

ASSESSMENT OF RESIDENTS' ATTITUDES TOWARDS TOURISM AND HIS IMPACT ON COMMUNITIES IN THE DANUBE DELTA

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Abstract

The Danube Delta was in 2016 the object of large debates regarding the future development of this area. The proposed strategic measures concentrate on the economic benefits of local communities and on the conservation of biodiversity, but in the same time sustainable tourism was considered (together with small industries and traditional crafts development) a very important source of revenue for the local communities. We consider that understanding residents' perceptions over the tourism activities from Danube Delta can improve the future decisions of stakeholders. In this context, the paper examines the attitudes of local people from Danube Delta towards the ongoing tourism and the impact of tourism on their communities. Questionnaire surveys were carried out in 2016 in 12 villages and were collected responses from 146 local residents. The main results of our survey revealed a positive attitude of residents towards tourism in general (especially amongst female, non-employees, high-income and directly involved in tourism respondents) and towards tourism in their community (especially amongst male, non-employees, low-income and directly involved in tourism respondents).

Key words: sustainable tourism, resident attitudes, tourism management

INTRODUCTION

Economic and social problems jeopardize the development of communities from areas with national parks or protected areas where the low incomes or the lack of jobs exacerbates the utilization of natural protected resources and creates conflicts with the authorities or the stakeholders responsible with the conservation of biodiversity. In remote areas, especially from protected areas like Danube Delta, the problems are bigger due to different factors like unauthorized tourism or high taxes imposed by local and central governments [1]. Here are needed a sustainable use of natural resources, an increase of human capital, a consolidation of local management (political intervention and sectors' integration [13] and the development of activities with added value to boost the local economy.

The development of touristic activities represents a viable solution for income' boosting in local communities but like highlighted [8] sometimes these benefits come with environmental and cultural costs. In Danube Delta, these aspects are very

important in the present even if tourism has been an important part of the delta economy for several decades. Why now? Because there is an increasing demand for resources both from tourists and residents and also a rise of polluted areas and accommodation facilities. But the implementation of a sustainable tourism, which can balance the demand for natural resources, needs a better distribution of environmental, social and economic costs and benefits of tourism [12]. In the process of reducing the costs and increasing the benefits, the strategic measures need to take in account the alteration of environment and the local resource consume due to transportation and accommodation of tourists [3], the tendency for a high consume in holiday periods [2] and the desire of investors to obtain benefits immediately with any regard for natural resources [11].

Many authors consider that the tourism development alters the relationship between residents and the environment [10]. In this situation, residents' relationships with their environment can become decontextualized [5] and different factors, like the increase of noise or prices, can lower the community

satisfaction [9]. In addition, the development leads to an increase in the use of energy (transportation, accommodations and specific activities) [15], water [6] and land.

How cope with these problems the residents? The tendency is to emphasize the economic gains to justify the environmental and cultural cost [4] and to create a negative opinion towards the controlled measures implemented by authorities. If the benefits are lower than the costs, the tendency is to develop feelings of resentment and irritation towards tourists and tourism activities [7]. In general, the people with economic gains from tourism or implicated in tourism planning have a positive attitude towards tourism [14].

In all this context, the implementation of any strategic measures in Danube Delta needs to take in account the overall opinion of residents towards the development of tourism and the impacts of this activity on their communities.

MATERIALS AND METHODS

The objective of this research is to understand the residents' attitudes towards tourism and his impact on communities. Understanding resident attitudes is a complicated process because it depends on residents' perceptions of authority's efficiency and environmental, social and economic impacts of tourism. In this context, our questionnaire survey was constructed by taking in account the following sections:

- Section 1* - the characteristics of respondents;
- Section 2* - 11 positive affirmation towards tourism (a 5-point Likert scale):
- Item 1 - We have much to learn from tourists;
- Item 2 - Tourism encourages the preservation of nature and traditions;
- Item 3 - Tourism activity develops other local industries;
- Item 4 - Tourism activity diversify the local economy;
- Item 5 - Tourism activity creates new markets for local products;
- Item 6 - Tourism development attracts investors;
- Item 7 - Tourism development increases the

prices of local products;

- Item 8 - Tourism development has made our community stronger;
- Item 9 - Tourism stimulates community members to work together;
- Item 10 - Tourists respect the values of local communities;
- Item 11 - Tourism development has brought more advantages than disadvantages in my community.

Section 3 - 7 negative affirmation towards tourism (a 5-point Likert scale):

- Item 12 - The environment is destroyed by tourists;
- Item 13 - Tourism development increases pollution;
- Item 14 - My community is much more crowded due to tourism development;
- Item 15 - Community tourism activities carried in my community bother me;
- Item 16 - The quality of community life has deteriorated due to tourism;
- Item 17 - Tourism development has created economic dependence on foreigners;
- Item 18 - Community resources are overused by tourists.

-*Section 4* – overall attitude – advantages and disadvantages of tourism development in the area (a 5-point Likert scale).

The statements from sections 2 and 3 are Likert-type items which fall into the ordinal measurement scale. In this case is recommended to use descriptive statistics tools like median (to measure the central tendency), frequencies (to measure variability) and the non-parametric test Mann–Whitney *U*. The median measure the central tendency (the 'likeliest' response), the IQR measure dispersion (clustered or scattered responses) and Mann–Whitney *U* estimate the differences between two independent groups.

We applied this descriptive and non-parametric methods with IBM SPSS Statistics. To assure the best results in the assessment of the attitude towards tourism, the similar items were merged into new variables based on the median value of all the items. The variables have the following meaning:

- PAT* - Positive attitude towards tourism

- (Items 1-11);
- PATGEN - Positive attitude towards tourism in general terms (Items 1-7);
- PATCOM - Positive attitude towards tourism in community (Items 8-11);
- NAT - Negative attitude towards tourism (Items 12-18);
- NATGEN - Negative attitude towards tourism in general terms (Items 12-13);
- NATCOM - Negative attitude towards tourism in community (Items 14-18);
- OAGEN - Overall attitude towards tourism in general terms (Items 1-7 and 12-13);
- OACOM - Overall attitude towards tourism in community (Items 8-11 and 14-18).

RESULTS AND DISCUSSIONS

The survey carried out in Danube Delta had 146 respondents, from which 50.7% male and 49.3% female (Table 1). The main characteristics of our respondents are: 67.1% are employees; 54.1% are indirect or indirect related with touristic field; 50.7% have under 2,000 RON per family member (around 450 euro).

Table 1. Frequency distribution of respondents

	Frequency	Percent	Cumulative Percent
Total	146	100.0	-
Gender			
Male	74	50.7	50.7
Female	72	49.3	100.0
Status			
Employee	98	67.1	67.1
Non-Employee	48	32.9	100.0
Income level (RON)*			
Under 2000	74	50.7	50.7
Over 2000	72	49.3	100.0
Implication in touristic field (direct or indirect)			
Yes	79	54.1	54.1
No	67	45.9	100.0

Source: Own calculation with SPSS

* (equivalence 1 Euro = 4.5 RON)

Positive attitude towards tourism

Our findings suggest consensus ($Mdn=4$, $IQR=0$) regarding the positive attitude towards tourism (Table 2). The analysis covers the statements which imply that touristic activities have a positive roll over environment, in local economy and inside the community.

Most respondents (76.0%) indicated agreement with all the statements and

especially with those related with the general benefits of this kind of activity (knowledge transfer, preservation of environment and traditions, economic development, investment growth, added value to local products). 82.2% of respondents have agreed with the statements regarding the positive impact of tourism on community (increase of strength, cooperation and self-respect) even if we may observe a more scattered responses pattern ($IQR = 0.5$).

Table 2. Frequency distribution of positive attitude towards tourism, median and IQR (PAT, PATGEN, PATCOM)

	Neutral %	Reject %	Accept %	Median ^a	Inter-Quartile Range (IQR) ^b
PAT	17.8	6.2	76.0	4.0	0
PATGEN	17.8	6.2	76.0	4.0	0
PATCOM	12.3	5.5	82.2	4.0	0.5

Source: Own calculation with SPSS

The verification of null hypothesis didn't show a gender significant difference ($p > 0.5$), but the Mann-Whitney U and Wilcoxon W statistics revealed a difference in mean ranks between male and female respondents. The females have a more favourably opinion about tourism in general, while man have a stronger positive attitude toward the impact of tourism in community (Table 3).

Table 3. Mann-Whitney Test (PAT, PATGEN, PATCOM) by genre

	N	Mean Rank	Sum of ranks	Test Statistics
PAT				
Male	74	73.7	5454.0	Mann-Whitney U (2649.0) Wilcoxon W (5277.0) Z (-0.068) Asymp. Sig. (2-tailed) (0.946)
Female	72	73.29	5277.0	
PATGEN				
Male	74	72.14	5338.5	Mann-Whitney U (2563.5) Wilcoxon W (5338.5) Z (-0.467) Asymp. Sig. (2-tailed) (0.640)
Female	72	74.90	5392.5	
PATCOM				
Male	74	75.33	5574.5	Mann-Whitney U (2528.5) Wilcoxon W (5156.5) Z (-0.552) Asymp. Sig. (2-tailed) (0.581)
Female	72	71.62	5156.5	

Source: Own calculation with SPSS

The verification of null hypothesis by status didn't show significant difference ($p > 0.5$), but the mean ranks showed a much stronger

difference. The non-employees (employer, students, etc.) have a more favourably opinion than employees about tourism in general and at community level (Table 4). In conclusion, the non-employees believe more in the benefits of tourism in their communities.

Table 4. Mann-Whitney Test (PAT, PATGEN, PATCOM) by status

	N	Mean Rank	Sum of ranks	Test Statistics
PAT				
Employee	98	71.61	7017.5	Mann-Whitney U (2166.5) Wilcoxon W (7017.5) Z (-0.897) Asymp. Sig. (2-tailed) (0.370)
Non-Employee	48	77.36	3713.5	
PATGEN				
Employee	98	72.53	7108.0	Mann-Whitney U (2257.0) Wilcoxon W (7108.0) Z (-0.470) Asymp. Sig. (2-tailed) (0.638)
Non-Employee	48	75.48	3623.0	
PATCOM				
Employee	98	69.2	6782.0	Mann-Whitney U (1931.0) Wilcoxon W (6782.0) Z (-1.826) Asymp. Sig. (2-tailed) (0.068)
Non-Employee	48	82.27	3949.0	

Source: Own calculation with SPSS

If we take in consideration the level of income, we may observe a difference between local residents with low and higher earnings. The positive impact of tourism, especially on their communities, are more appreciated by the low-income residents, the difference being almost significant in statistic terms (Table 5).

Table 5. Mann-Whitney Test (PAT, PATGEN, PATCOM) by income level

	N	Mean Rank	Sum of ranks	Test Statistics
PAT				
Under 2000	74	69.57	5148.0	Mann-Whitney U (2373.0) Wilcoxon W (5148.0) Z (-1.323) Asymp. Sig. (2-tailed) (0.186)
Over 2000	72	77.54	5583.0	
PATGEN				
Under 2000	74	71.28	5275.0	Mann-Whitney U (2500.0) Wilcoxon W (5275.0) Z (-0.762) Asymp. Sig. (2-tailed) (0.446)
Over 2000	72	75.78	5456.0	
PATCOM				
Under 2000	74	74.26	5495.0	Mann-Whitney U (2608.0) Wilcoxon W (5236.0) Z (-0.228) Asymp. Sig. (2-tailed) (0.819)
Over 2000	72	72.72	5236.0	

Source: Own calculation with SPSS

The following results confirm the research of Woo (2015). The residents implicated directly

or indirectly in touristic activities have a more positive attitude towards tourism, especially regarding the ones carry out in their communities (Table 6).

Table 6. Mann-Whitney Test (PAT, PATGEN, PATCOM) by the level of implication in tourism

	N	Mean Rank	Sum of ranks	Test Statistics
PAT				
Yes	79	77.84	6149.5	Mann-Whitney U (2303.5) Wilcoxon W (4581.5) Z (-1.564) Asymp. Sig. (2-tailed) (0.118)
No	67	68.38	4581.5	
PATGEN				
Yes	79	77.42	6116.5	Mann-Whitney U (2336.5) Wilcoxon W (4614.5) Z (-1.446) Asymp. Sig. (2-tailed) (0.148)
No	67	68.87	4614.5	
PATCOM				
Yes	79	78.7	6217.5	Mann-Whitney U (2235.5) Wilcoxon W (4513.5) Z (-1.681) Asymp. Sig. (2-tailed) (0.093)
No	67	67.37	4513.5	

Source: Own calculation with SPSS

Negative attitude towards tourism

The negative statements imply that touristic activities affect the environment and the community life through an increase in the level of pollution, agglomeration, noise, usage of resources, etc. Our findings suggest that the residents' opinions are more scattered and the median is at neutral levels ($Mdn=3$) (Table 7). Actually, regarding their attitude toward negative impact of tourism, almost half of residents didn't express their opinion and the other half presented a clear division of opinion ($IQR = 1-1.5$).

So, regarding the tourism in general many respondents (45.2%) expressed disagreement with the idea of negative impact, but 38.4% indicated that they agreed ($Mdn=3$, $IQR=1.5$). The reverse pattern - but much weaker - is observed for the impact of tourism on community: 20.5% of respondents believe that tourism has a negative impact, while 37.7% reject this idea.

There isn't a significant difference ($p>0.5$) between genders' opinion, but the mean ranks reveal that female agree more with the idea of negative impact of tourism in general, while man reject more the idea of negative impact over communities' life (Table 8).

Table 7. Frequency distribution of negative attitude towards tourism, median and IQR (NAT, NATGEN, NATCOM)

	Neutral %	Reject %	Accept %	Median ^a	Inter-Quartile Range (IQR) ^b
NAT	43.2	38.4	18.4	3.0	1.0
NATGEN	16.4	45.2	38.4	3.0	1.5
NATCOM	41.8	37.7	20.5	3.0	1.0

Source: Own calculation with SPSS

Table 8. Mann-Whitney Test (NAT, NATGEN, NATCOM) by genre

	N	Mean Rank	Sum of ranks	Test Statistics
NAT				
Male	74	71.75	5309.5	Mann-Whitney U (2534.5) Wilcoxon W (5309.5) Z (-0.541) Asymp. Sig. (2-tailed) (0.588)
Female	72	75.3	5421.5	
NATGEN				
Male	74	71.9	5320.5	Mann-Whitney U (2545.5) Wilcoxon W (5320.5) Z (-0.470) Asymp. Sig. (2-tailed) (0.638)
Female	72	75.15	5410.5	
NATCOM				
Male	74	76.76	5680.0	Mann-Whitney U (2423.0) Wilcoxon W (5051.0) Z (-0.977) Asymp. Sig. (2-tailed) (0.319)
Female	72	70.15	5051.0	

Source: Own calculation with SPSS

The situation is similar when we compare the employees with the non-employees (Table 9). The employees agree more with the idea of negative impact of tourism in general, while non-employees reject more the idea of negative impact over communities' life.

Table 9. Mann-Whitney Test (NAT, NATGEN, NATCOM) by status

	N	Mean Rank	Sum of ranks	Test Statistics
NAT				
Employee	98	71.55	7011.5	Mann-Whitney U (2160.5) Wilcoxon W (7011.5) Z (-0.852) Asymp. Sig. (2-tailed) (0.394)
Non-Employee	48	77.49	3719.5	
NATGEN				
Employee	98	74.92	7342.0	Mann-Whitney U (2213.0) Wilcoxon W (3389.0) Z (-0.587) Asymp. Sig. (2-tailed) (0.557)
Non-Employee	48	70.60	3389.0	
NATCOM				
Employee	98	71.86	7042.0	Mann-Whitney U (2191.0) Wilcoxon W (7042.0) Z (-0.709) Asymp. Sig. (2-tailed) (0.478)
Non-Employee	48	76.85	3689.0	

Source: Own calculation with SPSS

The residents with higher incomes, compared with the ones with low-income, agree more

with the idea of negative impact of tourism in general, but they reject the idea of negative impact over communities' life (Table 8).

Table 10. Mann-Whitney Test (NAT, NATGEN, NATCOM) by income level

	N	Mean Rank	Sum of ranks	Test Statistics
NAT				
Under 2000	74	72.00	5328.0	Mann-Whitney U (2553.0) Wilcoxon W (5328.0) Z (-0.464) Asymp. Sig. (2-tailed) (0.643)
Over 2000	72	75.04	5403.0	
NATGEN				
Under 2000	74	72.54	5368.0	Mann-Whitney U (2593.0) Wilcoxon W (5368.0) Z (-0.282) Asymp. Sig. (2-tailed) (0.778)
Over 2000	72	74.49	5363.0	
NATCOM				
Under 2000	74	71.16	5266.0	Mann-Whitney U (2491.0) Wilcoxon W (5266.0) Z (-0.716) Asymp. Sig. (2-tailed) (0.474)
Over 2000	72	75.90	5465.0	

Source: Own calculation with SPSS

The residents implicated directly or indirectly in touristic activities reject more the idea of negative impact of tourism on their communities (Table 11), but have almost similar opinion with the non-involved residents regarding the general negative impact of tourism.

Table 11. Mann-Whitney Test (NAT, NATGEN, NATCOM) by the level of implication in tourism

	N	Mean Rank	Sum of ranks	Test Statistics
NAT				
Yes	79	71.08	5615.5	Mann-Whitney U (2455.5) Wilcoxon W (5615.5) Z (-0.801) Asymp. Sig. (2-tailed) (0.423) Effect Score (0.066)
No	67	76.35	5115.5	
NATGEN				
Yes	79	73.16	5779.5	Mann-Whitney U (2619.5) Wilcoxon W (5779.5) Z (-0.107) Asymp. Sig. (2-tailed) (0.914) Effect Score (0.009)
No	67	73.90	4951.5	
NATCOM				
Yes	79	69.88	5520.5	Mann-Whitney U (2360.5) Wilcoxon W (5520.5) Z (-1.187) Asymp. Sig. (2-tailed) (0.235) Effect Score (0.098)
No	67	77.77	5210.5	

Source: Own calculation with SPSS

CONCLUSIONS

In our research, we hypothesized that there are differences between residents of Danube Delta regarding their attitude towards tourism,

but our results partially confirmed our hypothesis. Even if there aren't statistically differences between respondents we extracted some important conclusions:

-gender differences – female agree more than men with the general statements regarding the positive and negative impact of the tourism (preconceived opinion);

-status differences – non-employees believe more than the employees in the benefits of tourism in general and in their communities;

-the low-income residents appreciate more the positive impact of tourism, especially on their communities;

-the residents implicated directly or indirectly in touristic activities have a more positive attitude towards tourism, especially regarding the ones carry out in their communities.

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