Renting (2000) claimed that 'rural development consists of a wide variety of new activities, such as the production of high quality and region-specific products, nature conservation and landscape management, agritourism and the development of short supply chains. The number and variety of new activities is, in reality, much

larger' (p. 513). The change of the social, economic and political system in Serbia at the beginning of the new millennium also marks the start of a new phase in the development of agritourism. According to Todorović and Bjeljac (2009), this form should be one of the main carriers of tourism offer and a factor of integral development of rural areas in Serbia and the rest of the Balkans.

The main subject of this research is the examination of how agritourist activities affect rural surroundings in a typical rural, transitional society, from communism and socialism to the capitalist era. How do individual and/or community benefits correlate with support for tourism development? How do concerns for tourism development correlate with the general opinion about tourism? And how do impacts of tourism development correlate with the community support for tourism? Therefore, the general aspects of agritourism's impact, as well as its effect on the local residents, will be explained. The study has three objectives. The first objective, drawing on the study of Lankford and Howard (1994), is to test the Tourism Impact Attitude Scale (TIAS), in order to examine the attitude of residents in the observed area. The second one is to examine if there are any differences in attitudes among residents, divided into groups according to the results of the exploratory factor analysis and to compare with previous similar studies. The third objective is to demonstrate relations between the obtained factors by using Pearson  $r$  statistical correlation.

## **2. Impacts of agritourism on local community**

Globally speaking, agritourism is a very important and increasing segment of travel industry. Nickerson, Black and McCool (2001) stated that the rural area is the basic resource for the development of agritourism and that it relies on the city residents' need for peace and outdoor space for recreation. Agritourism is used more conventionally for notions that are related to products and services, which are directly related to the agrarian environment, agricultural products and types of farm-stay. Such activities involve staying in such environment, educational visits, recreational activities or selling agricultural and homemade products (Sznajder, Przezborska and Scrimgeour, 2009). As many other branches of tourism, agritourism has certain impacts on local surroundings. It brings numerous consequences on the environmental, economic, social and (even) psychological changes (Table 1).

The effect of (agri)tourism activities and events on attitudes and behavior of the locals was explained in several research papers. Some of the studies showed that residents think tourism helps the local economy (Ritchie, 1988; Choi and Sirakaya, 2005), affects the general increase of the life standard of a community (Var and Kim, 1989; Choi and Sirakaya, 2005), but also stimulates the entrance of foreign currency in a host country (Ahmed and Krohn, 1992). Furthermore, the studies have shown that tourism directly stimulates the opening of new jobs (Milman and Pizam, 1988; Var and Kim, 1989; Ahmed and Krohn, 1992; Tosun, 2002) and increases the income of numerous segments of local economy (Settina and Richmond, 1978; Tosun, 2002). However, Var and Kim (1989) noted that tourism also leads to the employment of

**Table 1:** Potential impacts of agritourism on local community

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<b>Positive economic impacts</b>
Provides employment opportunities in rural areas
Generates supply of foreign exchange
Increases income and gross national product (GNP)
Improves rural infrastructure, facilities and services
<b>Negative economic impacts</b>
Causes inflation of land value
Raising prices on food and other products
Frequent seasonal employment
<b>Positive social impacts</b>
Creates favorable image of the countryside
Provides recreational facilities for residents, as well as tourists
Facilitates the process of modernization
Provides opportunities for additional education
<b>Negative social impacts</b>
Creates resentment and antagonism related to dramatic differences in wealth
Invites moral degradation resulting in increasing crime, prostitution, social conflicts, etc.
Causes conflicts in traditional societies and values
<b>Positive cultural impacts</b>
Encourages pride in local arts, crafts and cultural expression
Preserves cultural heritage
<b>Negative cultural impacts</b>
Loss of spiritual and cultural sense due to excessive global commercialization of products
Abandonment of indigenous culture and adapting to modern, generally accepted parameters
<b>Positive environmental impacts</b>
Justifies environmental protection and improvement
Encourages education on value of nature-based tourism
<b>Negative environmental impacts</b>
Fosters water and air pollution and solid waste
Disrupts flora and fauna species

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**Source:** Authors' findings according to the bellow mentioned studies.

locals out of their (poor) communities. Nevertheless, numerous studies (Liu and Var, 1986; Weaver and Lawton, 2001; Andereck *et al.*, 2005; Blešić *et al.*, 2014b; Vujko and Gajić, 2014; Vujko and Plavša, 2014) emphasized the prevailing positive effects of tourism on life standard, employment and income. On the other hand, those activities are often the main ones 'to blame' for numerous social issues (the rate of poverty, crime, overconsumption of alcohol, prostitution, hazardous games, etc.), which could result in devastation of traditional culture, customs and the beliefs of the community (Ahmed and Krohn, 1992; Nunkoo and Ramkissoon, 2011) and even to the process of *acculturation* (Weaver and Lawton, 2001). Nevertheless, tourism considerably contributes to the building of numerous facilities for cultural, artistic and sport events (Liu and Var, 1986; Yu, Chancellor and Cole, 2011). In addition, the significance of mutual influence between the local community and visitors frequently leads to progressive changes and development for both sides (Aref, Gill and Aref, 2010).

When it comes to the environmental issues, many authors stated numerous negative cases of the tourism's impact on the environmental pollution, such as devasta-

tion of natural resources, noise, and damaging cultural heritage (Var and Kim, 1989; Ahmed and Krohn, 1992; Andereck and Vogt, 2000; Brankov, Jovičić and Milijašević, 2015; Srdanović and Pavić, 2015). Besides the mentioned impacts, the tourism economy results in great amounts of solid refuse, since hospitality facilities, traffic companies and visitors themselves leave behind loads of rubbish, which is very often not easily degradable. The problem is far more obvious in developing countries, where the absence of sustainable refuse management and adequate recycling measures is extremely apparent (Andereck and Vogt, 2000). Even though in the recent years, tourism shows a 'protective' attitude towards the environment, the understanding of this issue is still quite limited. All the previous studies comprehensively explained that (agri)tourism is a relevant factor in positive, as well as negative changes in the local area and that it might affect the residents' behavior, attitudes and even lifestyle.

### 3. Methodology

#### 3.1. Study area, research procedure and sample

The analysis of this paper should point to the significance of the impact of agritourism development on the life of local population in the selected village settlements. The selection of the village settlements has been done according to the recommendations of a National Project 'Wealth of Diversity', supported by the Provincial Government of Vojvodina in Northern Serbia. According to their established criteria<sup>1</sup>, the project 'Wealth of Diversity' has evaluated and made a list of the 17 most representative villages in Vojvodina Province with respect to agritourism. In this regard, the research involved only those villages which already have agritourist activities and amenities.

The main problem issues of the paper refer to the general aspects of agritourism's impact, as well as its effect on the residents. In this respect, the analysis of data was conveyed several times during 2014 (from September to December) and 2015 (from March to June), by using the Tourism Impact Attitude Scale (TIAS). All the interested respondents in the observed villages participated in the survey. The only condition was that their domicile address was in the researched villages. The poll was anonymous, i.e. the names of the examinees were not relevant for the selected data. The examination of the target groups was done with the technique 'face to face'. Their socio-demographic characteristics are shown in detail in Figure 1.

Of the 300 distributed questionnaires in total, 228 were filled correctly and used in the statistical procedure. This number represents 76% of the response rate. According to Babbie (1986), the response rate on the level of  $\geq 70\%$  is considered to be a good

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1 Identification of the key elements of tourist product, cultural diversity and heritage, the formation of the tourist products of local and regional offer (according to the measurements of the international market), the supply and sales of products, the improvement of marketing activities, natural settings, the construction and development of the common information system, the provision of necessary financial means, staff education, the increase of competitiveness by adding values through the whole chain, etc.



indicator of the measurement scale acceptance. The sample in this research ( $N \geq 51$ ) is adequate for meaningful statistical assessments (Bagozzi, 1981).



Figure 1: Analyzed study area and socio-demographic characteristics of respondents

Source: Magellan Geographix (retrieved from <https://www.pinterest.com/geographylovin/europe-geography/>)

### 3.2. Research instrument

In order to propose measurement solutions for the tourism impact effects, Lankford and Howard (1994) wrote a paper titled 'Developing a Tourism Impact Attitude Scale'. Contrary to the previous similar scales (Pizam, 1978; Liu and Var, 1986; Milman and Pizam, 1988; Ap, 1992), the authors' intention was to overcome the suggested omissions by using a multivariate Likert Scale (Likert, 1967). The authors have presented a unique model for measuring tourism's impact on the attitude of local population (most often in rural tourism), called Tourism Impact Attitude Scale – TIAS. The TIAS consists of original variables, respectively 27 dependent variables (Lankford and Howard, 1994, p. 130) and 15 independent variables (Lankford and Howard, 1994, p. 132). After the main study, the TIAS has been used in the researches conveyed mostly in economically developed countries, such as Canada (Rollins, 1997), the USA (Vesey and Dimanche, 2001; Harrill and Potts, 2003; Wang, Pfister and Morais, 2006; Wang and Pfister, 2008; Woosnam, 2012), China and Japan (Schneider, Lankford and Oguchi, 1997) and Taiwan (Lankford, Chen and Chen, 1994). For this reason, it will be highly challenging to test TIAS in the conditions of Serbia (Vojvodina Province), as an example of typical transitional country, similar with other transitional Balkan states. Bearing in mind that the observed country has specific economic, geographical and sociological aspects, it

should give a great number of possibilities of the later application on the level of the whole region. Till now, closest to the observed region (Northern Serbia) was only the TIAS testing in Western Serbia (Blešić *et al.*, 2014a) and in Slovakia (Sabolova, 2013). In this respect, it is highly necessary to discover the coherence between tourism's impacts and locals, and work to improve them. A 5-points Likert scale (from 1 'strongly disagree' to 5 'strongly agree') was used for the measuring of the elements.

### 3.3. Data analysis

In order to explore agritourism's impact on the locals' attitudes in selected villages, factor analysis, descriptive statistics and statistical correlations were applied. The data was processed with the statistical program SPSS 18.0. Exploratory factor analysis is used for the analysis of the gathered data about interconnections of the sets of variables. It is not meant for testing research hypotheses, but for the reduction of the amount of input data (Pallant, 2011) and their better interpretation. The reliability of the measurement instrument was checked by using Cronbach's Alpha Reliability Coefficient. For the needs of the further results analysis, the descriptive statistical measurements have also been applied (Mean, Standard deviation, Median and Mode or Dominant value). Finally, the connection among the selected factors will be expressed by Pearson's *r* statistical correlation, since it deals with the interval variables.

### 3.4. Research hypotheses

A research goal of the paper states: *Interconnection of items grouped into factors, which explains the level of agritourism impact on the attitudes of local population, shows positive correlation values.* Explanation: The goal is formed according to the supposition that TIAS variables, grouped into factors, positively inter-correlate. In the results of the paper, the hypothesis will be proved or refuted by using Pearson's *r* statistical correlation and includes six sub-hypotheses (Figure 2):

1. *H1a*: Benefits from tourism development for individuals and local community and negative impacts of tourism development show positive correlation value;
2. *H1b*: Benefits from tourism development for individuals and local community and concern for local tourism development show positive correlation value;

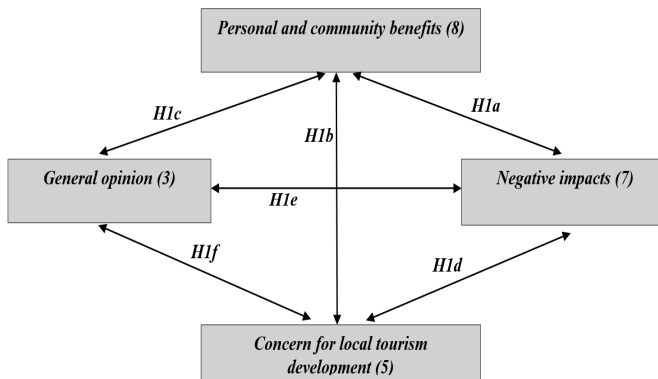


Figure 2: The theoretical model regarding the inter-correlation values

3. *H1c*: Benefits from tourism development for individuals and local community and general opinion about tourism development show positive correlation value;
4. *H1d*: Negative impacts of tourism development and concern for local tourism development show positive correlation value;
5. *H1e*: Negative impacts of tourism development and general opinion about tourism development show positive correlation value; and
6. *H1f*: Concern for local tourism development and general opinion about tourism development show positive correlation value.

## 4. Results and discussion

### 4.1. Factor analysis findings

Exploratory factor analysis is used for the overview of the gathered data about interconnections of the sets of variables. According to the previous findings (Lankford and Howard 1994; Lankford, Chen and Chen, 1994; Rollins, 1997; Schneider, Lankford and Oguchi, 1997; Harrill and Potts, 2003; Wang, Pfister and Morais, 2006; Wang and Pfister, 2008; Woosnam, 2012) and for the needs of the main components analysis in this paper, all the 27 original questions were taken. Kaiser-Meyer-Olkin measure value was 0.74, which exceeds the recommended value of 0.60 (Kaiser, 1974). In addition, Bartlett's test of sphericity has achieved the needed statistical significance ( $p=0.000$ ), which confirms the justification of the application of the exploratory factor analysis. The main components analysis has discovered the presence of four components with characteristic values above one (1), which is explained by 17.17% (*F1*), 11.58% (*F2*), 9.70% (*F3*) and 9.01% (*F4*) of the variance (Table 2). After the forming of factors, the rotation was done by using the method of *Varimax rotation*.

The reliability of the measurement instrument was checked by using *Cronbach's Alpha Reliability Coefficient*. This instrument is among the most commonly used for inner closeness of the items composing the scale (Pallant, 2011). In an ideal case, Cronbach's coefficient should be above 0.70 (DeVellis, 2003), but the values of this instrument are very sensitive to the number of items on the scale. As Pallant (2011) stated, short scales (fewer than 10 items) usually have quite small Cronbach's coefficient (below 0.50), so in that case it is more appropriate to calculate the mean inter-item correlation. In this case, the recommended values are from 0.20 to 0.40, as optimal scope of inter-item correlation (Briggs and Cheek, 1986). Even though the reliability coefficients that are below 0.70 are generally considered unacceptable, sometimes the coefficients above 0.60 are accepted. According to Lehman *et al.* (2005), the ideal value of internal consistency value is in the interval from 0.80 to 0.90. The coefficient value for the first, third and fourth factor exceeds the recommended value of 0.70 ( $F1=0.88$ ,  $F3=0.71$ ,  $F4=0.71$ ), while the value of the second factor is close to the recommended value ( $F2=0.69$ ). According to previous authors, who used similar grouping of the items (put in the brackets beneath), the factors are titled in the way presented in the Table 2.



**Table 2:** Results of the factor analysis

Titles of the factors	Eigenvalue	Variance explained	Cronbach's coefficient $\alpha$
<b>F1 – Personal and community benefits</b> (Lankford and Howard, 1994; Lankford <i>et al.</i> , 1994; Schneider <i>et al.</i> , 1997)	6.130	17.175	.885
<b>F2 – Negative impacts</b> (Rollins, 1997; Harrill and Potts, 2003; Schneider <i>et al.</i> , 1997)	2.719	11.582	.693
<b>F3 – Concern/support for local tourism development</b> (Lankford and Howard, 1994)	2.248	9.698	.709
<b>F4 – General opinion</b> (Rollins, 1997)	1.719	9.012	.710

Source: Authors' findings.

Cronbach's coefficient for the whole scale of 23 items is  $F1-F4=0.86$ , which is above the value of 0.70. After the conveyed factor analysis, the pure factor structure has been obtained, with high coefficients. Four items have been excluded from the model, due to their low values of factor loading coefficients (below 0.40). Thus, a model with 23 items grouped into four factors, which explain 47.47% of the variance has been obtained.

**Table 3:** Factor loadings for each item

Factors	Items (Variables)	Factor loadings
<b>F1</b>	F1a Better roads and sidewalks due to tourism.	.729
	F1b Public services (health services, water supply, fire protection) improved due to tourism.	.772
	F1c Have more money to spend.	<b>.850*</b>
	F1d Tourism has increased my standard of living.	.816
	F1e More recreational opportunities (sports fields, swimming pools, playgrounds).	.725
	F1f Tourism provides highly desirable jobs.	.540
	F1g Shopping opportunities are better.	.723
	F1h Tourism will play major economic role.	.558
<b>F2</b>	F2a Should not attract more visitors.	.603
	F2b Negatively impacts environment.	.549
	F2c Noise level not appropriate.	.605
	F2d More litter from tourism.	.513
	F2e Limits outdoor recreation development.	.418
	F2f Crime has increased.	<b>.637*</b>
	F2g Tourists are valuable.	.612
<b>F3</b>	F3a Encourage tourism in community.	<b>.689*</b>
	F3b Community should become destination.	.649
	F3c Like to see tourism be main industry.	.471
	F3d Will provide more jobs in community.	.590
	F3e Against new tourism development.	.633
<b>F4</b>	F4a Encourage more intensive development.	.792
	F4b Tourism vital for community.	.677
	F4c Council right in promoting tourism (importance of local authorities' support in tourism development and affirmation).	<b>.798*</b>

Source: Authors' findings. The marked numbers\* represent the values with the highest loading within the factor.

From the results in Table 3, it can be concluded that there are significant differences in residents' attitudes considering the impact of agritourism on their local communities. The results in the *F1* show that respondents consider the possibility to have more money to spend, thanks to tourism development, as the most important item. In addition, this item shows the highest factor loadings among all the others in factor analysis. *F1* grouped equal items, which are titled the same as it was done in some previous papers (Lankford and Howard, 1994; Lankford, Chen and Chen, 1994; Schneider, Lankford and Oguchi, 1997). The largest difference of 0.164 compared to those in the paper of Lankford and Howard (1994) was noticed in the case of *F1g*. It can be explained by the fact that, in the observed villages, the shopping opportunities have not yet risen under the impact of tourist activities, as it is present in the analyzed USA villages, where agritourism is much more widespread. On the other hand, the research results from Taiwan (Lankford, Chen and Chen, 1994) have also grouped seven items into this factor, and it can be noticed that six items are identical and with similar factor loadings. The greatest difference is noticed with item *F1f* (0.28), which can be explained by the fact that the jobs which are provided by (agri)tourism in Taiwan are more attractive than the jobs which are present in the observed villages of Vojvodina. It leads to the conclusion that in rural areas of Taiwan, agritourism is more developed and that the locals consider the jobs provided via tourism development much more attractive, which is present on a much lower level in the analyzed villages in a transitional country, such as Serbia. The only left-out factor in the case of this research is *F3d*, which has been set in the factor *Concern for local tourism development* in this paper. This statement is explainable by the fact that locals, having the opinion that tourism will affect a large number of the employees in their settlement, at the same time have concerns about the general well-being and the development of their community, which can be considered as a justifying result.

The findings in Table 3 indicate that the most important item in the *F2* is the fact that crime could be increased due to tourism development, which is usually the main locals' concern in many other presented tourism study areas. Even though Rollins (1997) got five items within this factor, all the items are identical with the items grouped in this factor and with similar factor loading, except *F2d*. This difference can be explained by the fact that the increase in the amount of litter is still not a relevant problem in the observed villages, due to the absence of mass participation in agritourism. Harrill and Potts (2003) also have got five items grouped in this factor. However, item *F3e*, which is in this paper within the factor *Concern for local tourism development* (the same as in the research by Lankford and Howard, 1994), in the case of these authors, it was comprised in *Negative impacts of tourism*. Such a fact is not worrying, since in Rollins's research, this item is in the factor *General opinion about tourism development*. In the case of this study, the objection to building tourist facilities, which will attract a large number of visitors to the rural areas, can certainly be considered a concern for tourism development by the locals in the observed Serbian villages.

The most important issue to the respondents in the *F3* is similar with the *F2*, which also have connection with the tourism encouragement in the local community. The greatest difference in the loadings to some previous results (Wang, Pfister and Morais, 2006; Wang and Pfister, 2008; Woosnam, 2012) is noticed in the variable *F3c*, which can be explained by the fact that a large share of the number of examinees in Serbia think that tourism should become the main industry (together with agriculture). Wang, Pfister and Morais (2006), and Wang and Pfister (2008) have also got a large number of items grouped within this factor (12 in total). Although, the grouped items have similar factor loadings, the largest difference is noticed in *F3a*. This can also be explained with the conclusion that the residents in the observed rural areas may not have completely understood the meaning of the statement that in their settlement tourism development should be encouraged.

Results emphasized that support of council right to promote tourism, which reflects the importance of local authorities in tourism development and affirmation, is the most important one (*F4*). All the obtained items in this paper completely match Rollins's findings (1997), as well as factor loadings where the differences are small. The largest difference is noticed in *F4a*, which leads to the conclusion that the examinees in both study areas (the Island of Vancouver in Canada and Vojvodina Province in Serbia), in a relatively similar amount, think that their communities should encourage more intensive development, with the aim of a more successful tourist affirmation of the rural areas.

#### **4.2. Descriptive statistical analysis findings**

Beside factor analysis, for the needs of the results testing, some descriptive statistical measurements have also been used. Those are: *Mean (M)*, *Standard deviation ( $\sigma$ )*, *Median (Mdn)* or *Central value* and *Mode (X)* or *Dominant value* (Table 4).

Based on the results presented in Table 4, the values of arithmetic mean on the level of total values within the defined factors range from 3.21 (*F1*), as a lowest value, to 4.62 (*F2*), as a highest value. The lowest arithmetic mean is closest to score 3, while the highest arithmetic mean is closest to score 5. Based on that, it can be concluded that the values in the defined factors are relatively high. This means that the local population perceived negative impacts and concern for agritourism development and that they are aware of the potential challenges and risks that it may pose to them. In the overall factor set of questions, the biggest marks were given to the following: 'Against new tourism development', 'Encourage tourism in community' and 'Community should become destination'. The lowest mark was given to the question 'Like to see tourism be main industry', which points out that tourism is still developing in these areas and that locals give advantage to tourism to be an economically important industry in future (in addition to the traditional agriculture). Together with these, it is also proved by the mode (the most frequent score), which is 5 in all the cases on the level *F1-F4*. For the individual questions, in 75% (18) of cases it is 5, while in 15% (5) of the questions is 4. Median (central values of a series) on the level *F1-4* is 5 in all the

**Table 4:** Mean ratings of F1-F4 and items

	M	$\sigma$	Mdn	X
<b>F1 – Personal and community benefits</b>	<b>3.2116</b>	<b>1.04076</b>	<b>5</b>	<b>5</b>
<i>F1a – Better roads and sidewalks due to tourism.</i>	2.77	1.520	4	5
<i>F1b – Public services improved due to tourism.</i>	2.99	1.437	5	5
<i>F1c – Have more money to spend.</i>	2.87	1.654	5	5
<i>F1d – Tourism has increased my standard of living.</i>	2.98	1.620	5	5
<i>F1e – More recreational opportunities.</i>	3.12	1.436	5	5
<i>F1f – Tourism provides highly desirable jobs.</i>	4.29	.999	5	5
<i>F1g – Shopping opportunities are better.</i>	2.65	1.420	5	5
<i>F1h – Tourism will play major economic role.</i>	4.03	.917	4	4
<b>F2 – Negative impacts of tourism development</b>	<b>4.6172</b>	<b>.42230</b>	<b>5</b>	<b>5</b>
<i>F2a – Should not attract more visitors.</i>	4.68	.656	5	5
<i>F2b – Negatively impacts environment.</i>	4.66	.681	5	5
<i>F2c – Noise level not appropriate.</i>	4.69	.619	5	5
<i>F2d – More litter from tourism.</i>	4.57	.727	4	4
<i>F2e – Limits outdoor recreation development.</i>	4.49	.821	5	5
<i>F2f – Crime has increased.</i>	4.61	.697	5	5
<i>F2g – Tourists are valuable.</i>	4.62	.761	5	5
<b>F3 – Concern/support for local tourism development</b>	<b>4.6096</b>	<b>.51214</b>	<b>5</b>	<b>5</b>
<i>F3a – Encourage tourism in community.</i>	4.76	.654	4	4
<i>F3b – Community should become destination.</i>	4.71	.782	4	4
<i>F3c – Like to see tourism be main industry.</i>	4.19	.884	5	5
<i>F3d – Will provide more jobs in community.</i>	4.58	.827	5	5
<i>F3e – Against new tourism development.</i>	4.80	.574	5	5
<b>F4 – General opinion about tourism development</b>	<b>4.4342</b>	<b>.80931</b>	<b>5</b>	<b>5</b>
<i>F4a – Encourage more intensive development.</i>	4.48	.964	5	5
<i>F4b – Tourism vital for community.</i>	4.22	1.194	4	4
<i>F4c – Council right in promoting tourism.</i>	4.60	.867	5	5

Source: Authors' findings.

cases, while among the individual questions in 17 out of 23 questions it has a value of 5, and in the remaining six questions it has the value 4. Since the three values are closely the same in questions, it can be said that it is a symmetrical frequency distribution. Standard deviation, which shows the mean value of the deviation of individual scores from the arithmetic mean, exceeds the value 1 in seven questions, while in the remaining 16 questions it ranges in the interval from 0.57 to 0.99.

### 4.3. Statistical correlation findings

The connection among the selected factors (F1-F4) will be expressed by Pearson's  $r$  correlation, since it deals with the continuous (interval) variables. As Cohen (1988) stated, the gained values in Pearson's  $r$  correlation can present: low correlation ( $r=0.10-0.29$ ); middle correlation ( $r=0.30-0.49$ ); and high correlation ( $r=0.50-1.00$ ).

According to the results shown in Table 5, it can be noticed that all the obtained correlation between the observed factors are positive and that nowhere high correlations have been obtained. Thus, it is important to comment the obtained middle correlations, i.e. those which exceed the value of 0.30. From the correlation pattern, it is

**Table 5:** The average Pearson's *r* on the relation level *F1-F4* ( $p < 0.01$  (2-tailed))

	F1 – Personal and community benefits	F2 – Negative impacts of tourism development	F3 – Concern for local tourism development	F4 – General opinion about tourism
<i>F1</i>	1			
<i>F2</i>	.26	1		
<i>F3</i>	.41	.30	1	
<i>F4</i>	.27	.20	.39	1

**Source:** Authors' findings. The middle correlation values are dark, and the low correlation values are light grey.

concluded that the positive correlation of the middle strength, between *F3* and *F1*, equals 0.41. It means that concern for local tourism development shows a positive correlation with the benefits that the individuals and the local community have from tourism development (proved sub-hypothesis *H1b*). This can be interpreted that locals, who are concerned and take care of their surroundings, also have the individual benefits from tourist activities in their area, and that benefits are potential for their surroundings as well. On the other hand, the results obtained by Woosnam (2012) showed that concern for local tourism development highly positively correlates ( $r=0.52$ ) with the benefits that the local community has from tourism development. This can be explained by the difference in the number of the examinees that the author used in the research ( $N=446$ ). In addition, there are differences in geographical and cultural regions where the researches were conveyed (Texas, USA), as well as in the number of the obtained factors (two factors).

A bit of a lower correlation is noticed in the correlation of *F3* and *F4*, which equals 0.39. Such a value shows that the concern for local tourism development correlates positive values with the general opinion about tourism development. This leads to the conclusion that the better the general opinion and attitude of individuals and of the community about tourism development in a destination is, the higher is the level of concern for it (proved sub-hypothesis *H1f*).

The correlation between *F3* and *F2* equals 0.30. It points to the fact that concern for local tourism development positively correlates with negative impacts of tourism development. Namely, the higher the concern for the surroundings in a tourist destination is, the more obvious are the negative impacts and vice versa (proved sub-hypothesis *H1d*). This statement can be explained by the fact that locals realize more negative impacts provided by tourism in their settings when they are directly involved in tourism business than when they are not involved. In this respect, they will be more concerned when they have their own interests in tourism development and pay more attention to any potential threat or weakness, which can be provoked by tourists and tourism development.

Besides the presented results, low correlations ( $r=0.10-0.29$ ) also have positive values. According to that, the other sub-hypotheses are also accepted – *H1a*, *H1c* and *H1e*. It points to the conclusion that individual and community benefits from tourism development in the Serbian selected villages positively correlate with the general opinion about tourism development and with the negative impact of tourism

development. According to that, it can be stated that the higher the negative impact of tourism is, the general opinion about tourism development, which produces the feeling of benefits from tourist activity in the local area, rises. This phenomenon can be explained by many examples from the destinations worldwide (Bali, Costa Rica, Crete, Sicily, Turkey). Apparently, the residents perceived tourism impact (even negative) as a new way of economic activity, earning chance, enterprising possibility or even an event ('something happens') in their (passive) rural surroundings. Mostly, agriculture is the main and only industry in these rural areas, so tourism gives to the locals some new economic, social and cultural frameworks, which are usually very challenging for them.

## 5. Conclusion

The disadvantaged position of agritourism in Serbia during the 1990s, the absolute and relative small role and almost negligible significance on a national scale are the results of the many limiting factors (political, economic, social, etc.). Some of them may be mentioned: surrounding areas that have high tourist values, more complete and better quality network of tourist infrastructure and a system of mediating factors with well-planned performance at the international market level, the lack of tourism development programs as systematic tourism policies, the effects of policy reforms and foreign currency as substantial reduction in border and other formalities of tourists' stay and so on.

Good position of agritourism of Serbia in the international market will actually be the final result of transformation of interconnected quantitative and qualitative tourism resources in the regional tourism offer, as well as the overall tourism product. Achieving a good position in the tourism market will enable identification of the objectives of tourism development that will contribute to the quantitative change of contemporary tourist offer. So far, there was not found a reliable general model of agritourism development, which would, in the shortest time, help a developing country (such as Serbia) to have a more stable position. It should be noted that the agritourism, where it had conditions for the formation of tourism supply, demand and support from the leadership of political and economic entities, within 10 years, had affected the development of many passive and undeveloped rural parts of the country.

For these reasons, this study had the aim to give a contribution through an analysis and overview of agritourism aspects, such as its impact on residents' attitudes. The research succeeds in this goal of implementing the Tourism Impact Attitude Scale (TIAS). The factor analysis, descriptive statistics and statistical correlation are used for the analysis of the gathered data about interconnections of the sets of variables and factors, comparing them with the findings of similar researches. At the same time, it has been the focus of the paper to analyze the methodology and the results obtained earlier compared with the findings of this study. The results show that respondents consider the possibility to have more money to spend, thanks to tourism development, as the most important one. The second important issue is the support of council



right to promote tourism, which reflects the importance of local authorities in tourism development and affirmation. It is followed by the tourism encouragement in their local community. Less favored is the fact that crime rate could be increased due to tourism development.

Results also point to the conclusion that the higher the negative effect of tourism is, the more positively it affects the awareness of the general, as well as individual tourism benefits in the observed local areas in Serbia. Together with these, the study came to the conclusion that the locals who take care of their local surroundings may also benefit from tourist activities in their area, and these benefits are potential for their environment as well. The obtained findings confirm previous results, which also proved that care about the local tourist development is in positive correlation with the benefits of tourism for the local community. On the other hand, results indicated that the higher the negative effect of tourism in Serbian villages is, the higher the opinion on tourism development of the locals, and that the higher the care about the area, the easier it is to recognize the potential negative effects and vice versa. With all these matters, our research emphasizes the finding that the higher the general opinion and attitude of an individual and of the community on tourism development in their local surroundings are, the higher is the care about the community. These statements in fact describe the general aspects of agritourism's impact, as well as its effect on the locals in rural areas of Serbia in the middle of the second decade of the 21<sup>st</sup> century.

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