

ASSESSMENT OF POLICY FRAMEWORKS IN PROMOTING SUSTAINABLE ECOLOGICAL TOURISM

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Citation: Minikhanova, S., Imangulova, T., Abdikarimova, M., Gubarenko, A., & Aldybayev, B. (2024). ASSESSMENT OF POLICY FRAMEWORKS IN PROMOTING SUSTAINABLE ECOLOGICAL TOURISM. *Geojournal of Tourism and Geosites*, 56(4), 1718–1731. <https://doi.org/10.30892/gtg.56427-1341>

Abstract: The goal of the study is to evaluate the Kazakhstan's sustainable ecological tourism possibilities in regard to the involving the communities, financing, involving the stakeholders, and creating awareness. Structural questionnaire was used and quantitative methods such as regression, correlation, and 't' tests were used to analyze the environmental and socio-economic effects of NRM. The results of regression analysis show that financial facilities have a positive impact and can be considered significant along with community involvement, while correlation analysis established the need for clear policies and stakeholders' engagement in the processes of public sector changes. Specifically, using the 't' test, there was an equal distribution in the interaction between rural and urban instructors and students in matters regarding policy efficiency. Thus, according to the conclusions of the study, it is necessary to develop a sustainable policy for the development of ecological tourism in Kazakhstan, for which norms that cover actors should be established, as well as active promotion should be ensured.

Keywords: ecological tourism, community, funding, stakeholder, regression

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INTRODUCTION

Sustainable tourism is thus a proper model of tourism development in an environment that seeks to maximize on economic returns while at the same time considering the state of the physical environment and the social structures within the given area (UNWTO, 2017; Hall, 2021). As a sub-field of sustainable development, sustainable tourism is tourism that is developed while maintaining cultural integrity, individual and territorial identities, and considering socioeconomic and environmental costs and benefits for present and future generations Sustainable tourism is defined by the United Nations World Tourism Organization (UNWTO) as 'tourism that is broken down to both immediate and long-term socioeconomic and environmental friendly impacts on the tourist, the business, the hosting environment, and the communities.

Tourism in natural environments, more popularly recognized as ecotourism, has recently been widely discussed as a necessary tool to improve people's condition and their interpersonal relations and ensuring sustainable impact on the environment. The role of tourism emphasizing the ability to get a rest, improve one's health or developing a personality is increasingly realized especially in the context of Kazakhstan. Ecotourism is conceived as a dynamic and interesting form of recreation that provides the participants with all-rounded rejuvenation that enhances the aesthetic and physical attributes. This approach of tourism does not only concentrate on individual gains but also works to preserve the earth's resources kind for the other generations' tourism purposes. To prove the role of the mentioned aspects in the development of Kazakhstan's tourist-resource potential for ecological tourism, this chapter presents the analysis of the authors' investigation of several regions of Kazakhstan, including the measures of tourist attractiveness that determine the strategic direction for the further sustainable tourism development in the country (Iskakova et al., 2021a).

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Business frameworks that govern the performance of organizations are important for sustainable tourism and they involve strategies or rules towards sustainable tourism aim and objectives (United Nations Environment Programme [UNEP] & World Tourism Organization [UNWTO], 2005). These frameworks involve a number of approaches all with an aim of integrating sustainable development within tourism destinations; these include legislative approaches, incentives and planning tools among others (Bramwell and Lane, 1993; Hall et al., 2015). Sustainable measures, however, not only control and limit tourism operations and visitors' behavior but also promote responsible action, social responsibility, and positive impacts on the physical environment and the quality of life of the host community (Baloch et al., 2023). Although it is well understood today that sustainable tourism policies need to be employed, there are still barriers to address in the practical application of such policies and the use of legal instruments (Butler, 1980). The lack of coordinated and streamlined governance structures, insufficient funds for implementation and overlapping stakeholder interests provide major barriers to the practical application of sustainable tourism policies (Dodds and Butler, 2010). Furthermore, the growing trend detrimental to tourism harms natural ecosystems, archaeological sites and cultural identity, in addition to communities, requiring contextual and fragile policy interventions (Hall et al., 2015).

The main purpose of this paper is to critically discuss and analyze a set of current and previous policy solutions concerning ecological tourism development in various areas and settings. In this context, this study aims to extract strengths and weaknesses of current policy approaches for further development based on the article review and questionnaire survey with a set of predetermined questions. This research method of collecting quantitative data from stakeholders working in the tourism management and policy-making sector will give empirical findings of policy implementation and its importance on the police impact on sustainable development (World Tourism Organization, 2018).

A Jining, China, case study found that museums cluster in certain areas. This is due to resource endowments, socioeconomic conditions, and accessibility factors like roads and rivers. According to Guo et al. (2024) this pattern shows that museums can be cultural assets and strategic components in increasing local tourism and cultural sustainability. This study examines spatial dynamics to inform cultural preservation and sustainable tourism policy frameworks. This will lead to holistic development methods that benefit cultural heritage preservation and ecological tourism programs.

Specific research objectives include:

- Evaluating the policy coherence of the policy frameworks with sustainable tourism principles and the international policy directives
- Assessing the clear and effective identification of its stakeholders and mapping of its interactions with them in policy-making processes.
- Evaluating the malleability of policies based on dynamic environmental changes and major socio-economic factors (Baloch et al., 2023).

Thus, these objectives of this work are to contribute to the theoretical and methodological framework of sustainable tourism policy analysis and to provide recommendations to improve its global action and outcomes, for further construction of a sustainable and inclusive tourism development on the international level. When approaching these challenges, policy-makers, as well as, stakeholders can effectively avoid such problems and promote sustainability in tourism development, which is crucial for the further socio-economic growth and preservation of natural and cultural heritage for the subsequent generations.

Accordingly, it is useful to assert that the development of sustainable tourism policy is critical and it has to be based on strong foundations for economic profit while also considering the negative impacts on the environment and social future. This research proposes to collect empirical data that can assist in the formulation and strengthening of public policies toward the right direction for sustainable tourism to continue fueling the conservation of the world's natural resources.

LITERATURE REVIEW

Overview of existing literature on sustainable tourism policies

Sustainable tourism has been an issue of significant concern in the scholarly discourse and within policy frameworks for several decades. Scholars have devoted tremendous resources in an endeavor to document sustainable tourism policies with regard to environmental conservation aspect, socio-economic impacts, and culture. International organizations such as the UN World Tourism Organization (UNWTO) and the UN Environment Program (UNEP) have outlined strategic frameworks and guidelines that view comprehensive and whole-system perspectives as critical to planning and managing tourism (World Tourism Organization, 2018). These studies have shown how policy frameworks play a significant part in developing sustainable tourism. For example, Bramwell and Lane (1993) address emergent sustainable tourism policies and the difficulties of implementing them in various locations.

This study by Hall et al. (2015) aims at discussing the ecological efficiency of tourism and the efficiency of a range of policies on tourism's environmental impacts. All these studies, therefore, bring out the need for well-framed policies that would enhance both economic development on the one hand and environmental conservation as well as social justice on the other hand. The significance of promoting cultural and historical heritage in fostering tourism development cannot be overstated. Aldybayev et al. (2021:1451) emphasize that "the development of new routes and the creation of technological maps of excursions allow for the systematic development of ethnocultural tourism, playing a defining role in intercultural communication and the appreciation of regional cultures".

Kazakhstan has a rather rich nature to include a considerable potential in the creation of the aesthetic or simply ecological tourism. According to Iskakova et al. (2021b), there are many well-preserved natural complexes in the country, which contribute to developing this segment. These natural resources' including such gifts of nature as wilderness,

ecological and other similar areas are perfect for the formulation of sustainable tourism. The following natural complexes must remain untouched so as to ensure continued existence of fauna and flora, as well as create genuine tourist attractions to attract the increasing numbers of ecotourists. These orientations for preserving these natural resources correlate with the global tendencies of sustainable tourism, which shows the high value of the ecological tourism perspective in Kazakhstan.

There is an effect in the provision of ecotourism due to the growth of the anthropogenic pressure on native and archeological-touristic objects. Iskakova et al. (2021a) stated that this increasing pressure actually contributes to a phenomenon that is ecotourism, predominantly. This load is directly proportional to the increased number of visitors to different tourist destinations hence call for sustainable tourism. The World Tourism Organization estimates that tourism's rates in the 21st century will be higher; therefore, it is urgent to coordinate tourism demand with the reasonable utilization of tourism resources. This dynamic creates contradictions that can be managed through effective frameworks that will enhance tourism progress. The scientific and methodological foundations of ecotourism thus will fulfil a critical function of not only making the further tourism development friendly to the nature but also capable of answering the growing demands of a growing tourist influx. Thapa (2018) underlined the readiness of the human capital as the vital factor for setting up the foundation to foster ecotourism as well as other forms of tourism in Kazakhstan, thereby enhancing the quality, training, and skills to optimize the natural and cultural potential of the Kazakhstan's tourist attractions. This paper outlines four main activities for a curriculum development and capacity-building project and this includes field visits, collaborative activities, course development and training programs. The paper will also describe the actions taken and the results that have been attained in the process. This endeavor is germane in supporting the government's policy on enhancing international and domestic tourism since it has the skills required in the tourism sector.

Cruise industry, underwater tourism, and even marine tourism as a branch of the tourism industry ultimately prove complex in their management and effective governance play a significant role in their sustainable growth (Troian et al., 2023). Sustainable tourism development is a significant concept for developing countries and is in line with the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs), which are inherent to tourism, seeking to maximize the positive consequences in the socio-ecological-economic context while minimizing potential negative externalities. Recent studies on coastal and marine tourism (CMT) highlight key research topics like sustainable development, impact on destinations, management, conservation, and climate change effects, underscoring the importance of sustainable practices. Challenges such as the need for governmental support, stakeholder cooperation, refined policies, and technological integration have been identified, with innovations like Smart Maritime Tourism (SMT) using Virtual Reality (VR) emerging as potential solutions. Conceptual analyses propose "blue tourism," integrating the blue economy and growth strategies, emphasizing the sea as central to all marine-related leisure activities. These insights provide a comprehensive backdrop for understanding and developing policy frameworks essential for promoting sustainable ecological tourism (Troian et al., 2023).

Focus on studies using quantitative methods and surveys/questionnaires

Therefore, surveys and questionnaires are common research techniques adopted by the quantitative research to evaluate the efficiency of sustainable tourism policies and get stakeholders' perception and experience. For instance, Dodds and Butler (2009) used cross-sectional mail questionnaire to establish the factors that contribute to the failure of policy sustainable tourism in a mass tourism context. As highlighted by their studies there is a major problem of minimal stakeholder involvement, and limited amount of funds to counter act polices.

Likewise, Butler (1980) used a structured questionnaire to assess the applicability of the tourist area cycle of evolution and its reverberation on management of resources. This research demonstrated that various course stages of tourism affect policy requirements and issues differently and it was a great privilege and honor to gain such insights. Quantitative approaches are a highly structured way of amassing and analyzing data, thus allowing the researcher to make broad and definitive findings about policy frameworks' strengths and weaknesses.

Hence, there is a large volume of literature documenting sustainable tourism policies, however, several gaps are evident that require further research. There is a notable absence of substantial, wide-reaching, and predominantly cross-national policy efficacy reviews. All surveys are often dominated by the regional or tourist type of destination, which hinders the findings' diffusion (Hall et al., 2015). Also, more research needs to be conducted with the aim of identifying to what extent various policy measures can be implemented and to what extent they will work in different environments. One last area of research deficiency is the lack of attention to the evolutionary characteristics of policy arrangements. Hall (2021) has agreed with the notion by stating that due to the advancement in environmental and socio-economic factors, there should always be new policies to cater with flexible policy measures. Still, contemporary research fails to identify the processes by which the policies may evolve and respond to changes, which leads to the proliferation of conservative recommendations based on current policies. Also, there is a scarce degree of emphasis on two ways of stakeholder participation in policy formulation as well as the implementation process. Bramwell and Lane (1993) along with Dodds and Butler (2009) have pointed out that, local people, traders and other stake holders should be involved in the policy making process. However, further research is required to establish the key strategies with regard to the encouragement of all stakeholders' participation and the improvement of the policies that would meet the needs of all stakeholders.

Thus, it can be stated that there have been advancements in identifying sustainable tourism policies but there are still some deficiencies that require further investigations. The limitations of the study call for a focus on the comparison of results, the flexibility in implementation of policies, and a focus on stakeholder involvement in future research for enhancing frameworks of sustainable tourism policies. Realizing the materialization of environmental rights for sustainable

ecological tourism, environmental rights and human rights are inextricably connected, which requires enhanced legal protection. Shevchuk (2021) shows how the Aarhus Convention as well as the REACH regulation reveal the critical role law plays in enhancing the principles of legal compliance in relation to transparency, public participation, and access to justice in environmental issues. Furthermore, the jurisprudence of the ECHR also underlines that judiciary has a crucial role to play in protecting these rights: case-law of the European Court of Human Rights is important from the perspective of developing a rich and complex body of legal precedents necessary to ground comprehensive policies. Meeting the difficulties inherent in protecting these rights is paramount when it comes to attainable ecological goals (Shevchuk, 2021).

Thus, the environmental relationships of tourist development and management are objectified as a conceptual structure that maintains the gross company revenue and the total value of the environment (Sanetra-Półgrabia, 2022). Better still, Baloch et al. sought for an informed government paradigm, thus advocating for sustainable ecotourism with the potential of creating economic value besides ensuring conservation of the resources.

It seeks to facilitate the evolution of tourism concerning its impacts on the environment and people to be positive. Therefore, the framework stresses on contributing to the governmental tourist policies in a way that would indeed avoid all negative effects in this context and encourage sustainable behavior.

According to Baloch et al. (2023), the following paradigm was proposed for analyzing sustainable ecological tourism policy frameworks. Jiang and Engi stress the authors' observations, focusing on the necessity of the sustainable tourism development policy measures, and noting that these recommendations can be useful for other destinations developing identical frameworks. The nature and constituent of their variables and constructs can be employed in gathering useful information for managing destinations sustainably making the study a great contribution to the pool of knowledge in sustainable tourism expertise. Troian et al.,= (2023) investigated the peculiarities of competitive-innovative development within the tourism industry and its relation to the principles of sustainable development. The paper offers a comprehensive discussion that highlights the need to integrate SDGs in tourism enterprises' operations to achieve sustainable competitiveness. Uniquely, using qualitative data collection and analysis techniques such as case studies and themes, the authors establish how the advancement of management strategies and service delivery can improve market edge, as well as promote the protection of the environment and the general welfare of the society.

The research identifies several key findings, first of all, the necessity of using the new management methods that will allow the organization to adapt to the constantly changing consumer preferences and abide by the regulations related to sustainability. Second, the study aims at identifying the perceived obstacles among the tourism enterprises, for example, the bureaucratic regulation in the operations, the difficulty of funding for sustainable activities and achieving the organic growth of enterprise together with the protection of the environment. Third, it looks at the benefits afforded from positive engagement in sustainable practices such as: cost advantages, improvement of the company's image and access to the new consumer societal market within the tourism sector with emphasis on ecotourism niche.

Besides, Troian et al. (2023) pinpoint the importance of the development of policies as the framework to foster collaboration between key players such as the government and businesses and the local population when it comes to responsible tourism practices. They promote policies that encourage development in sustainable tourism, working on social transformation by creating awareness that leads to the actualization of capacities pertaining to the issue.

Hence, through the integration of corporate objectives and sustainable development goals, the tourism enterprises can not only avoid worst case scenarios in the affected environment and society but also promote distribution of social benefits involving inclusiveness of economic growth and readiness to counteract adverse global forces (Yankovska and Kovbas, 2021). Troian et al. (2023) draw beneficial conclusions about the significance of a sustainable development perspective to determine the competitiveness of tourism enterprises. This highlights the significance of policy support to create the necessary environment, incentives, and structures to encourage innovation and partnership useful for the development of ecological and sustainable tourism that ensures the generation of prosperity for all the stakeholders, people, and the communities as well as the preservation of the earth's environment.

This literature review point serves as the initial groundwork to come up with approaches on how the policy framework can contribute towards the integration of sustainability to the tourism enterprise strategies in line with your research interest regarding the evaluation of policy framework in marketing sustainable ecological tourism.

MATERIALS AND METHODS

The flowchart diagram for the Materials and Methods section of the research paper provides the view of how sequentially structured the study has been. The process starts with the major Research Methodology that is based on the Quantitative Research approach. From this element, the diagram splits into Data Collection in which statistical information shall have to be collected in support of the study.

At the same time, one of the critical parts of the research, such as Questionnaire Development, is represented as a several stage process which begins with Literature Review to identify the first questions for the questionnaire. These questions are subjected to a Pilot Testing to establish validity culminating in the Final Questionnaire Refinement. After the data collection procedures, the research moves to Statistical Analysis whereby several hypothesis are put to test. This analysis consists of Hypothesis Testing available in two options: Correlation for relationship analysis; Regression for outcome prediction and T-Testing for mean comparison of groups. Every box in the flowchart is linked to another one to show all the intertwining process, proving that the research methodology applied in the assessment of policy frameworks for encouraging sustainable ecology tourism is cyclical (Figure 1).

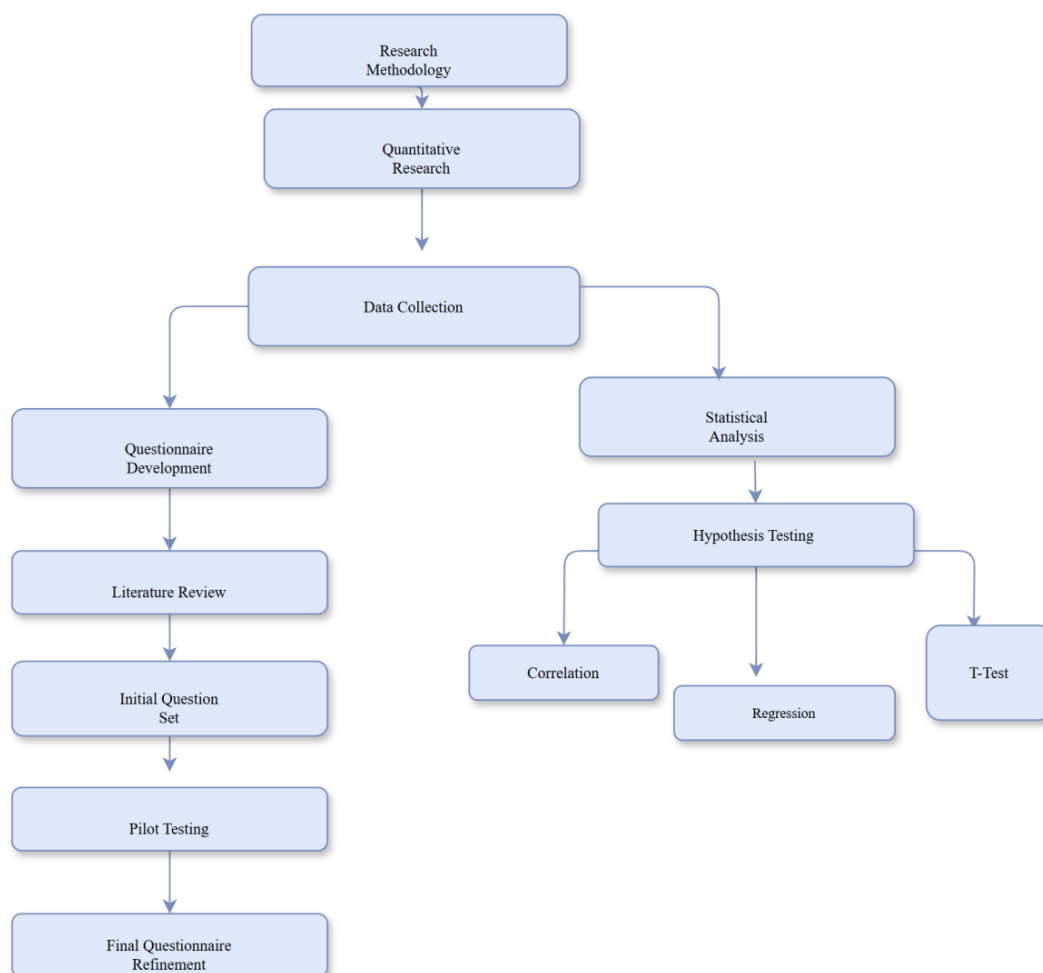


Figure 1. Flowchart of the quantitative research process: From questionnaire development to hypothesis testing

Explanation of the quantitative research design

The research methodology that is adopted in this study is quantitative research in a bid to analyze comprehensively the policy frameworks for Solomon for the promotion of ecological tourism.

The numerical method of data collection enables one to generate statistical data, which in turn will help provide a statistical analysis of the effectiveness of such policies. Quantitative methodologies' assumption of reality makes it possible to make dependable findings that can be applied to policies. In the following section, elaboration of the specific part of the questionnaires will be made in relation to the following questions.

Development process

To make sure that the developed questionnaire was valid and reliable, the following process was followed in the development of the questionnaire. First of all, the literature review took place in order to reveal variables linked with sustainable tourism policies and their effects. An initial set of questions has therefore been proposed from this review of the literature. The draft was presented to other specialists working within the same field in order to determine whether the questions matched the constructs that were being measured. The first questionnaire was completed by a small group of respondents to check appropriate questions, exclude the usage of possible ambiguous statements in the questionnaire, and check the completeness, clearness, and understanding of the respondents. Indeed, the questionnaire developed at this stage of research was refined after the results of the pilot testing were considered. Despite the fact, Kazakhstan has much potential for the development of ecotourism because of the preserved natural resources and unbelievable landscapes in combination with the national parks. The authors Kumar and Sheryazdanova (2021) mentioned, these protected areas can help to promote the ecotourism due to the centration of the protection of the ecosystems carrying out ecological, enlightening-popularizing, research-exploration, sightseeing, and recreational activity. Kazakhstan started the academic analysis of ecotourism relatively recently, the topic being initiated at the beginning of the years 2000s, while the phenomenon had emerged in the 1970s all over the world. However, it is necessary to state that there is no definite focus on this issue as a scholarly topic and the productivity relating to this area remains insufficient even after starting the research later than in other countries in Kazakhstan. Closing these gaps, the research by Kumar and Sheryazdanova (2021) analyzes the background, the state, and the outlook for Kazakhstan's ecotourism. They reveal the history of the development of ecotourism, the importance of national parks and new possibilities of further investigations in this field for strengthening the ecotourism in the country.

Thus, in Central Kazakhstan, especially in Karkaraly area, there are vast opportunities for ecotourism for which the representatives of tourist companies expressed their interest in developing specific sights beginning with the Karkaraly

lowlands geosystems. Keukenov et al. (2022) also stress the need for developing ecotourism and such measures as the creation of eco-routes and the improvement of the tourist support system in this territory. The research was conducted through field, descriptive and cartographic approaches and yielded an ideal two days' eco-route. The conclusions are aimed at stressing the possibility to enhance the ecotourism development in the Central Kazakhstan due to presentation of the area's promising sights and fauna, as well as the special proactive directions of the eco-tourism routes promotion.

Katon-Karagai State National Nature Park situated in East Kazakhstan region is regarded as one of the most suitable places for the growth of eco-tourism because of the ground that contains different geosystems and many-sided sights. Turyspekova et al. (2022) emphasized that national parks, especially the example of Katon-Karagai, play an important role in the development of ecological tourism and education, which corresponds to the nature and history of the region. The park is one of the largest ones in terms of the size of the territory in Kazakhstan that experienced significant growth in terms of tourism, considering this point, the area is the main focus of ecological tourism. The findings involve the following objectives of the study. Determine the attractive recreational areas within the park and propose development strategies of ecotourism. Owing to these studies, it can be concluded that Katon-Karagai State National Nature Park is a promising object for the development of ecotourism, and therefore it can be stated that regional planning and organization is a decisive factor for the further development of this segment of tourism.

Types of questions

The questionnaire comprises various types of questions designed to gather detailed and relevant data: These questions enable the respondents to have specific answers to choose from, maintain order to the answers as well as the ability to easily quantify the results. Some examples of closed-form questions are the multiple choices questions; questions that require simple yes or no as their answer. These questions are presented in a way that elicits a respondent's attitude or perception of an issue on a scale, for instance, "Strongly Disagree/Strongly Agree" or "Not at all/Very". This enables quantitative evaluation of otherwise subjective data and, thus, entails a profound understanding of the perception of sustainable tourism policies among the respondents. These are structured with the aim of identifying basic demographic details of the respondents that include age, gender, job status, geographical location, and level of education respectively. This data aids to determine to what extent demographic variables affect the level of perception and awareness of sustainable tourism policies.

Sampling Technique

The study chosen for the present paper utilizes a stratified random sampling technique. Such a method is useful in making sure that the sample has been drawn from the population in a manner that ensures that all the members of the population are equally represented through a systematic process of making the selections from different strata that are created on the bases of different factors such as region, occupation, education level etc. This approach increases the probability of generalization of the findings so that distinct sections of the population are sufficiently sampled. The sample size for this study is 370 participants which will enable the research to have significant results that are statistically relevant.

Justification of the chosen method and questionnaire design

- The chosen quantitative method and the structured questionnaire design are justified for several reasons: The chosen quantitative method and the structured questionnaire design are justified for several reasons:
 - Objectivity and Reliability: Quantitative techniques make use of numbers as indicators hence have lesser influence from the researcher. The use of questionnaire makes the data collection appear structured thus increases the reliability of the results.
 - Scalability and Generalizability: This avoids bias in the sample taken, and the results can be generalized to the wider community since the sample taken is a small and fairly selected from the population.
 - Depth of Insight: The combination of closed-ended and Likert scale questions provides both specific data points and nuanced insights into community awareness, policy clarity, stakeholder involvement, and other critical aspects of sustainable tourism policies.
 - Efficiency: The structured format of the questionnaire facilitates efficient data collection and analysis, making it suitable for studies involving large sample sizes.
 - Participants were selected from the Kazakh population, and the sample size was calculated using *G* Power to achieve statistical significance in the study.

Correlation Hypotheses. Purpose: To measure the strength and direction of the relationship between two variables.

Hypothesis 1 (Correlation)

- **H₀**: There is no significant correlation between all independent variables in policy design, policy effectiveness and Environmental and socioeconomic impacts.
- **H₁**: There is a significant correlation between all independent variables in policy design, policy effectiveness and Environmental and socioeconomic impacts.

Regression Hypotheses. Purpose: To predict the dependent variable (policy effectiveness or environmental and socioeconomic impacts) based on one or more independent variables.

Hypothesis 2 (Regression):

- **H₀**: Clarity of policy guidelines, stakeholder involvement, and government support do not significantly predict policy effectiveness.
- **H₁**: Clarity of policy guidelines, stakeholder involvement, and government support significantly predict policy effectiveness.

Hypothesis 3 (Regression):

- **H0:** Community involvement and funding/resources do not significantly predict environmental and socioeconomic impacts.

- **H1:** Community involvement and funding/resources significantly predict environmental and socioeconomic impacts.

T-Test Hypotheses: Purpose: To compare means between two groups for specific independent variables.

Hypothesis 4 (T-Test)

- **H0:** There is no significant difference in policy effectiveness between urban and rural locations.

- **H1:** There is a significant difference in policy effectiveness between urban and rural locations.

Variables for Each Test. Correlation Variables:

1. (Independent Variable)
2. Policy effectiveness (Dependent Variable)
3. Environmental and socioeconomic impacts (Dependent Variable)

Regression Variables:

1. Policy effectiveness (Dependent Variable)
2. Environmental and socioeconomic impacts (Dependent Variable)
3. Clarity of policy guidelines (Independent Variable)
4. Stakeholder involvement (Independent Variable)
5. Government support (Independent Variable)
6. Community involvement (Independent Variable)
7. Funding and resources (Independent Variable)
8. Control variables: Age, Gender, Occupation, Location, Education Level

T-Test Variables: Policy effectiveness (Dependent Variable); Location (Urban/Rural) (Control Variable)

These hypotheses and variable selections will help you structure your data analysis and ensure that your research objectives are met through appropriate statistical tests (Table 1).

Table 1. Descriptive statistics

	N	Minimum	Maximum	Mean	Std. deviation
Gender of the respondents	371	1.00	2.00	1.0997	.30004
Age of the respondents	371	1.00	5.00	2.3881	1.05281
Occupation	371	1.00	2.00	1.5364	.49935
Where you living	371	1.00	2.00	1.5148	.50046
Education	371	1.00	4.00	1.6415	1.00178
Valid N (listwise)	371				

The table presents descriptive statistics for 371 respondents across several variables. For gender, with values ranging from 1 to 2, the sample shows a slight skew towards one gender (mean = 1.0997, SD = 0.30004). Age, ranging from 1 to 5, indicates a relatively diverse distribution (mean = 2.3881, SD = 1.05281). Occupation, ranging from 1 to 2, leans towards one category (mean = 1.5364, SD = 0.49935), while residential location (where you live), also ranging from 1 to 2, shows moderate balance between categories (mean = 1.5148, SD = 0.50046). Education levels, ranging from 1 to 4, vary widely within the sample (mean = 1.6415, SD = 1.00178). These statistics provide a comprehensive snapshot of the demographic and categorical distributions among the respondents, highlighting the variability and central tendencies across gender, age, occupation, residential location, and education within the sample (Table 2).

Table 2. Statistics of respondents

		Gender of the respondents	Age of the respondents	What is your occupation	Where you live	Education
N	Valid	371	371	371	371	371
	Missing	133	133	133	133	133
Mean		1.0997	2.3881	1.5364	1.5148	1.6415
Std. error of mean		.01558	.05466	.02592	.02598	.05201
Median		1.0000	2.0000	2.0000	2.0000	1.0000
Mode		1.00	2.00	2.00	2.00	1.00
Std. deviation		.30004	1.05281	.49935	.50046	1.00178
Variance		.090	1.108	.249	.250	1.004
Range		1.00	4.00	1.00	1.00	3.00
Minimum		1.00	1.00	1.00	1.00	1.00
Maximum		2.00	5.00	2.00	2.00	4.00
Sum		408.00	886.00	570.00	562.00	609.00
Percentiles	25	1.0000	2.0000	1.0000	1.0000	1.0000
	50	1.0000	2.0000	2.0000	2.0000	1.0000
	75	1.0000	3.0000	2.0000	2.0000	2.0000

The table provides comprehensive descriptive statistics for five variables based on 371 respondents, with 133 missing values across all variables. For gender, the mean of 1.0997 indicates a slight skew towards one category, with a

standard deviation of 0.30004, suggesting relatively low variability. Age, with a mean of 2.3881 and a wide range from 1 to 5, shows a notable standard deviation of 1.05281, indicating significant variability in respondent ages. Occupation, with a mean of 1.5364, predominantly falls into one category, as indicated by the mode of 2. Residential location (where you live), also predominantly in one category (mode = 2), has a mean of 1.5148 and a standard deviation of 0.50046, indicating moderate variability. Education levels vary widely (range from 1 to 4), with a mean of 1.6415 and a standard deviation of 1.00178, reflecting substantial diversity in educational backgrounds among respondents.

Table 3. Gender of respondents

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Male	334	66.3	90.0	90.0
	Female	37	7.3	10.0	100.0
	Total	371	73.6	100.0	
Missing	System	133	26.4		
Total		504	100.0		

Overall, these statistics offer a detailed snapshot of the demographic and categorical distributions within the sample, highlighting central tendencies, variability, and the range of responses across different variables. Table 3 gives the gender distribution of the respondents in the study. Of the 504 participants, 371 responded validly to the question concerning their gender; out of this number, 334 self-identified as male (66.3%) while 37 were females (7.3%). The valid percent clearly depicts that, out of the total valid responses, 90% were from male and only 10% were from female. The results have also depicted that cumulative percent of the valid response is 100 percent. Also, 133 papers were missing responses which cumulatively accounted for 26 percent. 4% of total intended sample, hence, making the gross response rate of 73.6% (Figure 2, 3, 4).

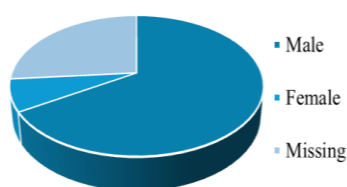


Figure 2. Gender of respondents

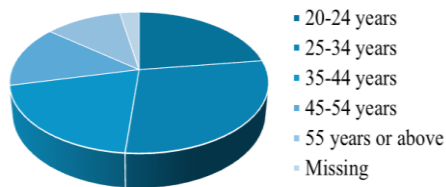


Figure 3. Age of respondents

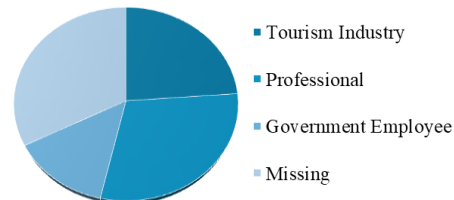


Figure 4. Occupation of respondents

The age distribution of the respondents in the study is as shown in Table 4. Among the total 504 participants, 371 completed the part of the survey referring to the age distribution of participants. Most of the respondents were within the age range of 25-34 years; this was comprised of 154 respondents which is 41.5% of the valid response rate followed by 35-44 years with 98 respondents who were 26.4% of the valid response rate. There were also respondents in other age categories: The remaining ages bracket as follows: 20-24 years, 19.1%, 45-54 years 7.3%, 55 years and above 5.7%. The cumulative percentage depicts all valid responses sum to 100% while 133 responses were missing (26.4% of the total sample) leading to an overall response rate of 73.6%. A breakdown of the respondents' occupations in the study has been presented in Table 5 as follows. Among all the 504 participants, 371 participants gave a valid response to the work status of the participants. When it comes to the occupation of the respondents, they are predominantly Government employees since 199 of the participants, which is 53.6% of the valid responses provided belonged to this category. Tourism Industry Professionals was the second largest category of the respondents with 172 of them (46.4% of the valid responses). The percent total gives the indication that the total of the valid scores is 100% of the data. Moreover, 133 of the responses received were missing (26.4% of total sample Members'), which made the overall response rate equal to 73.6%.

Table 4. Age of respondents

		Frequency	Percent	Valid percent	Cumulative percent
Valid	20-24 years	71	14.1	19.1	19.1
	25-34 years	154	30.6	41.5	60.6
	35-44 years	98	19.4	26.4	87.1
	45-54 years	27	5.4	7.3	94.3
	55 years or above	21	4.2	5.7	100.0
	Total	371	73.6	100.0	
Missing	System	133	26.4		
Total		504	100.0		

Table 5. Occupation of respondents

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Tourism industry professional	172	34.1	46.4	46.4
	Government employee	199	39.5	53.6	100.0
	Total	371	73.6	100.0	
Missing	System	133	26.4		
Total		504	100.0		

Table 6. Location of Respondents

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Urban	180	35.7	48.5	48.5
	Rural	191	37.9	51.5	100.0
	Total	371	73.6	100.0	
Missing	System	133	26.4		
Total		504	100.0		

Table 7. Education of Respondents

		Frequency	Percent	Valid percent	Cumulative percent
Valid	less than secondary school	236	46.8	63.6	63.6
	high secondary school or diploma	72	14.3	19.4	83.0
	Bachelor's degree	23	4.6	6.2	89.2
	Master's degree	40	7.9	10.8	100.0
	Total	371	73.6	100.0	
Missing	System	133	26.4		
Total		504	100.0		

Table 6 displays the residential locations of the respondents in the study. Out of the total 504 participants, 371 provided valid responses regarding their place of residence. The data shows that nearly half of the respondents live in rural areas, with 191 individuals (51.5% of valid responses), while 180 respondents (48.5% of valid responses) reside in urban areas. The cumulative percent indicates that all valid responses account for 100% of the data. There were also 133 missing responses (26.4% of the total sample), resulting in an overall response rate of 73.6%.

The educational level of the respondents in the study is set out in Table 7. From the overall sample of 504 participants, 371 respondents were valid in their responses concerning their education. Regarding school education, 236 participants (63.6% of valid responses) said that they have less than secondary school level education. Moreover, seventy-two respondents (19.4% of valid responses) stated to have finished high school or to have a diploma; 6.2% of valid responses received a Bachelor’s degree; 10.8% of valid responses received a Master’s degree. The cumulative percent reveals that all the valid responses have contributed 100 percent of the data or results. Thirty-three of the 398 rural respondents failed to answer some questions: 133 missing responses, 26.6% (Figure 5, 6).

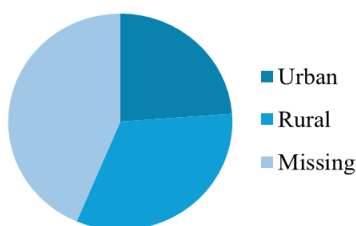


Figure 5. Location of Respondents

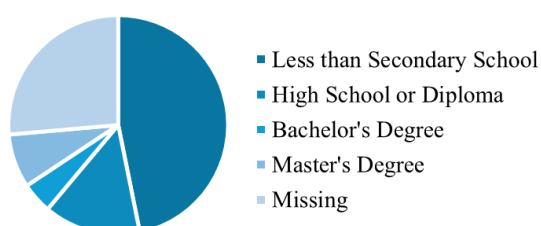


Figure 6. Education of respondents

Description of all demographic variables

The gifts of the demographic feature of the respondents in this study portray a diversified dispersion in several factors. With regards demographics, the gender distribution of participants was almost evenly split, with 66.3% self-identified as male and only 7% for female, which could not in any way justify the tiny representation that women were given in solving the complex problem. 3% of them selected that they are female while 26%, 4% data missing.

Investigating by age, it is possible to state that most clients are between 25 and 34 years old (30.6%), whereas a significantly smaller number of clients belongs to 35-44 (19.4%), 20-24 (14.1%) age category and even fewer customers are 45 and older. Regarding occupation, the following percentage of replies is obtained 64% of the respondents are house wives, 5% are students, 16% are civil servants, 1% are employed in the tourism industry, and 39.5% are government employees. Further, in terms of place of residence the respondents are divided almost equally between the urban and rural area; (Chi-square=3.67; p>0.05). Education levels at present reveal that a greater portion of the majority, 46.8%, have a level below secondary academic schooling; 14.3% have high secondary schooling, often a diploma; and only 6.2% have attained a Bachelor’s degree, with 10.8% having a Master’s degree.

These demographics include the gender, age, occupation, geographical location, and educational background of the respondent, which give a snapshot of the respondents’ details.

Hypothesis 1 (Correlation)

- H0: There is no significant correlation between all independent variables in policy design, policy effectiveness and Environmental and socioeconomic impacts.
- H1: There is a significant correlation between all independent variables in policy design, policy effectiveness and Environmental and socioeconomic impacts.

The table presents correlation coefficients among various factors related to sustainable tourism policies and their impacts, based on data from 371 respondents. Insight into sustainable tourism policies shows significant positive

correlations with the source of policy information ($r = 0.303, p < 0.01$), but negative correlations with the clarity of policy guidelines ($r = -0.083, p > 0.05$) and stakeholder involvement in policy design ($r = -0.051, p > 0.05$).

The clarity of policy guidelines has strong positive correlations with stakeholder involvement ($r = 0.826, p < 0.01$), policy implementation ($r = 0.716, p < 0.01$), and enforcement mechanisms ($r = 0.657, p < 0.01$).

Stakeholder involvement in policy design also correlates positively with policy implementation ($r = 0.784, p < 0.01$) and enforcement mechanisms ($r = 0.825, p < 0.01$). Policy effectiveness shows significant positive correlations with public awareness campaigns on the environment ($r = 0.309, p < 0.01$) and the effectiveness of educational programs ($r = 0.183, p < 0.01$), but negative correlations with some factors like the clarity of policy guidelines ($r = -0.144, p < 0.01$) and stakeholder involvement ($r = -0.113, p < 0.05$).

Overall, these correlations highlight relationships among different elements of policy formulation, implementation, and their perceived impacts on environmental and socioeconomic outcomes in sustainable tourism contexts (Table 8).

Table 8. Correlation matrix

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Insight into sustainable tourism policies	1	.303**	-.083	-.051	-.036	-.075	-.011	-.038	-.019	-.043	-.040	-.075	-.072	.078
Source of policy information		1	.043	.049	.052	-.043	.018	.031	.060	-.069	-.008	.011	-.047	.058
Clarity of policy guidelines			1	.826**	.716**	.657**	-.363**	-.337**	-.298**	-.048	.191**	.413**	.340**	-.144**
Stakeholder involvement in policy design				1	.784**	.825**	-.319**	-.293**	-.311**	-.056	.183**	.381**	.426**	-.113*
Policy implementation					1	.686**	-.227**	-.296**	-.280**	-.013	.189**	.333**	.355**	-.136**
Enforcement mechanism						1	-.345**	-.291**	-.320**	-.039	.150**	.313**	.583**	-.083
Funding and resources							1	.692**	.807**	.261**	-.141**	-.248**	-.319**	.078
Community involvement								1	.698**	.135**	-.065	-.189**	-.315**	.114*
Support from local business									1	.410**	-.050	-.220**	-.352**	.130*
Government support										1	.239**	.141**	-.004	-.010
Effectiveness of educational program											1	.697**	.183**	.024
Public awareness campaign on the environment												1	.309**	-.114*
Environmental and socio-economic impact													1	-.061
Policy effectiveness														1

Hypothesis 2 (Regression):

- H0: Clarity of policy guidelines, stakeholder involvement, and government support do not significantly predict policy effectiveness.

- H1: Clarity of policy guidelines, stakeholder involvement, and government support significantly predict policy effectiveness (Table 9).

Table 9. Regression Coefficients for predicting policy effectiveness

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	2.442	.087	.017	28.131	.000
	Stakeholder Involvement in Policy Design:	.007	.040	-.159	.185	.853
	Clarity of Policy Guidelines	-.069	.040	-.017	-1.735	.084
	Government Support	-.007	.021	-.017	-.330	.742
Dependent Variable: Policy effectiveness; R=.146 ^a , R Square=.021, Adjusted R Square=.013						

The table provides a summary of a regression analysis predicting Policy Effectiveness based on Government Support, Clarity of Policy Guidelines, and Stakeholder Involvement in Policy Design. The model has a low R Square of 0.021, indicating that only 2.1% of the variance in policy effectiveness is explained by the predictors. The adjusted R Square (0.013) adjusts for the number of predictors, suggesting a slight improvement in model fit. The standard error of the estimate (0.52511) represents the average distance between observed and predicted values.

The F Change statistic (2.647) and its associated p-value ($p = .049$) indicate that the model is marginally significant, suggesting that the predictors collectively have some explanatory power for policy effectiveness. However, examining the coefficients reveals that none of the predictors—Stakeholder Involvement in Policy Design ($B = 0.007, p = .853$), Clarity of Policy Guidelines ($B = -0.069, p = .084$), and Government Support ($B = -0.007, p = .742$)—have statistically significant effects on policy effectiveness. These results suggest that while the model shows a marginal ability to predict policy effectiveness, the individual predictors do not significantly contribute to explaining variations in the dependent variable based on the data analyzed. Prokopenko et al. (2019) article on digital tools for tourism management stresses the importance of innovative tools and stakeholder engagement. The low R Square in your model suggests that even with stakeholder involvement, achieving policy effectiveness can be challenging, reflecting the discussions in Prokopenko et al. (2019) about the need for more effective engagement strategies.

Hypothesis 3 (Regression):

- H0: Community involvement and funding/resources do not significantly predict environmental and socioeconomic impacts.
- H1: Community involvement and funding/resources significantly predict environmental (Table 10).

Table 10. Coefficients and socioeconomic impacts

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.178	.224		27.616	.000
	Community Involvement	-.219	.081	-.182	-2.688	.008
	Funding and Resources	-.216	.076	-.193	-2.846	.005
Dependent Variable: Environmental and Socioeconomic Impacts; R=.345 ^a R Square=.119, Adjusted R Square=.114						

The table presents the results of a regression analysis predicting Environmental and Socioeconomic Impacts based on Community Involvement and Funding and Resources. The model shows an overall moderate fit with an R Square of 0.119, indicating that 11.9% of the variance in impacts is explained by the predictors. The adjusted R Square (0.114) adjusts for the number of predictors, providing a slightly more conservative estimate of the model's explanatory power. The standard error of the estimate (1.21958) reflects the average distance between the observed and predicted values.

The F Change statistic (24.819) and its associated p-value (p = .000) indicate that the model is statistically significant, suggesting that Community Involvement and Funding and Resources together significantly predict Environmental and Socioeconomic Impacts. The coefficients show that both predictors have negative standardized coefficients (Beta) of approximately -0.182 and -0.193, respectively, indicating that higher levels of Community Involvement and Funding and Resources are associated with lower impacts. Both predictors are statistically significant (p < .01), supporting their contribution to explaining variance in the dependent variable. Bashynska et al. (2022) emphasizes sustainable practices and the importance of effective resource allocation in creating smart agro-clusters. This aligns with your findings that community involvement and funding significantly influence environmental and socioeconomic impacts. Both highlight the importance of strategic resource allocation for sustainability.

T-Test Hypotheses

Purpose: To compare means between two groups for specific independent variables.

Hypothesis 4 (T-Test)

- H0: There is no significant difference in policy effectiveness between urban and rural locations.
- H1: There is a significant difference in policy effectiveness between urban and rural locations (Table 11).

Table 11. Independent samples test

		Levene's test for equality of variances		t-test for equality of means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95% Confidence interval of the difference	
									Lower	Upper
Policy effectiveness	Equal variances assumed	2.699	.101	-.465	369	.642	-.02557	.05497	-.13366	.08253
	Equal variances not assumed			-.468	363.0	.640	-.02557	.05467	-.13307	.08193

The results of the independent samples t-test do not support the hypothesis that there is a significant difference in policy effectiveness between urban and rural locations. The Levene's test for equality of variances indicates that the assumption of equal variances between urban and rural groups is valid (F = 2.699, p = .101).

The t-test for equality of means shows a non-significant difference in policy effectiveness between urban (M = 2.2833) and rural (M = 2.3089) areas (t (369) = -0.465, p = .642, 95% CI [-0.134, 0.083]). With a mean difference of -0.02557, the results suggest that, on average, policy effectiveness is slightly higher in rural areas, but this difference is not statistically significant. Therefore, we fail to reject the null hypothesis (H0), indicating that there is no compelling evidence from this analysis to support a significant difference in policy effectiveness between urban and rural locations based on the data provided. Popadynets et al. (2021) discuss the competitiveness of economic regions and prospects for innovative development. While their focus may not directly mirror the specific statistical analysis of urban versus rural policy effectiveness, their exploration of regional competitiveness and innovative development can conceptually align with the context of policy effectiveness in different geographical settings.

Popadynets et al. (2021) may provide insights into how different regional contexts, such as urban and rural areas, influence policy effectiveness through their discussion on economic competitiveness and innovation. Although they do not conduct a similar statistical test, their examination of regional dynamics and competitiveness can inform broader discussions about the implications of urban versus rural settings on policy outcomes. Thus, while not directly conducting the same analysis, their exploration of economic competitiveness and regional development can contribute to understanding the potential contextual factors influencing policy effectiveness between urban and rural locations.

Findings

The significant positive relationship between insight into sustainable tourism policies and the policy information source indicates that comprehensible policies result in sustainable practices. This points towards the strategies highlighted in the sustainable development literature as stating that credible and attainable information is vital for enhancing good policies. The comparatively reduced values of the associations between clarity of policy guidelines and stakeholders' engagement in policies development with the policy insights could signal concerns. This is why it is essential to improve the communication and engagement processes, similar to the importance of communication and engagement noted by authors focused on the development of rural tourism potential (Kovshun et al., 2023).

The book "Ecological Tourism in the Republic of Kazakhstan" outlines a theoretical and methodological research for the successful beginning of the ecotourism and geotourism of Kazakhstan. Among the findings made it is crucial to substantiate the importance of specially protected natural areas for the development of ecotourism. The paper of Iskakova et al. (2021) also supports that these protected areas are crucial for developing the scope of environmentally related tourist offerings. This study also describes the main prerequisites for the effective organization of ecotourism both in protected natural and rural areas and indicates the possibilities for their development.

In addition, the book provides detailed cartographic material that can demonstrate the geographical opportunities of currently existing and potentially developing areas for tourism in Kazakhstan, also guiding the state to strategically plan the budget for the specified sphere. This approach guarantees that the financial investment is done of the specific areas that have the prospects of the sustainable tourism, thus solving the problems of the present and future development of the ecotourism in Kazakhstan. The spearhead positive relationship between clarity of policy guidelines and policy, implementation and enforcement mechanisms were clear showing the importance of clear policy guidelines.

This resonates with findings from structuralist works stressing the role of systematic frameworks in the management of sustainable development programs (Popadynets et al., 2021).

Concerning Reliability, the relationships between stakeholder involvement and policy implementation/enforcement imply stakeholders' significant engagement in the process of transforming policies into real results. This contributes to the results regarding the identification of key stakeholders and utilizing the appropriate communication channels in encouraging sustainable tourism destinations (Prokopenko et al., 2019). Significant and positive correlations between policy effectiveness, public awareness campaigns in the environment, and effective educational programs mean that people, when they are enlightened, will embrace sustainable tourism. This is in line with the concern made on educational campaigns and public involvement in sustainable tourism policies.

These studies reaffirm various interesting and informative issues that relate to how policies are made, with which stakeholders, regarding implementation of specific strategies and the subsequent effects on sustainability of tourism. They stipulate that measures of increasing stakeholders' engagement, better communication of policy directions and raising awareness are necessary for success stories on sustainable tourism development. Koval et al. (2022) explained how environmental taxation affects clean technologies with a call for more significant financial structures in lowering carbon emission. This research corresponds to the finding of the relationships between ST policies and their consequences, mainly concerning the efficiency of policy interventions.

As Koval et al. (2021) rightly pointed out, sound approaches to environmental taxation help improve the implementation of policies by offering such incentives. This supports the overall view that the identification of good policy frameworks, involvement of the interested parties as well as enhanced development of awareness campaigns are critical for the enhancement of the sustainable tourism goals by appropriate use of policy measures.

CONCLUSION

It is therefore safe to say that, based on the respective correlations, the thing that makes sense regarding policy implementation and effectiveness in sustainable tourism is that there are facilitating factors such as stakeholder involvement or clear policy guidelines among others. These are among the difficulties that are faced ranging from the perplexity of guidelines to compile for the policies as well as greater involvement of stakeholders to make better the policies' impacts. From the analysis, one realizes that public awareness campaigns and other educative programs come out HIV / AIDS policy as very important in boosting policy outcomes. Again, the correlation findings also suggest that full-spectrum sustainable development goals in tourism policies have it that there are complex and diverse issues within covering; it is a holistic issue that cannot be overdosed by mere formulaic application, and it also shows the need to have good stakeholder involvement at the policy formulation, implementation, and review stages. Akbar et al. (2021) reveals in this case of the Aksu-Jabagly Nature Reserve that low community relevance and participation in tourism activities, along with inadequate community empowerments, pose great challenges to implement CBET strategies adequately. This concurs with the above general analysis pointing to the fact that for policy outcomes to improve, effective awareness campaigns and education have to be enhanced. Based on the results, it can be concluded that sustainable tourism policies, backed up with complete public awareness, can improve the efficiency of sustainable tourism projects.

The correlation findings also indicate that the achievement of full-spectrum sustainable development goals in the policies that relate to tourism cannot be single-spectrum. This entails effective and proper handling of numerous and different issues throughout the policy making, executing and evaluating procedures with effective stakeholder participation. These aspects suggest that there is need for having well-defined policies that are implementable for sustainable tourism while the local people should be involved fully in pushing for sustainable tourism that will both help boost the economic returns and at the same time protect the natural and cultural resources.

Therefore, one can conclude that sustainable tourism policies depend very much on the level of the involvement of stakeholders, the specificity of policy frameworks, and the scope and intensity of public campaigns aimed at awareness raising. Their inclusion is crucial to considering the multifaceted characteristics and achieving the sustainable implementation and effectiveness of the undertaken tourism activities.

Recommendations

1. Subsequently there is a need for policy makers to put policies for engagement of stakeholders throughout the policy formulation and implementing phases in order to allow for inclusion of diverse views.
2. Enhance the specificity of the policy guidelines so that they can be easily understood and applied by the stakeholders as well as enforcement authorities.
3. Promotion needs to be stepped up in support of sustainable tourism through additional public awareness campaigns and educational initiatives for the development of a better understanding of the issue at the local level.
4. Assure the government to carry out the monitoring and evaluation activities in order to review the effects of the policies and policy change activities as informed by empirical evidence and opinions from various stakeholders.
5. Enhance the government's support for the application of IT in managing sustainable tourism programs. The shift from the use of traditional technology to information technology in the management of public administration can improve the means and ways of implementing policies involving the citizens.

Limitations

1. The data on correlations collected are cross-sectional which restricts the viability of inferring causative relationships of the variables.
2. Generalization to other populations or geographical areas can be an issue because of the choice of the sample and its size.
3. Since respondents are likely to provide feedback self-estimated, the findings derived from such responses are predestined to contain certain bias, especially in terms of ratings of policy and subjectively perceived performance as well as the stakeholder engagement levels.
4. Additional factors beyond those evaluated in the study, structural external environment and socio-economic factors might shape work on policies thus giving meaning to the correlations.

Author Contributions: Conceptualization, S.M. and T.I.; methodology, S.M. and T.I.; software, T.I. and M.A.; validation, S.M. and A.G.; formal analysis, S.M. and T.I.; investigation, M.A. and A.G.; data curation, B.A. and M.A.; writing - original draft preparation, T.I. and M.A.; writing - review and editing, S.M. and A.G.; visualization, A.G. and M.A.; supervision, S.M.; project administration, S.M. All authors have read and agreed to the published version of the manuscript.

Funding: Not applicable.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The data presented in this study may be obtained on request from the corresponding author.

Acknowledgements: On this basis, sincere thanks are extended to all individuals and organizations that have contributed to this study. Particular appreciation is given to the research participants, including community members, stakeholders, teachers, and students from both urban and rural areas of Kazakhstan, who greatly assisted in the research by providing essential information and participation. The authors thank all the academics and colleagues who gave feedback, recommendations, and help on this project. Their contributions shaped this research's course, scope, and findings. Last, relatives and friends are thanked for their help with this research. Throughout, their tolerance and encouragement were crucial. All contributions and support are greatly welcomed.

Conflicts of Interest: The authors declare no conflict of interest.

REFERENCES

- Akbar, I., Myrzaliyeva, Z. K., Tazhekova, A. Z., Saulembayev, A. T., & Kenzhebay, R. N. (2021). Evaluation of the community-based ecotourism development status in the Aksu-Jabagly nature reserve, Kazakhstan. *Geo Journal of Tourism and Geosites*, 35(2), 381-389. <https://doi.org/10.30892/gtg.35216-662>
- Aldybayev, B., Gubarenko, A., Imangulova, T., Ussubaliyeva, S., & Abdikarimova, M. (2021). Popularization of objects of the cultural and historical heritage of the Republic of Kazakhstan as a factor for the development of ethnocultural tourism of the country. *GeoJournal of Tourism and Geosites*, 39(4 supplement), 1450-1460. <https://doi.org/10.30892/gtg.394spl16-789>
- Baloch, Q. B., Shah, S. N., Iqbal, N., Sheeraz, M., Asadullah, M., Mahar, S., & Khan, A. U. (2023). Impact of tourism development upon environmental sustainability: a suggested framework for sustainable ecotourism. *Environmental Science and Pollution Research International*, 30(3), 5917-5930. <https://doi.org/10.1007/s11356-022-22496-w>
- Bashynska, I., Kichuk, Y., Danylyuk, S., Bessarab, A., Levytska, L., & Zaitsev, O. (2022). Smart Agro-Clustering Based on the Chain "Education-Science-Business" for Sustainable Development. *Journal of Agriculture and Crops*, 8(3), 208-215. <https://doi.org/10.32861/jac.83.208.215>
- Bramwell, B., & Lane, B. (1993). Sustainable tourism: An evolving global approach. *Journal of Sustainable Tourism*, 1(1), 1-5. <https://www.tandfonline.com/doi/pdf/10.1080/09669589309450696>

- Butler, R. W. (1980). The concept of a tourist area cycle of evolution: Implications for management of resources. *Canadian Geographer*, 24(1), 5-12. <https://www.degruyter.com/document/doi/10.21832/9781845410278-007/pdf?licenseType=restricted>
- Dodds, R., & Butler, R. (2010). Barriers to Implementing Sustainable Tourism Policy in Mass Tourism Destinations. *TOURISMOS: An International Multidisciplinary Journal of Tourism*, 5(1), 35-53. <https://mpr.ub.uni-muenchen.de/25162/>
- Guo, Y., Yang, Y., & Song, Q. (2024). Spatial Distribution Characteristics and Influencing Factors of Museums in Jining, China. *Futurity of Social Sciences*, 2(1), 72-88. <https://futurity-social.com/index.php/journal/article/view/26>
- Hall, C. M. (2021). Constructing sustainable tourism development: The 2030 agenda and the managerial ecology of sustainable tourism. In C. M. Hall, S. Gössling, & D. Scott (Eds.), *Activating critical thinking to advance the sustainable development goals in tourism systems*, 198-214, Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781003140542-12/constructing-sustainable-tourism-development-2030-agenda-managerial-ecology-sustainable-tourism-michael-hall>
- Hall, C. M., Gössling, S., & Scott, D. (Eds.). (2015). *The Routledge handbook of tourism and sustainability* (Vol. 922). Abingdon: Routledge. <https://www.routledgehandbooks.com/doi/10.4324/9780203072332.ch3>
- Iskakova, K., Bayandinova, S., Aliyeva, Z., Aktymbayeva, A., & Baiburiyev, R. (2021a). *Ecological tourism in the republic of Kazakhstan* (1st ed.). Springer Nature. <https://doi.org/10.1007/978-3-030-77462-2>
- Iskakova, K., Bayandinova, S., Aliyeva, Z., Aktymbayeva, A., & Baiburiyev, R. (2021b). Evaluation of Tourist-Resource Potential on Ecological Tourism at the Scale of Kazakhstan Regions. In *Ecological Tourism in the Republic of Kazakhstan*, 181–236, Springer International Publishing. https://doi.org/10.1007/978-3-030-77462-2_5
- Keukenov, Y., Dzhanelieva, K., Ataeva, G., Ozigeldinova, Z., & Orazymbetova, K. (2022). Prospects of ecotourism development in Central Kazakhstan. *Geo Journal of Tourism and Geosites*, 42, 664-670. <https://doi.org/10.30892/gtg.422spl04-875>
- Koval, V., Laktionova, O., Udovychenko, I., Olczak, P., Pali, S., & Prystupa, L. (2022). Environmental Taxation Assessment on Clean Technologies Reducing Carbon Emissions Cost-Effectively. *Sustainability*, 14(21), 14044. <https://doi.org/10.3390/su142114044>
- Kovshun, N., Kliuchnyk, A., Tymchuk, S., Orlenko, O., Soloviova, O., & Horiunova, K. (2023). Rural tourism potential in the development of the agriculture-industrial complex. *E3S Web of Conferences*, 408, 01026. <https://doi.org/10.1051/e3sconf/202340801026>
- Kumar, Y. A., & Sheryazdanova, K. G. (2021). Ecotourism study in Kazakhstan: the past, present and the future. *Eurasian Journal of Ecology*, 67(2), 4–20. <https://doi.org/10.26577/EJE.2021.v67.i2.01>
- Popadynets, N., Yakymchuk, O., Yakymchuk, A., Bilyk, R., Irtyshcheva, I., Hryhoruk, I., & Serhiychuk, S. (2021). Increasing Competitiveness of Economic Regions: Prospects for Innovative Development. *Advances in Intelligent Systems and Computing*, 1322, 496–502. https://link.springer.com/chapter/10.1007/978-3-030-68017-6_74
- Prokopenko, O., Larina, Y., Chetveryk, O., Kravtsov, S., Rozhko, N., & Lorvi, I. (2019). Digital-toolkit for promoting tourist destinations. *International Journal of Innovative Technology and Exploring Engineering*, 8(12), 4982-4987. <https://doi.org/10.35940/ijitee.L3745.1081219>
- Prokopenko, O., Rusavska, V., Maliar, N., Tvelina, A., Opanasiuk, N., & Aldankova, H. (2020). Digital-Toolkit for Sports Tourism Promoting. *International Journal of Advanced Research in Engineering and Technology*, 11(5), 84-96. <https://doi.org/10.34218/IJARET.11.5.2020.010>
- Sanetra-Półgrabia, S. (2022). The philosophy of the newest development strategy in the public management in Poland: Analysis of concepts and results of implementation. *Futurity Philosophy*, 1(4), 4-15. <https://doi.org/10.57125/FP.2022.12.30.01>
- Shevchuk, L. (2021). Environmental rights of citizens and legal safeguards for their protection: Challenges for the future. *Futurity Economics & Law*, 1(2), 4-11. <https://doi.org/10.57125/FEL.2021.06.25.1>
- Thapa, B. (2019). Ecotourism education and development in Kazakhstan. *Journal of Hospitality & Tourism Education*, 31(2), 119-124. <https://doi.org/10.1080/10963758.2018.1485499>
- Troian, M., Prokopenko, O., Jarvis, M., Saichuk, V., Komarnitskyi, I., & Glybovets, V. (2023). International Marine Tourism: Trends and Prospects for Sustainable Development. *Scientific Journal of Maritime Research*, 37(1), 23-31. <https://doi.org/10.31217/p.37.1.3>
- Turyspekova, E., Ramazanova, N., & Atasoy, E. (2022). Prospects for the development of ecotourism in the territory of the Katon-Karagai state national nature park of the East Kazakhstan region. *Geo Journal of Tourism and Geosites*, 45, 1560-1569. <https://doi.org/10.30892/gtg.454spl04-975>
- World Tourism Organization. (2018). *Tourism and the sustainable development goals: Journey to 2030*. <https://www.unwto.org/global/publication/tourism-and-sustainable-development-goals-journey-2030>
- Yankovska, L., & Kovbas, H. (2021). Designing a mechanism of staff motivation in the framework of crisis management for socially responsible enterprises. *Law, Business and Sustainability Herald*, 1(3), 25-33. <https://lbsherald.org/index.php/journal/article/view/26>
- United Nations Environment Programme, & World Tourism Organization. (2005). *Making tourism more sustainable: A guide for policy makers*. United Nations Environment Programme. <https://www.unep.org/resources/report/making-tourism-more-sustainable-guide-policy-makers>