MULTI-CRITERIA ANALYSIS OF ACCOMPANYING EVENTS OF FESTIVAL HAYMAKING ON RAJAC IN SERBIA

Mališa R. ŽIŽOVIĆ, Dragan TURANJANIN, Mladen JANJIĆ

Abstract: In this paper, we present multi-criteria analysis of possible accompanying events at traditional haymaking competition “Haymaking on Rajac”. These accompanying events are very important for increasing the level of success of main event.

Key words: Multi-criteria analysis, weighted coefficients, weighted sum, haymaking competition, accompanying events.

Introduction

Various happenings in Serbia in different forms, like carnivals, festivals, exhibitions, congresses, symposiums, conferences, etc., have important role in tourism development of municipalities where these happenings take place. Also, these happenings have major impact on local community and improving standards of living and employment (Bjeljac, 2010b, Getz, 1997). All these happenings can be classified according to different criteria, which can be found in extensive comprehensive literature (e.g. Bjeljac, 2010b, Hadžić et al., 2006).

This paper presents accompanying events at traditional haymaking competition “Haymaking on Rajac” (traditional scythe haymaking competition on mountain Rajac).

Firstly, a few words about mountain Rajac (600-849m). It belongs to the lower mountains (under 1000m), and according to the official statistics of Serbia the status of lower mountain regions has Fruška Gora, Avala, Kosmaj, Rajac and Vršac mountains (Bjeljac et al., 2001a). In paper (Bjeljac et al., 2015) the author makes comparison of Rajac and Vršac mountains: “By touristic function Rajac is polyvalent mountan (picknick – recreation – sport events – weekend tourism, etc.) with developed specialties of tourism (recreation, eco-tourism, health resorts, cultural, etc.). By average nights spent (4.6) Rajac is among most popular destination for tourists, mainly thanks to the developed infrastructure for tourism, good tourist management, attractive natural values (Rajac cave), cultural heritage, etc.

Further, analysis of competition between these five regions places Rajac second only to Fruška Gora, due to the distance from the main sources of tourists and lack of highway. But, the highway Belgrade-Požega, expected to be finished till the end of 2018 (Belgrade-Čačak section, which runs near mountain Rajac), will put Rajac on the first place shared with Fruška Gora.
"Haymamking on Rajac" has long tradition, the first competition was held in 1892 (Brankov et al., 2009), and it is continuously being organized since 1973. It is one of around 50 such competitions in the world (since 2006 Biebrza national park in northeastern Poland is host to the international scything competition; in 2016 there were 46 participants from Poland, Hungary, Belarus and Belgium; also, “Sharp Scythes” duo competition is held for couples).

Acompanying events have seen exhibitors from Great Britain, Iceland, Romania, Russia, Netherlands, Hungary, Bosnia and Herzegovina, as well as Montenegro (Bjeljac, 2010b).

Every year there are more than 20,000 visitors (mostly from Slovenia and Bosnia and Hercegovina). The whole happening is not just for competition event, it is also an exhibition of tradition, accompanied by sport events, traditional dances festival, promotion of books, public lectures, music concerts, and all of that on mountain Rajac. According to touristic categorization (Bjeljac, 2010b), “Haymaking on Rajac” was the third most important tourist festival in Serbia, behind “Trumpet festival in Guća” and „Exit“ in Novi Sad.

It is obvious that multi-criteria evaluation with a number of criteria can provide more objective evaluation than this categorization. A survey done by Brankov et al., 2009 on “Haymaking on Rajac” in 2008 is interesting to analyze. The question “Are you here for the first time?” was answer with “yes” by almost two thirds of visitors, and almost the same percentage (66.5%) answered that they came to become familiar with tradition and customs of haymaking and scything.

Opportunity for socializing and having good is the main reason for 11% of visitors, nature of mountain Rajac for around 6%, the same as entertainment (music concerts of famous folk singers under 9 improvised tents with 3000 seats), while less than 2% came for traditional food (clay pot of cabbage (so-called wedding cabbage), wide range of roast meat, corn bread, cheese, milk cream, etc.), while all of this is the motive for 7% of visitors.

The majority of visitors are from local and surrounding municipalities, and 98% of visitors answered that they will return the next year. But, obviously, some of the visitors coming from far away forget that ‘promise’ the next year.

The number of visitors saw a decline in the recent few years, which motivated authors of this paper to suggest a few accompanying events that would attract more tourists.

The analysis is performed using method of multi-criteria method presented in paper Miljković et al., 2017. Generally, multi-criteria analysis can be applied for solving various problems. Here we will give a few words about multi-criteria analysis.

Let say we have a problem of choising one alternative from the set of alternatives \( \{A_1, A_2, \ldots \} \) (or problem of ranking these alternatives), by the set of criteria \( \{C_1, C_2, \ldots \} \).
Usually, the problem of multi-criteria analysis can be represented by (decision) matrix:

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<tr>
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<th>$C_1$</th>
<th>$C_2$</th>
<th>...</th>
<th>$C_n$</th>
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<td>...</td>
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<td>$A_2$</td>
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<td>$a_{22}$</td>
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<td>$a_{2n}$</td>
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<td>$A_n$</td>
<td>$a_{n1}$</td>
<td>$a_{n2}$</td>
<td>...</td>
<td>$a_{nn}$</td>
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Table 1. Decision matrix.

where:
- $C_1, C_2, ..., C_n$ denote criteria,
- $A_1, A_2, ..., A_n$ denote alternatives,
- $a_{ij}$ is the performance value of the alternative $A_i$ by the criterion $C_j$ ($i = 1, 2, ..., m$; $j = 1, 2, ..., n$).

Each criterion $C_j$ is associated with the weighted coefficient $w_j$ which represent the degree of importance of this criterion.

The natural assumption is that the weights are normalized, i.e., they add up to 1,

$$w_1 + w_2 + ... + w_n = 1.$$  

In the view of the method given by Miljković et al., 2017, we will additionally assume that the criteria are aligned based on importance, from the most important criterion $C_1$ to the least important criterion $C_n$. This procedure is based on the pair-wise comparisons between the most important criterion $C_1$ and the remaining $n - 1$ criteria $C_2, ..., C_n$.

Finally, each alternative $A_i$, $i = 1, 2, ..., m$ is associate with the final mark (aggregation value) $V(A_i)$ which induce the ordering of alternatives.

**Accompanying events at “Haymaking on Rajac”**

Every happening or festival, beside the main event, is accompanied by auxiliary events. It is a good practice to have more these accompanying events, so that visitors do not get bored. But also, the number of such accompanying events should be kept at a reasonable number, mainly for the sake of quality of
such events and not to cause conflicting interest of visitors, who wish to be present at two such events that are held at the same time.

“Haymaking on Rajac” has a few accompanying events, and the presented analysis will not cover all those events, due to the fact that some of them (e.g., folklore show) became traditional events. The results of this analysis may help organizers to make changes in accompanying events in order to attract more visitors.

To apply multi-criteria decision making and obtain ranking of alternatives (accompanying events), we will propose the following criteria.

\( C_1 \) – *Feasibility*

- 5 – Easily feasible;
- 4 – Feasible with some work;
- 3 – Feasible with lots of work;
- 2 – Hardly feasible;
- 1 – Almost unfeasible.

For this criterion we propose weighted coefficient \( r_1 = 0.25 \).

\( C_2 \) – *Utility*

In sense of how interesting it would be for visitors and whether it will attract them to return the next year), with values:

- 5 – Excellent;
- 4 – Good;
- 3 – Average;
- 2 – Small;
- 1 – Insignificant.

For this criterion we propose weighted coefficient \( r_2 = 0.35 \).

\( C_3 \) – *Cost*

Financial funding needs for carry out the event, with values:

- 5 – Funding can be obtained without financial impact on other events;
- 4 – Funding can be obtained within the budget of the festival;
- 3 – Funding can be obtained within the budget of the festival with some additional funding;
- 2 – Substantial sum of money needed, but obtainable with some additional work;
- 1 – Almost impossible to obtain the funding.

For this criterion we propose weighted coefficient \( r_3 = 0.25 \).

\( C_4 \) – *Acceptability by potential performers*

Values:

- 5 – Huge interest;
- 4 – Great interest;
3 – Sufficient interest;
2 – Sufficient interest with some additional work;
1 – Insignificant interest, but attainable with some work.

For this criterion we propose weighted coefficient \( r_4 = 0.15 \).

Regarding to weighted coefficients, we have that criteria are ordered by importance in the following way. The most important criterion is \( C_2 \), then follows criteria \( C_1, C_3 \) and finally criterion with lowest importance \( C_4 \).

Further, we propose some alternatives (accompanying events), with short description:

\( A_1 \) – *Chicken fricassee competition* (first day).
\( A_2 \) – *Lamb fricassee competition* (second day).
\( A_3 \) – *Venison goulash competition* (third day).

During the haymaking competition there is “bringing lunch to the meadow” as a traditional show. Thus, it can be a competitive event.

\( A_4 \) – *Musical contest of orchestras and music groups for weddings and parties.*

It became custom for various festivals and events to include music concerts and parties, so did for “Haymaking on Rajac”, too. It might be even more attractive for visitors to be able to attend musical contest instead of ordinary concerts. This would attract better orchestras and music groups, since their “good” position at this contest would bring them better reputation and more profitable activity later.

\( A_5 \) – *Artist colony “Haymaking on Rajac”* (first and second day).
\( A_6 \) – *Artist colony “Haymaking on Rajac” with a selling exhibition* (first and second day).

Paintings would be sold as “Haymaking on Rajac” souvenirs. Landscapes of Rajac are interesting and very attractive to artists. Clearly, if organizers would choose \( A_5 \) or \( A_6 \), there should be a technique recommendation (e.g., watercolor).

\( A_7 \) – *Five-a-side football tournament.*
\( A_8 \) – *Volleyball tournament* (men).
\( A_9 \) – *Volleyball tournament* (women).

Sporting events can be accompanying event of any happening or festival, so this one, too. Football club “Spartak” from Ljig municipality was founded in 1924, while volleyball club “Spartak” was founded in 1953, and men senior volleyball team is member of the elite volleyball league of Serbia.

\( A_{10} \) – *Manual collecting of hay to stacks competition.*
\( A_{11} \) – *Manual collecting of hay to platforms competition.*
Collecting of hay is one of the most important parts of hay preparation for the winter. Traditionally, all sufficiently grown-up family members took part in this work, and in some villages, neighbors would help each other, and in the evening, after hard work was done, they would organize a party. But, this activity requires good weather so that hay becomes dry enough for collecting, so this activity can accompany scything, but it is disputable how attractive it would be.

“Haymaking on Rajac” http://kosidba.com

“Haymaking on Rajac” http://kosidba.com
Table 2.

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Using multi-criteria method proposed by Miljković et al., 2017, the alternatives from Table 2. are evaluated and ranked in the following order.

\[ A_4 \rightarrow A_2 \rightarrow A_6 \rightarrow A_1 \rightarrow A_3 \rightarrow A_8 \rightarrow A_9 \rightarrow A_7 \rightarrow A_{11} \rightarrow A_{10} \rightarrow A_5. \]

**Conclusion**

From presented analysis, it is clear that the alternatives \( A_6, A_1, A_3, A_8, A_9, A_7 \) can significantly improve and enrich content of the festival.
"Haymaking on Rajac". These alternatives can be inspiration for the organizers of the festival.

REFERENCES

NOTES ON THE AUTHORS
MALIŠA ŽIŽOVIĆ PhD, Full Professor at University of Kragujevac, Faculty of Technical Sciences Čačak, University Singidunum, Belgrade, Faulty of Health, Legal and Business Valjevo, Serbia,

DRAGAN TURANJANIN PhD, Docent at College of Business, Blace, Serbia, E mail: turanjanindragan@live.com

MLADEN JANJIĆ MSc, assistant and PhD student at University of Kragujevac, Faculty of Technical Sciences Čačak, Serbia, E mail: mjianjic75@gmail.com