



**Assessing Awareness and Attitudes Towards Environmental Conservation in the Tourists-Attracting Mountainous Regions:
Challenges and Policy Implications**

Muhammad Mubashir, Aziz Ullah , Marium Javed

¹Department of Geography, The Islamia University of Bahawalpur Pakistan

²Lecturer of Economics at Balochistan University of Information Technology,
Engineering and Management Sciences, Sub Campus Muslimbagh

³Lecturer Hamdard University of Management Sciences

ARTICLE INFO

Keywords:

Environmental Awareness,
Ecological Awareness
Tourist Communities

Corresponding Author:

Muhammad Mubashir,
Department of Geography,
The Islamia University of
Bahawalpur Pakistan

ABSTRACT

Global environmental challenges such as warming, air pollution, and ozone depletion have emerged. The purpose of this study is to disclose local and visitor knowledge, attitudes, and practices regarding environmental conservation in mountainous areas. Individuals' environmental awareness, concern, attitude, behavior, and academic background knowledge are potential factors that may assist in dealing with these challenges. We assessed the ecological awareness, concern, attitude, and behavior of the local and tourist communities in the mountainous area. Furthermore, the author also investigated how environmental awareness, concern, and attitude influence individuals' ecological behavior. A self-administered questionnaire was used to collect data, including some locals and other tourists from different areas. The survey analysis concluded that people are aware and think that environmental change is a time to be concerned, and people strongly agree on ecological pollution, which is causing serious problems. The study analyzes the individual's daily routine, attitude towards environmental conservation, and people's responses positively and takes part in saving our environment from degradation.

1.0 INTRODUCTION

The study of environmental history focuses on the evolution of human interactions with nature. Its inquiries into the ways in which humans engage with nature. More than half of the world's population now lives in modern towns, for instance. Additionally, human activity is changing nature on a regular basis. There are very few areas in Europe and fewer yet globally where humans have not influenced the environment; therefore, we may now refer to a man-made or even artificial nature. (Worster 1988). In practice, most of the historical work in this manner concerns the last 200 years when industrialization among other forces greatly enhanced the human power to modify environments. (Kollmuss &

(Agyeman, 2002) communities fight social battles over land and resource use, as well as soil conservation and pollution control. Political conflict over resources is as old as human societies and is almost universal. They would not use the term environmental history to describe battles between herders over pastures, but he would use it to describe battles over whether a particular patch of land should be used as pasture or farmland.

The difference is that the outcome of the struggle has far-reaching consequences for both the land and the people involved. In practice, policy-related environmental history dates only from the late 1800s, with a few exceptions for early examples of soil conservation, air pollution restrictions, or monarchical efforts to protect charismatic species for their own hunting pleasure. This is because states and societies did not begin to make systematic efforts to regulate their interactions with the environment until the late nineteenth century. Because these efforts were patchy and often had limited impact, the majority of this type of environmental history focuses on the decades since 1965, when both states and explicitly environmental organizations became more active in their efforts.

The third major subset of environmental history is cultural and intellectual history. It is concerned with what humans have thought, believed, written, painted, sculpted, sung, or danced about the relationship between society and nature. Evidence of this type can be found in Australian aboriginal rock shelter paintings and cave art from southwestern Europe dating back tens of thousands of years. However, as with intellectual history, the vast majority of this type of work is drawn from published texts and addresses environmental thought contained in major religious traditions or, more commonly, the works of influential (and sometimes not-so-influential) writers ranging from Mohandas K. Gandhi to Arne Naess. This type of environmental history focuses on individual thinkers. (Arshad et al., 2021)

“A true conservationist is a man who knows that the world is not given by his fathers, but borrowed from his children.” Environmental conservation is a practice that paves the way for individuals, organizations, and governments to protect the environment and natural resources. Mountains are among the most popular tourist destinations. Since the 1960s, their popularity has grown worldwide, and this trend is expected to continue. Mountain tourism includes mass tourism to popular destinations, the ski industry, adventure tourism (trekking, climbing, and rafting), cultural tourism, ecotourism, and trip planning..(Apollo, 2017)

A mountain ecosystem is complex, including elements of a different nature connected with each other in many different ways and creating the whole reality. Mountaineering can affect the natural environment by rail impact, anthropogenic microforms on rocks, trampling and vegetation damage, introducing new species of plants and animals, disturbance or attracting animals, disruption of the natural landscape by tourist infrastructure and climbing equipment, pollution by rubbish, noise and by participants.

This study focuses only on the mountaineering’s environmental impact. It is notable that in some parts of the world, the mountains are the only source of fresh water (80–100% in some tropical areas), so keeping them clean is extremely important. This clearly shows that mountain areas and their resources are important for billions of people not only those living within and in their immediate vicinity, but also downstream and farther afield.

Environmental awareness is an educational tool that helps people to understand the aesthetic, biological and economic importance of preserving the natural resources and minimizing the negative effects of man-made adaptations and alterations. Several studies have reported a low level of environmental awareness and negative attitude among the students, teachers and other groups of society. Even sometimes those students are found with low levels of environmental awareness and environmental behavior who have

attended several courses relating to environmental issues. But high level of environmental awareness among individuals influences positively in developing the responsible environmental behavior (Budowski, 1976).

Environmental attitude means affective beliefs of individuals regarding participation in activities that can improve the environment, their competence on environmental improvement and values toward the natural environment. Positive environmental attitude creates responsible environmental behavior among people. Environmental concern is another important factor that may develop environmental behavior in people. It involves the sensitivity of individuals toward existing environmental conditions and crises. Public initiatives are also essential for effective environmental protection. Unless environmental conservation is becoming an effective mass movement, it is pointless to expect positive growth especially in the age of digital media which holds the potential to bring a revolution to save our planet from destruction.

1.2 Research Objective

- To access the environmental behavior among local community and tourists.
- To access the environmental factor that effects the environment among local community and tourist.

2.0: LITERATURE REVIEW

Without the presence of a healthy ecosystem, human existence is practically impossible. The interconnections among living and non-living things inside a natural ecosystem make up our environment. Sustainable development is urgently required in order to protect mother earth from the effects of industrialization and human indolence. In recent years, the definition of the word "mountaineering" has changed. Mass tourism, rather than elite travel, is replacing mountaineering. (1976, Budowski) Mountaineers may also be classified into two main categories based on the participant's demands (motivation): adventure tourists (thrill-seekers, adventure-lovers, and extreme-sports enthusiasts) and tourists (faith).

The number of hikers using a particular mountainous region or mountain is significantly easier to determine. For example, about 300,000 people attempt to climb Mt. Fuji, Japan's sacred mountain, which is 3776 meters high, each year, and 50,000 people climb Mt. Kilimanjaro, Africa's 5895-meter-high peak. Tourist numbers in mountainous areas are comparable to those of the locals who live there year-round. For instance, the Himalayas hosted 46.8 million tourists in 2011 and are inhabited by approximately 52.7 million people. Domestic travelers, most of whom are pilgrims travelling to holy shrines in the High Himalayas, make up a significant portion of this total (45.3 million). About 4.7 million people travel through the high Himalayas annually, and the majority of the crowded paths in the mountains lead to temples that attract tens of thousands of pilgrims each year. As an illustration, over 635,000 pilgrims toured the Amarnath cave (3888 m) in 2011 but the Badrinath temple saw fewer visitors (Apollo, 2017).

In addition to having a wide variety of rich cultural antecedents, Pakistan is home to several beautiful parks, woods, gorgeous marshes, prodigious rivers, and estuaries. The two most famous national parks in Pakistan are Ayubia and Saiful Malook. Studies show that national parks have a major economic impact on the host and nearby communities (especially during the summer season), attracting thousands of tourists who come to enjoy the natural beauty of the target area but with little or no recorded visitation during the winter months due to glacier activity in the region.

Each year, high-mountain regions are frequented by millions of mountain climbers. They produce the tones on the face. The conservation and management of high-mountain environments depend on the proper disposal of human waste. Changes in altitude or degree of development could have an impact on human waste disposal. A rise in

developmental stage has little effect on screening tests, either. The issue is more pervasive than initially believed.

Ecological contamination is a major concern in order to improve life quality and ensure the sustainable use of resources. Environmental contamination and resource overuse have. There are several forms of environmental degradation. A key worldwide concern is considered to be human health. The lungs, kidneys, liver, and heart are just a few of the organs that environmental degradation can impair. A comprehensive study found that around 23% of all deaths in the world were linked to the environment. Similar to how it affects people, communities, populations, ecosystems, or biospheres, industrial contamination can have an influence at any stage of the environment. increased as a result of rapid urbanization, industrialization, and agriculture. The implications for both people and the environment are huge.

Habitat fragmentation, functional issues, population reduction, species extinction, and many other things are examples of ecological impacts. Estimates show that 40% of the bodies of water on the planet are oceans (Foxall et al., 2006). For the preservation of natural resources, meaningful changes in human behavioral patterns are desired. People who are top players may, for instance, employ recyclable and reusable items, water-saving gadgets, energy-efficient appliances, and so forth, which might ultimately limit environmental destruction. Additionally, they can work to decrease ecological damage or even generate environmental benefits. The key thing that can reduce environmental issues is pro-environmental conduct. Environmental concern, environmental attitude, and environmental consciousness are three key influencing elements that might aid in enhancing people's environmental behavior (Arshad and others, 2021).

Many different ethical, practical, artistic, and financial considerations have driven environmental conservation throughout history and all around the world. However, a recent and extensively reported conservation effort minimizes the intrinsic value of nature in favor of a conservation ethic that is essentially human-centered. This perspective, promoted by well-known proponents, has garnered substantial press coverage and has been advanced in both popular and academic publications. This movement wants a drastic transformation in its core policies and guidelines but rather a minor increase in conservation measures. "A new conservation approach should aim to improve those natural systems that benefit the greatest number of people instead of protecting endangered species for the sake of biodiversity," says the author. There are many problems with conventional conservation strategies.

I conservation puts the preservation of biodiversity ahead of the needs of people, which continues to damage underprivileged groups and hinder economic growth. (ii) Because conservation is predicated on the idea of a pristine environment, its main objective is to protect and recreate this unreal state:

We create amusement parks that are works of human art on par with Disney Land. (iii) Environmentalists mistakenly believe that because the environment is already vulnerable, anthropogenic climate change will cause irreversible harm to it as well. However, nature is incredibly robust and can bounce back quickly from even the most severe human disturbances (IV) Conservation has not succeeded in preserving biological diversity. Despite the fact that we have established a large number of protected areas, extinctions and ecological degradation persist. "Protecting biodiversity for its own sake has failed." (v) Socially, conservation is failing as well, with declining support from a predominantly white, wealthy minority: "Conservationists are losing the struggle to safeguard nature because they are failing to connect with the hearts, concerns, and minds of a large part of the American population," the author writes. (2010) Hughes

Agenda 21 at the 1992 Rio de Janeiro Conference has made sustainable development a key component. Global development priorities include meeting human

needs while observing environmental constraints. The International Union for the Conservation of Nature (IUCN) defines sustainable development as the ability to uphold a linear sequential flow notion, giving a principal or state the ability to enhance the quality of human life while residing within the carrying capacity of supporting ecosystems. The long-term stability of the economy and environment is the goal of sustainable development. This is only possible if economic, environmental, and social considerations are taken into account throughout the entire decision-making process. Abdul-Halim and others, 2021

In order to achieve the idea of sustainable development, factors including social, economic, and ecological must work together to assure the nation's long-term viability. Adopting green policies but also rigorous regulation is a crucial technique to achieve environmentally friendly development. This will ensure that the environmental sustainability system is safely managed without harming the natural environment. But if individuals lack environmental education and awareness, environmental laws and legislation won't be effective on their own. The administration therefore stresses environmental education as one of the strategies to inform and increase awareness about the atmosphere during the first several years of school. This is due to the fact that education is a never-ending process of developing human resources. The ability to distinguish between good and bad, as well as to be perceptive, intelligent, and understanding

Because it may convert a culture from one that is backward to one that is sophisticated and civilized, literacy is the most potent force for change in society and life. Since the early 1960s, environmental education has evolved to inform people about the biophysical environment and its issues. Due to population expansion, pollution, and the natural resource loss at the time, people had to confront environmental degradation. It attempts to develop a population of people who possess the information, abilities, attitudes, motivation, and dedication necessary to work both individually and collectively to address present environmental issues and stop the emergence of future ones. Through environmental education, one can improve their knowledge of the environment and become more conscious of the need to protect and preserve it. Environmental education According to Dienno and Hilton, this is the cornerstone of building an ethical society. Abdul-Halim and others, 2021

The ongoing loss, fragmentation, and degradation of natural and modified ecosystems are the ecological trends that Pakistanis are most concerned about right now. Forests, freshwater and marine habitats, as well as the ongoing extinction of numerous native plant and animal species, are part of this. Some have already gone extinct, many are vulnerable on a global scale, and yet more are of national concern. Four mammal species, as well as the one-horned rhinoceros, the swamp deer, the tiger, and the lion, have been documented to have gone extinct in Pakistan in the past 400 years. The Asiatic cheetah, the Hangul, and the Black Buck all went extinct recently. There are 37 species and 14 sub-species of mammals that are listed as being present in Pakistan on the most official "IUCN Red List of Threatened Animals (1996)". Ten kinds of reptiles and 25 bird species that were already vulnerable globally are also present. The development and dissemination of a discourse on global ecology that has arisen over the past thirty years is deeply linked to the increase in international conservation efforts in northern Pakistan. Although the protection of biodiversity is emphasized in this discourse, the concept of a global environmental commons serves as its foundation. The dominance of "global ecology" has resulted in part from the ability of transnational institutions to generate and disseminate information as well as from their control over access to the resources that governments can utilize to further their development objectives. International organizations like IUCN emphasize their non-governmental status as evidence of their unbiased viewpoint, but what enables

them to transcend nationalist concerns is the way they have conceptualized environmental problems as global problems.

The concept of biodiversity has been crucial to this output because it has combined a variety of environmental ideas, including more specific ones like habitats or ecosystems, into one crucial topic: the preservation of global biodiversity. A worldwide representation of a linked web of life and the claim that biodiversity must be preserved for human survival have made biodiversity the dominant symbol in people's conceptions of the ecological catch. Due to this, worldwide bio governance has emerged, which is reflected in the growth of institutional ecology in international organizations like the IUCN, WWF, and GEF. These groups have established themselves as powerful defenders who use their position to outline environmental issues on a worldwide scale, propose remedies, and have an impact on local and state politics. These organizations frequently serve as a conduit between national governments and supranational organizations and have an impact on the creation of worldwide scientific research initiatives that shape the official environmental agendas of many governments in developing nations. 2009 (Scherrer)

An understanding of how institutions participate in the development of a global scale and use the power linked to it to acquire physical and ideological access to specific localities requires an understanding of these relationships between politics, science, and institutions. Rosen (1991) defined organizations as "devices for the attainment of goals and instruments of power, underlain and mediated by cultural and ideational elements." If we accept this description, we can start to see how the concept of scale is both an instrument in that process and a basis for the formulation and attainment of institutional goals. Regardless of the reaction, however, people continue to be confronted with the pressure to defend and replace local traditions or behaviors in order to conform to the IUCN's institutional movement. Demand and response may not always coincide, but a response is always given, and it does so inside and via a network of local power relations that is becoming more interconnected with these institutions that function remotely. (2004) (MacDonald) In Western societies, government, the private sector, and civil society have all traditionally overlapped. However, the nation state's ability to influence development and take on environmental and social issues has greatly decreased as a result of the ongoing globalization of markets and society, as well as the growing importance of multinational firms and new electronic communication technologies. Non-governmental organizations' (NGOs) performance measurement and began to play a more significant role in the political and social environments as a consequence of this new transfer of power. Thus, NGOs are now actively involved in many decision-making processes in important areas, including human rights, poverty reduction, and environmental protection. The third party, the private sector, is significantly impacted by this continuously growing engagement.

Business now has a wide range of new obligations to society and the environment, in addition to its role as the planet's leading sociopolitical power. Most NGO-business contacts revolve around these obligations, with the NGOs acting as the interests of society and/or the environment, thereby representing their basic principles and views. Therefore, it may be claimed that an NGO's value set, as well as changes to it, are crucial for any business since they indicate prospective subjects and challenges that the NGO might address. In Pakistan, the Ministry of Environment was founded in 1975 as an outcome of the Stockholm Declaration of 1972. Up until 2010, the Islamic Republic of Pakistan's 1973 constitution permitted both the federal and provincial legislatures the authority to enact environmental laws. The Pakistan Environmental Protection Ordinance, the first comprehensive environmental law, was conceived and drafted by the ministry in 1983. (PEPO) The primary goal of PEPO as federal legislation was to establish the Pakistan Environmental Protection Council (PEPC), which is presided over by the President of

Pakistan, as the nation's top environmental policy-making body. The Pakistan Environmental Protection Agency (PEPO) at the federal level and four environmental protection agencies at the provincial level are responsible for enforcing the PEPO's requirements. Without full rules for the regulation of land use, air, water, or noise pollution, marine pollution, biodiversity, or dangerous substances or activities, PEPO simply offered an institutional structure for enforcement and the preservation of the environment. Pakistan attended the Earth Summit in 1992 and joined a number of international agreements at the same time. This sped up the nation's process of passing environmental laws. In the same year, Pakistan created its National Conservation Strategy (NCS). The NCS offers a comprehensive framework for tackling environmental issues throughout the nation.

The first National Environmental Quality Criteria (NEQS), encompassing 32 liquid and 16 gaseous characteristics, were notified under PEPO in 1993. They set standards for industrial and municipal effluent and air emissions. In an effort to fill legal inadequacies, the Pakistan Environmental Protection Act, 1997 (PEPA) superseded the previous legislation, PEPO. Baluchistan enacted the Baluchistan Environmental Protection Act, 2012 after the 18th Amendment, while Punjab accepted the Punjab Environmental Protection (Amendment) Act, 2012 (Punjab Act) 2 with minor revisions (Baluchistan Act). 3. PEPA has been significantly expanded by the Baluchistan Act, and new environmental provincial laws are currently being drafted for Khyber Pakhtunkhwa (KPK) and Sindh. The original structure stipulated under PEPA, which is described here, shall endure till the adoption of the provincial environmental legislation in KPK and Sindh. The issuance of provincial laws will be at the discretion of each provincial assembly because the 18th amendment makes no mention of any specified schedules or deadlines for the changeover. The Asian Development Bank (ADB) began working on a project in Pakistan in 2011 titled "Building Capacity for Environmental Prosecution, Adjudication, Dispute Resolution, Compliance, and Enforcement in Asia." In March 2012, ADB hosted an environmental conference for the South Asian Association for Regional Cooperation (SAARC) with assistance from the Committee for Enhancing Environmental Justice (CEEJ), a group of judges from the High Court and Supreme Court, as well as the International Union for Conservation of Nature (IUCN). Ahsan and Khawaja (2013)

3.0 Materials and Method

A questionnaire-based data collection strategy is used in this quantitative investigation. An authority on the subject approved the questionnaire to guarantee its consistency and relevance, and SPSS software was used to analysis the data. The population that was being studied was from a separate region of Pakistan, and there were a total of 70 respondents who represented various age categories. The questionnaire was divided into six pieces. Socio-demographic data is included in the first part. Which of the following is a closed-ended question? Examples include gender, educational level, and race. The last five sections deal with factors and their effects, the world's contribution, personal attitudes, social platforms, and environmental sustainability. There was Likert-scale questions for each of these sections, ranging from strongly agree to strongly disagree.

3.1 Data Collection

Well-planned field surveys are conducted to collect the primary data from direct personal interviews of the visitors. The pleasant weather days of the month of June in 2022 in the Northern Area are selected to conduct the surveys to gain the maximum response from the locals and visitors. These are the months of vacation, and many people visit the north on these days. So, a good survey was conducted there. The questionnaire was translated into the local Urdu language to gain the most accurate response from the locals and visitors. The second part of the field survey was an in-depth interview with the locals to gather more information about the area from when to now. The last part of the

field investigation was general behavior observation of local people or visitors towards environmental conservation. Secondary data for my research was obtained from articles and journals. This data was collected to help me in the introduction and the literature review.

3.2 Data Analysis

After collecting the data, the data is processed and analyzed in SPSS to get the frequencies and percentages of each response. All items are examined based on descriptive analysis. The cumulative percentage is used to examine the significant role of respondents. The values of all items for every section of the questionnaire are computed and analyzed.

Figure 3.1 Destination information of respondents

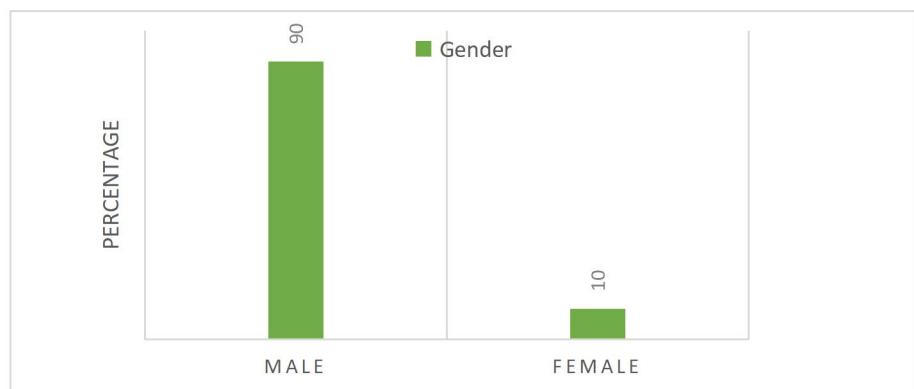


Source: field survey (2022)

Figure 3.1 shows the destination information of respondents. Most visitors came here from different areas of the destination. 14.3% of visitors are found in the city of Nathia Gali, 17.1% of visitors are found in the city of Donga Gali, 10.0% of visitors are found in the city of Lungal, 18.6% of visitors are found in the city of Ayubia, 32.9% of visitors are found in the city of Murree, and 7.1% of visitors are found in the city of Darwaza.

4.0 Results and Discussions

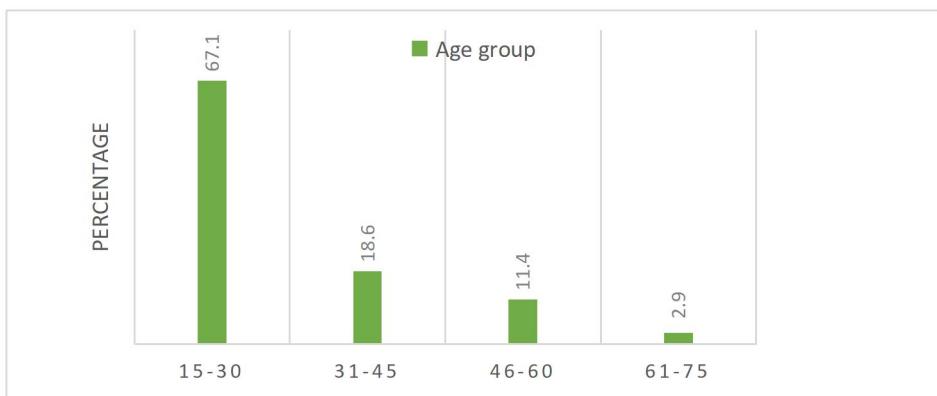
Figure 4.1: Gender information of respondents



Source: field survey (2022)

Figure 4.1 show that 90% of visitors are men and 10% are women. The majority of respondents are male tour groups from high schools and colleges who came here. Females are in the minority because they came here with their families.

Figure 4.2: Age group of respondents



Source: field survey (2022)

Due to the fact that the majority of visitors in this age range are students on school, college, or university tours, the 15- to 30-year-old age group accounts for 84.3 percent of those who visit these sites. Locations 8.6% of visitors are between the ages of 31 and 45, 4.3 % are between the ages of 46 and 60, and 1.4 % are between the ages of 61 and 75, and 1.4 % are over 75.

Figure 4.3: Occupation information of respondent

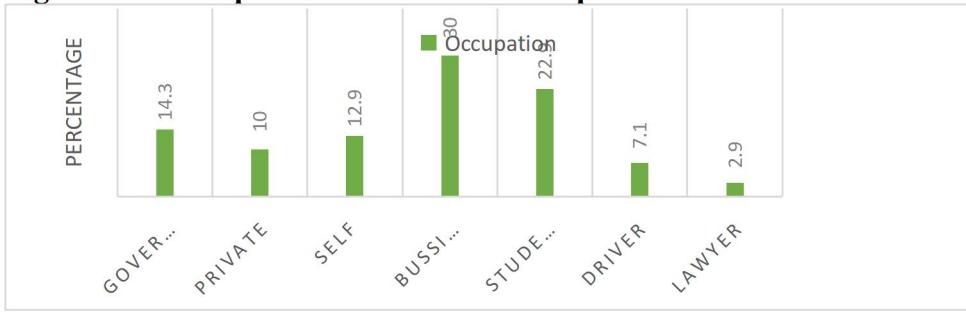


Figure 4.3 shows Occupation is another indicator for assessing visitors' social and economic standing. Because most visitors are students who earn nothing while studying, the majority of visitors (30.0 percent) are in the business category. 22.9 percent are self-employed, and the majority of their work is done online, such as freelancing. 12.9 percent are employed by the private sector, while 11.4 percent are employed by the government. 14.3% are drivers, 7.1% are lawyers, and 2.9 percent are both.

Figure 4.4: Education level of respondents



Source: field survey (2022): Figure 4.4 shows that most visitors are found in the study area. 34.3% graduate because most students came here for a study tour in their final year. 2.9%

post-graduation, 20.0% are intermediate, 27.1% metric, 1.4% middle, 4.3% primary, and 5.7% illiterate. 4.3% LLM.

Table 4.1: Language information of respondents

Language	Frequency	Percent	Valid Percent	Cumulative Percent
Urdu	21	30.0	30.0	30.0
Punjabi	12	17.1	17.1	47.1
Pashtun	8	11.4	11.4	58.6
Saraiki	3	4.3	4.3	62.9
Hindkoh	23	32.9	32.9	95.7
Other	3	4.3	4.3	100.0
Total	70	100.0	100.0	

Source: field survey (2022)

Table 4.1 shows the respondents' language information. The majority of visitors came from various parts of Punjab. The majority of visitors (30.0 percent) speak Urdu. Following that, 17.1% speak Punjabi, 11.4% Pashto, and 32.9 percent Hindko. This area's Hindko speaker are locals. Saraiki makes up 4.3 percent of the population, while other languages make up 4.3 percent.

Table 4.2: Income information of respondents

Income	Frequency	Percent	Valid Percent	Cumulative Percent
>5000	26	37.1	37.7	37.7
5000_20000	11	15.7	15.9	53.6
21000_35000	14	20.0	20.3	73.9
36000_50000	9	12.9	13.0	87.0
51000_65000	3	4.3	4.3	91.3
<400000	6	8.6	8.7	100.0
Total	70	100.0	100.0	

Source: field survey (2022) Table 4.2 depicts the income of respondents who visit environmental conservation sites in mountainous areas. 5000 accounts for 37.1% of visitors, while 15.7% of visitors have an income of 5000_20000, 20.0% have an income of 21000_35000, 12.9% have an income of 36000_500000, 4.3% have an income of 51000_650000, and 8.6% have an income of 400000.

Figure 4.5: Caste information of respondents

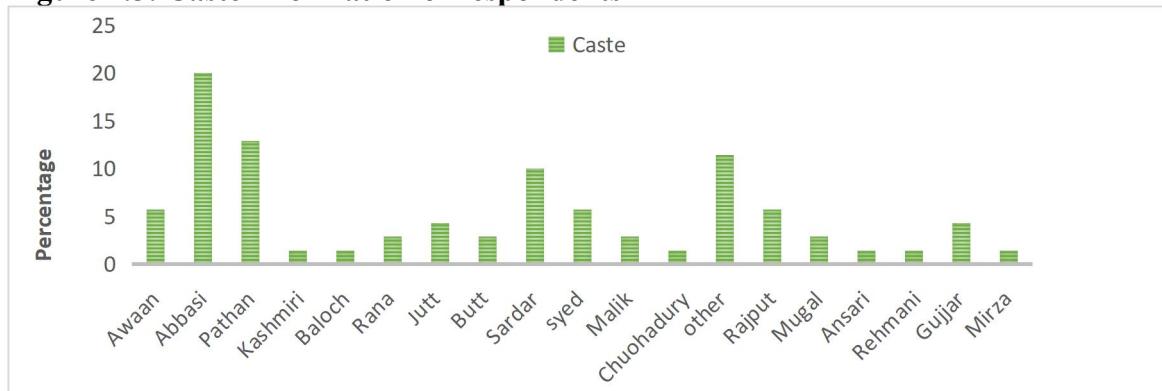


Figure 4.5 shows the caste of respondents who go to environmental conservation sites in mountainous areas. 5.7 percent are Awaan, 20.0 percent are Abbasi, 12.9 percent are Pathan, 1.4 percent are Kashmiri, 1.4 percent are Baloch, 2.9 percent are Rana, 4.3 percent are Jutt, 2.9 percent are Butt, 10.0 percent are Sardar, 5.7 percent are Syed, 2.9 percent are Malik, 1.4 percent are Choudhury, 11.4% are other, 5.7 percent are Rajput, 2.9 percent are Mughal, 1.4

Table 4.3: Family Member information of respondents

Family Member	Frequency	Percent	Valid Percent	Cumulative Percent
<2	2	2.9	2.9	2.9
1_5	21	30.0	30.0	32.9
6_10	42	60.0	60.0	92.9
11_15	3	4.3	4.3	97.1
21_25	2	2.9	2.9	100.0
Total	70	100.0	100.0	

Table 4.3 show the Family member of respondents who visit these areas that< 2 family member comprise 2.9% visitor, 30.0% of visitors are found in the Family member of 1_5, 60.0% of visitors are found in the Family member of 6_10, 4.3% of visitors are found in the Family member of 11_15, 2.9% of visitors are found in the Family member of 21_25

Figure 4.6: Environmental Pollution Causing Problem

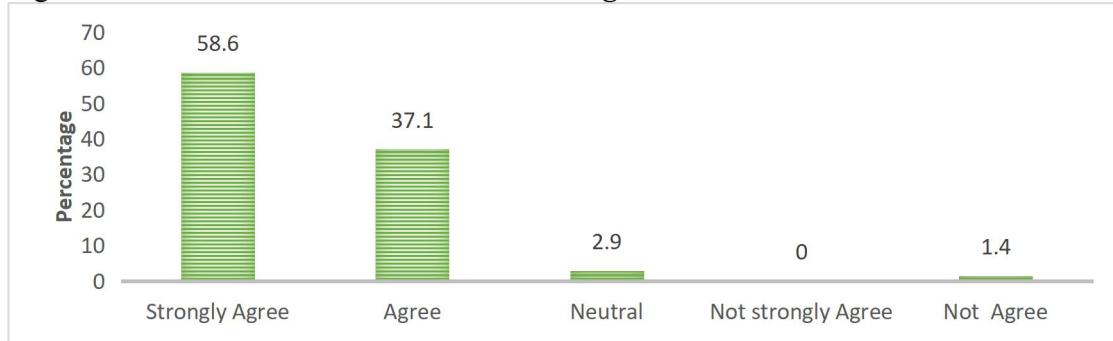


Figure 4.6 shows the visitor's Environmental Pollution Causing Ecological Extinction Problem. The statement "It is caused by loss and degradation of natural habitat" was strongly agreed on by 58.6 percent of visitors, agreed by 37.1 percent of visitors, neutral by 2.9 percent of visitors, not strongly agreed by 0 percent of visitors, and strongly disagreed by 1.4 percent of visitors.

Figure 4.7: Animal is not free in their habitat and is bound in specific area due to development.

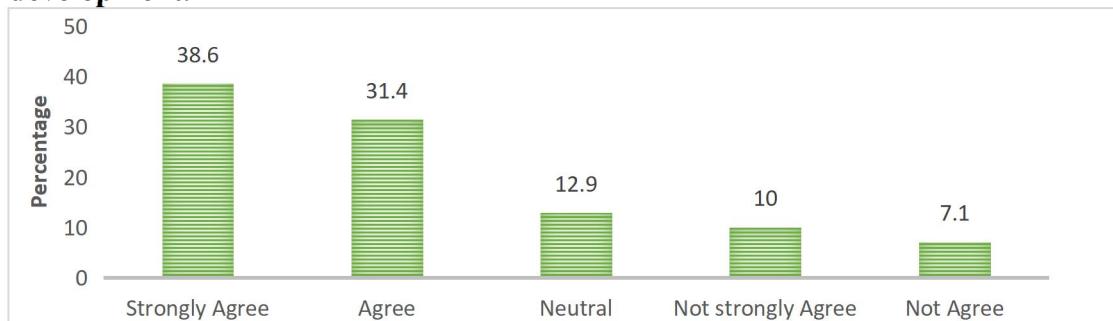


Figure 4.7 shows the visitor's environmental pollution-causing problem, ecological extinction. 38.6% of visitors strongly agreed on the statement that "Animals are not free in their habitat and are bound in specific areas due to development". 31.4 % of visitors rated it as agreed, 12.9 % of visitors rated it as neutral, 10.0 % of visitors rated it as not strongly

agreed, and 1.4 % said animals are not free in their habitat and are bound in specific areas due to development is just not agreed. The highest average of 62.96% is the visitor's ecological extinction agreed to for the statement " Climate Change is causing floral extinctions". The lowest visitor's ecological extinction was found to be for the statement that "animals are not free in their habitat and are bound in specific areas due to development." It shows that from ecological extinction, visitors were more inclined to the environmental pollution-causing problem.

Figure 4.8: Land degradation is the cause of lack of natural resources

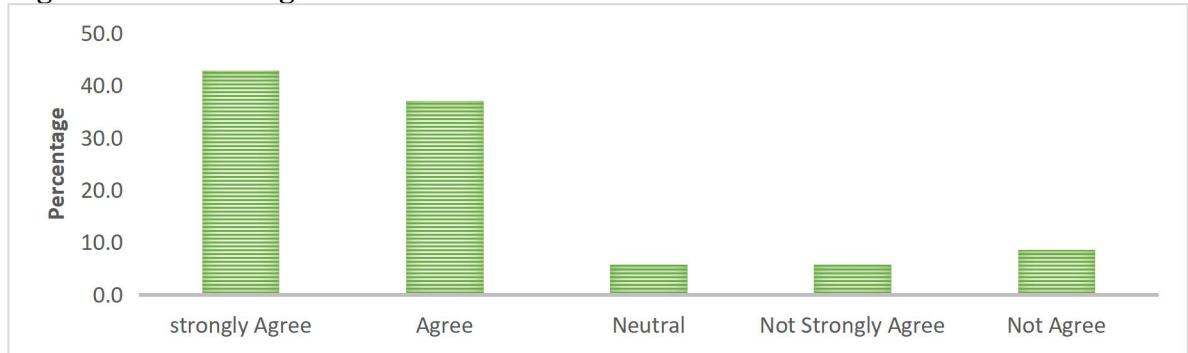


Figure 4.8 this shows the visitor's environmental pollution-causing problem: land degradation. 42.9% of visitors strongly agreed on the statement that "Land degradation is the cause of the lack of natural resources". 37.1% of visitors rated it as agreed, 5.7% of visitors rated it as neutral, 5.7% of visitors rated it as not strongly agreed, and 8.6 % said that land degradation is the cause of the lack of natural resources is just not agreed.

Figure 4.9: Cutting trees lead to land degradation

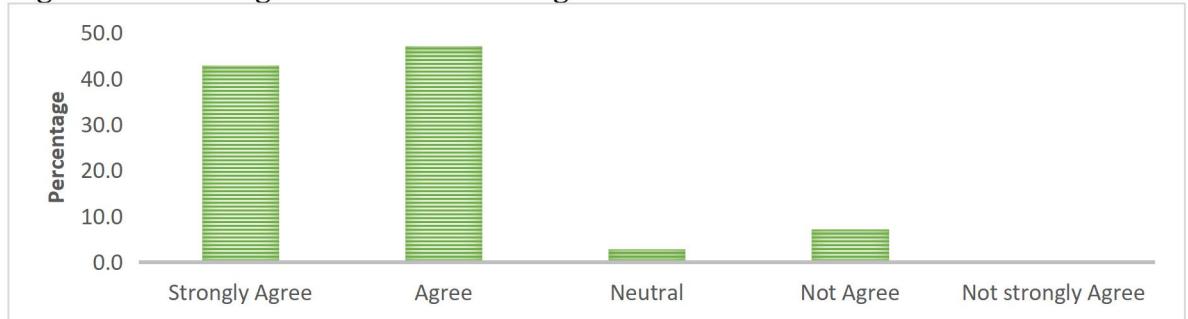


Figure 4.9 this shows the visitor's environmental pollution-causing problem: land degradation. 42.9% of visitors strongly agreed with the statement that "Cutting trees leads to land degradation." 47.1 % of visitors rated it as agreed, 2.9 % of visitors rated it as neutral, 0 % of visitors rated it as not strongly agreed, and 7.1 % said that cutting trees leads to land degradation is just not agreed.

Figure 4.0: Major infrastructure development causes and degradation

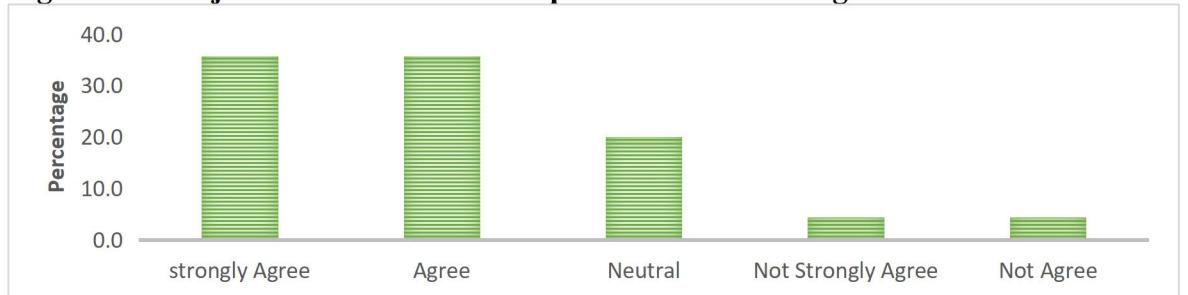


Figure 4.10 shows the visitor's environmental pollution-causing problem: land degradation. 35.7% of visitors strongly agreed with the statement that "Major infrastructure development. 20.0% of visitors agreed with it, 20.0% agreed with it, and 20.0% agreed with it. 4.3% of visitors rated it as not strongly agreed, and 4.3 % said that

major infrastructure development causes land degradation is just not agreed. The highest average of 48.6 % is visitor's land degradation strongly agreed with the statement. "Land Degradation increases the land sliding". Lowest visitor's land degradation found to be for the statement that " Major infrastructure development causes and degradation. It shows that because of land degradation, visitors were more inclined to the environmental pollution-causing problem.

Table 4.4: Deforestation

Variables	Strongly Agree	Agree	Neutral	Not strongly Agree	Not Agree
Human need become the cause of deforestation.	44.3	42.9	5.7	1.4	45.7
Use of paper and wood in our daily of deforestation.	32.9	54.3	57.1	1.4	4.3

Source: field survey (2022)

Table 4.4 this shows the visitor's environmental pollution-causing problem. 44.3% of visitors strongly agreed on the statement that "Human needs become the cause of deforestation". 42.9% of visitors rated it as agreed, 5.7% of visitors rated it as neutral, 1.4% of visitors rated it as not strongly agreed, and 5.7 percent said human needs become the cause of deforestation. It is just not agreed. This shows the visitor's environmental pollution-causing problem. 32.9% of visitors strongly agreed on the statement that "Use of paper and wood in our daily deforestation". 54.3% of visitors rated it as agreed, 7.1% of visitors rated it as neutral, 1.4% of visitors rated it as not strongly agreed, and 4.3 percent said that use of paper and wood in our daily deforestation is just not agreed. The highest average of 57.1% is the visitor's deforestation neutral for the statement. use of paper and wood in our daily deforestation. The lowest visitor's deforestation was found to be for the statement that " Human needs become the cause of deforestation." It shows that from deforestation, visitors were more inclined to the environmental pollution-causing problem.

Table 4.5: Waste Disposal

Variables	Strongly Agree	Agree	Neutral	Not strongly Agree	Not Agree
Waste Disposal areas destroy the scenic beauty.	70.0	22.0	4.3	2.9	0
Waste Disposal Causes skin.	27.1	45.7	17.1	1.4	8.6

Table 4.5 shows the visitor's environmental pollution-causing problem with waste disposal. 70.0% of visitors strongly agreed on the statement that "Waste disposal areas destroy the scenic beauty". 22.9% of visitors rated it as agreed, 4.3% of visitors rated it as neutral, 2.9 % of visitors rated it as not strongly agreed, and 0 % of visitors rated it as just not agreed. The visitor's waste disposal problem is caused by environmental pollution. 27.1% of visitors strongly agreed on the statement that "Waste Disposal Causes Skin". 45.7% of visitors rated it as agreed, 17.1% of visitors rated it as neutral, 1.4% of visitors rated it as not strongly agreed, and 8.6 %said that visitors' waste disposal causes skin is just not agreed. The highest average of 70.0% of the visitor's waste disposal strongly agreed with the statement. "Waste Disposal areas destroy the scenic beauty". The lowest visitor's waste disposal was found to be for the statement that " Waste Disposal Causes Skin." It shows that from waste disposal visitors were more inclined to the Environmental Pollution Causing Problem.

Table 4.6 Contribution of Wastes to Environmental.

Variables	70%	50%	30%	10%	Less than 1%
Household Garbage	25.7	20.0	10.0	31.4	12.9
Tourist Garbage	40.0	27.1	11.4	10.0	11.4
Fossil Fuel Burning	24.1	37.1	24.3	10.0	4.3
Infrastructure	14.3	31.4	37.1	10.0	7.1
Single use Plastic Waste	24.3	27.1	17.1	22.9	8.6

Source: field survey (2022)

Table 4.6 depicts the visitors' waste contribution to the environment. 27.7% of visitors 70% on the statement that "Household Garbage". 20.0% of visitors rated it as 50%, 10.0% of visitors rated it as 30%, 31.4 % of visitors rated it as 10%, and 12.9 % said that visitors' household garbage is just less than 1. It depicts the visitor's waste contribution to the environment. 40.0% of visitors agreed with the statement that "Tourist Garbage". 27.1% of visitors rated it as 50%, 11.4% of visitors rated it as 30%, 10.0 % of visitors rated it as 10%, and 11.4% of visitors said that visitor tourist garbage is just less than 1%.

It depicts the visitor's waste contribution to the environment. 24.1% of visitors gave the statement "Fossil Fuel Burning" a 70% rating, 37.1% gave it a 50% rating, 24.3% gave it a 30% rating, 10.0% gave it a 10% rating, and 4.3% said that visitors' fossil fuel burning is less than 1%. It shows the visitor's waste contribution to the environment. 14.3% of visitors gave the statement "Infrastructure" a score of 70%, 31.4% gave it a score of 50%, 37.1% gave it a score of 30%, 10.0% gave it a score of 10%, and 7.1% said it was less than 1%.

It illustrates the visitor's waste contribution to the environment. 24.3% of visitors 70% on the statement that "Single Use Plastic Waste", 27.1% of visitors rated it as 50%, 17.1% of visitors rated it as 30%, 22.9% of visitors rated it as 10%, and 8.6% said that visitors' single use plastic waste is just less than 1%. The visitor's contribution of waste to the environment has the highest average of 40.9%. 70 % for the statement "Tourist Garbage". Lowest visitor's deforestation found to be for the statement that "Infrastructure". It demonstrates that visitors to infrastructure were more likely to contribute waste to the environment.

Table 4.7 Individual level (at Guesthouses) Attitude towards environmental Conservation

Variables	Strongly Agree	Agree	Neutral	Not strongly Agree	Not Agree
I turn off the lights when not in use.	60.0	38.6	0	0	1.4
I turn off the Shower while taking bath	32.9	47.1	5.7	8.6	5.7
I turn off the tap While brushing	31.4	38.6	15.7	11.4	2.9
I always use Bin for trash	32.9	54.3	4.3	0	8.6
I avoid single use Plastic	35.7	27.1	21.4	4.3	10.0
I avoid frequent paper use	37.1	22.9	27.1	7.1	5.7
I prefer Public transport	55.7	15.7	12.9	10.0	5.7

Source: field survey (2022)

Table 4.7 it shows the visitor's individual attitude towards environmental conservation. 60.0% of visitors strongly agreed on the statement that "I turn off the lights when not in use". 38.6% of visitors rated it as agreed, 0% of visitors rated it as neutral, 0% of visitors rated it as not strongly agreed, and 1.4 % said that I turn off the lights Not in use is just not

agreed upon. it shows the visitor's individual attitude towards environmental conservation. 32.9% of visitors strongly agreed with the statement "I turn off the shower while taking a bath," while 47.1% agreed, 5.7% were neutral, 8.6% were not strongly agreed, and 5.7% said that I turn off the shower while taking a bath is simply not agreeable.

The table 4.7 shows the visitor's individual level attitude towards environmental conservation. 31.4% of visitors strongly agreed on the statement that "I turn off the tab while brushing". 38.6% of visitors rated it as agreed, 15.7% of visitors rated it as neutral, 11.4 % of visitors rated it as not strongly agreed, and 2.9 % said that I turn off the tab while brushing is not agreed. It shows the visitor's individual level attitude towards environmental conservation. 32.9% of visitors strongly agreed on the statement that "I always use Bin for trash". 54.3% of visitors rated it as agreed, 4.3% of visitors rated it as neutral, 0% of visitors rated it as not strongly agreed, and 8.6 % said that I always use Bin for trash is not agreed. it shows the visitor's individual level attitude towards environmental conservation. 35.7% of visitors strongly agreed on the statement that "I avoid single use plastic."; 27.1% of visitors rated it as agreed; 21.4% of visitors rated it as neutral; 4.3 percent of visitors rated it as not strongly agreed; and 10.0 % said that I avoid single use plastic is not agreed. The visitor's individual attitude towards environmental conservation. 37.1% of visitors strongly agreed on the statement "I avoid frequent paper use."; 22.9% of visitors agreed; 27.1% of visitors were neutral; 7.1% of visitors strongly disagreed; and 5.7% said I avoid frequent paper use is not agreed. It also shows the visitor's individual attitude towards environmental conservation. 55.7% of visitors strongly agreed with the statement that "I prefer public transport." 15.7% of visitors agreed, 12.9% said it was neutral, 10.0% said it was not strongly agreed, and 5.7% said they preferred public transportation. Highest average of 55.7% of is visitor's Individual level attitude towards environmental Conservation strongly agree for the statement "I prefer Public transport" The statement 'I turn off the tab while brushing' received the fewest visitors. It shows that from visitors there was a more individualistic attitude towards environmental conservation.

Table 4.8: Which Platform Has the Potential to Bring a Revolution to Save Our Planer?

Variables	Strongly Agree	Agree	Neutral	Not strongly Agree	Not Agree
Educational institute	70.0	28.6	0	1.4	0
Family Education	38.6	40.0	1.4	0	0
Private Sector	14.3	42.9	27.1	2.9	12.9
Online Session	11.4	37.1	18.6	4.3	28.6
Legislation	57.1	27.1	5.7	4.3	5.7
NGO, s	18.6	35.7	28.6	1.4	15.7
Group Discussion	48.6	31.4	14.3	2.9	2.9

Source: field survey (2022)

The table 4.8 shows the visitor's which Platform Has the Potential to Bring a Revolution to Save Our Planer. 70.0% of visitors strongly agreed on the statement that "educational institute". 28.6% of visitors rated it as agreed, 0% of visitors rated it as neutral, 1.4% of visitors rated it as not strongly agreed, and.01% of visitors rated it has not agreed.

It also shows the visitor's which Platform Has the Potential to Bring a Revolution to Save Our Planer. 38.6% of visitors strongly agreed with the statement that "Family Education" 60.0% of visitors rated it as agreed, 1.4% of visitors rated it as neutral, 0% of visitors rated it as not strongly agreed, and.01% of visitors rated it as not agreed. Figure 4.34 depicts the visitor's which platform has the potential to bring about a revolution in order to save our planet. 14.3% of visitors strongly agreed with the statement "Private Sector." It was rated

as agreed by 42.9 percent of visitors, neutral by 27.1 percent, and not strongly agreed by 2.9 percent. The rating of 12.9 percent of visitors has not been agreed upon. Figure 4.35 shows the visitor's which platform has the potential to bring a revolution to Save Our Planer. 11.4% of visitors strongly agreed with the statement that "Online Session" 37.1% of visitors rated it as agreed, 18.6% of visitors rated it as neutral, 4.3% of visitors rated it as not strongly agreed, and It was rated not agreed by 28.6% of visitors.

Furthermore, It shows the visitor's which platform has the potential to bring a revolution to Save Our Planer. 57.1% of visitors strongly agreed with the statement that "Legislation" It was rated as agreed by 27.1% of visitors, neutral by 5.7%, not strongly agreed by 4.3%, and not agreed by 5.7% of visitors. the visitor's which Platform Has the Potential to Bring a Revolution to Save Our Planer. 18.6% of visitors strongly agreed with the statement that "NGO", visitors rated it as agreed 35.7% of the time, neutral 28.6% of the time, not strongly agreed 1.4% of the time, and not agreed 15.7% of the time. 48.6% of visitors strongly agreed with the statement that "Group Discussion" Visitors rated it as agreed 31.4% of the time, neutral 14.3% of the time, not strongly agreed 2.9% of the time, and not agreed 2.9% of the time. The highest average of 70.0% is the visitor's Which Platform Has the Potential to Bring a Revolution to Save Our Planet? I strongly agree with the statement "Educational institute." The lowest visitor's found to be for the statement that 'online session. It shows that the visitors were more Which Platform Has the Potential to Bring a Revolution to Save Our Planet?

Table 4.9 Action to Be Taken Against the Environment Problem

Variables	Strongly Agree	Neutral	Not strongly Agree	Not Agree
Increasing the environmental awareness by different mediums.	61.4	35.7	2.9	0
Frequent Practices of environmental conversation.	37.1	52.9	8.6	1.4
Taking efficient legislative and regularly action.	64.3	25.7	7.1	2.9
Prohibition of single use of Plastic.	44.3	41.4	12.9	1.4

Source: field survey (2022)

The table 4.9 shows the visitor's actions to be taken against the environmental problem. 61.4% of visitors strongly agreed on the statement that "Increasing the environmental awareness by different mediums". 35.7% of visitors rated it as agreed, 2.9% of visitors rated it as neutral, 0% of visitors rated it as not strongly agreed, and 0 % said that increasing the environmental awareness by different mediums is not agreed. It also shows that the visitor's actions to be taken against the environmental problem. 37.1% of visitors strongly agreed on the statement that "Frequent Practices of environmental conversation". 52.9% of visitors rated it as agreed, 8.6% of visitors rated it as neutral, 0% of visitors rated it as not strongly agreed, and 1.4 percent of visitors rated it has not agreed.

Furthermore, it shows the visitor's actions to be taken against the environmental problem. 64.3% of visitors strongly agreed on the statement that "Taking efficient legislative and regular action." 25.7% of visitors rated it as agreed, 7.1% of visitors rated it as neutral, 0% of visitors rated it as not strongly agreed, and 2.9 percent of visitors rated it has not agreed. It also indicates that the visitor's proposed solution to the environmental problem. 44.3 percent of visitors strongly agreed with the statement "Prohibition of single use of plastic,"

with 41.4 percent agreeing, 12.9 percent neutral, 1.4 percent strongly disagreeing, and 0 percent saying Prohibition of single use of plastic is not agreed. The statement "Taking efficient legislative and regular action" is strongly supported by the highest average of 64.3 percent of the visitors' actions to be taken against the environmental problem. The statement 'Frequent Practices of Environmental Conservation' received the fewest visitors. It demonstrates that more action was taken against the environmental problem as a result of visitors.

5.0 CONCLUSION

According to the findings and conclusions in the aforementioned sections, many locals and visitors have high levels of environmental knowledge, concern for the environment, and environmental conduct, but relatively low levels of environmental attitude. Locals and tourists' environmental care and awareness play a beneficial role in influencing how they behave environmentally, while their attitude toward the environment has a negative role. In terms of their degrees of environmental awareness, concern, attitude, and behavior, the local community and the community of visitors exhibit notable disparities. The findings indicate that visitors make a notable contribution to environmental waste through multiple channels, with clear variation across different sources. Among all categories, tourist garbage emerges as the most significant concern, recording the highest average contribution (40.9%) and the largest share of respondents assigning it a 70% impact. This highlights poor waste management practices and limited environmental responsibility among visitors during tourism activities.

Household garbage also represents a substantial source of environmental pressure, as a considerable proportion of visitors perceived it to contribute at moderate to high levels. Similarly, single-use plastic waste shows a mixed but concerning pattern, with a sizeable share of respondents acknowledging its persistent presence, reflecting inadequate control over plastic consumption and disposal in tourist areas.

In contrast, fossil fuel burning is perceived as a moderately significant contributor, with most visitors rating its impact at 50% or below, suggesting that while emissions are recognized, they are not viewed as the dominant source of environmental degradation. Infrastructure-related waste received the lowest high-impact ratings, indicating that visitors perceive infrastructure development to contribute relatively less to direct waste generation compared to other factors.

Overall, the results demonstrate that visitor-related behaviors, particularly tourist garbage and household waste, pose greater environmental challenges than structural or infrastructural factors. This underscores the urgent need for targeted waste management strategies, visitor awareness campaigns, and stricter regulations focusing on waste disposal, plastic use, and responsible tourism practices to reduce the environmental footprint of visitors.

REFERENCES

(Anup, 2018; Apollo *et al.*, 2021; Chandra and Uniyal, 2021; Ding, Yang and Luo, 2021; Gebauer *et al.*, 2007; Karampela, Andreopoulos and Koutsouris, 2021; Khan, Khan and Khan, 2022; Shang, Li and Wang, 2021; Singh *et al.*, 2020; Sugiyama, 2019; Wang, 2021; Wu *et al.*, 2022; Zakoski, 2021; Zeng, Li and Huang, 2021; Zeng *et al.*, 2022)

Abdul-Halim, N. S., Ruslan, N. S., Idris, N. S. U., & Nawawi, S. A. (2021, 2021/08/01). Knowledge, attitude and practice of environmental sustainability among Sustainable Science students in Universiti Malaysia Kelantan. *IOP Conference Series: Earth and Environmental Science*, 842(1), 012048. <https://doi.org/10.1088/1755-1315/842/1/012048>

Ahsan, I., & Khawaja, S. A. (2013). *Development of environmental laws and jurisprudence in Pakistan*. Asian Development Bank. <https://books.google.com.pk/books?hl=en&lr=&id=5bTSBQAAQBAJ&oi=fnd&pg=PT7>

https://www.google.com/search?q=&dq=environmental+conservation+in+north+area+of+pakistan&ots=VjV_sVzMV_&sig=7mbUiLMV3LJbZAbEyIHbWI_boAY&redir_esc=y#v=onepage&q=environmental%20conservation%20in%20north%20area%20of%20pakistan&f=false

Anup, K (2018) 'Tourism and its role in environmental conservation', *Journal of Tourism and Hospitality Education*, 8, pp. 30-47.

Apollo, M. (2017). The good, the bad and the ugly—three approaches to management of human waste in a high-mountain environment. *International Journal of Environmental Studies*, 74(1), 129-158. <https://doi.org/https://doi.org/10.1080/00207233.2016.1227225>

Apollo, M., Andreychouk, V., Mostowska, J., Jin, Z., Maciuk, K., Rettinger, R. and Jones, T. E. (2021) 'HIMALAYAN NATURE-BASED TOURISM. POTENTIAL, REGIONAL DIVERSITY, NATURE CONSERVATION AND TOURISTIC LOAD', *International Journal of Conservation Science*, 12(4), pp. 1527-1546.

Arshad, H. M., Saleem, K., Shafi, S., Ahmad, T., & Kanwal, S. (2021). Environmental Awareness, Concern, Attitude and Behavior of University Students: A Comparison Across Academic Disciplines [journal article]. *Polish Journal of Environmental Studies*, 30(1), 561-570. <https://doi.org/10.15244/pjoes/122617>

Budowski, G. (1976). Tourism and environmental conservation: conflict, coexistence, or symbiosis? *Environmental conservation*, 3(1), 27-31. [https://doi.org/https://doi.org/10.1017/S037689290017707\[Opens in a new window\]](https://doi.org/https://doi.org/10.1017/S037689290017707[Opens in a new window])

Chandra, R. and Uniyal, V. (2021) 'An ethnobotanical study of wild medicinal plants among the mountain community of Western Himalayas: A case study of Govind wildlife sanctuary and national park', *Med. Plants*, 13, pp. 251-65.

Chandra, R. and V. Uniyal (2021). "An ethno botanical study of wild medicinal plants among the mountain community of Western Himalayas: A case study of Govind wildlife sanctuary and national park." *Med. Plants* **13**: 251-265.

Ding, K., Yang, M. and Luo, S. (2021) 'Mountain Landscape Preferences of Millennials Based on Social Media Data: A Case Study on Western Sichuan', *Land*, 10(11), pp. 1246.

Foxall, G. R., Oliveira-Castro, J. M., James, V. K., Yani-de-Soriano, M. M., & Sigurdsson, V. (2006). Consumer behavior analysis and social marketing: The case of environmental conservation. *Behavior and social issues*, 15(1), 101-125. <https://link.springer.com/article/10.5210/bsi.v15i1.338>

Gebauer, J., Luedeling, E., Hammer, K., Nagieb, M. and Buerkert, A. (2007) 'Mountain oases in northern Oman: an environment for evolution and in situ conservation of plant genetic resources', *Genetic resources and crop evolution*, 54(3), pp. 465-481.

Hughes, J. D. (2010, 01/01). J. Donald Hughes. *Environmental History*, 15, 305-318. <https://doi.org/10.2307/20749674>

Karampela, S., Andreopoulos, A. and Koutsouris, A. (2021) "Agro", "Agri", or "Rural": The Different Viewpoints of Tourism Research Combined with Sustainability and Sustainable Development', *Sustainability*, 13(17), pp. 9550.

Khan, A. N. (2001). Impact of landslide hazards on housing and related socio-economic characteristics in Murree (Pakistan). *Pakistan Economic and Social Review*, 57-74. <https://www.jstor.org/stable/25825220>

Khan, I. U., Khan, S. U. and Khan, S. (2022) 'Residents' satisfaction with sustainable tourism: the moderating role of environmental awareness', *Tourism Critiques: Practice and Theory*, (ahead-of-print).

Khan, S. R., & Naqvi, A. (2000). *Indigenous Rights and Biodiversity Conservation: A Case Study of Ayubia National Park*. Sustainable Development Policy Institute.

Kollmuss, A., & Agyeman, J. (2002). Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental education research*, 8(3), 239-260. <https://doi.org/https://doi.org/10.1080/13504620220145401>

MacDonald, K. (2004). Developing 'nature': global ecology and the politics of conservation in Northern Pakistan. *Confronting environments: Local environmental understanding in a globalising world*, 71-96. https://books.google.com.pk/books?hl=en&lr=&id=SXxAAAAQBAJ&oi=fnd&pg=PA71&dq=environmental+conservation+in+north+area+of+pakistan&ots=KxcwgbFL0T&sig=K_KG0jOukt73I7I4C1c6DSNk1-4&redir_esc=y#v=onepage&q=environmental%20conservation%20in%20north%20area%20of%20pakistan&f=false

McNeill, J. R. (2003). Observations on the nature and culture of environmental history. *History and theory*, 42(4), 5-43. <https://doi.org/https://doi.org/10.1046/j.1468-2303.2003.00255.x>

Scherrer, Y. M. (2009). Environmental conservation NGOs and the concept of sustainable development. *Journal of Business Ethics*, 85(3), 555-571.

Shang, Q., Li, M. and Wang, H. 'Environment Governance, Sustainable Livelihood and Indigenous Knowledge in Ethnic Tourism Villages of China'. *E3S Web of Conferences*: EDP Sciences, 01027.

Singh, R., Sharma, R. K., Babu, S. and Bhatnagar, Y. V. (2020) 'Traditional ecological knowledge and contemporary changes in the agro-pastoral system of upper spiti landscape, Indian Trans-Himalayas', *Pastoralism*, 10(1), pp. 1-14.

Sugama, A. G. 'The Sustainable Rural Tourism Asset Development Process Based on Natural and Cultural Conservation'. *International Conference On Applied Science and Technology 2019-Social Sciences Track (iCASTSS 2019)*: Atlantis Press, 152-156.

Wang, Y. 'Research on the Development of Emei Martial arts Tourism Project Based on Environmental Protection'. *Journal of Physics: Conference Series*: IOP Publishing, 022039.

Wu, D., Li, K., Ma, J., Wang, E. and Zhu, Y. (2022) 'How Does Tourist Experience Affect Environmentally Responsible Behavior?', *Sustainability*, 14(2), pp. 924.

Zakoski, I. (2021) 'The Glacial Lakes of Shar Mountain as a Tourist Attraction', *European Modern Studies Journal*, 5(2), pp. 95-100.

Zeng, L., Li, R. Y. M. and Huang, X. (2021) 'Sustainable mountain-based health and wellness tourist destinations: the interrelationships between tourists' satisfaction, behavioral intentions, and competitiveness', *Sustainability*, 13(23), pp. 13314.

Zeng, L., Li, R. Y. M., Nuttapong, J., Sun, J. and Mao, Y. (2022) 'Economic development and mountain tourism research from 2010 to 2020: bibliometric analysis and science mapping approach', *Sustainability*, 14(1), pp. 562.