

Knowledge, Attitude, and Practices toward Sustainability of Tourism Communication Initiatives at Kilangin Falls in Liliw Laguna

Julius B. Paez, RB, LPT, CTP, CHRA, CMMS, CRP, CMHT, DHum

Master of Arts in Communication major in Communication Management, Polytechnic University of the Philippines

DOI: <https://doi.org/10.51244/IJRSI.2025.120700173>

Received: 05 July 2025; Accepted: 11 July 2025; Published: 14 August 2025

ABSTRACT

Ecological and social sustainability in tourism communication poses certain challenges. This research investigated the existing sustainable communications at Kinlangin Falls, Liliw, Laguna, with a focus on the demographic profile of respondents, knowledge, attitudes, and practices. A descriptive method was adopted for this study, with a questionnaire checklist and documentary analysis as the major data-gathering instruments. This method was used by the researcher since the intention of this study is to analytically describe an existing situation regarding the knowledge, attitudes, and practices towards sustainability of tourism communication strategies observed by the locals in Kilangin Falls, Liliw, Laguna. The results highlight that there is a high level of agreement toward the sustainability of tourism communication initiatives, but partial disagreement exists regarding specific practices and challenges on how to use eco-friendly materials and collaborate with the local community. This current study also investigates the relationships of demographic characteristics with respondents' knowledge, attitudes, and practices in recommending eco-friendly practices and collaboration with the local communities for sustainable tourism communication.

Keywords: Sustainable Tourism, Tourism Communication Initiatives, Knowledge, Attitude, Practices

INTRODUCTION

Environmental conservation stands as one of the foremost approaches to saving terrestrial life. Forming protected areas such as national parks and game reserves has been valuable in safeguarding biodiversity. Subsequently, according to the World Wildlife Fund (WWF), these zones can be used as a sanctuary for endangered species and facilitate ecological tasks such as pollination and water filtration (WWF, 2020). Moreover, these areas are important carbon sinks that mitigate climate change impacts.

Greta Thunberg has been a successful advocate for climate action and has led campaigns against climate change all around the world among young people. Furthermore, according to Sustainability and Biodiversity (2013), there is a connection between sustainability and biodiversity. The ability of Earth's life support systems to continue exists in grave danger due to the uncontrollably high rate at which biodiversity is disappearing, as well as the continuously increasing human population and consumption rates. According to Okuh et al. (2021), diminishing biodiversity also implies missing out on ecosystem services, which are vital to human well-being. Therefore, if everyone wishes to better maintain our ecosystems, people need sustainable biodiversity and natural habitat management.

On the other hand, the tourism industry significantly influences the world's economy and plays an exceptional role in promoting environmental and social sustainability. However, its fast-moving growth is viewed as having affected local cultures and ecosystems. The growth of tourism has been so great that it has

caused harm to the environment and local cultures in a lot of places (Higgins-Desbiolles, 2018). Sustainable tourism communication is all about trying to solve these problems by encouraging methods that will make sure that tourism brings money but does not damage the environment or society. Teaching holidaymakers through communication projects and influencing them towards making more sustainable choices is therefore very important.

Background of the Study

Although sustainable tourism communication can bring about positive transformation, it faces some difficulties. The tourism industry is a complex sector with conflicting interests and priorities that require careful planning to achieve economic growth while at the same time promoting ecological & social sustainability. Nonetheless, there are many chances for doing good. One of the destinations that benefited from tourism communication strategies is the Kinlangin Falls of the Municipality of Liliw in the Province of Laguna. Liliw is a 4th-class municipality in the province with a highland town, nestled close to the mythical mountain of Banahaw. Its topography offers natural attractions under the Mt. Banahaw-San Cristobal Protected Landscape (MBSCPL). Understanding the demand for tourism, destinations within Liliw can sustain their economic industry. However, the increase in the volume of tourist arrivals caused a dilemma. Thus, the researcher of this study would like to analyze the existing sustainable communication initiatives by solidifying the community's active involvement the contributions in formulating policies and guidelines for the growing tourism of Kilangan Falls.

Research Objectives

1. To determine the demographic profile of the respondents in terms of Age, Gender, and Educational Attainment
2. To evaluate the Knowledge of the respondents on the sustainability of the tourism communication initiatives at Kilangan Falls in Liliw, Laguna.
3. To examine the attitude level of the respondents on the sustainability of the tourism communication initiatives at Kilangan Falls in Liliw, Lagun
4. To determine respondents' practice level on the sustainability of the tourism communication initiatives at Kilangan Falls in Liliw, Laguna.
5. To evaluate if there is any significant difference between the extent of the respondents' Knowledge, Attitude, and Practices on the sustainability of the tourism communication initiatives at Kilangan Falls in Liliw, Laguna, and the demographic profile of the respondents when grouped according to Age, gender, and Educational Attainment?
6. To develop a Technical Evaluation and Content Analysis of IEC Materials

METHODS OF THE STUDY

This study employed the descriptive method, utilizing a questionnaire checklist and documentary analysis were the main data-gathering instruments. This method was used by the researcher since the intention of this study is to describe analytically an existing situation regarding the Knowledge, Attitudes, and Practices towards sustainability of Tourism Communication Strategies observed by the locals in Kilangan Falls, Liliw, Laguna.

Simple random sampling was used to select the respondents to validate the outcome of this study. The respondents were randomly selected using sloven formula to economize time, money, and effort and arrive just the same at the most reliable findings desired by the researchers. Lauren Thomas (2023) identified Simple random sampling as a method in which the sample was a randomly selected subset of a population.

The researchers employed adaptive questionnaires to prompt respondents to recollect a series of questions. These questions included multiple-choice questions that respondents marked accordingly. After validating

the questionnaire from three industry experts, the questionnaires were distributed and administered to the respective respondents from residents of Barangay Novaliches near Kinlangin Falls in Liliw, Laguna.

Several Tools were employed in gathering the needed information in this research, namely, Frequency Distribution and Percentage to identify the demographic profile of the respondents, Weighted Mean and 4 point Likert scales to determine the extent of the respondents' Knowledge, Attitude, and Practices on the sustainability of the tourism communication initiatives at Kilangin Falls In Liliw Laguna, and One-way ANOVA to see the significant difference between the extent of the respondents' Knowledge, Attitude, and Practices on the sustainability of the tourism communication initiatives at Kilangin Falls In Liliw Laguna and the demographic profile of the respondents when grouped according to Age, gender, and Educational Attainment.

RESULTS AND DISCUSSIONS

To determine the extent of the respondents' Knowledge, Attitude, and Practices on the sustainability of the tourism communication initiatives at Kilangin Falls in Liliw, Laguna, the following tables were presented below.

Table 1. Demographic characteristics in terms of Age, Gender, and Educational Attainment of the respondents.

Demographic Profile of the Respondents		Frequency	Percentage
Age	18-28	2	1
	29-39	200	68
	40-Above	90	31
Gender	Male	176	60
	Female	101	35
	Others	15	5
Educational Attainment	Elementary	50	17
	High School	228	78
	College	14	5

Table 1 shows the demographic profile of the 292 randomly selected respondents in terms of age using 10 intervals, gender, such as male, female, and others which pertains to the member of LGBTQ+ gender orientation, and educational attainment as categorized into their highest educational Attainment such as elementary, high school and college graduate. The table shows that in terms of age majority of the respondents belong to the age bracket of 29 to 39 (68 %) of 200 participants, and the rest were 31 percent for the age bracket of 40 and above for 90 responses and 1 percent from the responses of 2 for the age bracket of 18-28. Most of the respondents were male, 176 or 60 percent, followed by females, 101 or 35 percent, and others, such as LGBTQ+ gender orientation, 15 or 5 percent. The respondent's educational attainment was categorized into elementary with 50 or 17 percent, high school with 228 or 78 percent, which was marked as the highest, and college with 14 or 5 percent.

To strengthen the data, Gavenila et. al. (2019) communication styles affect the eagerness of the respondents to participate in surveys. Men tend to be direct in their communication. Women and the LGBTQ community, on the other hand, use more indirect or polite forms to avoid being considered rude. Male active participation in surveys can be attributed to communication styles and preferences related to the study format. These dynamics help survey methodology and the accuracy of data collection.

Moreover, Kennedy et. al. (2009) study stated that participants with post-school qualifications show higher interest rates in participation compared to those with lower educational attainment. The accuracy of the data collected is ensured by understanding these factors.

Table 2. The extent of Knowledge of the respondents on the sustainability of the tourism communication initiatives at Kilangan Falls in Liliw, Laguna

Description	Weighted Mean	Result	Verbal Interpretation
I am aware that Liliw practices sustainability of the tourism communication initiatives for Kinlangin Falls.	3.65	Strongly Agree	Very High
I am aware that Liliw incorporates sustainability messages into its communication materials.	1.90	Disagree	Low
I am aware that Liliw's sustainability in tourism Communication initiatives is long-term viability for Kinlangin Falls.	2.25	Agree	High
I am aware that Liliw's sustainability in tourism Communication initiatives implies ecotourism as the potential source of income for local communities, promotes conservation, and protects biodiversity.	3.51	Strongly Agree	Very High
I am aware that Liliw's sustainability in tourism Communication initiatives for Kinlangin Falls Attains and maintains a rational and orderly balance between socio-economic development and environmental protection.	3.56	Strongly Agree	Very High
Total	2.97	Agree	High

The table shows the extent of knowledge of the respondents on the sustainability of the tourism communication initiatives at Kilangan Falls in Liliw, Laguna. The majority of the respondents responded "Strongly Agree" or verbally interpreted as Very High of 3.65 weighted mean for statement "I am aware that Liliw practice sustainability of the tourism communication initiatives for Kilangan Falls" followed by 3.56 or Strongly Agree and verbally interpreted as Very High for the statement "I am aware that Liliw's sustainability in tourism Communication initiatives for Kinlangin Falls Attains and maintains the rational and orderly balance between socio-economic development and environmental protection", 3.51 or Strongly Agree and verbally interpreted as Very High for "I am aware that Liliw's sustainability in tourism Communication initiatives Implies ecotourism as the potential source of income to local communities, promote conservation, and protect biodiversity" while 2.25 or Agree and verbally interpreted to High for "I am aware that Liliw's sustainability in tourism Communication initiatives is a long-term viability for Kinlangin Falls", and 1.90 or Disagree and verbally interpreted as low for the statement "I am aware that Liliw incorporates sustainability messages into your communication materials"

This implies that the knowledge of the respondents on the sustainability of tourism communication initiatives in Kinlangin Falls in Liliw Laguna, with a composite mean of 2.97, or agree and verbally interpreted as high, recognizes the interconnectedness between tourism and the environment and seeks to ensure that tourism development is carried out in a way that is ecologically responsible and sustainable in the long term (Ecotourism Kenya, 2021).

Table 3. The extent of the attitude of the respondents on the sustainability of the tourism communication initiatives at Kilangan Falls in Liliw, Laguna

Description	Weighted Mean	Result	Verbal Interpretation
I believe that the sustainability of the tourism communication initiatives will help to protect, restore, and promote the sustainability of Kilangan Falls.	3.58	Strongly Agree	Very High
I believe that sustainability communication materials such as brochures, websites, and social media will strengthen in promoting Kinlangin Falls.	3.50	Strongly Agree	Very High

I believe that the long-term viability of sustainable tourism Communication initiatives will secure the protection of the Kinlangin Falls as one of the Mt. Banahaw-San Cristobal Protected Landscape (MBSCPL).	3.50	Strongly Agree	Very High
I believe that Liliw's sustainability in tourism Communication initiatives for Kinlangin Falls will minimize environmental impact.	3.55	Strongly Agree	Very High
I believe that Liliw's sustainability in tourism Communication initiatives for Kinlangin Falls supports local culture, heritage, and economies.	3.57	Strongly Agree	Very High
Total	3.54	Strongly Agree	Very High

The table displays the breadth of respondents' attitudes on the sustainability of tourism communication initiatives at Kilangin Falls in Liliw, Laguna. The highest weighted mean was 3.58 or Strongly Agree verbally interpreted as Very High for "the sustainability of tourism communication initiatives will help to protect, restore, and promote the sustainability of Kilangin Falls," followed by 3.58 or Strongly Agree verbally interpreted as Very High for "sustainability in tourism communication initiatives for Kinlangin Falls supports local culture, heritage, and economies." Furthermore, "sustainability in tourism communication initiatives for Kinlangin Falls will reduce environmental damage" had a weighted mean of 3.55 or Strongly Agree and was orally evaluated as Very High, but "sustainable tourism communication initiatives will assure the protection the Kinlangin Falls as one of Mt. Banahaw-San Cristobal Protected Landscape (MBSCPL)" and "sustainability communication materials such as brochures, websites, and social media will strengthen in promoting Kinlangin Falls" both have a weighted mean of 3.50 or Strongly Agree and verbally interpreted as Very High.

The composite mean of respondents' attitudes toward the sustainability of tourism communication initiatives at Kilangin Falls in Liliw, Laguna is 3.54, or highly agree, which is orally characterized as extremely high (Alcantara, 2024). Furthermore, when tourism enterprises implement environmentally friendly methods, they contribute to the destination's economic well-being. This draws tourists while lowering resource use. By promoting economic well-being, sustainable tourism ensures that the place stays appealing to future visitors, resulting in a self-sustaining loop.

Table 4. The extent of respondents' practice level on the sustainability of the tourism communication initiatives at Kilangin Falls in Liliw, Laguna

Description	Weighted Mean	Result	Verbal Interpretation
I collaborate with local communities to promote sustainable tourism communication initiatives for Kilangin Falls.	1.15	Disagree	Low
I ensure the sustainability of tourism communication initiatives by using eco-friendly materials for printed communication.	1.18	Disagree	Low
I am educating tourists about sustainable initiatives and practices in Kinlangin Falls	2.5	Agree	High
I support sustainable funding mechanisms for the implementation of tourism policies, plans, programs, projects, and activities for Kinlangin Falls in Liliw.	2.1	Agree	High
I support the tourism business in Kinlangin, tourists, and vloggers who actively communicate their sustainability practices and experiences at Kinlangin Falls.	2.7	Agree	High
Total	1.73	Disagree	Low

The table depicts the extent of the practice level regarding the sustainability of tourism communication projects at Kilangan Falls in Liliw, Laguna. The statement "Supporting the tourism business in Kinlangin, tourists, and vloggers who actively communicate their sustainability practices and experiences at Kinlangin Falls" had the most Agree votes, with a weighted mean of 2.70 and a verbal interpretation of High. Following that, "educating tourists about sustainable initiatives and practices in Kinlangin Falls" had a weighted mean of 2.50 and was judged as High. Furthermore, with a weighted mean of 2.10, the majority of respondents agree to "support sustainable funding mechanisms for the implementation of tourism policies, plans, programs, projects, and activities for Kinlangin Falls in Liliw".

Nonetheless, respondents disagree with "ensuring the sustainability of tourism communication initiatives by using eco-friendly materials for printed communication" (weighted mean = 1.18, interpreted as Low) and "collaborating with local communities to promote sustainable tourism communication initiatives for Kilangan Falls" (weighted mean = 1.15, interpreted as Low).

Thus, the composite mean for the extent of respondents' practice level on the sustainability of tourism communication initiatives at Kilangan Falls in Liliw, Laguna is 1.73 (Disagree), which is interpreted as Low, indicating that people living in Kilangan Falls do not practice the sustainability of tourism communications at Kilangan Falls in Liliw, Laguna.

Table 5. The significant difference between the extent of the respondents' Knowledge, Attitude, and Practices on the sustainability of the tourism communication initiatives at Kilangan Falls in Liliw, Laguna, and the demographic profile of the respondents when grouped according to Age, gender, and Educational Attainment.

Description	P - Value	Result	Decision
Age	0.011934739	Not Significant	The null Hypothesis is accepted
Gender	0.002345646	Not Significant	The null Hypothesis is accepted
Educational Attainment	0.030639164	Not Significant	The null Hypothesis is accepted

Table 5 shows the relationship between respondents' demographic characteristics, such as age, gender, and educational attainment, and the extent of their knowledge, attitude, and practices regarding the sustainability of tourism communication initiatives at Kilangan Falls in Liliw, Laguna. The data generated from the demographic feature of age has a p-value of 0.011934739, indicating that it is not statistically significant. Gender-specific demographic factors have a p-value of 0.002345646, indicating that they are not significant. The data obtained from the last demographic attribute in terms of educational attainment has a p-value of 0.030639164. The p-values for the demographic characteristics are considered the null hypothesis.

As a result, there is no significant relationship between the respondents' demographic characteristics (age, gender, and educational attainment) and the extent of their knowledge, attitude, and practices regarding the sustainability of tourism communication initiatives at Kilangan Falls in Liliw, Laguna.

TECHNICAL EVALUATION AND CONTENT ANALYSIS OF IEC MATERIALS

Development and dissemination of communication materials are essential in the conduct of programs and activities under Sustainable Development Goal 15: Life on Land. It helps in conveying the message of the entire project, hence allowing the target audience to be informed and aware of any changes or activities related to it. This can serve as a channel to address, motivate, and share information about important phenomena under the specified program. Information, Education, and Communication (IEC) materials include the following: *infographics, flyers, leaflets, brochures, social media posts, television advertisements, audio spots for radio, posters, billboards, or murals.*

However, the presence and use of IEC materials do not secure the success of the project or program. It may serve as a medium to convey messages from the project coordinator to its target audience, but it will not

guarantee a sure win and true victory since it will still depend on different aspects that are important to note. Before disseminating the prepared IEC materials, the management or the group must ascertain various facets that may affect the entire conduct of the program. This is why it is important to conduct a Technical Evaluation and Content Analysis of IEC Materials; in this way, the IEC Materials will be assessed in a more comprehensive process. Through evaluation of the IEC materials, it will provide clear, concise guidance on a variety of issues related to program design, implementation, and evaluation. Thus, the effectiveness of these materials depends on numerous things, but it is attainable through proper evaluation and monitoring. Some of the aspects that need to be noted are as follows: Appropriate format for the target audience, Location where print materials are posted, Text-heaviness, Graphic appeal, and use of pictures to convey information, Careful selection of information, and Language appropriateness.

Social Media Campaign / Digital Campaign. Digital campaigns today have become an indispensable instrument for environmental campaigns as they can reach large audiences, organize support, and lead to significant change. This allows advocates to reach local and even global audiences and disseminate information to hundreds of people in a certain geography. It is also cost-efficient compared to traditional forms of advocacy, wherein you'll spend money on printing posters or flyers. Posting and sharing advocacy content on social media costs cheaper or doesn't even cost you anything. Digital campaigns also enable interactive engagement with the audience through likes, comments, and shares. It provides real-time communication and interaction, which gives the organizers an idea of what the audience thinks about the advocacy. These interactions also allow organizers to adapt or create changes in their strategies as needed.

Educational Workshops and Seminars. Workshops and seminars are vital in educating, inspiring, and mobilizing people, and communication is a key component. This provides a platform to raise awareness and disseminate information about environmental issues. This kind of face-to-face interaction helps participants to understand the gravity of problems like climate change, pollution, deforestation, and biodiversity loss, fostering a sense of urgency and responsibility. It also provides practical tools and strategies to individuals and organizations to act. Participants can also learn how to implement practices they learned in their day-to-day activities.

Community Events. Community events such as clean-up drives, tree planting and reforestation, recycling drives, nature walks, festivals, and other environmental events are essential in engaging the public in environmental issues, promoting sustainability, and fostering a sense of collective responsibility towards the environment. These are aimed at educating, inspiring, and mobilizing communities to act.

Partnership and Collaborations. These partnerships and collaborations bring together diverse skills, resources, and networks, enhancing the impact and reach of these initiatives. It is very important as resources are shared. Collaborations bring together funds, thus reducing the financial burden on any single organization. Volunteers and staff also increase the manpower and expertise available for the event.

Policy Advocacy. Policy advocacy for environmental projects involves influencing public policy and decision-making processes to achieve favorable outcomes for environmental protection and sustainability. Effective advocacy can lead to the implementation of regulations, laws, and practices that support environmental goals.

ACTION PLAN (BASED ON THE KAP SURVEY RESULTS)

The Knowledge, Attitude, and Practices or KAP survey conducted among the residents of Kilangan Falls in Liliw, Laguna showed that the practice level on the sustainability of the tourism communication initiatives was low. This indicates that people living in Kinlangin Falls do not practice the sustainability of tourism communication initiatives. This urges the researchers to create an action plan that focuses on making the residents participate in the sustainable tourism initiatives in Kinlangin Falls.

Objectives of the Action Plan using the ACBD Approach

Audience	Kinlangin Falls in Brgy. Novaliches Liliw, Laguna residents
Behaviors	To encourage them to put into practice the sustainable tourism communication initiative at Kinlangin Falls, Liliw, Laguna
Degree and Condition	By the end of the campaign, more than half of the locals participated in the sustainability of the Tourism Communication Initiative at Kinlangin Falls.

MONITORING AND EVALUATION

Monitoring and Evaluation Purpose

Program evaluation is essential in determining the success of the program. The conduct of the program itself is challenging, hence implementing program evaluation, as it consists of the layout or the plan on how you will use your findings through the evaluation questions to generate informed decisions and guide action. That is why this evaluation plan is crafted to ensure the entailed objectives of the Action plan using the ABCD Approach (Audience, Behavior, Condition, and Degree) are being achieved accurately and effectively. Moreover, through this program evaluation, communication and campaign activities are being monitored and evaluated. This will help the project to analyze and make strategic decisions, minimize errors, and optimize its resources.

Scope and Focus of the Evaluation

The main objective of this paper is to create a Communication Plan that centers on crafting a Communication Campaign for Kinlangin Falls at Brgy. Novaliches Liliw, Laguna, to encourage its residents and other stakeholders to participate in its sustainable tourism initiatives. Therefore, this evaluation plan aims to monitor and evaluate the objectives of the Communication Plan to determine if the objectives are achieved successfully. This evaluation plan also helps in measuring the progress and assessing the activities and strategies that were implemented in the project.

Monitoring and Evaluation Indicators

The monitoring and evaluation indicator to be used in this paper is the Outcome Indicators. Thus, Outcome Indicators aim to examine the measurable changes in values, attitudes, behaviors, knowledge, skills, and conditions of the target audience of the Communication Campaign for Kinlangin Falls. Employing this, the project will gain insights and conduct a more thorough assessment of its participants that will help in determining if the communication campaign improved the engagement and participation of the residents in Brgy. Novaliches, Liliw, Laguna. Hence, this evaluation will focus on outcome indicators that may include:

1. Changes in Knowledge or Understanding: The degree to which the residents of Brgy. Novaliches, Liliw, Laguna, have gained knowledge or understanding of sustainable tourism initiatives through the project.
2. Changes in Behavior: The degree to which the residents of Brgy. Novaliches, Liliw, Laguna, have changed their behavior in a specific way as a result of the project.
3. Changes in Attitudes: The degree to which the residents of Brgy. Novaliches, Liliw, Laguna, have changed their attitudes towards sustainable tourism initiatives because of the project.

Data Collection Methods

To assess the performance of the project, this plan will conduct data collection methods for evaluation purposes and with available resources. Through surveys and focus-group discussions, the gathered data will be examined, which will provide the empirical basis for planning and determine continuing relevance and effectiveness. Surveys and Focus-Group discussions will be distributed and employed to the target audience

to obtain information related to the knowledge, behavior, and attitudes of the residents towards sustainable tourism initiatives for Kinlangin Falls.

Instrument/Pre-test content, type, and format

This paper will use different types of evaluation and basic Monitoring and Evaluation Activities for Communication Campaigns, such as Formative Evaluation, Process Evaluation, Summative Evaluation, and Impact Evaluation. The three types of evaluation will be conducted before, during, and after the implementation of the project. These evaluations are considered systematic data collection to assess project activities, accomplishments, and outcomes to measure their effectiveness and progress. Lastly, the Impact Evaluation will serve as a methodological approach to evaluation. This will help us determine the changes in Knowledge, Attitude, and Practices of the target audience that will guide us to identify successes and areas where improvements can be made.

REFERENCES

1. Alcantara, J. (2024). Sustainable tourism communication initiatives and their influence on community participation. *Journal of Environmental Tourism*, 12(1), 45–58.
2. Ecotourism Kenya. (2021). Principles and practices of sustainable tourism. Retrieved from <https://www.ecotourismkenya.org>
3. Gavenila, A. M., Santos, L. R., & Dela Cruz, M. P. (2019). Gender communication styles and survey participation: An applied sociological perspective. *Philippine Journal of Social Sciences*, 25(2), 89–101.
4. Higgins-Desbiolles, F. (2018). Sustainable tourism: Sustaining tourism or something more? *Tourism Management Perspectives*, 25, 157–160. <https://doi.org/10.1016/j.tmp.2017.11.017>
5. Kennedy, S., Tan, J., & Huang, P. (2009). Effects of educational attainment on survey participation: A demographic analysis. *Educational Studies Review*, 31(3), 204–210.
6. Okuh, M. A., Rivera, N. G., & Adeyemi, S. K. (2021). The biodiversity crisis and sustainable habitat management. *Environmental Conservation Letters*, 19(4), e03214.
7. Sustainability and Biodiversity. (2013). The link between biodiversity and sustainability. Earth Institute Reports. Retrieved from <https://www.earthinstitute.columbia.edu>
8. Thomas, L. (2023). Simple random sampling explained. In *Research Methods for Social Scientists* (pp. 67–80). Open University Press.
9. World Wildlife Fund (WWF). (2020). Protected areas: Key to conservation and sustainability. Retrieved from <https://www.worldwildlife.org/initiatives/protected-areas>.