# RURAL AREAS MANAGEMENT AND STRATEGIC DEVELOPMENT CHALLENGES WITH EMPHASIS ON SUSTAINABLE ISLAND DEVELOPMENT

*Dominik Paparić[1], Jerko Glavaš[2], Sanela Ravlić[3]*

**Corresponding author E-mail: sravlic@unisb.hr*

ARTICLE INFO

Original Article

Received: *05 June 2024*

Accepted: *25 June 2024*

doi:10.59267/ekoPolj2403871P

UDC 631/635:332.146.2(497.5)(210.7)

***Keywords***:

*Economic development, sustainable development, rural area management, island development*

***JEL**: F63, Q01, Q56*

ABSTRACT

The main constraint of strategic development and management of rural areas is rooted in resource management and insufficient holistic approach to all available resources and its interdependence. Management of such areas involves thorough planning on all levels and management of changes to achieve the best competitive advantage possible. In this paper, the focus is on the strategic management of the destination (Croatian islands), the concept of sustainable development of rural areas on Croatian islands, level of permanent education of local population on the concept of sustainable development and existence of even distribution of opportunities that can enable local community to achieve socio-economic benefit. The primary survey is conducted in the observed area in 2019. The total sample of respondents is 243.

## Introduction

Although it was first mentioned in the 19th century, the concept of sustainable development and its definition has not been fully explained nor grasped since the time it is composed of two contradictory concepts that identify static (sustainability) and dynamic (development). Therefore, it is not surprising that different viewpoints on sustainable development are found in the scientific and professional literature. Development and sustainability have repeatedly acquired new meanings, hence requiring new analytical techniques, planning objectives and effective governance and management (Connell,

1 Dominik Paparić, Ph.D., Director, Ministry of Regional Development and EU Funds, Administration for Islands, Miramarska cesta 22, 10 000 Zagreb, Republic of Croatia, Phone: +385.1.6400.600, E-mail: paparicdominik@gmail.com, ORCID ID (https://orcid.org/0000-0001-5595-7756)

2 Jerko Glavaš, Ph.D., Professor, Josip Juraj Strossmayer University of Osijek, Faculty of Economics, Trg Lj. Gaja 7, 31000 Osijek, Republic of Croatia, E-mail: jglavas@efos.hr, ORCID ID (https://orcid.org/0000-0001-9227-1227)

3 Sanela Ravlić, Ph.D., Assistant Professor, University of Slavonski Brod, Trg Ivane Brlić Mažuranić 2, 35000 Slavonski Brod, Republic of Croatia, E-mail: sravlic@unisb.hr, ORCID ID (https://orcid.org/0000-0002-4959-7835/)

2018:111). Author Sharpley (2000:3) highlights that development and sustainability could be in opposition, where each could produce different effects. Contrary to such thinking, numerous economic theorists, as stated by Črnjar and Črnjar (2009:81), believe that development is necessary and "refers to the concept of the order of resources, while sustainability expresses the principle of the permanent survival of resources. Research related to sustainable development is dynamic and changing in accordance with the obtained research results and their practical confirmation in space. In one of his publications author Klarin (2018:72) has given an overview of international activities, reports, conferences related to the concept of sustainable development from 1969 until the late 2010s clearly showing the dynamic in this field. As stated, from its development, the concept has been adapting to the contemporary requirements of a complex global environment, but the underlying principles and goals, as well as the problems of their implementation, remained almost unchanged. Since the introduction of the concept, many international conferences, congresses, summits and meetings have been held, resulting in various declarations, reports, resolutions, conventions and agreements mentioning different issues and much needed sustainability in all areas of human behavior and activity. There is a continuous emergence of new ideas that enable improvements in sustainable development research respecting economic models (circular economy - CE, green economy - ZE and bio economy - BE) and sustainability models (development, maintaining the existing state and slowing down development). Viewed from the perspective of sustainable development policy, all three concepts are the subject of political discussions at the level of the European Union (EU) with the New Action Plan for the Circular Economy (EC, 2020), the green goals and objectives of economic policy (EC, 2020) and the European Bio-Economy Strategy from 2012 and 2018 (Kulušić, 2021). The Green Economy concept was initiated by the United Nations (UNECE, 2011), and is also found in the OECD Green Growth Strategy (OECD, 2011).

Adding in the narrative of sustainable development islands and their challenges, we get an even more layered and complex issues that must be addressed from multiple levels. As Connell (2023) commented in his recent work "progress toward sustainability in islands and island states is hampered by multiple challenges, including limited and threatened biodiversity, migration, resource deficits, shortages of skilled human resources, lack of capital, weak governance and management, inadequate data (and problems of interpretation), social divisions, and simultaneous quests for modernity (and superior incomes) and conservation".

Each island community has unique geographical features, a unique history, culture and socio-economic position (De Clercq et al. 2019:5). Therefore, every normative act, which seeks to impose solutions in the field of sustainable development and the use of clean energy, should be viewed as a framework to which the island community can adapt. To be able to purposefully consider the issues connected to much needed development, it is necessary to look at all the peculiarities that make up the island as destination. As author Munier (2005:37) detects that assessment of progress towards sustainable development should be based on an explicit set of categories or an

organizational framework that links vision and goals with indicators and assessment criteria, which clearly points to the importance of strategy and strategic thinking that will be holistically understood and considered by a greater number of local stakeholders, which is not always properly addressed.

The development programs for islands were developed with the basic intention of encouraging local communities to take the initiative to make their destination more attractive and competitive, while respecting environmental protection standards, sustainable development principles and circular economy principles. The development of sustainable rural areas has become a priority of national policies and/or strategies in many countries. The programs should be aligned with various supporting documents, declarations, laws and agendas such as Agenda 2030 on global level, Declaration on Smart Islands, Political Declaration on Clean Energy on EU Islands, Resolution of the European Parliament on the Special Situation of Islands (2015/3014(RSP)), Barcelona Convention on Integral Management of the Mediterranean Coastal Area (UNEP/MAP, 2011) and the European Green Deal (Fetting, 2020) on EU level. The national development strategy, sectoral and multi-sectoral strategies and spatial planning documents (national level). There are also ample regulations, such as EU Regulation 1698/2005, which supports rural development through the European Agricultural Fund for Rural Development (EAFRD), which indicates that special provisions should apply 'to mitigate the specific constraints and structural problems in farming and forestry activities and in adding value to agricultural and forestry products as a result of remoteness, insularity or distant location and of the dependency of the rural economy on a limited number of agricultural products, and to promote a robust rural development policy (EC, 2006). Besides mentioned regulations there is a considerable number of research that talks about the problems, stratification and challenges of island areas, the sustainable development of their future (Moncada et al., 2009) and various rural development program assessment methods such as SCEPTICAL method (Moutinho, 2000) or SEA approach (Strategic environmental assessment) that integrates sustainability issues into policies, plans and programs promoting the participation of different stakeholders including the communities (Polido et al., 2014; Spaziante and Murano, 2009). Throughout the entire recent history of the strategic thinking of the island's development, first purely economic, then sustainable and most recently circular, it has its starting point in the "top-down" approach. Despite numerous scientific and professional research, published books and articles, development documents do not sufficiently respect the specificity of each island as a separate unit which is crucial for its own, unique development but due to size of islands, this type of segmentation might not produce much desired effect.

In the case of Croatia, there have been several attempts to form the island's development through various regional plans, for example, into formed regions according to the geographical division into: North Adriatic, Central Adriatic and South Adriatic or according to island groups: Kvarner Islands, Zadar and Šibenik Archipelago, Dalmatian and South Dalmatian. The islands make up about 6% of the Croatian mainland, which

is the second largest archipelago in the Mediterranean (Vidučić, 2007:42). In the case of Croatia, the Law on Islands (NN, 116/18, 73/20, 70/21) defines the term insularity as: "a set of geographical, social, historical, economic and ecological peculiarities resulting from being completely surrounded by the sea".

The chronology of the problem of balanced development of the Croatian islands has its own historical, cultural, demographic and social characteristics. The strategic discussion resulting from the National Island Development Program (1997) treat the Croatian islands as a single entity, which they certainly are not. The absence of a differentiated approach to island development has led to inequality in the level of development between individual islands and island groups, which is confirmed by numerous indicators. With the adoption of several strategic documents on rural development and also the Tourism Development Strategy of the Republic of Croatia until 2020 (Official Gazette 55/13), the position was accepted that "development should be based on the improvement of environmental protection, preservation of the quality of natural resources and responsible and sustainable management", which amnestied the existing condition, but also limited development, such as tourism development, for those islands that managed it responsibly and sustainably. Without an overall umbrella strategy, current problems and limitations related to the sustainable development of island destinations can only be partially solved. Namely, all initiatives that come from the "bottom-up" approach are primarily the result of the interests of the local community, and only then of the general interest.

The topic of sustainable development of islands began to occupy Croatian scientists in the early nineties of the last century, and the works Radnić and Mikačić (Tourism and sustainable development of Croatian islands, 1994), Mikačić (Tourism as a function of sustainable development of Croatian islands, 1996) and Starc (Sustainable development, tourism and evaluation of investment ventures, 1996). Critical elements of a successful participatory planning process in protected areas that are under significant pressure from visitors were analyzed in recent years by Pivčević, Mikulić and Krešić (Mitigating the Pressures: The Role of Participatory Planning in Protected Area Management, 2021).

Within this paper, the issue of strategic management of an island with an emphasis on sustainable development will be viewed from a several different points of view that can allow a wider understanding and more in-depth approach that will include all crucial stakeholders who can help approach the complex issue of island development that will be in line with much needed sustainable development.

## Materials and methods

A questionnaire was used as a research instrument. The research was conducted on a selected sample in the period from February to October 2019, and the interviewed respondents were tourism workers (direct employment in tourism), representatives of local (regional) self-government and residents of the island connected with tourism (indirect employment in tourism).

The questionnaire was created in the form of statements, and the respondents were asked to express their views on the elements of the development strategy of the island, the development of the island destination, the concept sustainable development and the way of implementation and responsibility with the aim of research and formation of views on strategic guidelines for the sustainable development of tourist destinations on inhabited islands in the Republic of Croatia. The collected data were systematized according to the socio-demographic characteristics of the sample (respondents) and systematically statistically processed and analysed with the appropriate computer program (SPSS Statistics 24).

In this paper, the classification of islands according to permanent population as a measure of survival and development was approached. The first group A includes islands with more than 5,000 inhabitants. These are islands with developed infrastructure, they are well connected to the mainland, they have their own tourist tradition and acceptable development plans structured with a "bottom-up" approach. The second group B consists of islands with a permanent population of 1,001 to 5,000 inhabitants. They are smaller in area than the islands from group A, but have reached a high level of tourism development, have a solid infrastructure and a connection with the mainland. The third group C consists of islands with a permanent population of 100 to 1,000. In terms of tourism, these are marginal islands with a solid tourist perspective, but inadequate infrastructure. The last group of islands D consists of islands where up to 100 inhabitants live permanently. They are inferior in terms of tourism, without adequate infrastructure, weak connections with the mainland and an uncertain tourist perspective.

## Results and discussion

In the empirical part of the research, to analyze the collected data, the methods of descriptive and inferential statistics, analysis of variance, correlation analysis, examination of the connection of variables with the Chi-square test and the relevance of the sample with the T-test were used.

A highly structured questionnaire was used as a research instrument. The research was conducted in the period from February to October 2019, and the respondents were tourism workers, representatives of local and regional self-government, and residents of the island connected with tourism. The questionnaire consisted of statements and relevant dimensions of sustainable island development identified based on a review of the relevant literature. The collected data were analyzed using the SPSS Statistics 24 program. According to the 2011 census, there were fifty inhabited islands in the Republic of Croatia. The groups of islands are classified in relation to the number of permanently settled population into 4 groups as shown in table 1 together with the number of respondents per island.

**Table 1.** Frequency and distribution of the sample of respondents according to island category

| ISLAND CATEGORY | | F | % | Number | Respondent/island | Respondent/islands (50) |
|---|---|---|---|---|---|---|
| *A* | Over 5.000 inhabitants | 123 | 50,6 | 9 | 13,67 | 2,46 |
| *B* | 1.000 - 5.000 inhb. | 67 | 27,6 | 8 | 8,38 | 1,34 |
| *C* | 100 do 1.000 inhb. | 43 | 17,7 | 18 | 2,39 | 0,86 |
| *D* | Less than 100 inhb. | 10 | 4,1 | 15 | 0,67 | 0,20 |
| **Σ** | | **243** | **100** | **50** | **4,86** | **4,86** |

***Source:*** author's processing in Ms Excel according to data from the questionnaire

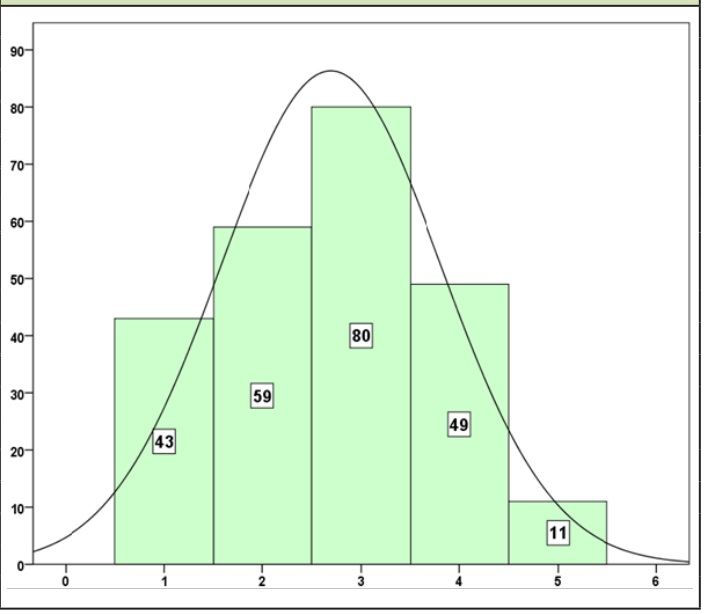
The total sample of respondents (n=243) amounts to 0.2% of the island's population, which would not be representative if the opinion of all the island's residents were examined. However, the research was conducted on a target group of experts in the sustainable development of island tourist destinations. Out of the total number, 45.3% of respondents are male, and 54.7% are female. More than half of the respondents (52.3%) have higher education. 26.7% of respondents have a secondary vocational education. The majority of respondents belong to the age group of 30 to 50 years (58%), 22.2% of respondents are over 50 years old, and 19.8% are under 30 years old. According to the role of the respondents on the island, 37.9% are tourist workers, 32.9% are representatives of local self-government and 29.2% are prominent residents of the island (reputable people from the field of culture, chroniclers, people with extensive experience in tourism.). As part of this paper, the results for the four claims will be presented using suitable methods.

Respondents were asked to grade the statements from 1 to 5 in such a way that: score "1" is "I do not agree - it is incorrect", score "2" is "mostly disagree - mostly incorrect", score "3" is "I neither agree nor disagree - it is neither true nor false", score "4" is "mostly agree - mostly true" and score "5" is " I absolutely agree - it is completely correct".

In the statement "There is an organized and satisfactory system of financing sustainable development on the islands", respondents mostly or completely agree that there is an organized and satisfactory system of financing sustainable development on the islands. This statement also represents the HI research hypothesis. In contrast, the null-hypothesis H0 was determined, according to which the respondents' answers were distributed evenly.

**Table 2.** Frequency and distribution of responses to this statement

| STATEMENT | | F | % | HISTOGRAM OF THE RESPONSE ON THE STATEMENT |
|---|---|---|---|---|
| score | 1 | 43 | 17,7 | |
| | 2 | 59 | 24,3 | |
| | 3 | **80** | **32,9** | |
| | 4 | 49 | 20,2 | |
| | 5 | 11 | 4,5 | |
| | **Σ** | **242** | **99,6** | |
| | invalid | 1 | 0,4 | |
| $\bar{X}$ | | 2,6942 | | |
| Median | | 3 | | |
| SD | | 1,11826 | | |
| Variance σ² | | 1,251 | | |
| Skewness | | 0,052 | | |
| Kurtosis | | -0,801 | | |
| Range | | 4 | | |
| Σ | | 652 | | |
| Percentile | 25 | 2 | | |
| | 50 | 3 | | |
| | *75* | *4* | | |



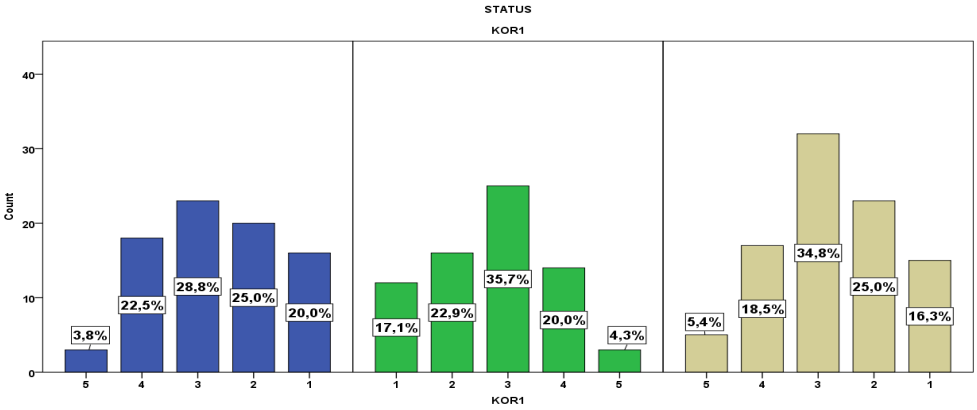

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

From the previous table, it can be seen how the respondents determined themselves according to the set Statement 20 in the range of grades from 1 to 5. Forty-three respondents (17.7%) do not agree with the statement, and 59 of them (24.3%) mostly agree. does not agree. 32.9% of respondents are neutral. For the most part, 49 respondents (20.2%) agree with the statement, while only 11 of them (4.5%) agree completely. The attached histogram clearly shows how the ratings follow a Gaussian distribution. The Skewness measure of asymmetry is very weak but positive at 0.052, which indicates a weak shift towards lower grades. The Kurtosis curve flattening measure has a value of -0.801, which indicates pronounced platykurticity, which is reflected in the grouping of results around the arithmetic mean. Respondents evaluated the observed statement with an average score of 2.6942 with a standard deviation of 1.11826 and a variance of 1.251.

The following table analyzes the responses to this statement according to the respondent's occupation. In principle, the HI research hypothesis is put forward, which claims that there is a significant difference in evaluation between individual categories of respondents. In contrast, the null hypothesis H0 was determined, according to which there is an evenness of evaluation of all categories.

**Table 3.** Analysis of the answers to the statement according to the respondent's occupation

| A representative of local government | a respectable resident of the island | A tourism worker |
|---|---|---|




| SCORE | 1 | 2 | 3 | 4 | 5 | $\bar{X}$ | N | SD |
|---|---|---|---|---|---|---|---|---|
| A representative of local government | 16 | 20 | 23 | 18 | 3 | **2,65** | 80 | 1,148 |
| A respectable resident of the island | 12 | 16 | 25 | 14 | 3 | 2,71 | 70 | 1,105 |
| A tourism worker | 15 | 23 | 32 | 17 | 5 | **2,72** | 92 | 1,113 |
| **Σ** | **43** | **59** | **80** | **49** | **11** | **2,69** | **242** | **1,118** |

| COEFFICIENTS | VALUE | df | | table $\chi^2$ for 5% sign. |
|---|---|---|---|---|
| Pearson $\chi^2$ | 1,752 | 8 | | 15,507 |
| the likelihood ratio | 1,759 | 8 | | $\chi^2 < \chi^2$ table 5% sign. **$H_0$ accepted** |
| Phi | 0,085 | | | |
| Cramer's V | 0,060 | Eta η | 0,028 | |
| Contingency Coefficient C | 0,085 | $\eta^2$ | 0,001 | |

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

Analyzing the average marks assigned by the respondents, it is evident that there are no significant differences between them in accepting this statement, which speaks of the uniformity of attitudes. This is additionally confirmed by the result of the χ2 test, which indicates that with a risk level of 5%, the null hypothesis H0 can be accepted, and it can be concluded that the respondents do not differ from each other when evaluating this statement. Cramer's V as a measure of symmetry has a minimal effect, and η2 as the association measure has a negligible value. The following table analyzes the answers to this statement according to the respondent's profile, the category of the island and the perception of the tourism development of the island destination.

**Table 4.** Analysis of responses to the statement according to the profile of respondents, island category and perception of tourist development of the island destination

| RESPONDENT PROFILE | | | ISLAND CATEGORY | | |
|---|---|---|---|---|---|
| **EDUCATION** | $\bar{X}$ | **N** | **POPULATION** | $\bar{X}$ | **N** |
| PhD | **4,00** | 2 | Over 5.000 inhabitants (A) | **2,95** | 123 |
| MSc | 2,73 | 11 | 1.001 - 5.000 inhb.(B) | 2,58 | 66 |
| Masters Degree | **2,53** | 127 | 100 do 1.000 inhb.(C) | **2,19** | 43 |
| Bachelor Degree | 3,32 | 38 | Less than 100 inhb.(D) | 2,50 | 10 |
| Secondary education | 2,61 | 64 | | | |
| **Σ** | **2,69** | **242** | **Σ** | **2,69** | **242** |
| Pearson $\chi^2$ = **30,499**; df = 16; | | | Pearson $\chi^2$ = **54,141**; df = 12 | | |
| table $\chi$2 za 5% sign. =26,296 | | | table $\chi$2 for 5% sign. = 21,026 | | |
| $\chi^2 > \chi^2$ table for 5% sign. **Prihvaća se $H_1$** | | | $\chi^2 > \chi^2$ table for 5% sign. **Acccepted $H_1$** | | |
| | | | | | |
| **EXPERIENCE** | $\bar{X}$ | **N** | **DEVELOPMENT PERCEPTION** | $\bar{X}$ | **N** |
| < 30 years | **2,85** | 48 | Inferior | **2,29** | 17 |
| 30 - 50 years | 2,66 | 140 | Promising | 2,38 | 95 |
| > 50 years | **2,63** | 54 | Developed | **2,98** | 130 |
| **Σ** | **2,69** | **242** | **Σ** | **2,69** | **242** |
| Pearson $\chi^2$ = **23,914**; df =8 | | | Pearson $\chi^2$ = **30,365**; df =8 | | |
| Table $\chi$2 for 5% sign. =15,507 | | | table $\chi$2 for 5% sign. =15,507 | | |
| $\chi^2 > \chi^2$ table for 5% sign. **Accepted $H_1$** | | | $\chi^2 > \chi^2$ table for 5% sign. **Accepted $H_1$** | | |

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

In order to confirm the results obtained by the Chi-square test, an ANOVA analysis of variance is additionally performed.

**Table 5.** Analysis of the variance of the Statement in relation to the characteristics of the respondents and the category of island groups

| ANOVA | | SUM OF SQUARES | DF | MS | F | F BORDER FOR 5% SIGN. |
|---|---|---|---|---|---|---|
| * occupation of the respondent | between groups | 0,234 | 2 | 0,117 | 0,093 | 2,239 |
| | within the group | 301,138 | 239 | 1,260 | | **2,09** |
| | Σ | 301,372 | 241 | | | |
| * development perception | between groups | 22,554 | 2 | 11,277 | **9,666** | 2,239 |
| | within the group | 278,818 | 239 | 1,167 | | 2,09 |
| | Σ | 301,372 | 241 | | | |

| ANOVA | | SUM OF SQUARES | DF | MS | F | F BORDER FOR 5% SIGN. |
|---|---|---|---|---|---|---|
| * respondent's education | between groups | 22,092 | 4 | 5,523 | 4,687 | 4,237 |
| | within the group | 279,280 | 237 | 1,178 | | 1,46 |
| | Σ | 301,372 | 241 | | | |
| * respondent's experience | between groups | 1,579 | 2 | 0,789 | 0,625 | 2,239 |
| | within the group | 299,793 | 239 | 1,254 | | 2,09 |
| | Σ | 301,372 | 241 | | | |
| * island group | between groups | 20,532 | 3 | 6,844 | 5,800 | 3,238 |
| | within the group | 280,840 | 238 | 1,180 | | 1,07 |
| | Σ | 301,372 | 241 | | | |

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

The result of the variance analysis is a prominent F-ratio, a value that represents a general indicator of the existence of statistically significant differences between the examined groups. The analysis of variance, except for the attribute education (shaded), confirmed the results of the conducted Chi-square tests, and an additional analysis using the T-test method is performed.

**Table 6.** Results of the T-test according to the experience of the respondents

| STATEMENT: THERE IS AN ORGANIZED AND SATISFACTORY FINANCING SYSTEM FOR SUSTAINABLE DEVELOPMENT ON THE ISLANDS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Category** | **Pairs** | **N** | $\bar{X}$ | **SD** | **F** | **t** | **df** | **Critical t** | **difference** $\bar{x}$ |
| Experience | Older | 194 | 2,65 | 1,100 | 0,390 | 1,107 | 240 | 1,97 | 0,1995 |
| | younger | 48 | 2,85 | 1,185 | | 1,059 | 68 | 2,00 | 0,1995 |

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

From the data in the previous table, it can be concluded that there is no statistically significant difference in the rating of this statement in relation to the experience of the respondents. This is confirmed by the results of the T-test considering that the calculated t is not greater than the limit value t for a certain degree of freedom, and the values of the differences of the arithmetic means are small. This also accepts the null hypothesis H0 about the homogeneity of the observed sets. This also accepts the null hypothesis H0 about the homogeneity of the observed sets. According to the calculated average values, the set statement resulted in a good rating (2.6942) and the respondents took a neutral position. The surveyed respondents know about island conditions and it is concluded that they are not too convinced that there is an organized and satisfactory

system of financing sustainable development on the islands. In support of such a claim, the following can be stated:

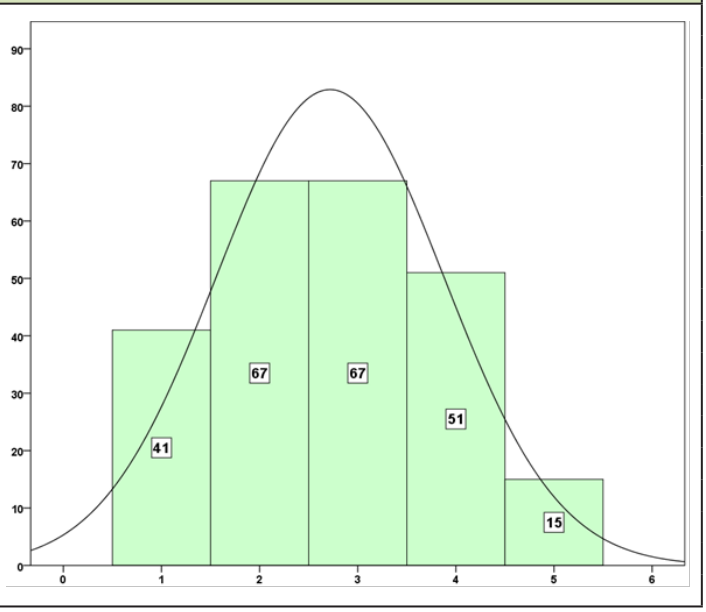
- The distribution of the assigned grades according to the respondents' profession ranged from 2.65 for local government representatives to 2.72 for tourism workers. The distribution is even, which was confirmed by the Chi-square test and analysis of variance.
- The distribution of assigned grades according to the level of education of the respondents ranged from 2.53 for respondents with a university degree to 4.00 for those with a PhD. The distribution is not even, which was confirmed by the Chi-square test and analysis of variance.
- The distribution of the assigned marks according to the respondents' experience in tourism ranged from 2.63 for the most experienced respondents to 2.85 for those under 30 years of age. The analysis showed that the distribution is even, although it was not confirmed by the Chi-square test, but homogeneity is indicated by the analysis of variance and the additional T-test.
- The distribution of the assigned scores according to the perception of the tourism development of the island destination from which the respondents come ranged from 2.29 for tourist inferior destinations to 2.98 for tourist developed destinations. The distribution is not even, which was confirmed by the Chi-square test and analysis of variance.
- The distribution of the assigned grades according to the category of the island from which the respondents come ranged from 2.19 for islands of category C to 2.95 for islands of category A. The distribution is not even, which was confirmed by the Chi-square test and analysis of variance.

In the distribution of answers according to the category of respondents, there is an evenness in relation to the occupation and experience of the respondents.

In the next statement (Education of the local population on the concept of sustainable development is carried out permanently), the respondents mostly or completely agree that the education of the local population on the concept of sustainable development is carried out permanently on the islands. This statement also represents the HI research hypothesis. In contrast, the null-hypothesis H0 was determined, according to which the respondents' answers were distributed evenly. The following table presents the frequency and distribution of respondents' responses to this statement.

**Table 7.** Frequency and distribution of responses to this statement

| STATEMENT | | F | % | HISTOGRAM OF THE RESPONSE ON THE STATEMENT |
|---|---|---|---|---|
| score | 1 | 41 | 16,9 | |
| | 2 | **67** | **27,6** | |
| | 3 | **67** | **27,6** | |
| | 4 | 51 | 21,0 | |
| | 5 | 15 | 6,2 | |
| | **Σ** | **241** | **99,2** | |
| | invalid | 2 | 0,8 | |
| $\bar{X}$ | | 2,7178 | | |
| Median | | 3 | | |
| SD | | 1,15977 | | |
| Variance σ² | | 1,345 | | |
| Skewness | | 0,147 | | |
| Kurtosis | | -0,865 | | |
| Range | | 4 | | |
| Σ | | 655 | | |
| Percentile | 25 | 2 | | |
| | 50 | 3 | | |
| | 75 | 4 | | |

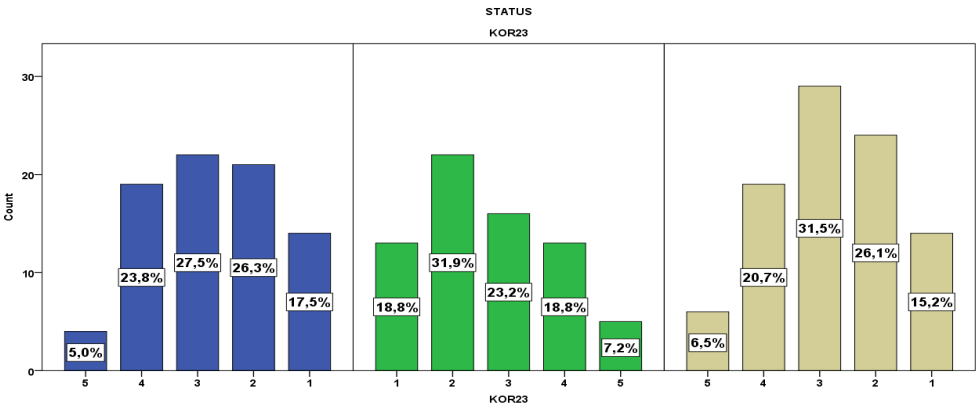



*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

From the previous table, it can be seen how the respondents decided according to the set statement in the range of grades from 1 to 5. Forty-one respondents (16.9%) do not agree at all with the statement, and 67 of them (27.6%) mostly disagree. 27.6% of respondents are neutral. For the most part, 51 respondents (21%) agree with the statement, while only 15 of them (6.2%) agree completely. The attached histogram clearly shows how the ratings follow a Gauss distribution. The Skewness measure of asymmetry is weak and positive at 0.147, which indicates a weak shift towards lower grades. The Kurtosis curve flattening measure has a value of -0.865, which indicates weak platykurticity, which is reflected in the grouping of results around the arithmetic mean. Respondents evaluated the observed statement with an average score of 2.7178 with a standard deviation of 1.15977 and a variance of 1.345. The following table analyzes the responses to this statement according to the respondent's occupation. In principle, the HI research hypothesis is put forward, which claims that there is a significant difference in evaluation between individual categories of respondents. In contrast, the null hypothesis H0 was determined, according to which there is an evenness of evaluation of all categories.

**Table 8.** Analysis of the answers to the statement according to the respondent's occupation

| A representative of local government | A respectable resident of the island | A tourism worker |
|---|---|---|




| SCORE | 1 | 2 | 3 | 4 | 5 | $\bar{X}$ | N | SD |
|---|---|---|---|---|---|---|---|---|
| A representative of local government | 14 | 21 | 22 | 19 | 4 | 2,73 | 80 | 1,158 |
| A respectable resident of the island | 13 | 22 | 16 | 13 | 5 | 2,64 | 69 | 1,200 |
| A tourism worker | 14 | 24 | 29 | 19 | 6 | 2,77 | 92 | 1,140 |
| **Σ** | **41** | **67** | **67** | **51** | **15** | **2,72** | **241** | **1,160** |

| COEFFICIENTS | VALUE | df | | table $\chi^2$ for 5% sign. |
|---|---|---|---|---|
| Pearson $\chi^2$ | 2,652 | 8 | | 15,507 |
| the likelihood ratio | 2,656 | 8 | | $\chi^2 < \chi^2$ table 5% sign **Accepted $H_0$.** |
| Phi | 0,105 | | | |
| Cramer's V | 0,074 | Eta η | 0,047 | |
| Contingency Coefficient C | 0,104 | $\eta^2$ | 0,002 | |

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

Analyzing the average marks assigned by the respondents, it is evident that there are no significant differences between them in accepting this statement, which speaks of the uniformity of attitudes. This is additionally confirmed by the result of the χ2 test, which indicates that with a risk level of 5%, the null hypothesis H0 can be accepted, and it can be concluded that the respondents do not differ from each other when evaluating this statement. Cramer's V as a measure of symmetry has a minimal effect, and η2 as the association measure has a negligible value.

The following table analyzes the answers to this statement according to the respondent's profile, the category of the island and the perception of the tourism development of the island destination.

**Table 9.** Analysis of responses to the statement according to the profile of respondents, island category and perception of tourist development of the island destination

| RESPONDENT PROFILE | | | ISLAND CATEGORY | | |
|---|---|---|---|---|---|
| **EDUCATION** | $\bar{X}$ | **N** | **POPULATION** | $\bar{X}$ | **N** |
| PhD | **4,00** | 2 | Over 5.000 inhabitants (A) | **2,85** | 123 |
| MSc | **2,45** | 11 | 1.001 - 5.000 inhb.(B) | 2,62 | 65 |
| Masters Degree | 2,61 | 127 | 100 do 1.000 inhb.(C) | **2,49** | 43 |
| Bachelor Degree | 3,21 | 38 | Less than 100 inhb.(D) | 2,80 | 10 |
| Secondary education | 2,65 | 63 | | | |
| **Σ** | **2,72** | **241** | **Σ** | **2,72** | **241** |
| Pearson $\chi^2$ = **32,985;** df = 16; | | | Pearson $\chi^2$ = 5,753; df = 12 | | |
| table $\chi$2 for 5% sign. =26,296 | | | table $\chi$2 for 5% sign. = **21,026** | | |
| $\chi^2 > \chi^2$ table for 5% sign. **Accepted $H_1$** | | | $\chi^2 < \chi^2$ table for 5% sign. **Accepted $H_0$** | | |
| | | | | | |
| **EXPERIENCE** | $\bar{X}$ | **N** | **DEVELOPMENT PERCEPTION** | $\bar{X}$ | **N** |
| < 30 years | **2,98** | 48 | Inferior | 2,65 | 17 |
| 30 - 50 years | **2,62** | 140 | Promising | **2,46** | 95 |
| > 50 years | 2,74 | 53 | Developed | **2,91** | 129 |
| **Σ** | **2,72** | **241** | **Σ** | **2,72** | **241** |
| Pearson $\chi^2$ =11,627; df =8 | | | Pearson $\chi^2$ =**16,013**; df =8 | | |
| table $\chi$2 for 5% sign. =**15,507** | | | table $\chi$2 for 5% sign. =15,507 | | |
| $\chi^2 < \chi^2$ table for 5% sign. **Accepted $H_0$** | | | $\chi^2 > \chi^2$ table for 5% sign. **Accepted $H_1$** | | |

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

In order to confirm the results obtained by the Chi-square test, an ANOVA analysis of variance is additionally performed.

**Table 10.** Analysis of the variance of the Statement in relation to the characteristics of the respondents and the category of island groups

| ANOVA | | SUM OF SQUARES | DF | MS | F | F BORDER FOR 5% SIGN. |
|---|---|---|---|---|---|---|
| * occupation of the respondent | between groups | 0,715 | 2 | 0,357 | 0,264 | 2,239 |
| | within the group | 322,099 | 238 | 1,353 | | **2,09** |
| | Σ | 322,813 | 240 | | | |

| ANOVA | | SUM OF SQUARES | DF | MS | F | F BORDER FOR 5% SIGN. |
|---|---|---|---|---|---|---|
| * development perception | between groups | 11,248 | 2 | 5,624 | **4,296** | 2,239 |
| | within the group | 311,565 | 238 | 1,309 | | 2,09 |
| | Σ | 322,813 | 240 | | | |
| * respondent's education | between groups | 15,138 | 4 | 3,784 | **2,903** | 4,237 |
| | within the group | 307,675 | 236 | 1,304 | | 1,46 |
| | Σ | 322,813 | 240 | | | |
| * respondent's experience | between groups | 4,597 | 2 | 2,298 | 1,179 | 2,239 |
| | within the group | 318,217 | 238 | 1,337 | | **2,09** |
| | Σ | 322,813 | 240 | | | |
| * island group | between groups | 5,019 | 3 | 1,673 | 1,248 | 3,238 |
| | within the group | 317,794 | 237 | 1,341 | | **1,37** |
| | Σ | 322,813 | 240 | | | |

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

The result of the variance analysis is a prominent F-ratio, a value that represents a general indicator of the existence of statistically significant differences between the examined groups. Analysis of variance confirmed the results of the conducted Chi-square tests.

According to the calculated average values, the set statement resulted in a good rating (2.7178) and the respondents took a neutral position. The surveyed respondents are knowledgeable about island conditions and it is concluded that they are not too convinced that there is an organized and satisfactory system of financing sustainable development on the islands. In support of such a claim, the following can be stated:

- The distribution of the assigned grades according to the occupation of the respondents ranged from 2.64 for prominent residents of the island to 2.77 for tourism workers. The distribution is even, which was confirmed by the Chi-square test and analysis of variance.
- The distribution of the assigned grades according to the level of education of the respondents ranged from 2.45 for respondents with a master's degree to 4.0 for those with a doctorate in science. The distribution is not even, which was confirmed by the Chi-square test and analysis of variance.
- The distribution of the assigned marks according to the respondents' experience in tourism ranged from 2.62 for medium-experienced respondents to 2.98 for those under 30 years of age. Distribution is uniform by Chi-square test and analysis of variance.

- The distribution of the assigned scores according to the perception of the tourism development of the island destination from which the respondents come ranged from 2.46 for promising tourist destinations to 2.91 for developed tourist destinations. The distribution is not even, which was confirmed by the Chi-square test and the analysis of variance.
- The distribution of the assigned grades according to the category of the island from which the respondents come ranged from 2.49 for islands of category C to 2.85 for islands of category A. The distribution is even, which was confirmed by the Chi-square test and analysis of variance.

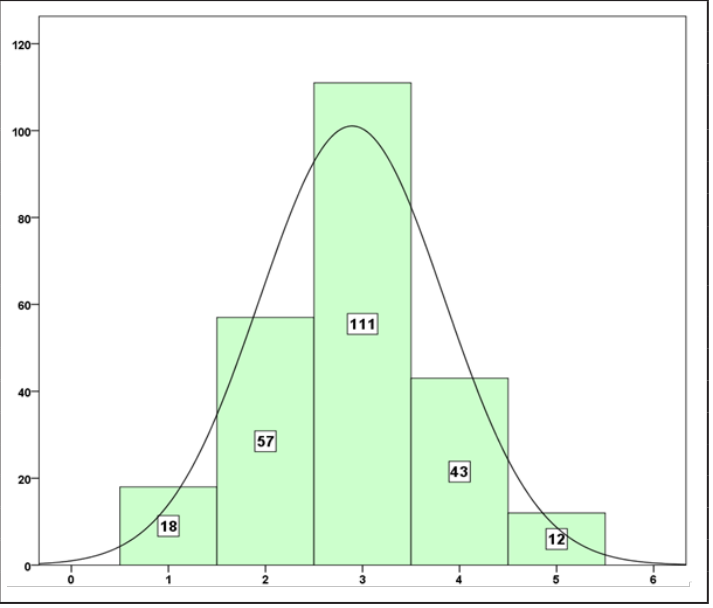
In the distribution of answers according to the category of the respondents, there is an evenness in relation to the profession and experience of the respondents and the category of the island.

In the next statement (Opportunities that can achieve socio-economic benefit are evenly distributed), the respondents mostly or completely agree that opportunities that can achieve socio-economic well-being are evenly distributed. This statement also represents the HI research hypothesis. In contrast, the null-hypothesis H0 was determined, according to which the respondents' answers were distributed evenly.

The following table presents the frequency and distribution of respondents' responses to this statement.

**Table 11.** Frequency and distribution of responses to this statement

| STATEMENT | | F | % | HISTOGRAM OF THE RESPONSE ON THE STATEMENT |
|---|---|---|---|---|
| score | 1 | 18 | 7,4 | |
| | 2 | 57 | 23,5 | |
| | 3 | **111** | **45,7** | |
| | 4 | 43 | 17,7 | |
| | 5 | 12 | 4,9 | |
| | **Σ** | **241** | **99,2** | |
| | invalid | 2 | 0,8 | |
| $\bar{X}$ | | 2,8921 | | |
| Median | | 3 | | |
| SD | | 0,95130 | | |
| Variance σ² | | 0,0905 | | |
| Skewness | | 0,042 | | |
| Kurtosis | | -0,072 | | |
| Range | | 4 | | |
| Σ | | 697 | | |
| Percentile | 2 | 2 | | |
| | 3 | 3 | | |
| | 3 | 3 | | |



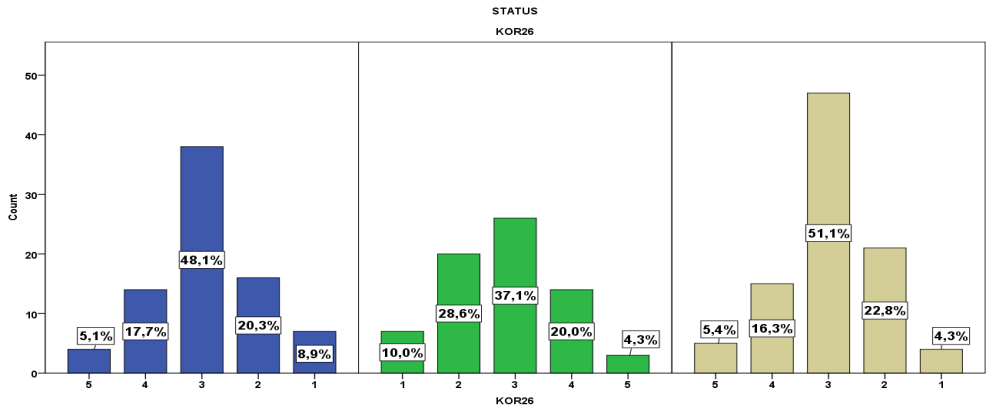

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

From the previous table, it can be seen how the respondents decided according to the set statement in the range of grades from 1 to 5. Eighteen respondents (7.4%) do not agree at all with the statement, and 57 of them (23.5%) mostly disagree. agrees. 45.7% of respondents are neutral. Forty-three respondents mostly agree with the statement (17.7%), while only 12 of them (4.9%) agree completely. The attached histogram clearly shows how the ratings follow a Gauss distribution. The Skewness measure of asymmetry is very weak but positive at 0.042, which indicates a weak shift towards lower grades. The Kurtosis curve flattening measure has a value of -0.072, which indicates weak platykurticity, which is reflected in the grouping of results around the arithmetic mean. Respondents evaluated the observed statement with an average score of 2.8921 with a standard deviation of 0.95130 and a variance of 0.0905.

The following table analyzes the answers to the set statement according to the respondent's occupation. In principle, the HI research hypothesis is put forward, which claims that there is a significant difference in evaluation between individual categories of respondents. In contrast, the null hypothesis H0 was determined, according to which there is an evenness of evaluation of all categories.

**Table 12.** Analysis of the answers to the statement according to the respondent's occupation

| A representative of local government | A respectable resident of the island | A tourism worker |
|---|---|---|




| SCORE | 1 | 2 | 3 | 4 | 5 | $\bar{X}$ | N | SD |
|---|---|---|---|---|---|---|---|---|
| A representative of local government | 7 | 16 | 38 | 14 | 4 | **2,90** | 79 | 0,969 |
| A respectable resident of the island | 7 | 20 | 26 | 14 | 3 | **2,80** | 70 | 1,016 |
| A tourism worker | 4 | 21 | 47 | 15 | 5 | 2,96 | 92 | 0,888 |
| **Σ** | **18** | **57** | **111** | **43** | **12** | **2,89** | **241** | **0,951** |

| COEFFICIENTS | VALUE | df | | table $\chi^2$ for 5% sign. |
|---|---|---|---|---|
| Pearson $\chi^2$ | 5,331 | 8 | | 15,507 |
| the likelihood ratio | 5,518 | 8 | | $\chi^2 < \chi^2$ table 5% sign. **$H_0$ accepted** |
| Phi | 0,149 | | | |
| Cramer's V | 0,105 | Eta η | 0,067 | |
| Contingency Coefficient C | 0,147 | $\eta^2$ | 0,005 | |

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

Analyzing the average marks assigned by the respondents, it is evident that there are no significant differences among them in the acceptance of this statement, which speaks of the uniformity of attitudes. This is additionally confirmed by the result of the χ2 test, which indicates that with a risk level of 5%, the null hypothesis H0 can be accepted and it can be concluded that the respondents do not differ from each other when evaluating the statement. Cramer's V as a measure of symmetry has a weak effect, and η2 as the association measure has a negligible value.

The following table analyzes the answers to this statement according to the respondent's profile, the category of the island and the perception of the tourism development of the island destination.

**Table 13.** Analysis of responses to the statement according to the profile of respondents, island category and perception of tourist development of the island destination

| RESPONDENT PROFILE | | | ISLAND CATEGORY | | |
|---|---|---|---|---|---|
| **EDUCATION** | $\bar{X}$ | **N** | **POPULATION** | $\bar{X}$ | **N** |
| PhD | **3,50** | 2 | Over 5.000 inhabitants (A) | **3,03** | 122 |
| MSc | 3,18 | 11 | 1.001 - 5.000 inhb.(B) | 2,76 | 66 |
| Masters Degree | 2,80 | 126 | 100 do 1.000 inhb.(C) | **2,72** | 43 |
| Bachelor Degree | 3,26 | 38 | Less than 100 inhb.(D) | 2,80 | 10 |
| Secondary education | **2,78** | 64 | | | |
| **Σ** | **2,89** | **241** | **Σ** | **2,89** | **241** |
| Pearson $\chi^2$ =22,560**;** df = 16; | | | Pearson $\chi^2$ = 18,840; df = 12 | | |
| table χ2 for 5% sign. =**26,296** | | | table χ2 for 5% sign. = **21,026** | | |
| $\chi^2 < \chi^2$ table for 5% sign. **Accepted $H_0$** | | | $\chi^2 < \chi^2$ table for 5% sign. **Accepted $H_0$** | | |
| | | | | | |
| **EXPERIENCE** | $\bar{X}$ | **N** | **DEVELOPMENT PERCEPTION** | $\bar{X}$ | **N** |
| < 30 years | **3,04** | 48 | Inferior | 2,59 | 17 |
| 30 - 50 years | 2,86 | 140 | Promising | **2,75** | 95 |
| > 50 years | **2,85** | 53 | Developed | **3,04** | 129 |
| **Σ** | **2,89** | **241** | **Σ** | **2,89** | **241** |
| Pearson $\chi^2$=12,432; df =8 | | | Pearson $\chi^2$=13,811; df =8 | | |
| table χ2 for 5% sign. =**15,507** | | | table χ2 for 5% sign. =**15,507** | | |
| $\chi^2 < \chi^2$ table for 5% sign. **Accepted $H_0$** | | | $\chi^2 < \chi^2$ table for 5% sign. **Accepted $H_0$** | | |

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the

questionnaire

In order to confirm the results obtained by the Chi-square test, an ANOVA analysis of variance is additionally performed.

**Table 14.** Analysis of the variance of the Statement in relation to the characteristics of the respondents and the category of island groups

| ANOVA | | SUM OF SQUARES | DF | MS | F | F BORDER FOR 5% SIGN. |
|---|---|---|---|---|---|---|
| * occupation of the respondent | between groups | 0,979 | 2 | 0,490 | 0,539 | 2,239 |
| | within the group | 216,216 | 238 | 0,908 | | 2,09 |
| | Σ | 217,195 | 240 | | | |
| * development perception | between groups | 6,334 | 2 | 3,167 | **3,575** | 2,239 |
| | within the group | 210,861 | 238 | 0,886 | | 2,09 |
| | Σ | 217,195 | 240 | | | |
| * respondent's education | between groups | 8,713 | 4 | 2,178 | **2,446** | 4,236 |
| | within the group | 208,482 | 236 | 0,883 | | 1,46 |
| | Σ | 217,195 | 240 | | | |
| * respondent's experience | between groups | 1,343 | 2 | 0,672 | 0,740 | 2,239 |
| | within the group | 215,852 | 238 | 0,907 | | **2,09** |
| | Σ | 217,195 | 240 | | | |
| * island group | between groups | 4,954 | 3 | 1,651 | 1,844 | 3,237 |
| | within the group | 212,241 | 237 | 0,896 | | **2,00** |
| | Σ | 217,195 | 240 | | | |

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

The result of the variance analysis is a prominent F-ratio, a value that represents a general indicator of the existence of statistically significant differences between the examined groups. The analysis of variance, except for the attributes education and perception (shaded), confirmed the results of the conducted Chi-square tests, and for dubious results, an additional analysis is performed using the T-test method.

**Table 15.** Results of the T-test according to the experience of the respondents

| STATEMENT: OPPORTUNITIES THAT CAN ACHIEVE SOCIO-ECONOMIC BENEFIT ARE EVENLY DISTRIBUTED | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Category** | **Pairs** | **N** | $\bar{X}$ | **SD** | **F** | **t** | **df** | **Critical t** | **Difference** $\bar{x}$ |
| Education | Higher | 139 | 2,84 | 0,878 | 2,729 | 0,952 | 238 | **1,97** | 0,1187 |
| | Lower | 101 | 2,96 | 1,048 | | 0,956 | 191 | **1,97** | 0,1187 |
| Perception | Undeveloped | 112 | 2,72 | 0,951 | 0,355 | **2,599** | 239 | 1,97 | 0,3155 |
| | Developed | 129 | 3,04 | 0,930 | | **2,595** | 233 | 1,97 | 0,3155 |

*Source:* author's processing in IBM SPSS Statistics 24 according to data obtained from the questionnaire

From the data in the previous table, it can be concluded that there is no statistically significant difference in the assessment of this statement in relation to the education of the respondents. This is confirmed by the results of the T-test considering that the calculated t is not greater than the limit value t for a certain degree of freedom, and the values of the differences of the arithmetic means are small. This also accepts the null hypothesis H0 about the homogeneity of the observed sets. However, in the case of perception attributes, the calculated t is greater than the limit value t for a certain degree of freedom, and the value of the difference of the arithmetic means is expressed. This also accepts the proposed research hypothesis HI about the inhomogeneity of the observed sets. According to the calculated average values, the set statement resulted in a good rating (2.8921) and the respondents took a neutral position. The surveyed respondents are connoisseurs of the island's conditions and it is concluded that they are not too convinced that the opportunities that can realize the socio-economic well-being of the island community are evenly distributed. In support of such a claim, the following can be stated:

- The distribution of the assigned grades according to the occupation of the respondents ranged from 2.80 for prominent residents of the island to 2.90 for representatives of local self-government. The distribution is even, which was confirmed by the Chi-square test and analysis of variance.
- The distribution of the assigned grades according to the level of education of the respondents ranged from 2.76 for respondents with a high school diploma to 3.50 for those with a doctorate in science. The distribution is even, which was confirmed by the Chi-square test, but not by the analysis of variance, and a T-test was performed, which confirmed the evenness.
- The distribution of the assigned marks according to the respondents' experience in tourism ranged from 2.85 for the most experienced respondents to 3.04 for those under 30 years of age. The distribution is even, which was confirmed by the Chi-square test and analysis of variance.
- The distribution of the assigned marks according to the perception of the tourist development of the island destination from which the respondents come ranged from 2.75 for promising tourist destinations to 3.04 for developed tourist

destinations. The distribution is not even though it is not confirmed by Chi-square test, but it is confirmed by analysis of variance and T-test.

- The distribution of the assigned grades according to the category of the island from which the respondents come ranged from 2.72 for islands of category C to 3.03 for islands of category A. The distribution is even, which was confirmed by the Chi-square test and analysis of variance.

In the distribution of answers according to the category of respondents, there is an unevenness in relation to the perception of development.

## Conclusion

The problems in strategic planning of rural development are significant and involve numerous interest groups with different interests, goals and values. For this reason, it is necessary to build a joint Strategy for the sustainable development of the rural area, which will be designed and implemented and monitored from the level of each local community on the islands, which are significantly different from each other. Although the subregional approach to the development of the islands remains only declarative in nature, since such an approach also faces the peculiarities of individual islands, but also due to the absence of a development policy that would respect these peculiarities, this work contributes to an important discourse in that area. The concept of sustainability in rural areas is becoming and will remain an important segment of every rural area. Sustainability cannot be based only on narrow principles of environmental protection, but as sustainability goals that extend to the preservation of the landscape and natural habitat, local culture and the identity of the local community, and the development and encouragement of support, understanding and awareness of decision-makers and other stakeholders responsible for long-term development of rural areas (Krajinović et al., 2011). Sustainable rural development is a complex concept, especially in the European Union and the modern economy, and form the point of view of the economic policy holder. The economic development of the Republic of Croatia is characterised by imbalances, inherent in the development of rural and urban areas. The results of the analyses of economic indicators indicate a significant lag in the development of rural areas compared to urban areas. Tourism activities in the area of rural development in the Republic of Croatia are important for the segment of diversification of rural economy and economic revival of rural areas (Tolić et al., 2019). The guidelines for the sustainable development of a rural area imply the harmonization of goals and interests of all stakeholders and assume a compromise management at all levels relevant to its sustainable development. Sustainable development can be defined as the relationship between economic and ecological systems that must be in ecological balance. In conclusion, the issue of strategic management of an island with an emphasis on sustainable development should continue to be explored and approached more in-depth from a spatial, ecological, cultural, socio-demographic and regulatory point of view.

## Conflict of interests

The authors declare no conflict of interest.

## References


1. Connell, J. (2018). Islands: balancing development and sustainability?. Environmental Conservation, 45(2), 111-124.
2. Connell, J. (2023). Islands and Sustainability. In The Palgrave Handbook of Global Sustainability. Cham: Springer International Publishing, 969-984.
3. Črnjar, M., & Črnjar, K. (2009). Menadžment održivoga razvoja: ekonomija-ekologija-zaštita okoliša. Fakultet za menadžment u turizmu i ugostiteljstvu u Opatiji Sveučilišta u Rijeci. [*in English*: Črnjar, M., & Črnjar, K. (2009). Sustainabe Development Management: economy-ecology-environmental protection. Faculty of Tourism and Hospitality Management, Opatija, University of Rijeka].
4. De Clercq, S., Proka, A., Jensen, J. & Montero Carrero, M. (2019). *Island Transition Handnook.* Brussels: Clean Energy for EU Islands Secretariat.
5. EP. (4. 2 2016.). Eur-Lex. Rezolucija Europskog parlamenta od 4. veljače 2016. o posebnoj situaciji otoka" (2015/3014(RSP)): Retreived from: https://eur-lex.europa.eu/legal-content/HR/TXT/?uri=CELEX%3A52016IP0049 (25.05.2024.). [*in English*: European Parliament resolution of 4 February 2016 on the special situation of islands (2015/3014(RSP)): Retreived from: https://eur-lex.europa.eu/legal-content/HR/TXT/?uri=CELEX%3A52016IP0049].
6. European Council. 2005. Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) (20.05.2024.)
7. European Council. 2006. Council Regulation (EC) No 1198/2006 of 27 July 2006 on the European Fisheries Fund.
8. Fetting, C. (2020). "The European Green Deal", ESDN Report, December 2020, ESDN Office, Vienna.
9. Klarin, T. (2018). The Concept of Sustainable Development: From its Beginning to the Contemporary Issues. Zagreb International Review of Economics and Business, 21(1), 67-94.
10. Krajnović, A., Čičin-Šain, D. & Predovan, M. (2011). Strateško upravljanje razvojem ruralnog turizma – problemi i smjernice. Oeconomica Jadertina, 1 (1), 30-45. Retrieved from: https://hrcak.srce.hr/68201 (20.05.2024.) [*in English*: Krajnović, A., Čičin-Šain, D. & Predovan, M. (2011). Strategic management of rural tourism development - problems and guidelines. Oeconomica Jadertina, 1 (1), 30-45. Retrieved from: https://hrcak.srce.hr/68201 (20.05.2024.)].
11. Kulušić, B. (2021). Bioekonoimija. EIZ Sektorske analize, 10(83), 4-6. [*in English*: Kulušić, B. (2021). Bioeconomy. Institute for Economy Zagreb Sector Analysis, 10(83) ].

12. Mikačić, V. (1996). Turizam u funkciji održivog razvoja hrvatskih otoka. U Z. u. Pepeonik, *l. hrvatski geografski kongres : zbornik radova* (str. 373-379). Zagreb: Hrvatsko geografsko društvo. [*in English*: Mikačić, V. (1996). Tourism in the function of sustainable development of Croatian islands, *l. Croatian Geographical Congress: Proceedings* (pp. 373-379). Zagreb: Croatian Geographical Society.].
13. Moncada, S., Camilleri, M., Formosa, S., & Galea, R. (2009). Islands at the periphery: Integrating the challenges of island sustainability into European policy. Occasional Papers on Islands and Small States, 1.
14. Moutinho L., (2000). "Strategic Management in Tourism", CABI Publishing, Wallingford.UK.
15. Munier, N. (2005). *Introduction to Sustainability: Road to a Better Future.* Dordrecht: Springer.
16. NN. (116/18, 73/20, 70/21). Zakon o otocima. Zagreb: Narodne novine.
17. OECD. (2011). Towards Green Growth. Paris: OECD Publishing.
18. Pivčević, S., Mikulić, J. & Krešić, D. (2021). Mitigating the Pressures: The Role of Participatory Planning in Protected Area Management. In: A. Mandić, L. Petrić (eds.), Mediterranean Protected Areas in the Era of Overtourism (str. 71-89). Cham: Springler.
19. Polido, A., João, E., & Ramos, T. B. (2014). Sustainability approaches and strategic environmental assessment in small islands: An integrative review. *Ocean & Coastal Management*, *96*, 138-148.
20. Radnić, A., Mikačić, V. (1994). Turizam i održivi razvoj hrvatskih otoka. U: G. Crnošija (ur.), *Simpozij Strategija održivog razvitka hrvatskih otoka, Hvar, 19.-21. svibnja 1994.: zbornik radova* (335-347). Zagreb: Centar za razvitak otoka. [*in English*: Radnić, A., Mikačić, V. (1994). Tourism and sustainable development of Croatian islands. In: G. Crnošija (ed.), Symposium Strategy for Sustainable Development of Croatian Islands, Hvar, 19-21. May 1994: Proceedings (335-347). Zagreb: Center for Island Development].
21. Sharpley, R. (2000). Tourism and Sustainable Development: Exploring the Theoretical Divide. Journal of Sustainable Tourism, 8(1), 1-19.
22. Spaziante, A., & Murano, C. (2009). Rural development programmes and strategic environmental assessment: towards a sustainable rural territory. *International Journal of Agricultural Resources, Governance and Ecology*, *8*(2-4), 205-222.
23. Starc, N. (1996). Održivi razvoj, turizam i ocjene ulagačkih pothvata. U Z. u. Baletić, *Hrvatsko gospodarstvo u tranziciji* (str. 345-360). Zagreb: Ekonomski institut. [*in English*: Starc, N. (1996). Sustainable development, tourism and assessments of investment ventures. In Z. u. Baletić, Croatian economy in transition (pp. 345-360). Zagreb: Institute of Economics].

24. Starc, N., Kaštelan-Macan, M., & Ćurlin, S. (1997). Nacionalni program razvitka otoka. *Ministarstvo obnove i razvitka, Zagreb*. [*in English*: Starc, N., Kaštelan-Macan, M., & Ćurlin, S. (1997). National Island Development Program. Ministry of Reconstruction and Development, Zagreb].
25. Tolić, I.; Vuković, D., Čudina, P. Strategic management of sustainable rural development in function of the rural tourism development of the Republic of Croatia. Economic system of the European Union and Accession of the Bosnia and Herzegovina – Challenges and Policies Ahead. In: M. Gadžić, V. Kandžija (eds.). Mostar: European Communities, 2019, 207-216.
26. UN (2015). *Transforming Our World: The 2030 Agenda for Sustainable Development* (UN, New York, 2015); Retrieved from: http://bit.ly/TransformAgendaSDG-pdf (21.05.2024.)
27. UNEP/MAP. (2011). Integral management of the IUOP coastal area. Retrieved from the Ministry of Environmental Protection and Energy: https://mzoe.gov.hr/o-ministarstvu-1065/djelokrug-4925/vode-i-more/konvencija-o-zastiti-morskoga-okolisa-i-coastal-area-of-the-Mediterranean-barcelona-convention/integral-management-of-the-coastal-area-iuop/1439 (10.05.2024.)
28. Vidučić, V. (2007). Održivi razvoj otočnog turizma Republike Hrvatske. *Naše more, 54*(1-2), 42-48. [*in English*: Vidučić, V. (2007). Sustainable development of island tourism in the Republic of Croatia. Our Sea, 54(1-2), 42-48.].